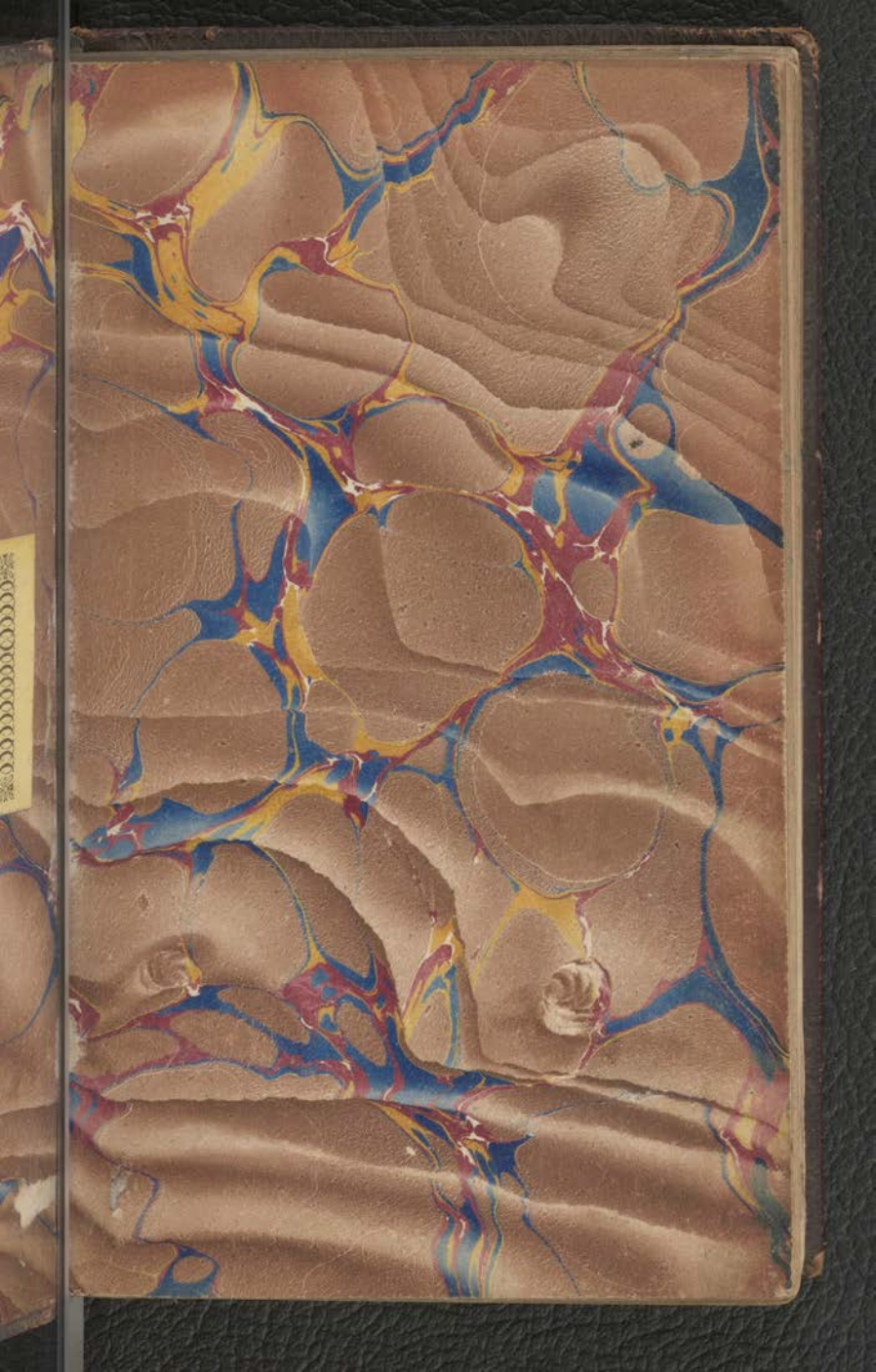
REBOUND *Xmas, 1835* in TOKEN of Master *Edwd. Whitby's* acquaintance with the Contents of this BOOK, and as an ENCOURAGEMENT to acquire a greater knowledge of the Subject.

NORTHAMPTON HOUSE,
CAMBERWELL GREEN.



Edwin Whitby
December 24th
A.D. 1835

BT
WILLIAMS, DAVID
PRECEPTOR'S···
1830



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THE UNIVERSAL DELUGE.



THE PASSAGE OF THE RED SEA BY THE ISRAELITES



THE DESTRUCTION OF THE PHILISTINES.

W. Read. Sculp.

London, Sherwood & Cº October 1830

THE

PRECEPTOR'S ASSISTANT;

OR,

MISCELLANEOUS QUESTIONS

IN

GENERAL HISTORY, LITERATURE, AND SCIENCE.

QUI NON RECTE INSTITUUNT ATQUE ERUDIUNT LIBEROS, NON SOLUM LIBERIS SED ET REIPUBLICÆ FACIUNT INJURIAM.—CIC.

A NEW EDITION,

ENLARGED AND IMPROVED, AND EMBELLISHED

WITH PLATES, &c.

BY THE

REV. DAVID WILLIAMS, M.A.

Author of the Parent's Catechism,

The Historical Class Readings, First Lessons in Composition and Rhetoric, &c.

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It was the observation of one of the profoundest writers on metaphysical philosophy, that "the taking a taste of every sort of knowledge is necessary to form the mind, and is the only way to give the understanding its due improvement to the full extent of its capacity." To those versed in the science of education, the truth and propriety of the observation are apparent. To fill the storehouse of the memory with such principles and facts as tend to enlarge the understanding, to stimulate curiosity, expand and exercise the reasoning powers of the mind, and inculcate habits of observation and inquiry, is the the design of the Preceptor's Assistant, or School Examiner. The subjects of which it treats, are—

1*st* *Miscellaneous Questions on General History.*
2*dly* ..... *on Grecian History.*
3*dly* ..... *on Roman History.*
4*thly*..... *on Eng'ish History.*
5*thly*..... *on the Formation, Structure, &c. of the Universe.*
6*thly*..... *on Astronomy.*
7*thly*..... *on Natural Philosophy.*
8*thly*..... *on the Arts and Sciences.*
9*thly*..... *on the Fine Arts.*
10*thly*..... *on Rhetoric.*
11*thly*..... *on Literature in General.*

12*thly Miscellaneous Questions on Philosophy.*
13*thly* ..... *on Chronology.*
14*thly* ..... *on Mythology.*
15*thly* ..... *on Mineralogy.*
16*thly*..... *on Heraldry.*
17*thly* .... *on Music.*
18*thly* ..... *on Agriculture.*
19*thly* ..... *on the British Constitution.*
20*thly* ..... *on Religion.*
21*stly* ..... *on Sacred History.*
22*dly* ..... *containing a variety of useful and interesting information.*
23*dly The manner of addressing, and writing to the different ranks in Society, &c. &c. &c.*
24*thly Forms of School Prayers, &c.*

Such are briefly the contents of the PRECEPTOR'S ASSISTANT, which, besides being an epitome of useful and general learning, is calculated to form a repository of valuable and interesting knowledge in after life, and to serve as a recapitulation and common-place book of minute and laborious research and inquiry.

THE

PRECEPTOR'S ASSISTANT;

OR,

SCHOOL EXAMINER

ON

LITERATURE, SCIENCE, AND HISTORY.

GENERAL HISTORY.

The sage historic muse
Should first conduct us through the deeps of time,
Shew us how empires grew, declin'd, and fell
In scatter'd states. THOMSON.

Q. How is history divided?—*A.* Into *sacred* and *profane*, or *ancient* and *modern*.

Q. Explain these terms.—*A.* Sacred History contains the incidents and transactions mentioned in the Holy Scriptures; Profane History includes all the facts and traditions to be found in authentic writers respecting the various nations of the world. All authenticated events since the creation of the world to the fall of the Western Empire of the Romans, and the final subjugation of Italy by the Lombards, come under the title of Ancient History; all since that era to the present time are included under that of Modern History.

Q. Are no other divisions of history in use?—*A.* Yes: some historians make use of these divisions: 1st, that of *ancient times*, which they make to extend from the creation of the world to the birth of Jesus Christ; 2dly, that of the *middle ages*, within which they comprise the time

between the birth of our Saviour and the re-establishment of the Roman empire by Charlemagne; and 3dly, that of *modern times*, which extends from the coronation of Charlemagne, in the year 802, A. D. to the present time.

Q. What was Varro's division of history?—*A.* Into the *obscure* and *uncertain ages*, the *fabulous age*, and the *historical age*.

Q. How did the poets divide history?—*A.* Into the *golden*, the *silver*, the *brazen*, and the *iron ages*.

Q. What period of time does Sacred History occupy in its narration?—*A.* About three thousand five hundred years from the creation of the world.

Q. When is it generally computed that Profane History begins?—*A.* About five hundred years before the Christian era; that is, about the time of the first war between Greece and Persia.

Q. What is meant by the obscure and uncertain ages?—*A.* That time which elapsed from the creation of the world to the universal deluge.

Q. What period of time is that which is denominated the fabulous age?—*A.* That which elapsed from the establishment of the Olympic games, or of political and civil society in Greece, to the time of the Trojan war.

Q. What interval of time is that which is called the dark and barbarous ages?—*A.* That which lasted from the time of the Roman emperor, Constantine the Great, to that of Charlemagne.

Q. When does the historical age commence?—*A.* From the time of Charlemagne.

Q. Mention the principal epochs in history?—*A.* First, the creation of the world; secondly, the universal deluge, 1656 A. C.; 3dly, the destruction of Troy, 1184 A. C.; 4thly, the foundation of Rome, 753 A. C.; 5thly, the birth of Jesus Christ; 6thly, the re-establishment of the Roman empire by Charlemagne, 802 A. D.; 7thly, the reformation of religion in the beginning of the sixteenth century, and the balance of power established among the states of Europe; and 8thly, the French revolution.

Q. Of what does history first inform us?—*A.* Of the creation of our first parents, Adam and Eve,—their fall from a state of perfect bliss,—and the introduction of sin and death, and their consequent evils, into the world.

Q. What does history next recount?—*A.* The destruction of the world by the universal deluge, and the preservation of the human race in the persons of Noah and his family.

Q. Which quarter of the globe is each of Noah's sons said to have peopled?—*A.* The descendants of Shem spread themselves over the east; those of Ham settled in Africa; and the posterity of Japhet peopled Europe.

Q. Which quarter of the globe was first inhabited?—*A.* Asia.

Ancient History *(Sacred.)*

Q. Which is the first nation of which we have any account?—*A.* The Hebrews, or as they were afterwards called, the Israelites, or Jews.

Q. Why were they called by these names?—*A.* They derived the name of Hebrews from Heber; that of Israelites from Israel, a name which the Almighty had been pleased to give to Jacob; that of Jews they took from Judah, on account of the strength and number of his tribe.

Q. Mention the most important incidents in the history of the Israelites.—*A.* 1st, Their separation from the rest of mankind who had relapsed into wickedness and idolatry, to preserve the knowledge and worship of the Supreme Being; 2dly, their bondage in the land of Egypt; 3dly, their departure out of Egypt, and the delivery of the decalogue or Ten Commandments; 4thly, their wanderings in the Wilderness or Desert of Arabia; 5thly, the division of the twelve tribes into the two kingdoms of Israel and of Judah, in the reign of Jeroboam; 6thly, the extinction of the kingdom of Israel, in the year of the world 3283, by Psalmanassar, and of the kingdom of Judah, in the year of the world 3420, by Nabuchodonoser; 7thly, their delivery by Cyrus the Great from the captivity of Babylon; and 8thly, the taking of Jerusalem, and the second destruction of the Temple in the seventieth year of the Christian era, when their dispersion and utter extinction as a nation took place.

Obs. In the war between the Romans and the Jews, which terminated in the capture of Jerusalem, it is said that nearly one million and a half of the latter perished, besides a vast number who died in caves,

woods, the wilderness, common sewers, &c. where they had secreted themselves, and of whom no calculation can be made.

This account, which may probably be considered as one of the romances of history, has no doubt received its authenticity from the following eloquent and highly-coloured account of Josephus :—

"Soon after the establishment of Christianity," says this highly-gifted historian, "the Jewish nation, dispersed since the second destruction of its temple, had totally disappeared. By the light of those flames which devoured the monuments of its ancient splendour, the conquerors beheld a million of victims dead or expiring on their ruins. The hatred of the enemies of that unfortunate nation raged longer than the fire which had consumed its temple. Weighed down by taxes, and forced to contribute more than Christians for the support of society, they had hardly any thing of the rights which it gives. If a destructive scourge happened to spread havock among the inhabitants of a country, the Jews had poisoned the springs; or those men, cursed by heaven, had, nevertheless, incensed it by their prayers against the nation which they were supposed to hate. Did sovereigns want pecuniary assistance to carry on their wars, the Jews were compelled to give up those riches in which they sought some consolation against the oppressing sense of their abject condition: as a reward for their sacrifices, they were expelled from the state which they had supported, and were afterwards recalled, to be stript again. Compelled to wear, exteriorly, the badges of their abject state, they were everywhere exposed to the insults of the vilest populace. When from his solitary retreat an enthusiastic hermit preached the crusades to the nations of Europe, and a part of its inhabitants left their country to moisten with their blood the plains of Palestine; the knell of promiscuous massacre tolled before the alarm-bell of war. Millions of Jews were then massacred to glut the pious rage of the crusaders. It was by tearing the entrails of their brethren, that these warriors sought the protection of heaven. Sculls of men and bleeding hearts were offered as holocausts on the altars of that God who has no pleasure even in the blood of the innocent lamb, and ministers of peace were thrown into a holy enthusiasm by these bloody sacrifices. Basil, Treves, Coblentz, and Cologne became human shambles. Upwards of 400,000 victims, of all ages and of both sexes, lost their lives at Cesarea and Alexandria."

Q. To how many kinds of government were the Jews subject?—*A.* To four: 1st, the patriarchal, under twenty-two patriarchs; 2dly, the judiciary, under twenty-two judges; 3dly, the royal, under twenty-two kings; and 4thly, the sacerdotal, under twenty-two pontiffs; among whom some bore the titles of kings, as Aristobulus, Alexander, Hyrcanus, Antipater, Herod, &c.

Q. Mention the duration of these respective governments.—*A.* The patriarchal began under Abraham, and lasted until the departure of the Israelites out of the land of Egypt, in the year of the world 2513. The judiciary government began in 2513 A. M. and endured 396 years.

The regal began in 2909 A. M. and lasted 559 years. And the sacerdotal began 3468 A. M. and lasted until the extinction of the Jews as a nation in the seventieth year of the Christian era.

Q. What was the nature of the patriarchal and judiciary government among the Jews?—*A.* That of a republic.

Q. Who were the most distinguished of the Jewish legislators and governors?—*A.* Moses, David, Solomon, and Judas Maccabæus; the latter of whom, by his valour and patriotism, effected the deliverance of his country from the political and religious oppression of the Romans.

Q. Of how many nations do the Scriptures profess to give an account?—*A.* Of twenty-three.

Q. Mention them.—*A.* 1st, The Israelites or Jews; 2dly, the Moabites; 3dly, the Ammonites; 4thly, the Midianites; 5thly, the Edomites; 6thly, the Amalekites; 7thly, the Ishmaelites; 8thly, the Canaanites; 9thly, the Philistines; 10thly, the Syrians; 11thly, the Phœnicians; 12thly, the Assyrians; 13thly, the Babylonians; 14thly, the Medes; 15thly, the Persians or Elamites; 16thly, the Scythians; 17thly, the Phrygians; 18thly, the Trojans; 19thly, the Mysians; 20thly, the Lydians; 21stly, the Lycians; 22dly, the Cilicians; and 23dly, the Egyptians.

Q. Through what period of time does the history of the Moabites extend?—*A.* From their founder Moab, the son of Lot, to the time of Nebuchadnezzar.

Q. Of the Ammonites?—*A.* From their founder Ammon to the time of Nebuchadnezzar.

Q. Of the Midianites?—*A.* From Midian, the fourth son of Abraham, to the time of their two last kings, Zeba and Zalmunah, who were vanquished by Gideon.

Q. Of the Edomites?—*A.* From Edom, or Esau, the son of Isaac, to the time of Joram, king of the Jews, by whom they were destroyed.

Q. Of the Amalekites?—*A.* From Amalek, the grandson of Esau, to the time of Saul and David; when they no longer subsisted as a nation.

Q. Of the Ishmaelites?—*A.* From Ishmael, the son of Abraham.

Q. Of the Canaanites?—*A.* From Canaan, the grand-

son of Noah, to the time of Joshua, who having defeated thirty-one of their petty kings, possessed himself of their country.

Q. Of the Philistines?—*A.* From Mitzraim, the son of Ham, to the time when they were in part overcome by Hezekiah; and finally, when they were vanquished by the Egyptians, and their nation extirpated.

Q. Of the Syrians?—*A.* From Rehob, their first king, who lived in the time of David, to the reign of Jeroboam, who destroyed Damascus.

Q. Of the Phœnicians?—*A.* From Agenor, the first king of Sidon, who reigned a short time before the Trojan war, to the time that Sidon and Tyre were reduced under the yoke of Alexander the Great.

Q. Of the Assyrians?—*A.* From their founder Assur, the second son of Shem, to the time of Sardanapalus, and his wife Semiramis; when the empire of Assyria was destroyed by Arbaces, governor of Media.

Q. Of the Babylonians?—*A.* From their founder Nimrod, who with his contemporary Assur lived about the middle of the eighteenth century after the creation of the world, to the time of the rise of the kingdom of the Medes and Persians.

Q. Of the Medes?—*A.* From their founder Arbaces to the time of Cyrus the Great, by whom the empire of the Medes was annexed to that of the Persians.

Q. Of the Persians?—*A.* From Elam, the son of Shem, to the time of Darius Codomanus; when the empire of the Medes and Persians was overthrown by Alexander the Great.

Q. Of the Scythians?—*A.* From their founder Scythes, a pretended son of Hercules, to the time of their last king Atheas; when Scythia became subject to Philip, king of Macedon.

Q. Of the Phrygians?—*A.* From Thogarme, the son of Gomer, to the time of Adrastus, who dying without heirs, Phrygia became subject to Crœsus, king of Lydia. Midas was one of the most ancient kings of Phrygia.

Q. Of the Mysians?—*A.* From Olympus, their first king, to Arius their last.

Q. Of the Lydians?—*A.* From their first king Mones to the time of Crœsus, who was vanquished by Cyrus the Great.

Q. Of the Lycians?—*A.* Of this people very little is known; their history and origin belongs to fabulous times. In the expedition of Xerxes against the Greeks, mention is made of their co-operation with the Persian forces.

Q. Of the Cilicians?—*A.* From Tarsis, the son of Javan, to the time of the destruction of the empire, when Cilicia became tributary to Macedonia.

Ancient History *(Profane.)*

Q. Whence is the history of other nations to be derived?—*A.* From profane writers.

Q. Mention the principal nations described by the writers of profane history.—*A.* 1st, the Chinese; 2dly, the Egyptians; 3dly, the Assyrians; 4thly, the Persians; 5thly, the Grecians; 6thly, the Romans; and 7thly, the Goths, Vandals, Huns, and Tartar tribes.

Q. Are no other nations mentioned in ancient history?—*A.* Yes. In Asia, the Arabians, the Carians, the Odrises, the Trojans, the Bithynians, the Cappadocians, the Armenians, the Parthians, the Indians, and the inhabitants of Pontus. In Africa, the Carthaginians, the Cyreneans, the Ethiopians, and the Numidians. In Europe, the Etruscans, the Iberians, the Illyrians, the Britons, the Gauls, the Pannonians, and the Thracians.

China.

Q. When was the Chinese empire founded?—*A.* About 240 years after the deluge, by Fohi, supposed by some to have been Noah. In the end of the tenth century of the Christian era, the Tartar descendants of Gengiscan conquered China; but during the middle of the fourteenth century the Chinese threw off the Tartar yoke, and continued subject to their native princes, till the year 1633, when the Tartars again made themselves masters of the empire, and continue so to the present day.

Egypt.

Q. What are the outlines of the history of Egypt?—*A.* It was founded by Misraim, called by profane authors Menes the second son of Ham, about 160 years after the

deluge. After the death of Misraim, Egypt was divided into the four dynasties of Upper Egypt, or Thebes, Lower Egypt, Thais, and Memphis. But Amenophis I. having united these dynasties, assumed the title of Pharaoh, or *Great King;* in which he was followed by his forty-eight successors, the last of whom, Psammeticus, was slain in battle by Cambyses, 1663 years after the foundation of the kingdom. Having been successively subject to the Persians and the Macedonians, it again became an independent kingdom in the person of Ptolemy, one of Alexander's generals, and continued so till after the death of Cleopatra, the last of its independent sovereigns; when it was reduced into the form of a Roman province by Augustus Cæsar, 31 A. C. In the seventh century of the Christian era, it became subject to the Saracens, in the reign of their caliph Omar. It was afterwards wrested from the Saracens by the Mamlouks, or slave usurpers; and in the fifteenth century was annexed to the Ottoman empire, of which it still forms a province, governed by a Turkish pacha and twenty-four begler-begs or chiefs.

Q. For what are the Egyptians particularly distinguished?—*A.* For the invention of the arts of sculpture, painting, and alphabetic writing; and their important discoveries in astronomy, geometry, and the mathematics.

Q. What customs were peculiar to the Egyptians?—*A.* First, that funeral rites were not conferred but after a scrutiny into the life of the deceased, and by a judicial decree approving of his character. Secondly, that the borrower of money gave in pledge the body of his father, and was deprived of funeral rites, if he failed to redeem it. Thirdly, that all professions were hereditary, and the rank of each was scrupulously settled. And fourthly, that the bodies of the dead were embalmed, and preserved with extreme care.

Q. What did the deprivation of funeral rites imply among the Egyptians?—*A.* The exclusion of the devoted object from Elysium, or the regions of happiness; where, according to the mythology of the ancients, the souls of the just lived through eternal ages of indescribable felicity.

Q. Mention the principal monuments of Egyptian antiquity.—*A.* The pyramids, the labyrinth, the obelisks, and the ruins of Thebes.

Q. Describe these monuments.—*A.* The largest of the pyramids, which are three in number, covers eleven acres of ground, and is 450 feet in perpendicular height. The labyrinth was celebrated for its 3000 apartments, which communicated with each other by so many turns and windings, that without a guide the traveller was lost. The obelisks, which were monuments of the victories of Sesostris, consisted of a single piece of granite, of 180 feet high. And the city of Thebes was distinguished for its hundred brazen gates.

Q. Which are the four great empires which have existed in the world?—*A.* The Assyrian or Babylonian, the Mede and Persian, the Grecian or Macedonian, and the Roman.

Assyria.

Q. When did the Assyrian or Babylonian empire take its rise, and how long did it endure?—*A.* The Assyrian or Babylonian empire was founded about 250 years after the flood by Belus, whom the Scriptures call Nimrod; and after enduring 1450 years, was overturned in the reign of Sardanapalus, by that of the Medes and Persians.

Persia.

Q. When that of the Medes and Persians?—*A.* The empire of the Medes and Persians was founded by Cyrus the Great, on the ruins of that of Babylon, five centuries and a half before the Christian era; and ended in the reign of Darius Codomanus, after a duration of 215 years, 330 B. C.

Q. By what means did Cyrus unite the empire of the Medes and Persians?—*A.* By his succession to the throne of Persia on the death of his father Cambyses, and to the sovereignty of the Medes, on that of his uncle Cyaxares II.

Q. Who was Cyrus?—*A.* The son of Mandane, the daughter of Astyages, the king of Media, and of a Persian of noble extraction named Cambyses.

Q. What was the extent of the empire of the Medes and Persians?—*A.* It comprised Persia, Media, Babylonia, Assyria, Lydia, Arabia, and their dependencies.

Greece and Rome.

Q. When did the Grecian or Macedonian empire take its rise, and how long did it endure?—*A.* The Grecian or Macedonian empire was founded by Alexander the Great, 330 years before the Christian era, on the ruins of the empire of Persia, and after enduring thirteen years, fell under the power of the Romans, 146 B. C.

Q. What became of the Macedonian empire on the death of Alexander?—*A.* After a series of contentions among his officers, it was divided into the kingdoms of Macedon, Asia, Syria, and Egypt.

Q. When did the Roman empire take its rise, and how long did it endure?—*A.* The empire of Rome was founded by Romulus, 753 years before the Christian era, and, till its division into the Eastern and Western Empires, comprehended the greatest part of the then known world. The Empire of the West was overturned by the Goths and Vandals, and other barbarous nations, in the fourth and fifth centuries; that of the East, by the followers of Mahomet, under the title of Turks, in the middle of the fifteenth century, who still keep possession of their conquests.

Q. What forms of government subsisted in Rome during its dominion?—*A.* In the first two centuries and a half it was governed by kings; for the next five centuries it was subject to a republican form of government; and at the commencement of the Christian era it was governed by emperors, and continued under that kind of government until its overthrow by the Turks.

Q. When was the Roman state divided into the Eastern and Western Empires?—*A.* About the middle of the fourth century after the Christian era, by Constantine the Great.

Q. What were the capital cities of the empires of the East and West?—*A.* The capital of the Western Empire was Rome, that of the Eastern, Constantinople.

Q. What nation first cultivated learning and science?—*A.* The Egyptians; they instructed the Greeks, who performed the same office to the Romans; and the two latter nations have contributed to the transmission of that know-

ledge to the world, of which we are in possession at this day.

Q. What proof have we of the superiority of the Egyptians over the rest of the ancient world in refinement and learning?—*A.* When Greece was in the meridian of its splendour, and renowned for arts as well as arms, no person could rise to distinction who had not visited the banks of the Nile, and conversed with the fathers of science. Orpheus and Homer adopted the mythology of the Egyptians; Pythagoras and Plato instructed themselves in their mathematical and philosophical discoveries; and Lycurgus and Solon studied the principles of their legislation.

Q. From what period does the history of Greece take its date?—*A.* From the foundation of the kingdom of Sicyon, namely, about 260 years after the deluge.

Q. Of how many states did Greece consist?—*A.* Of twenty-nine.

Q. Mention the most considerable of them.—*A.* Argos; Attica, of which Athens was the capital; Thebes; Corinth; and Sparta, or Lacedæmon.

Obs. The ancient name of Lacedæmon was Lelegia, so called from its founder Lelex. It was called Lacedæmon, after the name of its fourth king, and Sparta from that of his wife: though it may be remarked, that, in strict propriety, the former is the name of the kingdom at large, the latter of the chief city only.

Q. What remains of these cities exist in modern times?—*A.* Except Athens, only heaps of ruins.

Q. When do the states of Argos and Athens appear to have been founded?—*A.* About eighteen centuries before the Christian era.

Q. When was that of Lacedæmon founded?—About fifteen centuries before the same era.

Q. To what period may the kingdoms of Troy, Corinth, Latium, Mycenæ, Tyre, Thebes, and Lydia, be referred for their rise?—*A.* To about fourteen centuries before the Christian era.

Nineveh, Babylon, Media, and Cappadocia.

Q. What kingdoms arose on the ruins of the Assyrian monarchy, on the death of Sardanapalus I.?—*A.* Those of Nineveh, Babylon, Media, and Cappadocia.

Q. When did these kingdoms take their rise?—*A.* About eight centuries before the Christian era.

Q. Who was the founder of Nineveh, or the second kingdom of Assyria?—*A.* Phul, or Pul, sometimes called Ninus the Younger. This kingdom continued for 171 years, under a succession of eight princes; of whom the third was Psalmanasser, who destroyed the kingdom of Israel; and the last was Sarac, called also Sardanapalus the Second, in whose reign Assyria was divided between the Medes and Babylonians.

Obs. Sarac was called Sardanapalus the Second, from the similarity of his fortune and of his tragical end to that of Sardanapalus the First; for being defeated by the united forces of the Medes and Babylonians, he shut himself up in his palace, and in imitation of his effeminate namesake, burned it over his own head, together with his wives, children, and favourites.

Q. Who was the founder of the second kingdom of Babylon?—*A.* Nabonassar, the son of Beleses, who had assisted Arbaces, the governor of Media, in the subversion of the original monarchy of the Assyrians or Babylonians. In the reign of Nebuchadnezzar, the eleventh in succession from Nabonassar, Nineveh was destroyed, and Judea added to the new kingdom. But in the year 538 B. C., while Nabonadius, or Belshazzar, was upon the throne, the second kingdom of Assyria was annihilated by the Medes and Persians, under Cyrus and Darius.

Q. Who was the founder of the kingdom of the Medes?—*A.* Arbaces, the prefect or governor of Media under Sardanapalus. This state continued a kind of federal republic till the middle of the eighth century before the Christian era, when it became subject to Assyria. The first sovereign of Media was Dejoces, who was elected when the kingdom was delivered from the power of Assyria, on the murder of Sennacherib, king of that country. This kingdom was annihilated as an independent state, about the middle of the sixth century of the Christian era, in the person of Astyages, who was deposed by his grandson, Cyrus the Persian.

Q. Who founded the kingdom of Cappadocia?—*A.* Pharnaces, the prefect of that part of the ancient empire of Assyria. Little, however, is known of this state till after the death of Alexander the Great, when Eumenes, one of his generals, took possession of the throne. But the son of the deposed monarch recovering his paternal inheritance, the throne of Cappadocia regularly descended

to his descendants; the last of whom, Archelaus, bequeathed his kingdom to the Roman state, thirteen years before the Christian era.

Q. What other states arose about the period of the foundation of the kingdoms of Nineveh, Babylon, Media, and Cappadocia?—*A.* Carthage, Rome, and Macedon.

Carthage.

Q. Who founded the city of Carthage? *A.* Elissa, or Dido, a Tyrian princess, who fled thither from the tyranny and injustice of her brother, Pygmalion, sovereign of Tyre.

Q. Where was Carthage situated?—*A.* On the coast of Africa, near the place where Tunis now stands.

Q. When was Carthage founded?—*A.* About seventy years before the building of Rome.

Q. Mention the outlines of the history of Carthage.—*A.* Of the annals of the Carthaginians, little is known till their wars with the Romans; but during the three wars between the rival republics, which, in history, are styled the *Punic* wars, Carthage became one of the most splendid cities in the universe, and had, besides the cities of Carthagena and Cadiz in Spain, about three hundred smaller cities in Africa, subject to its jurisdiction. It also commanded the navigation of the Mediterranean and of the Atlantic Ocean itself, and had a monopoly of the commerce of the whole known world. But in the two first of the Punic wars, the Carthaginians, after very severe contests, were worsted; and in the last, which was terminated about a century and a half before the Christian era, the republic was totally annihilated, and the city rased to the ground.

Macedon.

Q. By whom was the kingdom of Macedon founded?—*A.* By Caranus, about the commencement of the ninth century before the Christian era. Of the future greatness of Macedon, Philip II. may be considered the founder; and his son, Alexander the Great, raised Macedon as the head of the third great monarchy of antiquity. In the reign of Perseus, the seventeenth monarch in succession from Alexander, Macedon became a province of the Roman Republic, 146 B. C.

Pergamos, Parthia, &c.

Q. When did the kingdoms of Pergamos, Bosphorus, Pontus, Armenia, Bithynia, and Parthia, rise into notice?—*A.* About a century before the Christian era.

Q. What became of these kingdoms?—*A.* They became provinces of the Roman empire, either by conquest or the bequest of their sovereigns.

Q. Who was the most distinguished sovereign of Armenia?—*A.* Tigranes the Great.

Q. Who of Pontus?—*A.* Mithridates the Great.

Q. Who were the Parthians?—*A.* A tribe of Scythians, who settled in Hyrcania, and were successively tributary to the Assyrians, the Babylonians, the Medes, the Persians, and the Macedonians. After the death of the Macedonian conqueror, Parthia was subject first to Eumenes, then to Antigonus, and finally to the kings of Syria and Babylon. In the reign of Antiochus Theos, the rapacity and crimes of Agathocles, the Syrian governor, excited the indignation of the Parthians; and under Arsaces, a man of obscure origin, but great military talents, they expelled their oppressors, and laid the foundation of an empire, which ultimately, under the race of able and vigilant princes, who assumed the name of Arsacidæ, extended over all Asia before the end of the third century of the Christian era. The Parthians had even disputed the empire of the world with the Romans, and were never wholly subdued by that invincible nation.—The last king of Parthia was Artaban V., who being slain in the beginning of the third century of the Christian era, the Parthian monarchy was lost, in the new kingdom of Persia, under Artaxerxes or Ardshir, after having flourished four hundred and eighty years.

Q. Who were the most distinguished sovereigns of Parthia?—*A.* Arsaces, Mithridates the Great, Orodes I., and Chosroes.

Modern Persia.

Q. Who was Artaxerxes, or Ardshir?—*A.* The founder of the second kingdom of Persia.

Q. Mention the outlines of the history of Persia.—*A.* The first kingdom of Persia was that founded by Cyrus,

and subverted by Alexander the Great; the second, that founded by Artaxerxes, and subverted by the Arabs; the third, that founded in the year 1499 A. D. by Ismael Sophi, and which subsists to the present time.

Q. Who were the most distinguished sovereigns of Persia?—*A.* Cyrus the Great, Artaxerxes, Sapor, Narses, and Schah Abbas, surnamed the Great, the son of Ismael Sophi.

The Huns.

Q. Who were the Huns?—*A.* They are supposed originally to have occupied a tract of country on the north side of the great wall of China.

Q. How have writers distinguished the Huns?—*A.* Into Ephthalite, or Nephthalite, or White Huns, and the Sarmatian, or Scythian Huns.

Q. At what period is notice taken of the Huns in history?—*A.* At the end of the fourth century of the Christian era; when invading the Roman empire from their settlements on the eastern side of the Palus Mœotis (now the sea of Azof,) and driving the Ostrogoths and Visigoths before them, they committed the most dreadful ravages and devastation throughout the Empire of the West.

Q. When was the power of the Huns broken?—*A.* About the middle of the fifth century; when their king, Attila, who had assumed the high-sounding title of the "*Scourge of God,*" was defeated and slain by Ætius, the Roman general, assisted by Theodoric, king of the Goths, and Meroveus, king of the Franks; when the dominions of the Huns being split into a number of small estates, their power ceased to be formidable; and at length their name was extinguished in the latter end of the eighth century, in the mixture of the various tribes who possessed themselves of Hungary.

The Goths.

Q. Who were the Goths?—*A.* They are supposed to have been originally natives of that part of Scandinavia, which now forms the kingdoms of Sweden and Norway. They consisted of many tribes, of which the two principal were the Westrogoths, or Visigoths, and the Eastern, or Ostrogoths, the former inhabited that part of Scandinavia

which borders on Denmark; the latter the more eastern parts, on the shores of the Baltic.

Q. When are they first mentioned in history?—*A.* In the first century of the Christian era; but they did not become formidable to the Roman empire till the reign of Caracalla. The empire of the Ostrogoths was established by Theodoric the Great, in Italy, in the year 493 A. D. on the destruction of that of Rome, by the Heruli under Odoacer. In the reign of the emperor Honorius, the Visigoths, under their king Alaric, made themselves masters of Italy. After the death of Alaric, they withdrew into Gaul and Spain, and founded an empire which extended from the Loire to the Straits of Gibraltar; but which ceased in the year 713, when they were defeated under their last king, Roderic, in the battle of Xeres, by the Moors. The last of the successors of Theodoric was Tejas, the son and successor of Totila, who was subdued by Narses, the general of Justinian, in the sixth century of the Christian era.

The Vandals.

Q. Who were the Vandals?—*A.* They were of Gothic origin, and were originally seated in the northern parts of Germany, along the coasts of the Baltic, extending as far westward as the Elbe. After having been long formidable to the Roman emperors, they settled, in the year 409, in Spain; but, when pressed by the Visigoths, who about that time invaded Spain, they retired, in the year 439, into Africa, where, under the authority of their king Genseric, they founded an empire which endured till the year 534; when Belisarius, the general of the Roman emperor Justinian, vanquished and made prisoner their last king Gilimer.

The Lombards.

Q. Who were the Lombards?—*A.* A tribe of Gothic origin. From the time of the Roman emperor Augustus, they had made various incursions on the empire of Rome; and in the middle of the sixth century of the Christian era, under their king Alboin, they made a conquest of Italy; but after a duration of 206 years the kingdom of the Lombards was extinguished by Charlemagne, 774 A. D

Q. Who were the Franks?—*A.* They were originally those tribes of Germans who inhabited the districts lying on the Lower Rhine and Weser.

The Saracens.

Q. Who were the Saracens?—*A.* Natives of Arabia.

Q. When are the Saracens first noticed in history?—*A.* About the latter end of the second century of the Christian era.

Q. By whom was the Saracenic empire founded?—*A.* By Mahomet, about the end of the sixth century. The reigns of the caliphs Omar, Othman, Ali, Walid I., and Solyman the Magnificent, are the most distinguished. In the reign of the latter of these princes, the power of this new empire became formidable to the rest of the world, and the banners of the unbelievers were spread over the greater part of Europe. Death alone disconcerted his extensive project of besieging Paris and Constantinople at the same time.

The Turks.

Q. Who were the Turks or Turcomans?—*A.* A race of Tartars from the regions of Mount Taurus, or Imaus. This once martial people boast that their founder, like Romulus, was suckled by a wolf.

Q. When are the Turks first noticed in history?—*A.* About the middle of the sixth century of the Christian era. In the reign of the emperor Justinian they were employed as mercenaries in the armies of the empire. Afterwards they enlisted themselves in the service of the caliphs of the Saracens; and to their assistance may be attributed the victories of the Mahometans over the Eastern emperors. At length, finding their own power, they overthrew the empire of the Saracens, in the middle of the eleventh century, and that of the Greeks, in the middle of the fifteenth.

Q. Who have been the most distinguished sovereigns of the Turks?—*A.* Mahomet II., who took Constantinople; and Selim I.

Q. Who was the founder of the Turkish empire?—*A.* Ottoman, or Othman, at the end of the thirteenth

century of the Christian era. He first assumed the title of sultan when he founded his empire in Bithynia.

France.

Q. When did the kingdom of France take its rise?—*A.* About the latter end of the fifth century, under Clovis: though legendary chronicles mention a Pharamond and a Meroveus, the latter the head of the first race of the kings of France, termed the Merovingian.

Q. Mention the outlines of the history of France.—*A.* First, the foundation of the monarchy by Clovis, to the assumption of the sovereignty by Pepin le Bref, mayor of the palace, a kind of viceroy, 752 A. D. Secondly, the reign of the Carlovingian race, from their founder, Pepin le Bref, to Louis V., the descendant of Charlemagne. Thirdly, the reign of the Capetian race, from its founder, Hugh Capet, to Charles IV. 987 A. D. Fourthly, the race of Valois, from its founder, Philip of Valois, to the reign of Henry III., who was assassinated in the year 1589. Fifthly, the race of Bourbon, which began in the person of Henry IV., king of Navarre, from whom the present king of France is descended. And sixthly, the French revolution.

Q. Who was Charlemagne?—*A.* The son of Pepin le Bref. During a reign of forty-five years, he annexed to his patrimonial dominions, Germany, Spain, and Lombardy; was crowned king of the Romans, and emperor of the West, in the year 802.

Q. What celebrated princes were contemporary with Charlemagne?—*A.* Alfred the Great of England, and Haroun Alraschid, caliph of the Saracens; the latter of whom, on account of his encouragement of literature, has been celebrated as a second Augustus.

Q. Do you remember any particular instance of Charlemagne's deficiency in learning?—*A.* Yes, it is said that he was forty years old before he knew how to write. Historians also assert, that Alfred the Great was twelve years of age before he could read.

Q. In whose reign was the Salic law enacted, which prohibited females succeeding to the throne of France?—*A.* In that of Charles IV.

Q. In what reign were dignities and titles made hereditary in France?—*A.* In that of Charles the Bald.

Q. Mention the most distinguished sovereigns of France.—*A.* Charlemagne, Francis I., Henry IV., and Louis XIV.

Q. Who were the Normans?—*A.* A race of Scandinavian Goths.

Q. When were they allowed to settle in France?—*A.* About the end of the ninth century, during the reign of Charles the Gross, the successor of Charles the Bald.

Q. By whom was the kingdom of Normandy founded?—*A.* By Rollo, the Norman, about the beginning of the tenth century.

Germany.

Q. When was the empire of Germany founded?—*A.* In the year 802, by Charlemagne, who was created emperor of the West.

Q. When was this empire extinguished?—*A.* In the year 1806, when the present emperor, in compliance with the will of Buonaparte, renounced his title, and assumed that of emperor of Austria.

Q. Who was the founder of the house of Austria?—*A.* Rodolphus of Hapsbourgh, a Swiss baron, who, about the latter end of the 13th century, was elected emperor of Germany.

Q. Who are the most distinguished emperors of Germany, of the house of Austria?—*A.* Maximilian I. and Charles V.

Q. Who was Charles V.?—*A.* The grandson of Maximilian I.

Q. Mention the most distinguished sovereigns who were contemporary with Charles V.—*A.* Francis I. of France, Henry VIII. of England, and the Sultan Solyman.

Sweden.

Q. When did the kingdom of Sweden take its rise?—*A.* About the beginning of the ninth century.

Q. What are the outlines of the history of Sweden?—*A.* The history of Sweden is vague and uninteresting till about the beginning of the fourteenth century, when the kingdoms of Sweden, Denmark, and Norway, were united

under Margaret of Waldemar. The next memorable epoch in Swedish history is its deliverance by Gustavus Vasa, a descendant of its ancient kings, from the odious tyranny of Christiern II.

Denmark.

Q. What are the most prominent events in the history of Denmark?—*A.* Of the history of Denmark little is known till its union with Sweden and Norway. The period of its glory was during the reign of Canute the Great, about the middle of the eleventh century; and its greatest debasement was during the reign of Christiern II., one of the completest tyrants which modern times have produced, and who has been justly styled the Nero of the North. In his reign the united empire of Sweden, Denmark, and Norway was dismembered, 1513 A. D.

Norway.

Q. When is Norway first noticed in history?—*A.* About the end of the tenth century. The first king of Norway was Olaus; and the country continued independent till the latter end of the fourteenth century, when by virtue of the treaty of Calmar, it was annexed to the united empire of Sweden, Denmark, and Norway, by Margaret of Waldemar, entitled the Semiramis of the North. Since that time, until the year 1815, it continued subject to Denmark, when, by the treaty of Paris, it was annexed to Sweden.

Poland.

Q. When is the kingdom of Poland first noticed in history?—*A.* About the latter end of the tenth century; when it was erected into a kingdom by Otho III., emperor of Germany, and Boleslaus I., the second in succession from the illustrious Piastus, elected its first sovereign. By the unjust partitions of this ill-fated country among its rapacious neighbours, Austria, Russia, and Prussia, it is now erased from the list of independent nations.

Russia.

Q. From what period does the empire of Russia date its rise?—*A.* From the ninth century of the Christian era; but its history is utterly unknown till the middle of the

fifteenth century, when it was freed from its subjection to the Tartars by the valour of John Basilowitz, or, as he is commonly called, Iwan Basilides.

Q. To whom is the vast and formidable empire of Russia principally indebted for its present grandeur and power?—*A.* To Peter the Great, the youngest son of Alexis Michaelowitz. He became master of the empire towards the end of the seventeenth century.

Q. Who were the most distinguished successors of Peter the Great?—*A.* His wife Catherine I.; his niece Anne, duchess of Courland; Elizabeth, his daughter; and Catherine II., the wife of the emperor Peter III.

Q. Mention the most celebrated princes who were contemporary with Peter the Great.—*A.* Lewis XIV. of France, and Charles XII. of Sweden.

Spain.

Q. Mention the leading historical epochs of the kingdom of Spain.—*A.* First, its subjection to the Romans for above five centuries, until it submitted, in the beginning of the fifth century of the Christian era, to the power of the Vandals. Secondly, its conquest by the Saracens and Moors, in the beginning of the eighth century. And, thirdly, its delivery from the sway of the Moorish monarchs in the beginning of the fifteenth century, when the whole of Spain was united under the sceptre of Ferdinand the Catholic.

Portugal.

Q. Mention the principal epochs in the history of Portugal.—*A.* First, its erection into an independent state in the eleventh century, by Alphonsus the Sixth, king of Castile and Leon; who rewarded Henry, the grandson of Robert, king of France, with that part of Portugal which was in the hands of the Christians, under the title of Count, for his bravery and assistance against the Moors. Secondly, its subjection, in the year 1580, to Philip II. of Spain, who claimed it in right of his mother. And, thirdly, its revolt, after it had been an appanage of the kingdom of Spain for sixty years, under the duke of Braganza, descended from the ancient kings of Portugal, who was proclaimed king by the title of Don John IV., 1640 A. D.

Naples.

Q. Who was the founder of the kingdom of Naples?—*A.* Robert Guiscard, one of the younger sons of Tancred of Hauteville, a Norman baron, in the eleventh century. This kingdom has been at various times an appanage of the German empire and the Spanish monarchy. In the middle of the thirteenth century, the pope Clement IV. gave the investiture of Naples and Sicily to Charles, count of Anjou, which his posterity continued to possess till nearly the end of the fourteenth century. In the year 1734, the same family was again placed on the throne.

Q. What countries are those termed the Two Sicilies?—*A.* Naples and the island of Sicily; a term which was once common to both.

Venice.

Q. When was Venice founded?—*A.* About the middle of the fifth century of the Christian era.

Q. To what cause did it owe its foundation?—*A.* To the ravages of Attila, king of the Huns; to avoid whose desolating fury the people of Italy escaped into the marshes of the Adriatic, and, in course of time, founded the city of Venice.

Switzerland.

Q. When did Switzerland, or the Helvetic Republic, take its rise?—*A.* In the beginning of the fourteenth century.

Q. What was the cause that Switzerland erected itself into a republic?—*A.* Albert, the successor of the emperor Rodolphus, of Hapsbourg, who was hereditary sovereign of several of the Swiss Cantons, wishing to erect the whole of these independent states into a principality for one of his sons, the Cantons of Schwitz, Ury, and Underwalden, combined to resist the tyrant, and with a small army of four or five hundred men defeated an immense host of the Austrians in the pass of Mogarte, in the year 1315. The rest of the Cantons by degrees joined the association; and after sixty pitched battles with their enemies, they won and secured their dear bought liberty.

Holland.

Q. When was the Republic of Holland established?—*A.* In the year 1579.

Q. What occasioned the establishment of the Republic of the Seven United Provinces of Holland?—*A.* The tyranny and cruelty of Philip II., king of Spain and of the Netherlands. This intolerant bigot endeavouring to establish the inquisition among his Flemish subjects, of the seventeen provinces of the Netherlands, seven, viz. Guelderland, Holland, Zealand, Friesland, Utrecht, Overyssel, and Groningen, united themselves under the conduct of the prince of Orange, a count of the German empire, and separated themselves from the odious yoke of Spain. Holland and the Netherlands are now denominated the Kingdom of the Netherlands.

America.

Q. When did the Europeans obtain their first knowledge of America?—*A.* About the latter end of the fifteenth century.

Q. Which were the most civilized native nations of America at the time of its discovery?—*A.* The Mexicans and Peruvians. The sovereigns of the Peruvians were called Incas.

Q. How is America supposed to have been first peopled?—*A.* It is conjectured that the Old and New Worlds were formerly united, some grand convulsion of nature having produced their separation; and that the new was peopled by emigration from the old continent, by way of Greenland.

Q. What favours this supposition?—*A.* The similarity of language, manners, and bodily appearance of the Greenlanders and northern Asiatics, and the Esquimaux or Iskimos, who inhabit that part of North America, which stretches from Labrador towards the North Pole. Additional credibility is also given to the supposition, from the circumstance, that of the twenty different species of animals which are enumerated as belonging to Kamtskatka, seventeen are to be found in America.

Q. What animals of the Old World were not to be found in America at the time of its discovery?—*A.* The horse and the cow.

Japan.

Q. When was Japan first known to Europeans?—*A.* About the middle of the sixteenth century of the Christian era. The Portuguese were the first discoverers.

India.

Q. What are the earliest accounts we have of India?—*A.* Those of the historian Herodotus, who lived about four centuries before the Christian era; and it is remarkable, that the character given of the people by that early writer perfectly corresponds with that of the modern Hindoos.

Q. When did the moderns first obtain any tolerable knowledge of India?—*A.* Not until the end of the fifteenth century of the Christian era, when the Portuguese navigator, Vasquez de Gama, discovered a passage thither by the Cape of Good Hope: from the age, however, of Alexander down to that discovery, there had constantly been some commercial intercourse between Europe and India, both by sea and across the Desert of Arabia.

Q. What are the distinctions of the principal inhabitants of India?—*A.* The Hindoos or Gentoos, the Mahomedans, and the Europeans.

Q. By whom was India first conquered?—*A.* By Alexander the Great, nearly three centuries and a half before the Christian era; when, with a handful of Macedonians, he overcame Porus, notwithstanding his immense army and his numerous elephants.

Q. Who were the Hindoos?—*A.* The original inhabitants.

Q. When did the Mahomedans establish themselves in India?—*A.* About the tenth century of the Christian era.

Q. Who first established the Mahomedan power in India?—*A.* Mahmoud, a Tartar; whose successor, Mohammed Gori, fixed the seat of the Mogul empire at Delhi, about the end of the twelfth century.

Q. Mention the revolutions which the Mogul empire has experienced in India?—*A.* The sovereignty founded by Mahmoud was overwhelmed in the thirteenth century, by Genghis or Zingis Khan; as was his empire, by Timour

or Tamerlane, in the following century, whose posterity are at this day on the throne of the Mogul empire. But the vast dominions of China, Great Bucharia, the greater part of India, Persia, Asia Minor, and Asiatic Russia, which once comprised that empire, are now dismembered, and subject to independent princes.

Q. Who was Aurengzebede?—*A.* One of the descendants of Tamerlane. This prince, murdering all his brethren, ascended the vacant throne; and uniting great talents with great crimes, concluded a long reign in 1707. But his successors being unable to wield the reins of so extensive an empire, Thomas Kouli Khan, or Nadir Schach, another Tartar chief, invaded Hindostan in 1739. On the death of this formidable invader, who was assassinated, eight years after, by some Persian officers in his service, the country being torn to pieces by contending chiefs, a body of foreign merchant adventurers (since styled the East India Company) was enabled, in the course of less than half a century, to sway the sceptre of Zingis Khan of Tamerlane, and of Aurengzebede.

Q. Who were the Moguls?—*A.* A people of eastern Tartary.

Q. Which is the most powerful European nation in India?—*A.* Great Britain.

Q. When did Great Britain first establish herself in India?—*A.* About the middle of the eighteenth century.

Q. What is the extent of British India?—*A.* Greater than twice that of Great Britain and Ireland together.

The Crusades.

Q. What were the crusades?—*A.* Expeditions of the Christians to the Holy Land of Jerusalem, to exterminate the infidels.

Q. How many expeditions were undertaken for this purpose?—*A.* Six. The first under Peter the Hermit; the second under the brother of Philip I. of France, then under the French king Lewis VII. and Conrad III. emperor of Germany; the third under Philip Augustus of France, the English king Richard I., and Frederick Barbarossa, emperor of Germany; the fourth under Baldwin, count of Flanders, who procured himself to be elected head of the Grecian empire of the East; the fifth

was undertaken to revenge an attack on Palestine by the sultan Sephadin of Egypt; and the sixth was under Lewis IX. of France.

Q. How long did the mania of these romantic enterprises last among the princes of Europe?—*A.* Nearly two hundred years, from the setting out of the first crusade, A. D. 1095, to the loss of Acre and all Palestine, A. D. 1291.

Q. What were the effects of the crusades?—*A.* The division of property among a number of smaller proprietors than had hitherto been the case in kingdoms subject to the feudal law, and the consequent acquisition of a spirit of independence among the lower classes of society.

Q. What number of Europeans is supposed to have fallen in the crusades?—*A.* Above two millions.

Historical Memoranda.

Q. Which century of the Christian era has conduced most to the happiness of mankind?—*A.* The fifteenth.

Q. Why?—*A.* During that period the art of printing was invented; navigation improved; commerce cultivated; the New World and the East and West Indies discovered; and the reformation of religion took place.

Q. What occasioned the reformation of religion?—*A.* The corruption of the sacred doctrines of Christianity by the church of Rome; and the infamous indulgences granted by that see, not only for sins already committed, but also for such as should be committed. By the Romish scale of commutation for crime, a bishop or abbot might commit murder for 10*l.*

Q. Mention the sovereigns who have voluntarily resigned sovereign power.—*A.* The Roman emperors Diocletian, Justin II. or the Younger; and Isaac Comnenus; the Turkish sultan Amurath, the father of Mahomet II., the captor of the Roman empire of the east, who abdicated twice in favour of his son; Carloman, king of the Franks; Charlemagne, emperor of Germany; Lotharius, the grandson of Charlemagne, and emperor of the West; Charles V.; Christana, daughter of Gustavus Adolphus, and queen of Sweden; Casimir, king of Poland; and Kien-Long, emperor of China, in the year 1796.

Q. Who gave the first instance of the abdication of sovereign power?—*A.* Dioclesian.

Q. Which were the most distinguished cities of antiquity?—*A.* Rome, Athens, Nineveh, Babylon, Jerusalem, Tyre, and Carthage.

Q. Which were the largest cities of antiquity?—*A.* Babylon, Nineveh, and Rome. The circumference of Babylon is said to have been sixty miles; that of Nineveh, forty-seven. In the modern sense of the word, however, these cities were fortified provinces, which contained gardens, arable ground, pasture for cattle, and every thing requisite for the subsistence of the inhabitants.

Q. Mention the cities of antiquity which were the most distinguished for their monuments of art.—*A.* Balbec in Syria, Palmyra in Arabia, and Thebes and Babylon, noted for their 100 brazen gates.

Q. Mention the sovereigns of the present states of Europe who have been assassinated.—*A.* Henry the Third of France; his successor Henry the Fourth, surnamed the Great; Gustavus the Third of Sweden; and Paul the First of Russia.

Q. For what are we indebted to the Phœnicians?—*A.* For the invention of writing and commercial navigation.

Q. Which was the first civilized part of the world?—*A.* Egypt.

Q. Who are the most distinguished learned men of whom we have the earliest notice?—*A.* The Greek poets Linus and Musæus; Orpheus, a celebrated poet, musician, and physician of Thrace; Chiron, a physician of Thessaly; and Esculapius, the renowned disciple of Chiron.

Q. When did these illustrious men flourish?—*A.* Between the years 2500 and 2900 of the world.

Q. Mention the great leading events which took place from the creation of the world to the universal deluge.—*A.* 1st, The creation of the world and of man; and 2dly, the destruction of the world by the universal deluge.

Q. Mention those which took place from the deluge to the end of the 2000th year of the world.—*A.* 1st, The dispersion of mankind at the destruction of the tower of Babel; 2dly, the foundation of the Chaldean monarchy,

and of the kingdom of Egypt, about 160 years after the deluge; and 3dly, the foundation of the Chinese and Assyrian empires, about eighty years after that of Egypt.

Q. Which were those which took place from the year 2000 to the year 3000 of the world?—*A.* The foundation of the Grecian states, and of the Persian empire; the invention of letters by Memnon the Egyptian; the Argonautic expedition; the Trojan war; and the building of the temple of Jerusalem.

Q. Which were those from the year 3000 to the year 4000 of the world?—*A.* The division of the kingdoms of Judah and Israel; the foundation of the empires of Rome and Macedon, and of the kingdoms of Carthage, Nineveh, Babylon, Media, and Cappadocia; and the introduction of the solar year by Julius Cæsar.

Q. What were the great events of the first century of the Christian era?—*A.* The birth of our Saviour Jesus Christ, and the promulgation of the Christian religion; the destruction of Jerusalem, and the dispersion of the Jews; the foundation of the city of London by the Romans; and the destruction of the cities of Herculaneum and Pompeii, by an irruption of mount Vesuvius.

Q. What were those of the second century?—*A.* The entire banishment of the Jews from Judea, and a plague over the whole known world.

Q. What were those of the third century?—*A.* An earthquake over the whole known world, and three successive days of darkness.

Q. What those of the fourth century?—*A.* The foundation of the empire of the Huns; the tenth and last persecution of the Christians; and the division of the Roman empire into the empires of the East and West.

Q. What were those of the fifth century?—*A.* The foundation of the Venetian States, and of the empires of the Goths and Vandals; the erection of France into a monarchy; the establishment of the Saxons in England; and the extinction of the empire of the West.

Q. What were those of the sixth century?—*A.* The establishment of the empire of the Saracens, and of the kingdom of the Lombards in Italy; the computation of time from the Christian era; the introduction of silk into Europe from China, by two Persian monks; the founda-

tion of the Heptarchy in England; and the publication of the Justinian code of laws.—During this century happened a terrible plague all over Europe, Asia, and Africa, which continued for the space of fifty-two years.

Q. What were those of the seventh century?—*A.* The commencement of the papal authority; the establishment of the Mahomedan religion; and the dissemination of the arts and sciences over Europe, which had hitherto been known only in Greece and Rome.

Q. Mention those of the eighth century.—*A.* The conquest of Spain by the Saracens; the first invasion of England by the Danes; and the computation of time from the Christian era first used in historical works.

Q. Which were those of the ninth century?—*A.* The foundation of the empire of Germany, of the kingdoms of Sweden, Norway, and Russia; the establishment of the Normans in France; and the union of the Heptarchy in England.

Q. Mention those of the tenth century.—*A.* The erection of Poland into a monarchy; the introduction of the Arabian method of notation into Europe; and the institution of juries in England.

Q. What were those of the eleventh century?—*A.* The foundation of the kingdoms of Denmark, Naples, and Portugal; the rise of the Ottoman power; the battle of Hastings, in consequence of which, William the Norman became king of England; and the first crusade to the Holy Land.—During this century, paper was first made of cotton and linen rags, musical notes were invented, and justices of the peace first appointed in England.

Q. Which were those of the twelfth century?—*A.* The institution of the Knights Templars, to defend the holy sepulchre at Jerusalem, and to protect Christian strangers; the study of the civil law revived, the Pandects of Justinian being now found in the ruins of Amalfi, in Italy; the publication of the canon law by Gratian, a monk of Bologna; and the rise of the Guelphs and the Ghibelines in Italy.—During this century, England was divided into six circuits; glass windows were first used in private houses; and the laws of England were digested by the celebrated Glanville.

Q. Those of the thirteenth century?—*A.* Surnames first used; Magna Charta enacted; the rise of the Tartar power under Genghiscan; the first institution of the odious tribunal of the inquisition; the Commons of England first summoned to parliament; the annexation of Wales to England; and the commencement of the Ottoman Empire.

Q. Mention those of the fourteenth century.—*A.* The foundation of the republic of Switzerland; the discovery of the properties of the magnetic needle; the invention of cannon, gunpowder, the mariner's compass, oil painting, and cards; the rise of the English power in France; the institution of the orders of the Garter and Bath; and the first creation of titles by patent.—During this century coals and bills of exchange were first used in England, and gold was first coined.

Q. Which were those of the fifteenth century?—*A.* The discovery of America, and the passage to the East Indies; printing, and engraving and etching invented; the empire of the Greeks overthrown by the Turks; the delivery of Spain from the dominion of the Moors; and the introduction of algebra into Europe.—During this century paper was made from linen rags in England; post-horses and stage-coaches first established; and weights and measures fixed.

Q. Which were those of the sixteenth century?—*A.* The establishment of the republics of Holland and Geneva; the reformation of religion; the revival of learning; the first voyage round the world performed by Magellan; the incorporation of the East India Company; the introduction of the Gregorian style; the great massacre of the Protestants at Paris on St. Bartholomew's eve; the invention of telescopes; the destruction of the Spanish armada; the use of watches, coaches, tobacco, knives, pins, and needles; the coinage of shillings; the weaving of stockings; and the manufacture of glass in England.

Q. Mention those of the seventeenth century.—*A.* The invention of decimal arithmetic, and of logarithms; the union of England and Scotland; the first British settlement formed in North America; the rise of the whig and tory factions in England; the abolition of monarchy in England; the abdication of James II. and the revolution

of 1688; and the great plague and fire of London.—During this century the circulation of the blood was discovered; tea was first used in England; the Bank and Royal Society established; and the habeas corpus, the land-tax, and toleration acts passed.

Q. Which were those of the eighteenth century?—*A.* The introduction of the new style into England; the independency of America; the French revolution; the union of Great Britain and Ireland; and the restoration of the old French government.

Q. Mention the great revolutions of power which have marked the history of mankind.—*A.* The conquests of the Medes and Persians under Cyrus the Great; 2dly, those of Alexander; 3dly, those of the Romans; 4thly, those of the Goths and Vandals; and 5thly, the French revolution.

Q. What state was first governed by laws?—*A.* Crete.

Q. Which is the first city of which mention is made in history?—*A.* Babel.

Q. What nation of antiquity first promoted navigation and commerce?—*A.* The Phœnicians.

Q. What of modern times?—*A.* Venice.

Q. What nation of modern times first promoted voyages of discovery?—*A* The Portuguese.

Q. By what name are those people called who lived before the flood?—*A.* Antediluvians; from the Latin words *ante* and *diluvium;* that is, before the deluge.

Q. Who were those who are denominated Postdiluvians?—*A.* Those who have inhabited the earth since the deluge. They derive their name from the Latin words *post*, after, and *diluvium*, the deluge; that is, after the deluge.

Rules for Studying History.

1. We should direct our attention, not to the frivolous anecdotes of a court, but to the circumstances which stamp the character and mark the destiny of a nation.

2. We should inquire, what has been the radical vice or predominant virtue of a nation?

3. What have been its naval or military achievements?

4. What has been the improvement or deterioration of its trade and commerce?

5. Wherein consist the excellences and the defects of its civil and municipal institutions?

6. The constitution and the influence of its ecclesiastical establishments.

7. We should trace the introduction of arts and manufactures, and observe the changes which have taken place in its manners and laws.

HISTORY OF GREECE.

Hail, Nature's utmost boast! unrival'd Greece!
My fairest reign! where every power benign
Conspir'd to blow the flower of human-kind,
And lavish'd all that genius can inspire.

THOMSON.

Clime of the unforgotten brave!
Whose land from plain to mountain-cave
Was Freedom's home or Glory's grave!
Shrine of the mighty! can it be,
That this is all remains of thee?

LORD BYRON.

Q. WHO were the ancient inhabitants of Greece?—*A.* The Pelasgi, the Hiantes, and the Leleges.

Q. When did the first dawn of civilization appear among the Grecian states?—*A.* When the Titans, a Phœnician or Egyptian colony, settled in the country about the time of Moses; namely, about 1800 years after the creation of the world.

Q. Which was the most ancient of the Grecian states?—*A.* Sicyon, founded by Ægilaus (thence sometimes called Ægialeia), about 260 years after the deluge.

Q. Which were the next states that were founded?—*A.* Argos, Athens, and Lelegia.

Q. Who was the founder of the kingdom of Argos?—*A.* Inachus, who was contemporary with Abraham, *viz.* 1856 B. C.

Q. Who founded Attica?—*A.* Cecrops, the leader of an Egyptian colony. By this prince the city of Athens was built, 1556 B. C.

Q. By whom was Lelegia founded?—*A.* By Lelex, in the beginning of the 16th century before the Christian



THE CITY OF ATHENS & ITS ARCHITECTURAL RUINS.



THE DEATH OF SOCRATES.



THE PASS OF THERMOPYLÆ.

W. Read. Sculp.

London. Sherwood & Co. October 1830

era. It derived its name of Lacedæmon from its fourth king, and of Sparta from that of his wife.

Q. What was the number of the Grecian states?—*A.* Twenty-nine.

Q. What was the extent of Greece?—*A.* About three hundred and eighty miles from north to south, and three hundred and ten from east to west.

Q. What were the geographical divisions of Greece?—*A.* 1st, The Peloponnesus; 2dly, Græcia Propria, or Proper Greece; 3dly, Epirus; and 4thly, Thessaly.

Q. What states occupied the Peloponnesus?—*A.* Sicyon, Argos, Messenia, Corinth, Achaia Propria, Arcadia, and Laconia.

Q. What Græcia Propria?—*A.* Attica, Megara, Bœotia, Locris, Epichnemidia, Doris, Phocis, Ozolæa, and Ætolia.

Q. Who occupied Epirus?—*A.* The Molossians, Amphilochians, Cassiopæans, Dræopians, Chaonians, Thresposians, Almenians, and Acarnanians.

Q. Who Thessaly?—*A.* The Thessalians, Estiotees, Pelasgians, Magnesians, and Phthiotians.

Q. Which were the most celebrated cities of Greece?—*A.* Athens, Thebes, Corinth, and Sparta or Lacedæmon.

Q. From what source are the facts of Grecian history deduced?—*A.* From the marble tablets found in the isle of Paros, one of the Cyclades, about the beginning of the 17th century, by Thomas, earl of Arundel, and now preserved among the Arundelian marbles at Oxford.

Q. What information do the Parian chronicles furnish?—*A.* They fix the dates of the most remarkable events in the history of Greece, from the time of Cecrops down to the age of Alexander the Great, in Greek capital letters.

Q. What two remarkable events are recorded in the chronicle of Paros?—*A.* The judgment of the Areopagus between Mars and Neptune, two princes of Thessaly; and the deluge of Deucalion.

Q. What was the Areopagus?—*A.* The supreme court of justice of the Athenians, to which the guardianship of the laws and the administration of justice were intrusted: it exercised a censorial power over the lives and manners of the citizens; and had likewise the custody of the

treasures of the state, the care of religion, and a tutorial power over the youth of the Republic.

Q. What was the Amphictyonic council?—*A.* A representative assembly of twelve of the states of Greece, which met twice a year at Thermopylæ, to consult concerning the general interests, and decide the differences which might arise between the respective states of Greece. This council, which was instituted by Amphictyon, the son of Deucalion, had the most admirable political effects in uniting the states, and giving them a common interest.

Q. Which were the most distinguished of the Grecian States?—*A.* Athens and Lacedæmon.

Q. Who was the founder of the city of Athens?—*A.* Cecrops, 1556 B. C.

Q. Who introduced alphabetic writing into Greece?—*A.* Cadmus, about 1519 B. C., from Phœnicia. At first the alphabet had only sixteen letters; and the mode of writing (termed Boustrophedon) was alternately from left to right, and right to left.

Q. What was the nature of the four solemn games, namely, the Olympic, the Pythian, the Nemean, and the Isthmian?—*A.* They consisted principally in contests of skill in all the athletic exercises, and had an admirable effect in diffusing the love of glory, and training the youth to martial exercises. They were not, however, confined to gymnastic and athletic exercises alone; they were also the resort of poets, historians, and philosophers, as the field where genius and learning might find competitors and reward.

Q. How did the Greeks compute time?—*A.* By Olympiads; that is revolutions of four complete years; the first of which began 776 years before the Christian era, and 28 years before the building of Rome.

Q. What was the nature of the Eleusinian games?—*A.* They were mysteries of a religious and moral nature, in which the doctrines of the unity of God, the immortality of the soul, and a future state of rewards and punishments, were inculcated.

Q. What was the object of the Argonautic expedition?—*A.* To open the commerce of the Euxine Sea, and to secure some establishments on its coasts.

Q. Why was the Argonautic expedition termed also the expedition of the Golden Fleece?—*A.* From the design of the adventurers in the expedition to carry off from the Colchians, against whom the expedition was directed, the Golden Fleeces which that people extended across the beds of the torrents, to collect the golden particles which were carried down from mount Caucasus.

Q. How was the Trojan war occasioned?—*A.* To recover Helen, the wife of Menelaus, king of Sparta, who had been carried off from her husband by Paris, the son of Priam, king of Troy.

Q. When did the Trojan war happen, and how long did it last?—*A.* It began 1184 years before the Christian era, and lasted ten years.

Q. Where was Troy situated?—*A.* It is supposed to have stood to the south of Abydos, towards the mouth of the Hellespont.

Q. What was the next memorable event in Grecian history?—*A.* The wars of the Heraclidæ, which happened above eighty years after the taking of Troy.

Q. Who were the Heraclidæ?—*A.* The descendants of Hercules, the sovereign of Mycenæ, who had been banished from his country by his uncle Eurystheus. But the Heraclidæ, returning to the Peloponnesus about a century after the expulsion of their ancestor, recovered possession of the states of Mycenæ from the successor of the usurper.

Q. Who was the last king of the Athenians?—*A.* Codrus; who showed a singular example of patriotism, in devoting himself to death, to prevent the civil war and bloodshed which then deluged his country.

Q. What kind of government succeeded that of royalty in Athens?—*A.* Republican; the chief magistrate of which was entitled *archon*.

Q. Was the example of Athens followed by the other states of Greece?—*A.* Yes.

Q. When was the republican form of government instituted at Athens?—*A.* One thousand and sixty-eight years before the Christian era.

Q. What was the amount of the population of Athens during its most flourishing era?—*A.* About twenty-one

thousand free citizens; the slaves amounted to four hundred thousand.

Q. Who were Lycurgus and Solon?—*A.* The former, who was the brother of Polydectes, one of the kings of Sparta, was the legislator of the Spartans; the latter, an illustrious Athenian of the race of Codrus, that of the Athenians.

Q. What were the principal of Lycurgus's institutions?—*A.* He divided the territory of the republic into thirty-nine thousand equal portions, among the whole of its free citizens; he abolished all useless arts and commerce, and substituted iron money instead of gold and silver; he compelled the whole of the citizens to take their meals in public; and he taught the Spartan youth obedience to the laws, reverence for old age, inflexible honour, contempt of danger and death, and, above all, the love of glory and of country.

Q. Who was Draco?—*A.* One of the archons of Athens; but his laws were so severe, that they were said to be written in blood.

Q. Mention the most remarkable defects in the Athenian legislation.—*A.* 1st, the vassalage of women, or their absolute subjection to the control of their nearest relations; 2dly, that all proposers of new laws found, on experience, impolitic, were subject to punishment; and, 3dly, the barbarous and disgraceful institutions of Ostracism and Petalism.

Q. What were the institutions of Ostracism and Petalism?—*A.* A ballot of all the citizens, in which each wrote down the name (in the first case on an oyster shell, and in the second on an olive leaf) of the person, in his opinion, most obnoxious to censure; and he who was thus marked out by the greatest number of voices, was, if the process was by the Ostracism, banished for ten years; if by the Petalism, for twelve years.

Q. By whom was the republican form of government in Athens overthrown?—*A.* By Pisistratus, 550 B. C. His sons Hippias and Hipparchus succeeded him in the regal power.

Q. Who restored the Athenian democracy?—*A.* Hermodias and Aristogiton.

Q. What were the principal wars in which the Athenians were engaged?—*A.* The Persian, the Peloponnesian, the Sacred, and the Roman.

Q. Mention the most signal battles fought during the first Persian war.—*A.* 1st, that on the plains of Marathon, in which Miltiades defeated Darius Hystaspes, 490 A. C.; 2dly, that of the straits of Thermopylæ, in which Leonidas and his three hundred Spartans overthrew the mighty host of Xerxes, the son of Darius; and 3dly, those of Salamis, Platæa, and Mycale, in which the fleets and army of Artaxerxes Longimanus, the successor of Xerxes, were completely destroyed.

Q. What was the occasion of the Peloponnesian war?—*A.* The pretensions of Athens to the command of the other states of Greece.

Q. How did this war terminate?—*A.* In the subjection of the Athenians to Lacedæmon, by the total defeat of the Athenian fleet by the Lacedæmonians, under the command of Lysander, at Ægos Potamos, 405 B. C.

Q. After the termination of the Peloponnesian war, how did Lysander conduct himself towards the Athenians?—*A.* He abolished the popular form of government in Athens, and substituted in its place absolute power under the direction of thirty tyrants; but a band of patriots, headed by Thrasybulus, soon expelled the usurpers, and once more reestablished the democracy.

Q. What was the occasion of the second Persian war, during the reign of Artaxerxes Mnemon?—*A.* The part which the Greek cities of Asia had taken with Cyrus, the younger brother of Artaxerxes, to dethrone his elder brother and sovereign.

Q. How did the Greek Asiatic cities assist Cyrus?—*A* Principally by the aid of 13,000 Greeks, under the command of Clearchus.

Q. How did Cyrus's expedition succeed against his brother?—*A.* In his total defeat and death. The remainder of the Grecian army, to the amount of 10,000 men, is celebrated for its amazing retreat, having traversed, under the command of Xenophon, an hostile country of 1600 miles in extent, from Babylon to the banks of the Euxine, or Black Sea.

Q. What steps did Artaxerxes take to revenge himself

upon the Grecian states?—*A.* Having excited a general league in Greece against Lacedæmon, he at length, after the honour of the country had been a considerable time sustained by its king Agesilaus, reduced it, as well as Athens, to the most humiliating condition, by the total defeat of the Lacedæmonian fleet at Cnidos, 387 B. C

Q. Mention the names of the principal of the Grecian colonies in Asia Minor.—*A.* The Æolians, the Ionians, and the Dorians.

Q. When, and by whom, was Thebes founded?—*A.* By Cadmus, 1448 years before the Christian era.

Q. What is the most remarkable circumstance in the early history of Thebes?—*A.* The misfortunes of the unhappy Œdipus, one of the successors of Cadmus; and the unnatural contention between the brothers Eteocles and Polynices, and their sons, for the sovereignty of their country.

Q. Who delivered the Theban republic from the dominion of Sparta?—*A.* Pelopidas and Epaminondas. In the war that ensued, Sparta and its ally Athens were completely humbled; but though Thebes was triumphant at the glorious battles of Leuctra and Mantinea, yet she was undone by the death of her illustrious leader Epaminondas, who fell in the last engagement, 363 B. C.

Q. How did this happen?—*A.* Artaxerxes, taking advantage of the enfeebled state of all parties, pretended to act the part of an intercessor, but, in fact, laid the foundation of the future destruction of the Grecian power, by stipulating that the lesser states should be independent of the greater.

Q. What was the occasion of the Sacred war?—*A.* A sacrilegious attempt of the Phocians to plunder the temple of Delphos.

Q. What was the result of this war?—*A.* In consequence of the battle of Cheronæa, fought 337 B. C., all the states of Greece were reduced to subjection to Philip, king of Macedon, whose aid had been courted by some of the contending parties.

Q. Who succeeded Philip in the sovereignty of Macedon?—*A.* His son Alexander, surnamed the Great. This *mighty murderer*, as he was styled by the Indian Brahmins, having, after a few successful battles, reduced all the

states of Greece to subjection, undertook his father's project for the conquest of Persia, and, with 30,000 foot and 5,000 horse, invaded the Persian dominions.

Q. What was his success?—*A.* In the battle of the Granicus he defeated the army of Darius Codomanus, consisting of 100,000 foot and 10,000 horse; in that of Issus he overthrew the Persian host of 400,000 men; and in that of Arbela, where he engaged Darius at the head of 700,000 men, he annihilated the Persian monarchy, which had subsisted for 206 years from its foundation by Cyrus the Great, 330 B. C.

Q. What became of Alexander's empire after his death?—*A.* It was divided among thirty-three of his principal officers. But the greater part of these new sovereigns having been destroyed in a series of wars and intrigues which ensued, a new partition of this vast empire again took place into four great monarchies, under Ptolemy, Lysimachus, Cassander, and Seleucus: of which the most powerful were that of Syria under Seleucus and his descendants, and that of Egypt under the Ptolemies.

Q. What was the nature of the Achaian league?—*A.* The union of a few of the smaller states to vindicate their freedom against the domineering influence of the greater. Of this league, the republic of Achaia was the head.

Q. What was the consequence of the Achaian league?—*A.* The reduction of Greece into the form of a Roman province.

Q. How was this accomplished?—*A.* The people of Ætolia being attacked by the Macedonians, the Ætolians, in conjunction with Aratus, the prætor of Achaia, besought the aid of the Romans, who speedily accomplished the reduction of Macedonia, and led its last sovereign, Perseus, captive to Rome, 167 B. C. In a little more than twenty years afterwards, the whole of Greece became a Roman province, under the name of Achaia, 146 B. C.

Q. Why was the name of Achaia given to Greece?—*A.* From the superior influence of the Achaian league.

Q. For what was the Greek language distinguished?—*A.* For its compass of sound, significance of expression, suavity of style, and elevation of sentiment. It was in such high estimation among the Romans, that Polybius,

Appian, and Dion Cassius, wrote their Roman histories in Greek.

Q. Into how many provincial dialects was the Greek language divided?—*A.* Into four; the Attic, the Ionic, the Doric, and the Æolic; of which the Attic was the purest; and next to it, the Ionic.

Q. Mention the principal of the Grecian states in which these dialects were spoken.—*A.* The Attic was spoken in Athens; the Ionic, in the Grecian states of Asia Minor; the Doric, by the Lacedæmonians and Argives; and the Æolic, by the Bœotians and the inhabitants of Æolia.

Q. Mention the principal Grecian authors who have written in the Attic dialect.—*A.* Plato, Thucydides, Xenophon, Isocrates, Demosthenes, and Aristophanes.

Q. Those who have written in the Ionic dialect.—*A.* Herodotus and Hippocrates.

Q. Those in the Doric.—*A.* Theocritus, Pindar, and Archimedes.

Q. What are the names of the eminent Grecian poets?—*A.* Linus, Orpheus, Homer, Hesiod, Archilochus, Terpander, Sappho, Alcæus, Simonides, Pindar, and Anacreon.

Q. Who were the most eminent dramatic writers of Greece?—*A.* Æschylus, Euripides, Sophocles, Aristophanes, and Menander.

Q. Who was the founder of the Grecian drama?—*A* Thespis, who was contemporary with Solon, 590 B. C.

Q. Mention the most celebrated Greek historians.—*A* Herodotus, Thucydides, Xenophon, Polybius, Diodorus Siculus, Dionysius of Halicarnassus, Plutarch, and Arrian.

Q. Who were the most famous orators of Greece?—*A.* Æschines, Demosthenes, and Isocrates.

Q. Who were the most eminent philosophers of Greece?—*A.* Thales, the founder of the Ionic school; Pythagoras, the founder of the Italian sect; Xenophanes, the founder of the Eleatic sect; Socrates, the founder of the Socratic school; Plato, the founder of the Platonic school; Aristotle, the founder of the Peripatetic sect; Pyrrho, the founder of the Sceptical sect; and Epicurus, the founder of the Epicurean sect.

Q. Who were the Cynics?—*A.* Pretended philosophers who condemned all knowledge as useless, and held, that virtue consisted in renouncing all the conveniences of life.

Q. Who were the Stoics?—*A.* Philosophers who professed themselves not to be influenced by any of the passions and feelings of human nature: they held, that virtue consisted in accommodating the disposition of the mind to the immutable laws of nature; vice, in opposing those laws.

Q. Mention the most distinguished Grecian generals.—*A.* Miltiades, Themistocles, and Xenophon, of Athens; Lysander and Agesilaus, of Sparta; Pelopidas and Epaminondas, of Thebes; Aratus and Philopœmen, of Achaia; Pyrrhus, of Epirus; and Philip and Alexander the Great, of Macedon.

Q. Who were tne most distinguished Grecian artists?—*A.* Praxiteles, Zeuxis, Apelles, Agesander, Polydorus, Athenodorus, Parrhasius, Protogenes, and Timanthes.

Q. In which of the fine arts did the Greeks excel?—*A.* In architecture, sculpture, poetry, and painting; which they carried to the summit of perfection.

Q. What specimens of Grecian architecture remain entire?—*A.* The temples of Theseus, Neptune, and Minerva.

Q. Who were the Ephori?—*A.* The legislative and executive magistrates of Lacedæmon: they were also the inspectors of the education and manners of the youth of the state.

Q. Who were the Helots?—*A.* Lacedæmonian slaves.

Q. Mention some of the Grecian laws respecting trade.—*A.* Tradesmen taking less than they asked for their commodities, were subject to punishment; and bad workmen were prohibited from exercising their trades.

Q. What were the Grecian laws respecting women?—*A.* The Athenians had so mean an opinion of the capacity of women, that they prohibited them from intermeddling in any thing beyond a medium of barley.

Q. Mention the Grecian laws respecting marriage.—*A.* Celibacy in men was deemed infamous, and as an encouragement to the holy institution of marriage, those who were the fathers of three children, had great immunities

granted them. In Athens, before any one could be intrusted with any command or public duty, he must be married and the father of children.

Q. How did the Greeks punish celibacy?—*A.* Old bachelors were compelled to walk naked through the market place once every winter, and to sing verses in disparagement of themselves and expressive of their opinion, that they were punished justly.

Q. In what were the Grecian laws remarkable respecting marriage portions?—*A.* Wives were allowed to carry no other dowry to their husbands than some trifling household vessels, and three suits of clothes. And in the case of orphan virgins, who had no fortune, their relations next in blood were obliged to marry them, or settle upon them a portion according to their ability. Orphan virgins having many kindred equally related to them, were to be jointly provided for by them all.

Q. What were the provisions of the Athenian laws respecting extravagance?—*A.* Spendthrifts were deemed infamous, and forfeited their right of being buried in the sepulchres of their fathers; and all those who died in debt were denied burial till satisfaction was made to the creditor.

Q. How did the Athenian laws punish harlots?—*A.* They were compelled to wear flowered garments as badges of their infamous mode of life; and adulteresses were prohibited to attire themselves in fine garments.

HISTORY OF ROME.

The pride of earth! Rome in her glory see!
A race of heroes! in whose virtuous times
Which knew no stain, save that with partial flame
Their dearest country they too fondly loved:

The meanest bosom felt a thirst for fame!
Flight their worst death, and shame their only fear.
Life had no charms, nor any terrors fate,
When Rome and glory called.

THOMSON.

Q. WHAT is the origin of the city and state of Rome?—*A.* The most common account is, that it was founded by



CICERO PLEADING BEFORE THE ROMAN SENATE.



THE DEATH OF LUCRETIA.



ROMAN FILIAL PIETY.

London Sherwood & Cº October 1830

a troop of shepherds or banditti, under the command of their leader Romulus, 753 years B. C.

Obs. Chronologists are not agreed about the exact time of the foundation of Rome. The Roman writers themselves, and all who have followed them on the subject, differ widely respecting it. Polybius fixes it in the year B. C. 751. Portius Cato, and some others, one year earlier. According to Marcus Verrius Flaccus, the supposed author of the Capitoline Tables, and Livy, it happened in the year 752 B. C. Terentius Varro places it 753 years B. C. Fabius Pictor, who is followed by Diodorus Siculus, assigns it to 747 B. C. Sir Isaac Newton adopts the year 627; and Playfair, after Varro, whose computation was used by the Roman emperors in their public instruments, places it in the year B. C. 753.

Q. Where was Rome situated?—*A.* In Italy.

Q. From whom did the Romans derive their knowledge of the arts and sciences, their maxims of government, the art of military tactics, the institution of public games, and the science of auspices and augury?—*A.* From the Etruscans, one of the ancient tribes of Italy; who, from the several monuments of the fine arts which exist of that nation at this day, appear to have been a highly refined and polished people many ages before the Roman name was known.

Q. Mention the principal epochs in Roman history.—*A.* First, the regal government; secondly, the republican government; and thirdly, the imperial government.

Q. What was the duration of the regal government?—*A.* Two hundred and forty-four years, under seven kings.

Q. Who were the seven kings?—*A.* Romulus, Numa Pompilius, Tullus Hostilius, Ancus Martius, Tarquinius Priscus, Servius Tullius, and Tarquinius Superbus.

Q. Which was the best of the Roman kings?—*A.* Numa Pompilius; he reformed the Roman calendar, abolished the practice of human sacrifices, and reformed the national religion.

Q. Who were the Horatii and Curiatii?—*A.* Branches of two illustrious families of Rome and Alba. To their individual valour was intrusted the decision of the dispute between their respective countries. By the defeat and death of the Curiatii, Alba became subject to Rome.

Q. What was the occasion of the abolition of the regal dignity at Rome?—*A.* The rape committed by Sextus, the son of Tarquin the Proud, on Lucretia, the wife of Collatinus.

Q. What kind of government succeeded that of royalty at Rome?—*A.* The consular; in which the supreme authority was intrusted to two magistrates, called *consuls.*

Q. When was the republican form of government established in Rome?—*A.* Five hundred and eighty years before the Christian era.

Q. What was the senate?—*A.* The great council of the state.

Q. What was the extent of the power of the senate?—*A.* It had the guardianship of the public religion,—the direction of the treasury,—the appointment of ambassadors and of the officers of the state,—and the making and abrogating of the laws.

Q. What was the number of the senate?—*A.* At first it consisted of 100 members; but in the time of Julius Cæsar it was increased to 900; and after his death to 1000 : but when Augustus ascended the imperial throne, he reduced the number to 600.

Q. Who were the equites or knights?—*A.* They were the young men of each tribe, who were the most distinguished for their rank, their wealth, and accomplishments. At first they were chosen by Romulus as his body guard.

Q. How were the Roman people divided?—*A.* Into Patricians and Plebeians; connected together as patrons and clients. The nobles were styled *nobiles;* the Plebeians, *ignobiles.*

Q. Who were the Patricians?—*A.* The nobles.

Q. Who were the Plebeians?—*A.* The commoners.

Q. Into how many classes were the Roman people divided?—*A.* Into six, containing 193 centuries.

Q. What was meant by the distinction of patron and client?—*A.* By these terms were signified the protector and the protected. It was the part of the patron to advise and defend his client, to assist him with his interest and substance, in short to do every thing for him that a parent ought to do for his child. The client was, in return, obliged to pay all kind of respect to his patron, and to serve him with his life and fortune in any extremity.

Q. What were the titles of the officers by whom the republic was governed?—*A.* Consuls, dictators, prætors,

censors, tribunes of the people, ædiles, questors, proconsuls, and proprætors.

Q. How long did the consular government last?—*A.* Four hundred and sixty-five years: namely, from the extinction of the regal power in the 244th year after the foundation of the city, to the 44th year before the Christian era, when Augustus assumed the imperial power.

Q. What was the power of the consuls?—*A.* They had the supreme administration of justice, the disposal of the public money, the power of convoking the senate and assembling the people, and of raising armies; but their authority was limited to one year.

Q. Who were the first consuls?—*A.* Brutus and Collatinus; the latter was the husband of Lucretia.

Q. In the war with Porsena, king of Etruria, mention the exploits of romantic heroism which signalized some of the Romans.—*A.* Horatius Cocles's defence of a narrow pass against the whole army of Porsena, until the bridge, which led into the city of Rome, was broken down; and the unshaken fortitude of Mutius Scævola, in holding his hand in a pan of burning coals until it was consumed, in order to give the king a specimen of Roman courage.

Q. What act reflects an additional lustre on Porsena's magnanimous conduct towards Mutius Scævola and Clelia?—*A.* After the conclusion of the war, knowing that the people of Rome were reduced to great straits for want of provisions, that generous prince ordered his troops to leave their tents behind them, furnished with all sorts of provisions and other necessaries, and to carry nothing away with them but their arms.

Q. How did the Romans acknowledge a conduct so grateful to them?—*A.* By erecting a statue to the king, near the comitium, and by presenting him with a throne, a sceptre, a crown of gold, and a triumphal robe. And to preserve the remembrance of such noble liberality, they ordained, that whenever any effects belonging to the public were to be sold, they were to be proclaimed by a herald in the following words, "These are Porsena's goods;" the intention of which was to preserve the memory of that prince's kindness, and to signify, that the goods exposed to sale would be sold cheap.

Q. Why was a dictator first appointed?—*A.* To compel the plebeians, who refused to enlist for the protection of the state, unless they were relieved from the oppression of the nobles, to enrol their names for the public service.

Q. Who was the first dictator?—*A.* Lartius.

Q. When were tribunes first created?—*A.* At the time the plebeians encamped on the Mons Sacer, in order to obtain a redress of their grievances from the nobles.

Q. What was the number of the tribunes?—*A.* At first they were five; they were afterwards increased to ten.

Q. What was the extent of the tribunitian power?—*A.* Though they had no seat in the senate, and their authority was confined to the limits of a mile from the city, yet they had the power, by a single vote, to suspend and annul the decrees and the sentences of the consuls.

Q. Who were the first tribunes?—*A.* Sicinius Bellutus, and L. Junius Brutus, the leaders of the late sedition.

Q. What was the nature of the office of Ædile?—*A.* The care of the public buildings, and the observation of the festivals.

Q. Who was Coriolanus?—*A.* A patrician of senatorial rank, who imprudently proposing the abolition of the tribunitian power, was condemned to perpetual exile. Assisted by the Volscians, he invested the city of Rome with the intention of avenging his wrongs, but was diverted from his criminal purpose by the intercession of his mother Volumnia, and Virgilia his wife, accompanied by all the principal women of Rome.

Q. Who was Quintus Cincinnatus?—*A.* One of the consuls of Rome, who after he had been reduced, by the payment of the fine which had been imposed upon his son Cæso by the tribunes, to such poverty as to be obliged to cultivate his few remaining acres of land with his own hand, was raised to the dictatorship.

Q. Why was the decemvirate established?—*A.* To frame and digest a code of laws for the explanation and security of all orders of the state.

Q. What were the laws enacted by the decemviri?—*A.* The twelve tables. These laws were afterwards increased by the senatus consulta, the plebiscita, the edictum perpetuum, and, in latter times, by the constitutions of the emperors.

Q. How was the Roman state governed by the decemviri?—*A.* They were invested with all the powers of the government. Each decemvir by turn presided for a day, and had the sovereign authority with its insignia, the lictors and fasces.

Q. What was the cause of the abolition of the decemvirate?—*A.* The lawless passion entertained by Appius Claudius, one of the number, for Virginia, the betrothed spouse of Icilius, formerly a tribune of the people. Virginius, to deliver his hapless daughter from the infamous designs of the decemvir, plunged a dagger into her breast, in the midst of the forum: and the shocking scene so inflamed the resentment of the Roman people, that they instantly abolished that hated magistracy, after it had endured three years, 449 B. C.

Q. What kind of government followed?—*A.* The consular, with which the tribunes of the people were restored.

Q. Why were military tribunes created?—*A.* To prevent the plebeians from succeeding in their demand of the right of intermarriage with the patricians, and of exercising the higher offices of the state.

Q. What was the census?—*A.* A survey of the names, dwellings, number of children, and amount of the fortunes of the Roman people.

Q. What was the duty of the censors?—*A.* To inspect the morals and regulate the duties of all the citizens, and to take an estimate or census every five years of the number and estates of the people.

Q. When was Rome taken and burnt by the Gauls?—*A.* Three hundred and eighty-nine years before the Christian era, under Brennus; who had previously defeated the Roman army near the river Allia, with the loss of forty thousand men.

Q. Who delivered Rome from the dominion of the Gauls?—*A.* Furius Camillus, who had succeeded Cincinnatus in the dictatorship. This brave man, returning from the exile to which the dissensions of his ungrateful countrymen had condemned him, delivered his country from the disgraceful sway of the Gauls, while the defenders of the capital were in treaty with Brennus for a mitigation of the slavery he designed for them.

Q. When was the entire conquest of Italy achieved by the Romans?—*A.* After the defeat of Pyrrhus, king of Epirus, at Beneventum; which happened about 480 years after the foundation of the city.

Q. By what means did the plebeians accomplish their eligibility with the patricians, to the higher offices and dignities of the republic?—*A.* From the pique of female pride. The younger daughter of Fabius Ambustus, married to a plebeian, envious of the honours she observed paid to her elder sister, the wife of a patrician, stimulated her father to the assertion of the long wished for privilege; which, after much turbulence and contest, was at length obtained, 366 B. C.

Q. What was the occasion of the Punic wars?—*A.* A desire of the Romans to expel the Carthaginians from Sicily, which had long been considered as the granary of Italy, and of acquiring its entire dominion.

Q. Mention the principal battles fought in the course of the Punic wars.—*A.* In Italy, those at Trebia, the Lake of Thrasymenus, and Cannæ, gained by the Carthaginian general Hannibal over the Romans; and that of Zama, in Africa, where the Carthaginians were totally defeated.

Q. What was the result of the Punic wars?—*A.* In the third, Carthage was taken by storm, and utterly razed to the ground, 146 B. C.

Q. Mention the most distinguished generals engaged in the Punic wars.—*A.* Regulus, Hannibal, Fabius Maximus, Marcellus, Scipio the younger, afterwards surnamed Africanus, and Asdrubal, the brother of Hannibal.

Q. Who were the Gracchi?—*A.* Two noble youths, Tiberius and Caius, whose zeal to reform the growing corruptions of the state, and to limit the overgrown property of the nobles, so incurred the resentment of that order, that both the patriotic brothers fell victims.

Q. What good resulted to the Roman state from the sedition (as it is erroneously called) of the Gracchi?—*A.* The freeing of the inferior magistrates of the state from the control of the patricians.

Q. What was the occasion of the Jugurthine war?—*A.* The attempt of Jugurtha, the nephew of Micipsa, king of Numidia, to usurp the entire sovereignty of that

kingdom, which had been divided by his uncle between him and his cousins, Adherbal and Hiempsal, the sons of Micipsa. To punish his murder of the two young princes, the Roman state declared war against Jugurtha, and the consul Marius having taken him prisoner, sent him in chains to Rome, where he was starved to death in a dungeon, 103 B. C.

Q. Who was Micipsa?—*A.* The son of Massinissa, who had co-operated with Hannibal against the Romans.

Q. What was the occasion of the Social war?—*A.* The endeavour of the allied states of Italy to attain the right of citizenship, which had been unjustly withheld from them by the intrigues of the senate.

Q. Who were Sylla and Marius?—*A.* Rival generals of the republic, and remarkable for their horrible massacres and proscriptions of their fellow-countrymen, while each of them usurped the sovereignty of his country.

Q. Of whom did the first triumvirate consist?—*A.* Of Crassus, Pompey, and Julius Cæsar. Crassus perishing in an expedition against the Parthians, Cæsar and Pompey each aspired to the sole dominion of their country. A civil war being the necessary consequence, the battle of Pharsalia, in which Cæsar entirely defeated his rival, determined the fate of Pompey; who flying to Egypt, in order to put himself under the protection of Ptolemy, king of that country, was basely murdered by the ministers of that prince, 49 B. C.

Q. What ensued after Pompey's death?—*A.* Cæsar arriving in Egypt, and being captivated by the charms of Cleopatra, who had, by her father's will, been left joint heir with her brother to the kingdom, decided the dispute respecting the sovereignty of Egypt in favour of Cleopatra, who though the sister, and, by the custom of the country, the wife of Ptolemy, was ambitious of undivided authority.

Q. What remarkable accident happened during the war between Ptolemy and the Romans?—*A.* The destruction of the famous library of Alexandria, which was burned to ashes, 48 B. C.

Q. After the death of Pompey, what opposition did Cæsar meet with to his designs to render himself absolute master of his country?—*A.* He was opposed by Cato and Scipio, and

the sons of Pompey; but these illustrious men being defeated in the decisive engagement of Thapsus, Cato determined not to survive the liberties of his country, and put an end to his existence in Utica, whither he had fled with an intention of defending himself.

Q. What conduct did Cæsar pursue after the subjection of his enemies?—*A.* Returning to Rome, he was hailed the father of his country—was created perpetual dictator, and master of the morals of the people—his person declared sacred under the title of Imperator—and he was invested with all the great dignities of the state. He, however, laboured to reform every species of abuse or grievance, and directed his attention solely to the prosperity and happiness of the Roman people. But it being rumoured that he intended to add to his numerous titles that of king, a conspiracy was formed against him by sixty of the senators, at the head of whom were Brutus and Cassius; and on the Ides of March, the day supposed to be fixed on for investing him with the diadem, he was assailed by the conspirators, while taking his seat in the senate-house, where he fell pierced by twenty-three wounds, in the fifty-sixth year of his age, and about fourteen years after he had begun the conquest of the then known world, 43 B. C.

Q. What was meant by the title of imperator?—*A.* Under the republic that word signified no more than generalissimo, or commander in chief of the whole armed force of the state; and, if we except those tyrants who violated every law of nature and decency, its signification went no further, even when Rome had surrendered her liberties to the will of one man, than to signify the general and first magistrate of the state. Its first use, in the acceptation the word emperor is now received, appears to have been after the Roman emperors had fixed their residence at a distance from the capital.

Q. What ensued on Cæsar's death?—*A.* Antony, Lepidus, and Octavius, the grand-nephew and adopted heir of Cæsar, desirous of succeeding to the power of the dictator, formed a second triumvirate, divided the empire among themselves, and to cement their infernal union, each made a terrible sacrifice of his friends to the vengeance of his associates.

Q. Was no opposition made to this usurpation?—*A.* Yes;

Brutus and Cassius, the leaders of the late conspiracy, had assembled a formidable army in Thrace; but in the engagement which ensued at Philippi, Antony and Octavius were victorious; and Brutus and Cassius, to escape the vengeance of their enemies, sought a voluntary death.

Q. How did the new triumvirate divide the empire between themselves?—*A.* It was agreed, that Augustus should have the West, Antony the East, and Lepidus the provinces of Africa. But this arrangement did not last long; for Lepidus attempting to invade the province of Antony, was soon deprived of his share in the triumvirate; and the madness of Antony in lavishing the provinces of the empire on his paramour Cleopatra and her children, and his repudiation of his wife Octavia, the sister of Augustus, gave his crafty colleague but too just a plea to attempt to deprive him of his share of power; and which the decisive naval conflict fought at Actium, on the coast of Epirus, confirmed, 31 B. C.

Q. What became of Antony?—*A.* Flying to Egypt, after an ineffectual resistance against his victorious rival, he put an end to his existence; and his example was soon followed by Cleopatra: from which time Octavius became sole master of the Roman empire, 27 B. C.

Q. What was the extent of the Roman empire at this time?—*A.* Its boundaries were, on the west, the Atlantic Ocean; the Rhine and the Danube on the north; the Euphrates on the east; and towards the south the sandy deserts of Arabia.

Q. What the population?—*A.* Mr. Gibbon estimates the free citizens of the empire at 20,000,000 souls, the provincials at twice that number, and the slaves at a number equal to the free citizens and provincials.

Q. What distinguished event happened during the reign of Augustus?—*A.* The birth of our Lord and Saviour Jesus Christ, who was crucified during the reign of Tiberius.

Q. Who succeeded Augustus?—*A.* His step-son Tiberius.

Q. Which of the Roman emperors are styled the twelve Cæsars?—*A.* The twelve immediate successors of Cæsar. But the imperial house of Cæsar was extinguished by the

death of Nero, and his family was continued afterwards only by the fictitious rite of adoption and female alliance.

Q. What are the grand leading events of the Roman empire, from the commencement of the Christian era, to its extinction by the Turks?—*A.* 1st, The translation of the seat of government from Rome to Constantinople, in the year 331 of the Christian era, during the reign of Constantine the Great; 2dly, the partition of the empire by Theodosius the Great, between his sons Arcadius and Honorius, and the establishment of the Eastern and Western Empires, 395 A. D.; 3dly, the extinction of the empire of the West by the Goths, Huns, and Vandals, under their kings, Alaric, Attila, and Genseric, in the year 476, during the reign of Romulus Augustulus; and 4thly, the extinction of the Eastern empire, by the Ottomans, under Mahomet II. in the year 1453, after having been subject to the government of seventy-six emperors, from Arcadius to Constantine Palœogus, the latter of whom perished at the taking of the capital of Constantinople.

Q. Which were the best of the Roman emperors?—*A.* Vespasian; Titus; Trajan; Hadrian; and particularly the Antonines, Titus Aurelius and Marcus Aurelius, surnamed Antoninus Pius and Marcus Antoninus; Pertinax; Alexander Severus; Decius; Claudius; Tacitus; Aurelian; Probus; and Tiberius II.

Q. Which the worst?—*A.* Tiberius I., Caligula, Nero, Vitellius, Domitian, Commodus, Caracalla, Heliogabalus, Maximin, and Justinian II.

Q. For what is the emperor Justinian I. principally distinguished?—*A.* For the code of laws which he formed, and which is the foundation of the civil jurisprudence of Europe.

Q. Who were the most infamous of the Roman empresses?—*A.* Livia, the wife of Augustus; Messalina and Agrippina, the wives of Claudius; and Faustina, the wife of Marcus Antoninus.

Q. In which of the reigns of the Roman emperors did Christianity make its appearance?—*A.* In that of Augustus.

Q. Which of the Roman emperors particularly favoured

the Christian religion?—*A.* Constantine, and his sons; Valentinian, Valens, Gratian, and Theodosius the Great. During the joint reign of Valentinian and Valens, it received its legal establishment as the national religion of the Roman world.

Q. Which were its greatest oppressors?—*A.* Dioclesian, Galerius, and Julian.

Q. What were the most remarkable events during the reign of Titus?—*A.* The taking and destruction of the city of Jerusalem, seventy years after the commencement of the Christian era; the destruction of the cities of Herculaneum and Pompeii by the eruption of mount Vesuvius; and the entire reduction of Britain under the Roman dominion.

Q. Who were the most distinguished Roman historians?—*A.* Livy, Sallust, Varro, Cæsar, and Tacitus. Fabius Pictor was the most ancient historian; but his writings were destroyed when Rome was burnt by the Gauls.

Q. Who the dramatic writers?—*A.* Plautus, Terence, and Seneca.

Q. Who the orators?—*A.* Cicero and Hortensius.

Q. Who were the most eminent Roman poets?—*A.* Lucretius, Catullus, Tibullus, Propertius, Virgil, Horace, Ovid, Martial, Juvenal, Lucan, Persius, Statius, and Silius Italicus.

Q. Mention the most eminent philosophers of Rome.—*A.* Seneca, Cicero, and Pliny.

Q. What were the denominations of the Roman priesthood?—*A.* The pontiffs, the augurs, the aruspices, the oracles, the vestals, the flamines, the salii, &c.

Q. Who were the pontifices?—*A.* The priests or ministers of religion. The pontifex maximus, or high priest, was supreme judge and arbiter in all religious matters.

Q. What was the office of the augurs?—*A.* To foretell future events, chiefly from the flight, chirping, or feeding of birds.

Q. What was the office of the aruspices?—*A.* They examined the victims and their entrails after they were sacrificed, and thence derived omens of futurity.

Q. Who were the vestals?—*A.* They were virgins appointed to keep the sacred fire always burning, and were bound to their ministry for thirty years. During the first

ten years they learned the sacred rites; during the next ten years they performed them; and during the last ten years they taught the younger virgins.

Q. Who were the sibyls?—*A.* Prophetesses.

Q. What were the Roman laws concerning debtors?—*A.* By the law of the Twelve Tables, they were delivered up as slaves to their creditors.

Q. What was the power of fathers over their children?—*A.* For many ages after the foundation of the city, a father had the power of life and death over his children; which likewise extended to grandchildren and great grandchildren: none of whom were their own masters till the death of their father and grandfather.

Q. What was the nature of the law of divorce?—*A.* A man might, among other causes, divorce his wife if she had counterfeited his private keys, or even drunk wine without his knowledge.

Q. Describe the dress of the Roman citizens during the republican form of government.—*A.* The universal dress of the Plebeians was a white toga; the toga of the equestrian was fringed with a narrow border of purple; that of the Patricians with a broad border of the same colour: but the robe of the imperator or generalissimo was entirely of purple.

Q. What were the political divisions of the Roman empire?—*A.* Those of prefectures, and the subordinate divisions of provinces. The prefectures were four, namely, that of the East, that of Illyria, that of Italy, and that of Gaul.

Q. What military force did the Romans employ to defend those extensive dominions?—*A.* Four hundred and fifty thousand men.

Q. What were the component parts of the military force of the Romans?—*A.* The legions, the auxiliaries, and the guards.

Q. Of what number of men did the legion consist?—*A.* Of twelve thousand five hundred men; 6831 of whom were Roman citizens; the rest auxiliaries.

Q. At what time was the empire of Rome at its greatest extent?—*A.* During the reign of Trajan.

Q. What was its extent at that period?—*A.* It comprehended all Italy, part of Germany, France, the Nether-



SIGNING OF MAGNA CHARTA
AT RUNNYMEDE



QUEEN ELIZABETH HARANGUING THE ENGLISH
ARMY IN SIGHT OF THE SPANISH ARMADA



THE BATTLE OF WATERLOO.

W. Read. Sculp.

London. Sherwood & Cº October 1830

lands, the greater part of Britain, Spain, Barbary, Biledulgerid, Egypt, Turkey in Europe and Asia, and Persia.

Q. What was the extent of the city of Rome at that time?—*A.* About fifty miles in circuit.

Q. What its population?—*A.* About six millions and a half.

Q. When was Rome in its zenith of greatness and full extent of power?—*A.* During that period which elapsed from the accession of Augustus to the death of Antoninus Pius, a space of nearly two hundred years, during which time the empire continued stationary in its full meridian blaze, and enjoyed a state of political happiness and prosperity which has seldom fallen to the lot of any nation.

Q. What length of time was Rome employed in subduing and plundering the world?—*A.* Nearly seven hundred years.

Q. From what time may the decline and fall of the Roman empire be dated?—*A.* From the reign of Valens.

HISTORY OF ENGLAND.

Land of the wise, the eloquent, the free.

PROLOGUE TO LORD MORPETH'S THE LAST OF THE GREEKS, OR THE FALL OF CONSTANTINOPLE.

Still may Freedom, with majestic mien,
Pacing thy rocks and thy green vales be seen.

BOWLES.

Q. To what period does the authentic history of England reach?—*A.* To the invasion of the Romans under Julius Cæsar, which happened fifty-five years before the Christian era.

Q. When is Britain supposed to have been first peopled?—*A.* About 1100 years before the Christian era.

Q. By what people was Britain first occupied?—*A.* By a tribe of Celtic Gauls.

Q. What ground is there for this opinion?—*A.* The great similarity of the manners, language, government,

and religion of the ancient Britons, at the time of the Roman invasion, to those of the Gallic Celtæ.

Q. Is it universally believed that the origin of the English is Celtic?—*A.* No: some authors have assigned their origin to a colony of Egyptians and Trojans; others have been of opinion that they derive their descent from a Scandinavian and Spanish stock. According to Geoffrey of Monmouth, an ancient British historian, Brute, a Trojan prince, arrived in Britain with his companions, not many years after the sacking of the city of Troy by the Greeks, and were the first inhabitants of this island. But these suppositions are entirely fabulous.

Q. Whence do the present people of Britain, in general, derive their descent?—*A.* From the Saxons, the Angles, and the Jutes, ancient German tribes; as also from the Danes and Normans.

Q. Are there no traces of Roman origin in the descent of the British?—*A.* Probably not. For the Roman colonists of provincial Britain, discouraged by the civil commotions among the natives, and the continual incursions of the Picts and Scots, after the departure of the Roman legions, disposed of their estates, and retired to the continent.

Q. How was Britain governed at the time of the Roman invasion?—*A.* It was divided among a variety of petty sovereignties, in number about thirty; of which the most considerable were the Belgæ, in the West; the Brigantes, in the North; the Silures, in South Wales; and the Iceni, in Norfolk and Suffolk.

Q. What was the cause of Cæsar's invasion of Britain?—*A.* Ambition to achieve the conquest of the distant and insulated world, which the circumscribed geographic knowledge of the Romans supposed Britain to be. But some writers pretend to say, that the Roman general was incited to the undertaking by the beauty and magnitude of the British pearls.

Q. What did he allege as his motive for the invasion?—*A.* The asylum which Britain afforded for the Gaulish enemies of Rome; it being a maxim in the politics of Rome, to deem all auxiliaries as principals, and to allow none to assist the enemies of the state with impunity.

Q. Is Cæsar's account of his exploits in Britain generally

believed?—*A.* No; even some of his countrymen and contemporaries assert, that the result of his operations on his first invasion against the Britons was not altogether so honourable to his former fame as he represents it himself; an assertion which receives some weight from the vague treaty he made with our rude but warlike ancestors.

Q. In what part of Britain did Cæsar land?—*A.* In his first invasion he landed at or near Deal, as he did also, in the year following, nearly upon the same spot, and encamped on Barham Downs.

Q. When, and by whom, was Britain completely reduced to subjection by the Romans?—*A.* In the reigns of the emperors Vespasian and Titus, by Julius Agricola; which was about the end of the first century of the Christian era.

Q. Mention the most distinguished British generals who opposed the Romans.—*A.* Cassibelanus, Caractacus, and Boadicea, queen of the Iceni.

Q. For what is Boadicea distinguished in British history?—*A.* In the reign of Nero, the predecessor of Vespasian, the Britons being cruelly oppressed by the Romans, took up arms under Boadicea, but being defeated with immense slaughter, the queen, dreading the insults of the Roman army, destroyed herself and her two daughters by poison.

Q. How long was Britain subject to the Romans?—*A.* About 475 years; namely, from the 55th year before the Christian era to 420 A. D., when the last Roman legion quitted the island.

Q. What was the cause that the Romans quitted Britain?—*A.* The increasing distresses of the empire, which required their whole collective force to repel the attacks of the northern barbarians, who threatened the destruction of the Western empire.

Q. What were the effects of the Roman government upon the affairs of Britain?—*A.* By the introduction of civilization, wise laws, and many noble monuments of art and industry, they considerably bettered the condition of the English.

Q. What were the effects of their departure?—*A.* The dissolution of all order, law, and government; the ruin and decay of the arts; and the exposure of the Britons to

the incursions of the Picts and Scots, and their consequent subjection to the Saxons.

Q. What was the population of Britain said to be at the time of the Roman invasion?—*A.* About 800,000 souls.

Q. What at their departure?—*A.* About twice that number.

Q. What was the most memorable monument of Roman art in Britain?—*A.* Severus's wall between the friths of Forth and Clyde; of which some vestiges remain to this day.

Q. Who were the Saxons?—*A.* People of Old Saxony, now Holstein.

Q. Who the Angles?—*A.* The inhabitants of the Cimbric Chersonese, now Jutland.

Q. By what name was Britain known to the Romans?—*A.* By Britannia.

Q. Why was it called England?—*A.* From Anglia, the country of the Angles; because that people were the most numerous and powerful tribe among the Germans who came into Britain. It took the name of England about the year 829.

Q. What was the religion of the ancient Britons?—*A.* A mixture of deism and paganism, for they worshipped a plurality of gods, though they believed in a Supreme Being, and the immortality of the soul.

Q. What are the most remarkable remains of ancient British art still in existence?—*A.* The prodigious blocks of stone raised at Stonehenge, and in the parish of Constantine in Cornwall.

Q. When was Christianity first introduced into Britain?—*A.* Some historians assert, that it was introduced about the middle of the first century of the Christian era by St. Paul; but the more probable account is, that we are indebted for this benefit to pope Gregory I., who sent St. Augustin, the monk, on the first apostolical mission to this country, in the year 590 A. D.

Q. What brought the Saxons into Britain?—*A.* The Picts and Scots having, after the departure of the Romans, renewed their invasions with increased violence and atrocity, the disheartened Britons sent ambassadors to the Saxons to invite them to send succours to their assistance.

Q. When did the Saxons first arrive in Britain?—*A.* In the year 449, under the conduct of Hengest and Horsa.

Q. What was the conduct of the Saxons towards the supplicant Britons?—*A.* After repelling the Picts and Scots, instead of protecting their disheartened allies against their enemies, they either destroyed, enslaved, or extirpated them; so that multitudes of the dispirited Britons abandoned their country, and fled to the opposite shores of Gaul.

Q. What length of time were the Saxons in reducing Britain?—*A.* About 150 years.

Q. How did the Saxons govern their new conquests?—*A.* They divided Britain into seven states, called the Heptarchy.

Q. How were these states denominated?—*A.* The kingdoms of Wessex, Sussex, Kent, Essex, East Anglia, Mercia, and Northumberland.

Q. What part of Britain was at this time in possession of the native Britons?—*A.* Almost all the western coasts from the frith of Clyde to the Land's-end in Cornwall.

Q. By whom were the seven Saxon kingdoms united into one monarchy?—*A.* By Egbert, the sole surviving descendant of the Saxon conquerors of Britain, in the year 827 A. D.

Q. What was the amount of the population in the time of the Heptarchy?—*A.* About the same as that at the time of the Roman invasion.

Q. To what was this owing?—*A.* To the depopulation and ravages of the Scots and Picts, and the expulsion and slaughter of the ancient inhabitants by the Saxons. The introduction of monastic institutions, which took place during this period, contributed also, not a little, to impede the increase of the people.

Q. Mention the benefits which Britain derived from the Saxon invasion.—*A.* The introduction of that spirit of freedom and love of liberty, which is the groundwork of the British constitution; and the introduction of the trial by jury.

Obs. Notwithstanding the evils the native English sustained by the Saxon invasion, the Saxon period, most assuredly, forms the *golden* age of British history; for during that epoch, the people were governed

by equal laws, and the lands so wisely distributed, that a large portion of the population possessed a permanent interest in the soil: the happiness of the many, not of the few, being the design of the Saxon policy.—*Note to Mr. J. D. Williams's edition of Blackstone's Commentaries.*

Q. What injurious institution did the Saxons particularly introduce into Britain?—*A.* That of villainage; an institution by which those who tilled the soil were claimed by the owner as appurtenant to the estate, and over whom he had hereditary jurisdiction of life and death.

Q. What became of the native English on the usurpation of the Saxons?—*A.* Some fled to Wales or Cornwall; others wholly abandoning their native country, emigrated to the neighbouring shores of France, and gave name to Brittany, the seat of their exile.

Q. When are the Danes first noticed in British history?—*A.* About the end of the eighth century; in the year 787 they first began to desolate Britain.

Q. Who succeeded Egbert on the English throne?—*A.* His son Ethelwolf, A. D. 838.

Q. What are the remarkable events of this reign?—*A.* Two invasions of England by the Danes, in the years 851 and 853; in the former of which they took and plundered London and Canterbury. In this reign, also, England first became tributary to the See of Rome, Ethelwolf obliging each family in his dominions to pay an annual tribute of one shilling, under the name of *Rome-scot*, or *Peter's pence.*

Q. Who was Alfred?—*A.* The grandson of Egbert, and the youngest son of Ethelwolf. This illustrious prince was, on account of his wisdom, his patriotism, and his numerous virtues, the darling of his subjects, and the delight of mankind. His patriotic wish "that the English were as free as the air they breathed," will ever endear his memory to every Englishman.

Q. Whom did Alfred succeed?—*A.* His brother Ethelred I., who had succeeded his second brother Ethelbert, the successor of his eldest brother Ethelbald.

Q. Mention the memorable events and improvements which took place during Alfred's reign.—*A.* He defeated the Danes in many battles, and obliged the survivors to embrace Christianity. He divided England into counties,

and their subdivisions of hundreds and tithings; introduced the custom of juries; and composed a body of law for the use of his subjects, which may be considered as the basis of the Common Law of England. He founded the university of Oxford, for the support of which he allotted one-eighth part of his whole revenue; and was the first English prince who established a national militia, and promoted voyages of discovery; having sent Ochter, a Norwegian, to the coasts of Scandinavia, and Sighelm, an Anglo-Saxon priest, to convey assistance to the forlorn Christians of St. Thomas, settled at Meliapour, on the coast of Coromandel.—In his reign houses were first built of brick.

Q. How long did Alfred reign over Britain? — *A.* Twenty-eight years; he began his reign in the year 872, and died in the year 900.

Q. Mention the most distinguished ancient writers of Britain.—*A.* The Saxon literati Gildas, Aldhelm, Bede, Alcuin, Johannes Scotus, and Alfred the Great.

Q. Who succeeded Alfred?—*A.* Edward, his eldest surviving son, and who in history is surnamed "the Elder" —a name given him to distinguish him from Edward the Martyr and Edward the Confessor.—In this reign the university of Cambridge was founded.

Q. Who was Ethelfleda?—*A.* The sister of Edward. This heroic princess (who inherited more of the spirit and wisdom of the great Alfred than any of his children) commanded armies, gained victories, built cities, and performed exploits in defence of her brother's dominions, which would have done honour to the greatest heroes of any age.

Q. Who succeeded Edward? — *A.* His natural son Athelstan, and his legitimate sons Edmund I. and Edred, who were successively kings of England, A. D. 925 to 955 A. D. In the reign of Athelstan, the Bible was first translated into Saxon; and in the reign of Edmund, the first capital punishment for robbery took place. It was in the time of Athelstan that Guy of Warwick lived, famous for overcoming Colbrand, the Danish champion, the great Goliah of that people, near the walls of the city of Winchester.

Q. Who were the next English monarchs?—*A.* Edwy and Edgar, the sons of Edmund, A. D. 955 to 975 A. D.

Q. What actions of Edgar deserve the gratitude of the English?—*A.* His commutation of the tribute of money and cattle, which the Welsh princes were accustomed to pay to England, for 300 wolves' heads yearly; and his institution of one kind of weights and measures, and money, throughout the kingdom.

Q. By whom was Edgar succeeded on the throne?—*A.* By his sons Edward and Ethelred II. The former, after a short reign, was stabbed by order of his step-mother Elfrida, and on that account is known in English history by the name of "Edward the Martyr." The reign of the latter, who from his indolence was surnamed the *Unready*, was one of the most calamitous in the annals of England, A. D. 975 to 1016 A. D. In his reign, the first land-tax, called dane-gelt, was imposed; and he is said to have been the first king of England to whom a coronation oath was administered.

Q. Mention the principal calamity which happened to England during his reign.—*A.* The Danes re-invaded the kingdom, under the conduct of Swein, king of Denmark, and Olave, king of Norway; and committed great outrage and devastation. In revenge for these atrocities, the English were guilty of a general massacre of their oppressors throughout the kingdom, 1002 A. D.

Q. What was the result of the Danish invasion?—*A.* On account of the ill success of Edmund the Elder, son and successor of Ethelred, and the circumstance of the greater part of the English clergy and nobility having abjured all the posterity of Ethelred, and sworn allegiance to Canute, (who, on the death of his father Swein, had succeeded to the command of the Danes in England,) the nobility on both sides prevailed on the two kings to share the kingdom between them.

Q. How was England divided between the rival princes?—*A.* To Canute was allotted the kingdoms of Mercia and Northumberland, which were chiefly inhabited by the Danes; and to Edmund, all the country south of the Thames. But the brave Edmund, who, for his hardiness in war, was surnamed *Ironside*, being shortly after mur-

dered, Canute became sole sovereign of this kingdom, by virtue of the treaty of partition.

Q. What were the remarkable acts of Canute?—*A.* The murder of Edwy, Edmund's brother, who was held in so high esteem by the common people of England, that he obtained the name of the *Ceorls'* (i. e. people's) king; the punishment of those nobles who had betrayed their gallant king Edmund; and his annexation of Norway to the kingdoms of England and Denmark.

Q. Who succeeded Canute?—*A.* His sons Harold, surnamed *Harefoot*, and Hardicanute, 1036 A. D.

Q. What title had Hardicanute to the throne?—*A.* By the marriage settlement of Canute with Emma, the widow of the late king Ethelred, he was appointed to succeed to the English throne; but being then absent in Denmark, his brother Harold, seizing his father's treasures, declared himself king. Harold, however, agreed, on the English in general declaring in favour of Hardicanute, to a partition of the kingdom, and consented that the part allotted to Hardicanute should be governed by his mother Emma, till his arrival.

Q. How did this princess act?—*A.* Finding herself possessed of so much power, she invited Alfred and Edward, her sons by Ethelred II., to quit the court of Robert, duke of Normandy, and come to her in England. Harold suspecting that the design of their visit was to assert their right to the English crown, caused Alfred to be murdered. To avoid a like fate, Edward fled to the continent.

Q. Did Harold fulfil his agreement of partitioning the kingdom with Hardicanute?—*A.* No: he reigned alone until his death, in the year 1039.

Q. Who succeeded him?—*A.* Hardicanute.

Q. Who succeeded Hardicanute?—*A.* His uterine brother Edward, surnamed the *Exile*, the son of king Ethelred II. and queen Emma, A. D 1042. In the person of this king the Anglo-Saxon line of princes was restored, and the race of Egbert became extinct.

Q. Why was Edward surnamed the *Confessor*?—*A.* For his abstemiousness in consummating his marriage with his wife Edgitha, daughter of Godwin, earl of Kent; and for his favour towards the monks of the time.

Q. Mention the memorable events which took place during this reign.—*A.* The collection of the Saxon, the Danish, and the Mercian law, into one code, when it was called the Common Law of England; the abolition of the odious and ignominious tax called *dane-gelt;* and the institution of the anniversary festival called *hokeday*, in commemoration of the deliverance of the country from the ravages and violence of the Danes, for above 200 years.—Edward the Confessor is said to have been the first who touched for king's evil; a ridiculous ceremony practised by the kings of France, and continued in vogue in England till abolished by George I. in the year 1714.

Q. Who succeeded Edward the Confessor?—*A.* Harold, son of Godwin, earl of Kent. He was proclaimed by the style and title of Harold II., 1066 A. D.

Q. What claims had Harold to the crown?—*A.* They were founded on the allegation, that the late king had appointed him his successor; but of this he was never able to produce sufficient evidence. The truth is, that he owed his elevation to the throne to his own great power and wealth, (two-thirds of all England being then under the dominion of his family,) his intimate connexions with the chief nobility, the favour of the clergy, and his general popularity.

Q. Who was the undoubted heir to the English throne at this time?—*A.* Edgar Atheling, the son of Edward, who was the youngest son of the heroic king Edmund Ironside. To avoid the designs of Canute, the usurper of his father's dominions, Edward had long resided in the court of Solomon, king of Hungary; but to stifle the ambitious views of Harold, the unfortunate Edward was invited by his uncle, Edward the Confessor, to take up his residence in England; where, a month after his arrival, he died, leaving his infant son Edgar Atheling, and two daughters, the elder of whom was afterwards queen of Scotland.

Q. With what opposition did Harold meet?—*A.* Ambassadors arrived from William, duke of Normandy, reproaching him with the breach of the oath which he had pledged to that prince to favour his elevation; and requiring him to descend from that throne which he had usurped. His elder brother Tosti, earl of Northumber-

land, jealous of his advancement to the crown of England, had also invited the king of Norway to his assistance.

Obs. Perhaps William grounded his hopes of succession to the English throne from the circumstance that his wife Maud was descended from Judith, the wife of Ethelwolf, as also of his son Ethelbald.

Q. What was the result of this opposition to Harold's elevation?—*A.* While the rebel forces were advancing to York, Harold met and routed them, and killed both the earl Tosti and the king of Norway. But before he had finished the celebration of this important victory, he was informed of the landing of William, duke of Normandy, at Pevensey, in Sussex, at the head of an army of 60,000 men, in order to dispute his alleged right to the crown of England.

Q. At what place did the hostile armies of William and Harold encounter?—*A.* At Hastings; to which place William had marched about fifteen days after his landing.

Q. What caused the defeat of the English army?—*A.* William, despairing of success, ordered his army to retire a little, as if they were on the point of flying, which the English mistaking for a real flight, broke their ranks in order to pursue; when the Normans, on a signal given, facing about, totally defeated the English, slew their king Harold, his two sons, and the flower of the English nobility. In this battle above 60,000 English are said to have fallen; and the Saxon monarchy in England was terminated in the person of Harold.

Q. What followed William's success at the battle of Hastings?—*A.* Soon after his victory, marching to London, he received the submissions of the nobility (among whom was Edgar Atheling); and on the Christmas day following, was solemnly crowned king of England, by the archbishop of York.

Q. What circumstance took place at the coronation which proves that William succeeded to the crown of England by election and the free will of the people, and not by the rights of war?—*A.* The question of the archbishop to the English who were present at the ceremony, namely, whether they voluntarily chose William for their king, and also the administration of the oath which had always been administered to the Anglo-Saxon kings at their coronation.

Q. What right did William allege for his pretensions to the throne of England?—*A.* The intention of Edward the Confessor, communicated to him when he paid a visit to that prince in England, that he was to be his successor; and the promise of Harold, (when he visited Normandy for the purpose of procuring the liberation of his brother and nephew, who had been given as hostages to Edward by his father, the earl of Kent, and whom Edward had intrusted to the care of William,) that he would, on the demise of Edward, assist him in mounting the throne of England.

Q. How did William treat his new subjects?—*A.* The English, loaded with injuries and indignities by the Norman captains, to whose care William had intrusted the defence of Britain at his departure for the Continent, having revolted in several places, William returned to England, suppressed his disaffected subjects, and confiscated their property, which he transferred to his rapacious Norman followers.

Q. How did the English brook this treatment?—*A.* The remaining noble families who were not extinguished or reduced to poverty by the rapacity of the Normans, retired into foreign countries. Edgar Atheling and his two sisters fled to Scotland.

Q. How was William's death caused?—*A.* By a fall from his horse while besieging the town of Mante, in France, in the year 1087.

Q. What was the cause of his engaging in this war?—*A.* The sarcastic criticism of the king of France on his corpulency.

Q. What were the most remarkable acts of William's reign?—*A.* The revival of the odious tax of dane-gelt; the survey of England, contained in the two valuable volumes called Doomsday-book; the extinction of the ancient English nobility, there not being at the end of his reign a single Englishman, who was either earl, baron, bishop, or abbot; the laying waste a tract of country to the extent of sixty miles between the Humber and the Tees, and the sacrifice of above 100,000 persons in the execution of this barbarous act of policy; the separation of the ecclesiastical from the civil courts; the institution of the courts of exchequer and chancery, and of the four terms in the courts

of law; the appointment of sheriffs; the introduction of the Norman-French into the law-pleadings; the abolition of the Saxon modes of trial by ordeal and camp-fight; and the introduction of surnames.

Q. What was trial by ordeal?—*A.* Trial by ordeal was either by fire or water. In that by fire, the person accused was brought into an open plain, and several ploughshares, heated red hot, were placed at equal intervals before him; over these he was to walk blindfold, and if he escaped unhurt, he was acquitted of the charge. In the trial by water, the accused was thrown bound into the water; if he sunk, he was declared innocent, but if he swam, guilty.

Q. What was trial by camp-fight?—*A.* A combat between the accuser and the accused: he who in such case came off victorious, was deemed innocent; and he who was conquered, if he survived his antagonist's resentment in the field, was sure to suffer as a malefactor some time after.

Q. What were the consequences of the Norman conquest?—*A.* The introduction of heavy feudal services, the payment of oppressive taxes and tyrannical customs, and the perversion of justice. But as the Anglo-Saxons were far behind their Norman oppressors in civilization, it must be admitted, that the conquest led to material improvements in arts, science, government, and law.

Q. What are the contents of Doomsday-book?—*A.* A general survey of all the lands in the kingdom, with a distinct specification of their nature, extent, value, the names of their proprietors, and an enumeration of every class of inhabitants who lived on them.

Q. By whom was William succeeded?—*A.* By his second son William, surnamed Rufus, from the colour of his hair, 1087 A. D. By the marriage of this prince with Matilda, the niece of Edgar Atheling, the last remnant of the Saxon line of princes was united with the Norman line. Among the remarkable events of this reign was the overflowing of the lands of Goodwin, earl of Kent, by the sea, which to this day are called the *Goodwin Sands.*

Q. By what right did William Rufus, or William II., obtain the crown?—*A.* By the nomination of his father.

Q What was the cause that Robert mortgaged his

dukedom of Normandy to his brother William?—*A.* To procure money to join in the epidemic frenzy of crusading, or rescuing the city of Jerusalem and the Holy Land out of the hands of the Turks.

Q. Who succeeded William Rufus?—*A.* His youngest brother Henry, surnamed *Beauclerc*, on account of his learning, 1100 A. D.

Q. How did Henry the First behave towards his eldest brother Robert, duke of Normandy?—*A.* While absent in the Holy Land, he seized his kingdom, and on his arrival in Britain to complain of the injury, he cast him into prison, where that unfortunate prince died after a confinement of twenty-eight years.

Q. By whom was Henry the First succeeded?—*A.* By Stephen, earl of Boulogne, second surviving son of Stephen, earl of Blois, by Adela, fourth daughter of William the conqueror; and consequently nephew to Henry the First, 1135 A. D.

Q. What title had Stephen to the throne?—*A.* Being one of the nephews of Henry the First, he pretended, that Henry on his death-bed had disinherited his daughter the empress Maude, and had declared him his successor.

Q. Did the empress dispute his succession?—*A.* Yes: Three years after Stephen's usurpation, landing in England, accompanied by her natural brother the earl of Gloucester, in the space of two years from her first arrival, Stephen falling into her hands, she was declared queen of England in the year 1141.

Q. Who was the empress Maude?—*A.* Daughter of Henry I. of England, and wife of the emperor Henry IV. of Germany.

Q. What were the incidents of her reign?—*A.* Her haughty and ungracious behaviour creating her many enemies, particularly the bishop of Winchester, the nephew of Stephen, she was besieged by that artful and temporizing prelate in the castle of Winchester; from which she with difficulty escaped by the contrivance of her brother the earl of Gloucester; but this prince in his flight falling into the hands of his enemies, was shortly after exchanged for Stephen, who thereby was again enabled to dispute his title to the throne. The remainder of Stephen's reign,

until the invasion of prince Henry of Anjou and Normandy, was occupied with the civil war between himself and the empress Maude.

Q. Who was prince Henry?—*A.* The son of the empress Maude, by her second husband Geoffrey Plantagenet, earl of Anjou.

Q. What was the consequence of prince Henry's invasion?—*A.* An agreement between him and his opponent Stephen, that Stephen should continue to reign during his life, and that prince Henry should, at his death, succeed to the throne without any opposition.

Q. What event particularly distinguished Stephen's reign?—*A.* The erection of castles by the nobles, by which they became independent of the king, and put him at defiance; and the introduction of the canon law into England.

Q. When did prince Henry succeed to the throne?—*A.* In the year 1154, by the title of Henry Plantagenet the Second.

Q. Did this prince reign in tranquillity?—*A.* No; the rebellion of his children was a constant source of trouble to him, and finally terminated his life.

Q. What is his character?—*A.* He is considered to have been the best king that swayed the English sceptre since the time of Alfred the Great. He is renowned for his wisdom and justice, as well as for his power and greatness. To him England owes her first permanent improvement in arts, law, government, and civil liberty.

Q. What are the principal acts of his reign?—*A.* The demolishing of the numerous castles of the nobility in Britain; the conquest of Ireland and its division into counties; the introduction of the assize of arms, which may be considered as the foundation of the military law in this country; the establishment of the freedom of the towns of the empire by charter, which at this day is the basis of the national liberty; the appointment of circuits, and justices itinerant; the enactment of the constitutions of Clarendon, by which he endeavoured to render the clergy subject to temporal jurisdiction; and the digestment of the laws of England by the celebrated Glanville.

Q. Who succeeded Henry the Second?—*A.* His second son Richard, surnamed Cœur de Lion, or the lion-

hearted, 1189 A. D. Henry his eldest son, whom he had crowned joint king of England with himself, being then dead.

Q. What are the remarkable events of this prince's reign?—*A.* His expedition to the Holy Land; his seizure by Leopold, duke of Austria, while passing through Germany, and his detention for above four years in prison by the emperor Henry VI., to whom Leopold had assigned him; and the insurrection under William Fitzosborn, commonly called *Long-beard*, which is the first instance of the people struggling for liberty as a body distinct from the barons and clergy. Richard was the first king of England who took three lions passant for his arms, in which he has been imitated by his successors. In this reign, Robin Hood, and his associate little John, with their desperate band of robbers, committed their depredations.

Q. How was Richard's death occasioned?—*A.* By a wound which he received while besieging the castle of Chalus, near Limoges, with the design of possessing himself of a number of ancient coins and medals which were deposited there, and which he claimed in right of his sovereignty of the country in which they were found.

Q. For what great improvement in the legislation of nations is Richard said to have been the author?—*A.* For the institution of the famous maritime laws of Oleron.

Q. Who succeeded Richard?—*A.* His brother John, the youngest son of Henry the Second, in the year 1199.

Q. Who disputed John's title?—*A.* His nephew Arthur, duke of Brittany, the only son of his third brother Geoffrey.

Q. What was the result of this dispute?—*A.* Arthur being taken prisoner, was cruelly put to death by his uncle John. But the deed excited so much execration and hatred against the English monarch, that many of the powerful Norman barons, assisted by Philip, king of France, united against him, and deprived him of nearly the whole of his continental dominions.

Q. Why was John surnamed *Lackland?*—*A.* From the loss of his foreign possessions.

Q. What are the remarkable occurrences in John's reign?—*A.* His establishment of English laws in Ire-

land; his deposition by the pope, and resignation of the kingdoms of England and Ireland into the pope's hands as his tributary; the invasion of England, and capture of London, by Louis the son of Philip, king of France, with an army of 50,000 men, at the instigation of the pope; his deposition by the barons; and the granting of Magna Charta, the foundation and bulwark of English liberty.

Q. What was the cause of his deposition by the pope?—*A.* His dispute with that prelate because Stephen Langton had been chosen, at Rome, by a few monks, archbishop of Canterbury, without John's knowledge or consent.

Q. What was the result of Louis's invasion?—*A.* He was, during John's reign, solemnly crowned at London as king of England; but on the accession of Henry III. he was defeated, and obliged to relinquish all pretensions to the kingdom.

Q. What is meant by Magna Charta?—*A.* The great charter which secures English liberties. It was granted Friday, June 19th, 1215, in a meadow called Runny Mede, situated between Windsor and Staines.

Q. By whom was John succeeded?—*A.* By his eldest son Henry the Third, in the year 1216.

Q. What are the remarkable occurrences of this prince's reign?—*A.* The confirmation of the great charter; the appointment, by the pope, of Henry's second son as titular king of Sicily, as also of his brother Richard, earl of Cornwall, king of the Romans, by the electors of the Germanic empire; the battles of Lewes and Evesham between Henry and the refractory barons, who were discontented at his favour and protection shown to foreigners; and the first summons of knights of counties, and deputies from the towns and boroughs, to parliament.—From this reign, may be dated the first dawn of English liberty.

Q. What acts are recorded of the meanness and injustice of this prince?—*A.* It is said, that he would invite himself to the houses of his subjects, and always expected a present at the door.

Q. Who succeeded Henry the Third?—*A.* His eldest son Edward the First, surnamed *Long Shanks*, from the length and smallness of his legs, 1272 A. D.

Q. What are the remarkable occurrences in the reign of Edward the First?—*A.* His conquest of Wales, in the year 1283, and his appointment of his eldest son as prince of Wales; his reduction of Scotland; his execution of the brave William Wallace, the illustrious defender of his country; and his appointment of Baliol as tributary king of that country.—In this reign was passed the first law, which enacted that no tax should be levied without the consent of the commons; an act which may be considered as the dawn of legislative authority in that assembly.

Q. Why was Edward I. called the English Justinian?—*A.* On account of the admirable laws which were passed during his reign.

Obs. This prince was assuredly the greatest and the worthiest legislator England had beheld since the days of Alfred; he punished corrupt judges,—settled the jurisdiction of the several courts,—obliged a seditious and tyrannical aristocracy to submit to the laws,—encouraged commerce by means of new provisions,—and limited the power and influence of the popish clergy, by the statutes of mortmain.

Edward I., at his death, was embalmed, and the face encrusted with wax, painted to resemble the life; his body was dressed in royal robes, with a crown on the head and a sceptre in the right hand: the dress was renewed in the reign of Edward III.; and in the year 1776, the Royal Society having obtained leave to open the tomb in Westminster Abbey, found the body perfect and in the state just described.

Q. Who were the Welsh?—*A.* The descendants of the ancient Britons who had escaped the Roman and Saxon conquests.

Q. Who was the successor of Edward the First?—*A.* His youngest surviving son Edward the Second, in the year 1307.

Q. What were the remarkable occurrences of his reign?—*A.* The civil war between him and his nobles, on account of the insolence and tyranny of his successive favourites Gaveston and the two Spencers; the decisive battle of Bannockburn, by which Robert Bruce was restored to the Scottish crown, and the independence of that kingdom established; the separation of the House of Commons from that of the Lords; the abolition of the Norman language in the Courts of Justice; the depriving of the people of their ancient privileges of electing sheriffs and justices of the peace; and the deposition and murder of Edward by his faithless wife and her paramour Morti-

mer.—Never was so much blood spilt in a juridical manner as in this hideous reign.

Obs. In the history of this despicable prince, the base and crafty policy of the bishop of Hereford deserves the severest execration. The opinion of that time-serving prelate being required by Edward's keepers respecting his future treatment, the artful churchman transmitted to them the following quibbling line, the interpretation of which, depending on the pointing, might be so construed, as both to countenance the murder, and excuse himself: *Edwardum occidere nolite timere bonum est.* The solution of this sphinx's riddle depends on a comma, which if placed after the word *nolite,* prohibits, but if after *timere,* encourages the regicide.

Q. By whom was Edward the Second succeeded?—*A.* By his eldest son Edward the Third, in the year 1327.

Q. What are the remarkable occurrences of his reign?—*A.* The battle of Hallidown Hill between the Scots and the English, which occasioned the restoration of Baliol, and the deposition of Bruce; the invasion of France by Edward, and his assumption of the title of king of that country; the memorable battles of Crecy in the year 1346, and of Poictiers in 1356, in the former of which the French army was five times the number of the English, and in the latter, eight times more numerous; and the capture of Calais and of the French king John.

Obs. To this prince the English are indebted for that spirit of industry and commerce which has raised them to the highest degree of prosperity; for England had long been tributary to the Flemings, who purchased the raw materials of wool and flax here, and sent back part of them in a manufactured state. But Edward having allured a number of Flemish artisans to this country, by the hopes of privileges, immunities, and rewards, taught his countrymen those arts which have rendered them the most opulent and industrious people in the world.

Q. What are the other remarkable transactions of this reign?—*A.* The rise of Lollardism in England, under Wickliffe, who may be considered the father of the reformed church; the use of law-pleadings in English instead of French; the institution of the court of Admiralty, of the order of the Garter, and of the title of duke; and the introduction of the manufacture of wool.—In the 29th year of this reign, the first record for impressing seamen is to be found; and the present house of Commons, St. Stephen's chapel at Westminster, and Windsor Castle, were built, for the erection of which every county was obliged to

supply a certain number of bricklayers, masons, carpenters, &c.

Q. What remarkable event happened throughout Europe during this reign?—*A.* A pestilence more terrible than any mentioned in former history. After having dispeopled almost all Asia and Africa, it cut off a fourth part of the population of Europe. In London, it raged with such violence, that in one year above 50,000 persons were buried in Charter-house church-yard.

Q. What title had Edward to the crown of France?—*A.* On the death of Charles IV. surnamed the Fair, without issue, he claimed it in right of his mother, Isabella daughter of Philip the Fair, and sister to the three last kings of France.

Q. By whom was Edward assisted in these great achievements?—*A.* By his heroic and magnanimous son Edward the Black Prince, usually denominated the *mirror of chivalry*.

Q. Why was Edward called the Black Prince?—*A.* From the colour of the armour which he wore.

Q. How did Edward reward his son?—*A.* He granted him the entire sovereignty of all the southern provinces of France, which had been lately ceded by the French king.

Q. What occasioned the death of the Black Prince?—*A.* Generously undertaking the restoration of Pedro the Cruel, king of Castile, he marched into that kingdom, and at the battle of Najara routed the army of his opponent, which was four times the number of the prince's. But his health being ruined by the excessive heats of Spain, he soon after sickened and died.

Q. For what is John, king of France, distinguished in history?—*A.* For his inviolable observance of his engagements: to the solicitations of his ministers not to fulfil his promises towards Edward, he replied, "That though honour and good faith should forsake every other part of the world, they ought still to be found in the breasts of princes."

Q. By whom was Edward the Third succeeded?—*A.* By his grandson Richard the Second, the only son of the illustrious Edward the Black Prince, 1377 A. D.

Q. What are the remarkable occurrences during the reign of Richard II.?—*A.* The insurrection of Walter, a

tiler by trade, and who on that account has been styled by historians Wat Tyler; and his deposition and murder by Henry duke of Lancaster, who usurped the crown.—In this reign the present mode of riding on horseback by women was introduced by Richard's queen Anne, ladies before her time being accustomed to sit as men do now.

Q. What was the occasion of the insurrection under Wat Tyler?—*A.* The levying of a poll-tax throughout the empire, and the unjust act of parliament which reduced those who had purchased their freedom of their tyrannical lords, to their former bondage.

Q. What did the insurgents demand?—*A.* That all slaves should be set free, and that all commonages should be open to the poor as well as the rich; demands which though they breathe nothing but common justice, have been branded by some historians with all the virulence of reproach. "The punishment of men," says an ingenious and patriotic historian, "who have fought for native freedom against their unfeeling oppressors, is called by many writers justice: but we must be contented with such misrepresentations of facts, till philosophers can be found to write history."

Obs. The observation of Sir William Blackstone, respecting Tyler's views and demands, is deserving of attention: "Our ancestors heard, with detestation and horror, those sentiments rudely delivered, and pushed to most absurd extremes, by the violence of a Cade and a Tyler, which have since been applauded with a zeal almost rising to idolatry, when softened and recommended by the eloquence, the moderation, and the arguments of a Sidney, a Locke, and a Milton."

Q. What were the improvements made during the reign of Richard II.?—*A.* The use of bills of exchange; and the enactment of the first navigation law, prohibiting natives to export or import goods in foreign vessels.

Q. Who was the successor of Richard the Second?—*A.* Henry the Fourth, the only son of John of Gaunt, duke of Lancaster, who was the fourth son of Edward the Third, 1399 A. D.

Q. Was he the right heir to the throne?—*A.* No; Edmund Mortimer, earl of March, was then alive. This young nobleman was descended from Lionel duke of Clarence, third son of Edward III., and elder brother of John of Gaunt; consequently he was the undoubted heir.

Q. What were the remarkable occurrences in the reign of Henry IV.?—*A.* The insurrections of Owen Glendour in Wales, and of the earl of Northumberland and his valiant son Hotspur in the north of England, to dethrone Henry.—In this reign the order of the Bath was instituted.

Q. Mention the most distinguished literary men who flourished during this reign.—*A.* The poets Chaucer and Gower, and William of Wickham the historian.

Q. Who succeeded Henry the Fourth?—*A.* His eldest son Henry the Fifth, in the year 1413.

Q. What are the remarkable occurrences of this reign?—*A.* The signal battle of Agincourt in the year 1415, in which the French forces were nearly seventeen times more numerous than those of the English; the treaty between Henry and Charles the Sixth king of France, by which it was stipulated, that Henry should succeed to the French crown on the death of Charles, with the authority of regent of that kingdom in the intermediate time.

Q. By whom was Henry the Fifth succeeded?—*A.* By his infant child Henry the Sixth, in the year 1422.

Q. What are the remarkable occurrences during the reign of Henry VI.?—*A.* The coronation of Henry, as king of France, in the city of Paris; the loss of all the conquests of Henry the Fifth, and of the whole of the hereditary dominions of the kings of England in France, except Calais and Guignes; the insurrection of Cade, occasioned by the oppression and exactions of the government; the origin of the disputes and fatal contentions between the houses of York and Lancaster; and the deposition and surrender of Henry.

Q. How are the factions of York and Lancaster distinguished in history?—*A.* By the distinction of the *white* and *red roses*; the title of the white rose distinguishing the faction of York, that of the red rose that of Lancaster.

Q. What was the result of the dispute between the two roses?—*A.* During their contentions, twelve pitched battles were fought, and the unfortunate Henry was thrice raised to the throne to be as often deposed.

Q. Mention the principal improvements which took place during the reign of Henry VI.—*A.* The introduction

of the art of printing into England, and of the manufacture of glass.—In this reign viscounts were first created.

Q. Who was the rival claimant of the throne of England on behalf of the house of Lancaster?—*A.* Richard duke of York, descended by his mother from Lionel, second son of Edward III., and eldest brother of John of Gaunt, the progenitor of Henry VI.

Q. By whom was Henry the Sixth succeeded?—*A.* By Edward the Fourth, the eldest son of the duke of York, who had fallen in the battle of Wakefield. He began his reign 1461.

Q. What are the remarkable events of this reign?—*A.* The invasion of England by Margaret queen of the deposed monarch Henry the Sixth; the restoration of her unfortunate husband; the flight of Edward the Fourth to the continent, in the year 1470; his return to England in the following year; his recovery of the crown; and his murder of Henry VI.

Q. Who succeeded Edward the Fourth?—*A.* His eldest son Edward the Fifth, in the year 1483.

Q. What are the remarkable occurrences of his reign?—*A.* The murder of this prince and his brother the duke of York by their uncle, the duke of Gloucester, who had been declared protector.

Q. By whom was Edward the Fifth succeeded?—*A.* By his uncle, the duke of Gloucester, under the title of Richard the Third, 1483 A. D.

Q. What are the remarkable occurrences in this reign?—*A.* The battle of Bosworth, which terminated Richard's reign and life, as also the contests between the houses of York and Lancaster.—The statutes of Richard III. were the first which were expressed in English, as also the first which were printed.

Q. What are said to have been the consequences of the disputes between these two contending parties?—*A.* It is said, that in the twelve battles fought between the houses of York and Lancaster, sixty princes of the royal blood, one half of the nobility and gentry, and above 100,000 of the gallant and noble-hearted people of this realm, lost their lives.

Q. Who succeeded Richard the Third?—*A.* Henry, earl of Richmond, the only surviving heir of the house of

Lancaster. He was the grandson of Catherine, widow of Henry the Fifth; assumed the title of Henry the Seventh; and ascended the throne in the year 1485.

Q. What are the remarkable occurrences in this reign?—*A.* The union of the two houses of York and Lancaster, by Henry's marriage with the princess Elizabeth, the eldest daughter of Edward the Fourth; the insurrections of Lambert Simnel, a baker's son, who personated Henry Plantagenet, earl of Warwick; and of Perkin Warbeck, the son of a Flemish Jew, who personated Richard, duke of York, the youngest son of Edward the Fourth.

Q. For what is the memory of Henry VII. deserving of remembrance?—*A.* Henry VII., if not the greatest, was at least the most useful prince that ever sat upon the British or any other throne. All his efforts were employed to promote trade and commerce, and to extend the privileges of his subjects, by humbling the nobility and clergy, and disengaging the people from their dependence upon them. He released all prisoners for debt in his dominions whose debts did not amount to forty shillings, and paid their creditors out of the royal coffers; and he endeavoured to abolish the privilege of sanctuary.—In his reign, America and the passage to the East Indies were discovered, and the barring of entails and alienation of estates permitted.

Obs. This prince may be considered as the founder of the naval power of England. He instituted the navy-office, appointed commissioners, and constructed several large vessels.

Q. By whom was Henry the Seventh succeeded?—*A.* By his second son Henry the Eighth, in the year 1509.

Q. What are the remarkable occurrences in this reign?—*A.* The declaration of the clergy and laity, that the king was supreme head of the church, and the separation of the kingdom of England from the papal jurisdiction; the dissolution of the monasteries and nunneries; the translation of the bible into the vulgar tongue; and the subjection of Wales to the English laws.—In this reign was fought the famous battle of Flodden Field; and books of astronomy and geometry were burned, under the idea of their containing magic arts.

Q. Why did the pope confer the title of defender of the faith on Henry?—*A.* For the book which he wrote, in the

beginning of his reign, against the supposed heresies of Martin Luther.

Q. Who were the wives of Henry?—*A.* Catherine of Arragon, daughter of the king of Spain; Anne Boleyn, niece to the duke of Norfolk; Jane Seymour, daughter of sir John Seymour; Anne of Cleves, sister of the duke of Cleves; Catherine Howard, niece to the duke of Norfolk; and Catherine Parr, widow of lord Latimer.

Q. What was the conduct of Henry towards his wives?—*A.* Two of his queens, Anne Boleyn and Catherine Howard, he beheaded; two of them, Catherine of Arragon and Ann of Cleves, he divorced; one of them, Jane Seymour, died soon after her marriage; and Catherine Parr, after narrowly escaping the block, survived him.

Q. What children had Henry VIII. by his wives?—*A.* By his first queen he had two sons, who died in their infancy, and Mary, afterwards queen of England. By his second he had one daughter, named Elizabeth, who succeeded her sister Mary on the throne; and by his third he had one son, Edward, his immediate successor.

Obs. Sir Walter Raleigh, speaking of this odious and profligate tyrant in the preface to his History of the World, justly observes, that "If all the pictures and patterns of a merciless prince were lost, they might all again be painted to life out of the story of this king." By the concessions of a cowardly parliament he was allowed to clothe his proclamations with all the authority of statutes, and his will constituted the sole rule of obedience.

Q. When did Edward the Sixth succeed his father Henry the Eighth?—*A.* In the year 1547, being then only nine years old.

Q. Mention the remarkable occurrences of this reign.—*A.* The creation of the duke of Somerset, the young king's uncle, protector of England, by the sixteen persons whom Henry had left executors of his will; the total abolition of the Catholic faith in these realms; and the appointment, by Edward, of lady Jane Grey to the succession of the crown on his decease—a female gifted with every virtue and every accomplishment that could adorn her sex.—In this reign was fought the battle of Pinkey, between the English and Scots.

Q. Do you recollect any law passed in the reign of Edward VI. remarkable for its severity?—*A.* Yes: that which enacted, that if any person should loiter, without

offering himself to work, for three days together, he should be adjudged a slave for two years to the first informer, and should be marked upon the breast with the letter V, or *vagabond*, imprinted with a hot iron.

Q. Who was lady Jane Grey?—*A.* The daughter of the duchess of Suffolk, whose mother was the daughter of Henry the Seventh. She was also daughter-in-law to the duke of Northumberland, by her marriage with his fourth son lord Guildford Dudley.

Q. Did lady Jane Grey succeed to the crown of England?—*A.* On Edward's decease, she was, by the importunities of her father and father-in-law, prevailed on to allow herself to be proclaimed queen of England; but the people not acknowledging her title, she abdicated the throne after holding the royal authority for the space of ten days; and thus made way for the accession of Mary, the eldest daughter of Henry the Eighth.

Q. When did Mary succeed to the crown?—*A.* In the year 1553.

Q. Mention the most remarkable occurrences during Mary's reign.—*A.* Her marriage with Philip, king of Spain, and son of the emperor Charles the Fifth; the formidable rebellion of sir Thomas Wyatt against the queen's cruelty; the execution of the lady Jane Grey and her husband; the re establishment of the papal power in England, and the re-acknowledgment of the pope's title as supreme head of the English church; the capture of Calais, after it had been 200 years in the possession of the English, whereby they lost the whole of their possessions in France.

Q. By whom was Mary succeeded?—*A.* By her uterine sister, Elizabeth, in the year 1558.

Q. What are the remarkable occurrences during the reign of this great and politic princess? — *A.* The re-establishment of the reformed religion, and the total abolition of the papal power in England; the resumption of the supremacy of the church by the queen; the assistance granted by the queen to the Scottish reformers, to the French protestants under the prince of Condé and the admiral Coligni, and to the United Provinces against the Spaniards under the sanguinary duke of Alva; the offer of the sovereignty of Holland by the Dutch to the queen; the

defeat of the Spanish armada; and the execution of Mary queen of Scots.

Q. What other memorable occurrences took place during this reign?—*A.* The introduction of the slave trade; the first transportation of criminals; the use of stops in literature, and of hackney-coaches; the incorporation of the Bank of England; and the establishment of the East-India Company.

Q. On what account is Elizabeth not entitled to unqualified respect?—*A.* For her enforcement of passive obedience to unlimited power, and her contempt for the civil liberty of the subject.

Q. On what grounds did Elizabeth execute the queen of Scotland?—*A.* On the ground that she had conspired to deprive her of her life and kingdom; that she, in conjunction with her first husband Francis, the dauphin of France, had assumed the arms and title of the king and queen of England; and that she had murdered her second husband, lord Darnley.

Q. Who was lord Darnley?—*A.* The eldest son of the earl of Lenox, who as grandson to Henry VII. by his daughter Margaret of Scotland, divided with Mary the claim to the crown of England.

Q. How was Mary queen of Scots related to Elizabeth?—*A.* By descent from Henry the Seventh, to whom Mary queen of Scots was great grandaughter.

Q. Can you mention any extraordinary instance of valour exhibited during Elizabeth's reign?—*A.* Yes; that of sir Richard Greenville, who, with his single ship the "Revenge," engaged a force of fifty-three Spanish men of war, manned with 10,000 seamen, and did not surrender till his men were almost all slain or wounded, his powder spent, his masts gone, his vessel, pierced by 800 bullets, almost sinking under him, and he himself covered with wounds.—A monument, intended as a memorial of this glorious exploit, is exhibited in Westminster Abbey.

Q. Can you recollect any expressions of Elizabeth which display her magnanimity?—*A.* Yes: First, her reply to the parliament when solicited to levy new taxes, "that she thought the money of her subjects was better in their pockets than in her exchequer;" and secondly, when a ball was fired into the barge in which she was sailing down

the Thames, she dismissed the offender, who had been sentenced to the gallows, with these memorable and glorious words, "that she would credit nothing against her subjects, which a parent might not believe against her own children."

Q. Can you mention the names of the great statesmen and captains of Elizabeth's reign?—*A.* Yes: Cecil, Burleigh, Walsingham, Howard, Norris, Forbisher, and Drake.

Q. Who was Elizabeth's successor?—*A.* James the First, the son of Mary queen of Scots, in the year 1603.

Q. What are the memorable events of this reign?—*A.* The gunpowder plot; the introduction of potatoes into England; baronets and knights of Nova Scotia created; and copper halfpence and farthings first coined.—In this reign began that spirit of party which has ever since subsisted in England, and that noble freedom of opinion which peculiarly distinguishes the British nation. The custom, also, of falling upon the knees in the presence of the sovereign, which was in use in the reigns of Henry VIII. and Elizabeth, was now omitted.

Obs. In the beginning of this reign the title of Great Britain was first given to England and Scotland; a title which was assumed by James in order to put an end to the dispute that arose about the royal title, viz.—Whether England or Scotland should be named first.

Q. What was the object of the gunpowder-plot conspiracy?—*A.* To place the lady Arabella Stuart, the king's near relation, by the family of Lennox, and descended from Henry VII., on the throne.

Q. Who succeeded James I.?—*A.* His son Charles I. in the year 1625.

Q. Mention the remarkable events of this reign.—*A.* The revival of the odious practices of benevolences, forced loans, martial law, and arbitrary imprisonments; the levying of ship money; the granting of the famous parliamentary declaration of the liberties of the people, entitled the Petition of Right, in the year 1680; the massacre of the protestants in Ireland; and the civil war between the king and the parliament.—During this reign died Thomas Parr, at the age of 152 years, after having lived during the reigns of ten English kings.

Q. What was meant by ship-money?—*A.* Money raised

on the subject, at the will of the king, for the providing and furnishing of a certain number of ships and men for the defence and safety of the realm.

Q. Mention the principal battles fought between Charles and the parliament.—*A.* Those of Worcester and Edgehill, in which the parliamentary forces were defeated; and those of Newbury, Naseby, and Marston Moor, in which the royalists were overthrown.

Q. How long did the republican form of government last in England?—*A.* Nearly twelve years; namely, four years and three months as a pure republic, and the remainder under the protectorate of Cromwell.

Q. What were the remarkable incidents during the republican form of government?—*A.* The abolition of royalty, and of the house of peers; the execution of Charles I.; and the introduction of presbyterianism.

Q. By whom was Charles I. succeeded?—*A.* By his son Charles II. in the year 1660.

Q. Mention the memorable occurrences of this reign. —*A.* The great plague in the year 1665; the fire of London in the year 1666, which continued burning three days, and destroyed 13,200 houses, besides 80 churches, and several other public buildings; and the Rye-house plot. During this reign Quakers first appeared; the custom of franking letters began; the Habeas Corpus Act was passed; the Royal Society founded; and the distinguishing epithets of Whig and Tory were first known.—In this reign, also, the first cabinet council was formed, by the leading members in the administration; and it was called the *cabal*, from the initials of the names of the ministers, viz. Clifford, Arlington, Buckingham, Ashley, (Cooper) and Lauderdale.

Q. What was meant by the epithets of Whig and Tory? —*A.* The former were the opposers of the crown; the latter its partizans.

Obs. It was during the reign of Charles II. that the rigours of the feudal system were, after a lapse of nearly six centuries, wholly and finally extinguished, by the abolishing of the odious and oppressive imposts of wardships and purveyances. During this period of tyranny and oppression, the majority of the people were in a state of the most deplorable servitude, being liable to be sold, bestowed, and transferred, with the land, exactly in the same manner as slaves in the West Indies. The peasantry could not, without leave, give their daughters in mar-

riage; and with the exception of violation, for which the laws had provided a remedy, on the part of the *niefe*, or female bondswoman, the lord might, with impunity, commit any oppression on these modern helots. And as to those of still higher condition, their pecuniary mulcts were intolerable; for a tax was imposed on all the common incidents of humanity; so that the loss of a father, and his own minority or marriage, subjected the tenant to heavy fines, which ruined his estates, whilst certain crimes deprived himself and his posterity of the possession of them.—*Note to Williams's edition of Blackstone's Commentaries.*

Q. Who succeeded Charles II.?—*A.* His brother James II., A. D. 1685.

Q. What are the memorable events of that reign?—*A.* The rebellion of the duke of Monmouth, the natural son of Charles II.; the trial of the seven bishops for refusing to allow the declaration of liberty of conscience to be read in their churches—a scheme devised by James for the introduction of the Catholic religion into England; the pretended plots known in history by the name of the Jesuits' and Meal-tub plots; and the forced abdication of James.

Q. By whom was James II. succeeded?—*A.* By his son-in-law William, the stadtholder of Holland, and his daughter Mary; who assumed the title of William III. and Mary, A. D. 1689.

Q. What were the most remarkable events during the reign of William and Mary?—*A.* The final settlement of the British constitution, by the Bill of Rights, or Declaration of Right; the abolition of episcopacy in Scotland; the battles of the Boyne and La Hogue, in which James's hopes of reascending the throne of Britain were entirely frustrated; the appointment of public lotteries; the incorporation of the bank of England by act of parliament; the loss of the battle of Steenkirk by the English; and the first institution of the funding system, or national debt, when annuities were granted for a long term (99 years) for the purpose of liquidating the debts contracted by the expenses of the revolution, and thus the first national debt was entailed upon posterity. Before this period the supplies were raised within the year for which they were granted.

Obs. The abdication of James II., and the elevation of William III., form two splendid epochs in the history of mankind; the result of which was the Revolution, which dispelled all the mysteries of king-craft and priest-craft, and settled monarchy on its only true basis, the rights of the people.—*Note to Williams's Blackstone.*

Q. By whom was William III. succeeded?—*A.* By Anne, princess of Denmark, and the second daughter of James II. in the year 1702.

Q. What were the memorable events of this reign?—*A.* The battles of Blenheim, Ramilies, Oudenard, and Malplaquet; the capture of Gibraltar; and the union of England and Scotland, in the year 1706.

Q. Who was Anne's successor?—*A.* George I. in the year 1714.

Q. Who was George I.?—*A.* The son of the princess Sophia, grandaughter of James I., and wife of the first elector of Brunswick.

Q. By what right did George I. succeed to the English throne?—*A.* By virtue of the act of settlement.

Q. Mention the memorable occurrences which took place during this reign.—*A.* The invasion of Scotland by the old pretender (James III.), known by the title of the chevalier de St. George; the South Sea bubble; and inoculation for the small-pox introduced.

Q. By whom was George I. succeeded?—*A.* By his son George II. in the year 1727.

Q. Mention the remarkable events of this reign.—*A.* The invasion of Scotland by the young pretender in 1745; the battles of Dettingen, Fontenoy, Preston Pans, Culloden, Quebec, and Minden; lord Anson's voyage round the world; the institution of the delusive scheme of the Charitable Corporation; the abolition by law of the old Roman military dress in Scotland; the introduction of the new style of calculating time into England; the overthrow of the power of the French in India; and the use of the Latin language abolished in law proceedings.

Q. Who was the successor of George II.?—*A.* His grandson George III. in the year 1761.

Q. Mention the memorable events which happened during this reign.—*A.* The separation of the American colonies from England, and their erection into an independent state; captain Cook's three voyages round the world; the memorable siege of Gibraltar; the final expulsion of the French from India, by the capture of Pondicherry; the full establishment of the British power in India, by the overthrow of Tippoo Saib; the French revolution; the union of Ireland with Great Britain; the

abolition of the odious slave trade; and the invention of life-boats, telegraphs, and air-balloons.

Q. Did no other remarkable circumstances happen during this eventful reign?—*A.* Yes; the disappearance of the lake Harentorin, in the county of Kerry, in Ireland, which was a mile in circuit; and two falls of hail-stones in Bedfordshire and Somersetshire of eleven and seven inches in circumference. In the year 1800, a dreadful hurricane happened, which ravaged nearly a seventh part of Europe.

Q. Who succeeded George III.?—*A.* His son George IV., in the year 1820.

Q. What are the most remarkable events which have happened in this reign?—*A.* 1st. The conclusion of the revolutionary war with France, and the subversion of the government of Buonaparte; 2d. the laudable attempt to simplify and ameliorate the British Code of Laws; and, 3d. the emancipation of the Catholics, or their admission to the full participation of constitutional rights.

Q. Mention the lines of kings who have swayed the English sceptre.—*A.* The Saxon, the Danish, the Norman, the Plantagenet, the Tudor, the Stuart, those of the house of Nassau, and of Brunswick.

Q. What was the duration of the Saxon line?—*A.* From the union of the Heptarchy, under Egbert, to the death of Harold in the battle of Hastings.—Of this line there were 17 kings.

Q. What that of the Danish line?—*A.* From Swein, who began his reign in the year 1013, to Hardicanute, who died in 1041.—Of this line there were only three kings.

Q. What that of the Norman line?—*A.* From the accession of William the Norman to Stephen, who died in the year 1154.—The Norman line produced four kings.

Q. What that of the family of Plantagenet?—*A.* From Henry II. to Richard III. inclusive.

Q. Is not the house of Anjou, or the family of the Plantagenets, subdivided into distinct branches?—*A.* Yes: into that of Plantagenet the elder, York, and Lancaster; of the first of which there were eight kings, and three of each of the other two.

Q. What that of the house of Tudor?—*A.* From Henry

VII. to Elizabeth inclusive.—Of this line there were three kings and two queens.

Q. What that of the Stuart line?—*A.* From James the First to Anne inclusive.—This line produced four kings and two queens.

Q. What that of the house of Nassau?—*A.* William III.

Q. What that of the Brunswick line?—*A.* From George I. to the present time.

Q. Mention the best sovereigns of England.—*A.* Edgar, Alfred, Henry the Second, and Elizabeth.

Q. Who were the worst?—*A.* William the Norman, John, Henry the Eighth, and Mary.

Q. Which of the English sovereigns were distinguished for their attainments in learning?—*A.* Alfred the Great, Henry I., Henry VII., Henry VIII., Edward VI., lady Jane Grey, Elizabeth, and James I.

Q. What were the literary productions of Alfred the Great?—*A.* His Poetical Apologues, and his Translations of the histories of Bede and Orosius, and of Boethius on the Consolation of Philosophy. He is said to have been the best of the Saxon poets.

Q. What of Henry the Eighth?—*A.* His book against Luther, intitled De Septem Sacramentis, (*concerning the Seven Sacraments*); a preface to the book called "A necessary Doctrine and Erudition for any Christian Man;" and a manual of prayers, intitled the King's Primer Book. He is also supposed to have assisted Wolsey and Lilly in the compilation of Lilly's Grammar.

Q. What were Elizabeth's literary productions?—*A.* Translations of Isocrates, and of Boethius on the Consolation of Philosophy; and several poetical fragments.

Q. What were those of James I.?—*A.* Basilicon Doron.

Q. In what reign was the first great instance of a magistrate doing justice in opposition to power?—*A.* In the reign of Henry IV., when sir William Gascoyne, chief justice of the court of King's Bench, committed to prison the prince of Wales for his insolent conduct to that magistrate.

Q. What was the comparative value of money in the reigns of William the Norman and John, with that of the

present time?—*A.* During the reign of William it was fifteen times more valuable than at present, and during that of John ten times.

Q. What was the comparative value of labour and provisions during Mary's reign, and in the middle of the sixteenth century, with that of labour and provisions in the present time?—*A.* In Mary's reign labour and provisions were about a third of their present value; in the middle of the sixteenth century the cost of living was five times cheaper than at present.

Q. Mention the most eminent English poets. — *A.* Chaucer, Spenser, Shakspeare, Milton, Butler, Dryden, Pope, Churchill, Thomson, Young, Goldsmith, Akenside, Gay, Prior, Cowper, Gray, Burns, Byron, Moore, Campbell, and Bloomfield.

Q. Who are the most distinguished historians?—*A.* Clarendon, Robertson, Hume, Henry, and Gibbon.

Q. The most eminent writers on morals and philosophy?—*A.* Bacon, Locke, Swift, Boyle, Priestley, Clarke, Berkely, Johnson, Addison, Paley, Burke, Blair, and Stewart.

Q. On divinity?—*A.* Tillotson, Taylor, Hall, Prideaux, and Shuckford.

Q. On legislation?—*A.* Coke, Blackstone, Smith, and Millar.

Q. On mathematics?—*A.* Brigs, Newton, Simpson, Sanderson, Emerson, Maclaurin, and Euler.

Q. On chemistry?—*A.* Priestley, Watson, Black, Davy, and Brande.

Q. On romance?—*A.* Sterne, Fielding, Defoe, Smollett, Richardson, and Scott.

Q. Mention the principal epochs in the history of England.

A. 1st. The Roman Invasion.
2dly. The Saxon Invasion.
3dly. The Norman Invasion.
4thly. The Reformation in Religion.
And 5thly. The Revolution in the year 1688.

Q. Mention the principal political epochs in the history of England.

A. 1st. The enactment of Magna Charta, or the Great Charter of Liberties.

2dly. The granting of the Petition of Rights.

3dly. The enactment of the Habeas Corpus Act.

And 4thly. The passing of the Bill of Rights, or Declaration of Right.

This branch of our subject cannot be concluded more appropriately than in the words of the late Dr. Clark, who, in the last volume of his travels, thus apostrophizes his country:—

"O, England! decent abode of comfort, and cleanliness, and decorum! O blessed asylum of all that is worth having on earth! O sanctuary of religion and of liberty for the whole civilized world! it is only in viewing the state of other countries that thy advantage can be duly estimated! may thy sons who have fought the good fight, but know and guard what they possess in thee! O land of happy fire-sides, and cleanly hearths, and domestic peace! of filial piety, and parental love, and connubial joy! the cradle of heroes, the school of sages, the temple of the law, the altar of faith, the asylum of innocence, the bulwark of private security and of private honour!

Where'er I roam, whatever realms to see,
My heart, untravell'd, fondly turns to thee!"

THE WORLD IN GENERAL;

PARTICULARLY THE TERRESTRIAL GLOBE.

These are thy glorious works, Parent of good!
Almighty, thine this universal frame,
Thus wond'rous fair! thyself how wond'rous then!
Unspeakable, who sitt'st above (the) heavens,
To us invisible, or dimly seen
In these thy lowest works; yet these declare
Thy goodness beyond thought, and power divine.

MILTON

Q. How was the world created?—*A.* By the word of God, for he commanded and it was made.

Q. What space of time was the Almighty employed in the creation of the world?—*A.* Six days.

Q. In what order did the parts of the creation make their appearance?—*A.* The first day the Almighty created light; the second day the air and the clouds; on the third he separated the sea from the earth, and commanded the earth to produce all sorts of trees and herbs; on the fourth

he created the sun, moon, and stars; on the fifth, birds and fishes; and on the sixth, living creatures of all kinds, as also man after his own image.

Q. How long is it since the creation of the world?—*A.* Nearly six thousand years, namely 4,004 before the birth of Jesus Christ, and 1831 years since that event.

Q. Has this computation of the world's age been received by all nations?—*A.* No: philosophers have formed some curious conjectures concerning its antiquity. Plato describes his celebrated island Atlantis to have been buried in the ocean about 9,000 years before the age in which he wrote. The Chinese represent their empire to have existed many thousand years before; and the astronomical records of the ancient Chaldeans compute the origin of the world nearly 500,000 years back. The Egyptian accounts are equally discordant.

Q. Are the sacred writings accordant on this subject?—*A.* No: according to the Hebrew text of the Scriptures, the world was created 4,000 years before the Christian era; according to the version of the Septuagint, 5,872; and according to the Samaritan version, 4,700 years before that epoch.

Q. Do the Christian writers agree respecting the precise age of the world?—*A.* No: chronologers reckon one hundred and thirty-two opinions respecting this matter; according to some of which the age of the world was 7,000 years old at the time of the appearance of the Messiah upon earth: but none reckon less than 3,700 years.

Q. What are the component or constituent parts of the earth?—*A.* Earth, water, and mineral substances. As to the internal structure of the earth our knowledge is very confined.

Q. What is its general structure?—*A.* In general, the interior part of the earth is found to consist of seams or layers of different substances lying parallel to each other. The first layer which presents itself is most commonly the bed of vegetable mould which covers the surface of the earth. Under this is generally found, in beds or strata, gravel or sand; then clay or marl; afterwards chalk or coal, marble, ores, &c. This disposition, however, is far from being uniformly continued all over the globe; in different soils the order of these layers varies.

Q. Mention the opinions of philosophers concerning the original formation of the world.—*A.* Some have affirmed, that it existed from all eternity, as Democritus and Aristotle; others have held, that it was made out of nothing, and that it is constantly preserved by the Supreme Being; as Pythagoras and Plato. Descartes and Leibnitz conceived that the earth was an old sun, with its fire extinguished; the celebrated naturalist Buffon fancied, that a comet struck off a corner from the sun, and that being melted by heat, formed the earth; and Kepler considered the earth as being actually alive, with the waters for blood, and the rocks for bones. But the various *Systems of Geology*, or *Theories of the Earth*, as they are termed, which have, from time to time, been broached by fanciful conjecture, have, at length, given way to the Mosaic Geology, or original formation and organization of the earth from chaos, as the most agreeable to reason, and the most consonant to the idea of an all-directing and all-wise Intelligence,

"Whose wond'rous power
Presided o'er Creation's natal hour;"

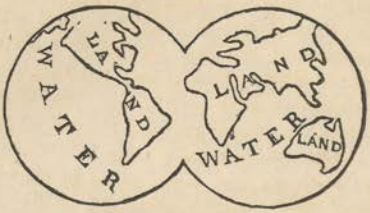
and of whose overruling providence continuing still to superintend, direct, modify, and control the system of the universe, the laws of nature afford undeniable proofs; for

"There is a voiceless eloquence on earth,
Telling of Him who gave her wonders birth;
——— Whose hidden but supreme controul
Moves through the world, a universal soul!"

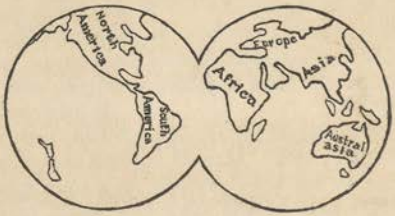
Obs. The theories of the Earth which have gained the greatest notoriety are those of Burnet, Woodward, Whiston, Buffon, Hutton, and Werner. The two last mentioned, which respectively refer the formation of the earth to fire and water, are the prevailing theories of the day. But in the eye of reason and philosophy, the Mosaic Geology, which has been lately elucidated by Mr. Penn, is the most probable.

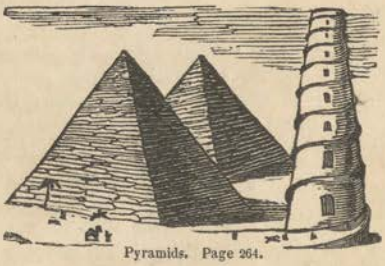
Q. What is the opinion of learned men respecting the nature of the centre of the earth?—*A.* Burnet supposed it to consist of water, Buffon of glass, Whiston of heated iron, and Kircher of volcanic matter. But the various conjectures, or, as they are called, theories of the earth, of these ingenious men are entirely visionary, as our knowledge of the internal structure of the earth is confined to a very small depth from the surface: the deepest mine

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Q. What was the opinion of the ancients respecting the form of the earth?—*A.* They entertained many very absurd and unphilosophical notions respecting its form. Some thought that it was a level horizontal plane, indefinitely extended, and covered by the sky, in the form of a vault or tent; others, that it was concave; many, that it was quadrangular; and not a few, that it was oblong, or in the form of a parallelogram. Crates resembled it to a semicircle; Hipparchus to a round table; Posidonius to the form of a sling, and Leucippus to that of a drum. Nor were these rude notions confined to the earlier ages of the world: even the fathers of the Christian church maintained (among whom were Lactantius and St. Augustin) that the earth was a plane, extending an immense way downwards, and established on foundations. Many of the ancients, however, had a correct notion of the true figure of the earth.

Q. What was the extent of the geographical knowledge of the ancients?—*A.* Very confined. They believed that both the torrid and frigid zones were uninhabitable; and they were but very imperfectly acquainted with a great part of Europe, Asia, and Africa. Denmark, Sweden, Prussia, Poland, and the greatest part of Russia, were unknown to them; nor did they apprehend that Africa was almost circumnavigable. In Ptolemy's description of the globe, the 63d degree of latitude is the limit of the earth to the north, and the equinoctial to the south.

Q. What are the proportions of earth and water in the terrestrial globe?—*A.* Their proportions are not exactly known. According to the most exact calculations, the surface of the earth may be taken at 51,242,000 square miles, and the sea at 145,600,000; or it may be said in round numbers, that rather less than three-fourths is covered with water, and rather more than one-fourth is land.

Q. How is the earth generally divided?—*A.* Into four quarters, namely, Europe, Asia, Africa, and America. Modern geographers have also added the newly discovered continent of Australasia, or Southern Asia, as a fifth division. Another division of the globe adopted by geographers, is that of the Eastern and Western Continents, or the Old and New Worlds.

Q. Mention the limits of Australasia, and the principal countries it includes.—*A.* It is larger than the whole of Europe, and includes the continent of New Holland, the islands of New Guinea, New Zealand, New Britain, New Caledonia, Van Diemen's land, &c.—The numberless islands situated between Asia and America, as the Pelew Isles, the Ladrones, the Carolines, the Sandwich Isles, the Marquesas, the Society Isles, and the Friendly Isles, are distinguished in the recent treatises on Geography by the title of Polynesia.

Q. Why is the globe distinguished by the title of the Old and New World?—*A.* Because the fourth quarter, containing North and South America, has not been known much above three centuries ago. This important discovery was made by Christopher Columbus, a native of Genoa, in the service of Spain, in the year 1492.

Q. From what does America take its name?—*A.* From Americanus Vespucius, a native of Florence, in the service of Portugal; who, by the publication of his discovery of the continent of South America, had the address to give his name to that part of the world, and ungenerously to usurp the honour due to his more daring predecessor.

Q. What quarter of the globe was first peopled?—*A.* Asia.

Q. What quarter is at present the most civilized?—*A.* Europe.

Q. What is the population of the Earth?—*A.* The accounts on this subject are various and contradictory. Some geographers rate the whole population of the globe at 800,000,000, others at 750,000,000; of which Asia is supposed to contain 500,000,000, Europe 150,000,000, Africa 30,000,000, America 20,000,000, and Australasia and Polynesia 50,000,000. A third computation states it at 1,080,000,000 of souls; of which number Asia is said to contain 650,000,000, Africa 150,000,000, America the same number, and Europe 130,000,000. The population of England, Wales, and Scotland amounts to above 14,000,000; that of Ireland to nearly 7,000,000 of souls.

Q. Has the earth always subsisted in its present form?—*A.* No: some philosophers have supposed, that at the universal deluge, a great deterioration of the seasons, and of the course of nature took place.

Q. When did the universal deluge happen?—*A.* One thousand six hundred and fifty-six years after the creation of the world.

Q. What has been the consequence of the deluge?—*A.* The abridgment of the life of man, and the introduction of a formidable train of diseases from which the human race was free before that event.

ASTRONOMY.

O NATURE! *all sufficient! over all!*
Inrich me with the knowledge of thy works!
Snatch me to Heaven; thy rolling wonders there,
World beyond world, in infinite extent,
Profusely scatter'd o'er the blue immense,
Shew me; their motions, periods, and their laws,
Give me to scan.

THOMSON.

Q. WHAT is the use of astronomy?—*A.* It teaches the method of examining and calculating the nature, motions, periods, eclipses, magnitudes, order, and distances of the heavenly bodies.

Q. What benefit is derived from the study of astronomy?—*A.* It enlarges the human mind, raises it above mean and vulgar prejudices, dissipates the vain fears and superstitions incident to human nature, and fills the mind with sentiments of the most profound reverence towards the Creator of the universe.

Q. What nations are considered the first cultivators of astronomical science?—*A.* The Egyptians and Chaldeans.

Q. For what discoveries are those nations distinguished?—*A.* For the true motion of Mercury and Venus about the Sun, and the true length of the year, by the Egyptians; and the calculation of eclipses of the moon by the Chaldeans.

Q. What nation appears to have first cultivated astronomy as a science?—*A.* The Greeks. About fourteen centuries before the Christian era they appear to have had an idea of the sphericity of the earth, of the opaque and habitable nature of the moon, of a plurality of worlds, of the motion of the earth, and the return of comets.

Q. Who were the most distinguished Grecian astronomers?—*A.* Thales, born 640 years before the Christian era; Pythagoras, born about 500 years before the same epoch; Aristarchus, Hipparchus, Eratosthenes, and Ptolemy.

Q. What were the doctrines of Thales?—*A.* He taught the sphericity of the earth, the obliquity of the ecliptic, and the true courses of the sun and moon.

Q. What were the improvements of Pythagoras in astronomy?—*A.* He taught the diurnal motion of the earth, and its annual revolution with the other planets round the sun. He also gave such an account of the comets as is agreeable to modern discoveries.

Q. For what is astronomy indebted to Aristarchus?—*A.* For his discovery of the summer solstice, and his endeavours to ascertain the diameter and the distance of the sun.

Q. For what to Eratosthenes?—*A.* For the measure of the earth, and his observations on the obliquity of the ecliptic.

Q. For what to Hipparchus?—*A.* For the calculation of the extent of the tropical year; of that of the revolution of the moon; of the longitude and latitude of places, as also the fixed stars; and the discovery of the precession of the equinoxes.

Q. For what to Ptolemy?—*A.* For the discovery of the moon's evection; and the determination of the relative positions and distances of the planets from the earth, and the apparent paths which they describe among the fixed stars.

Q. How many systems of astronomy have been promulgated in the world?—*A.* Four—1st, the Pythagorean; 2dly, the Ptolemaic; 3dly, the Tychonian; and 4thly, the Cartesian.

Q. What were the doctrines of the Pythagorean system?—*A.* That the sun was the centre of the universe, and that the earth with the other planets revolved round it.

Q. Is this system known by no other names?—*A.* Yes: by those of the Copernican and Newtonian systems.

Q. Why is it called the Copernican?—*A.* Because it was revived by Copernicus, a native of Thorn, in Polish

Prussia, after it had been enveloped in darkness during twelve centuries.

Q. Why is it called the Newtonian?—*A.* Because it was established on the basis of truth and demonstration by the illustrious sir Isaac Newton.

Q. What were the doctrines of the Ptolemaic system?—*A.* Its founder Ptolemy, a native of Egypt, and who flourished in the second century before the Christian era, rejecting the theory of Pythagoras as contrary to natural appearances and the evidence of the senses, held that the earth was fixed immovably in the centre of the universe, and that all the heavenly bodies revolved round it from east to west every twenty-four hours, in a number of circles, called epicycles and differents. Above the planets he placed the firmament of the fixed stars, which he imagined to be fixed in solid crystalline spheres.

Q. What was the nature of the Tychonian system?—*A.* Its author Tycho Brahé, a native of Denmark, and who flourished about the end of the 16th century, influenced by the prejudices of astronomy, or by the vanity of giving his name to an astronomical system, supposed the earth to be stationary in the centre of the universe, and the sun with all the planets to revolve round it in the space of a year, whilst the planets, by their inherent motions, revolved round the sun in their several periods.

Q. What benefits did astronomy derive from the labours of Tycho Brahé?—*A.* The discovery of the variation and annual equation of the moon; of the refraction of the air; and a catalogue of stars very superior for its precision and number to that of Hipparchus.

Q. For what is astronomy indebted to Copernicus?—*A.* For his explanation, according to the laws of mechanics and physics, of the celestial phenomena of the motion of the earth on its axis and round the sun.

Q. What were the doctrines of the Cartesian system?—*A.* Its founder, Renes des Cartes, a French philosopher, who flourished about the beginning of the 17th century, formed one of the most fanciful and philosophical romances that human ingenuity has ever exhibited. To account for the motions of the celestial bodies on the laws of mechanism, he imagined vortices of subtil matter, in the centre of which he placed the heavenly bodies. According to his

system, the vortex of the sun forced the planets into action, while that of the planets in the same manner forced their satellites to revolve round them; and thus a circular motion was given to the whole universe.

Q. Who are the other distinguished contributors to astronomical science?—*A.* Kepler, Galileo, and sir Isaac Newton.

Q. What benefits did astronomy derive from Kepler?—*A.* He discovered the forms and properties of the planetary orbits, proved that they were elliptical, and not circular; and he demonstrated those laws of their motions which laid the foundation of the Newtonian astronomy. He considered gravity as a mutual and corporeal affection between similar bodies; and he likewise supposed that the tides were produced by the attraction of the moon, and that the lunar inequalities were occasioned by the united action of the earth and sun.

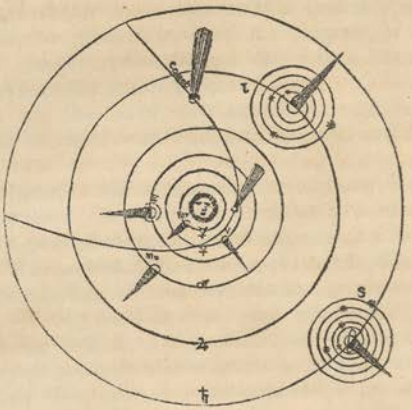
Q. What advantages did Galileo render astronomy?—*A.* By his invention, or rather adaptation of the telescope to astronomical purposes, he afforded additional proofs of the truth of the Copernican system, and discovered new inequalities and new worlds in the heavens. He concluded that the moon was an opaque body like our earth; and observed the spots and rotation of the sun upon its own axis. He verified the prediction of Copernicus, that Venus would exhibit phases similar to those of the moon; discovered a number of stars which were beyond the reach of unassisted vision; and was of opinion that the light of the Milky Way was occasioned by an infinite number of stars collected in that zone of the heavens. He explained the laws of accelerated motion in falling bodies, and laid the foundations and unfolded the elementary truths on which Newton erected the sublime theory of motion.

Q. What were the improvements which astronomy received from Newton?—*A.* His explanation of the laws of attraction and gravitation; his demonstration that the earth is an oblate spheroid; and his explanation of the course of the tides.

Q. What are the names of the other distinguished men by whom astronomy has been improved?—*A.* Purbeck, Regiomontanus, Waltherus, Napier, Hevelius, Huygens,



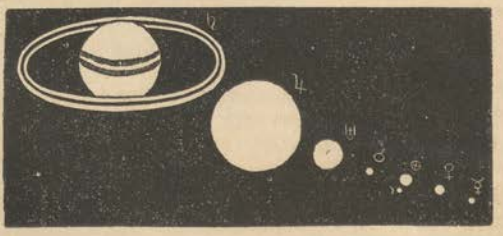
Solar System. Page 99.



Moon. Page 102.



Proportioned Magnitudes of the Planets, page 105.



Dominic Cassini, Gassendus, Flamstead, Wallis, Wren, Hook, Maclaurin, D. Bernouilli, Simpson, D'Alembert, Boscovich, Euler, Bailly, Bradley, Halley, La Lande, Maskelyne, Piazzi, Olbers, Troughton, La Grange, Herschel, and La Place.

Q. What is meant by the term, the solar system?—*A.* The order and disposition of the celestial bodies; namely, the sun, planets, asteriods, and comets; of which the sun is the centre of motion.

Q. Of what bodies does the solar system consist?—*A.* Of the sun, the planets, with their satellites, the fixed and moveable stars, and the comets.

Q. What is the form and situation of the sun in the solar system?—*A.* The sun is of a spherical form, and is placed in the centre of the universe.

Q. Describe his motion.—*A.* He turns round his own axis in 25½ days, as is evident from the motion of the maculæ or spots upon his surface.

Q. What is the magnitude of the sun, and his distance from the earth?—*A.* He is about 3,000 times larger than the earth, and is above 97,000,000 of miles distant from it.

Q. What is his diameter?—*A.* 883,246 miles.

Q. What is the component matter of which the sun is formed?—*A.* The ancient philosophers assert, that he is an immense body of fire; and this opinion is supported by La Place, in his excellent work "Le Système du Monde." Dr. Halley is inclined to believe, that he is a solid opaque globe, surrounded by an extensive lucid and transparent atmosphere, of a phosphoric nature.

Q. What is the use of the sun?—*A.* To furnish light and heat to the universe, and raise the vapours of the sea.

Q. Supposing the sun to be an inhabitable globe, according to Dr. Halley, from whence then do you account for the light and heat which are communicated to the planets?—*A.* From the luminous atmosphere with which the sun is surrounded.

Q. What justifies this supposition?—*A.* Were the sun a body of fire, it would be hotter on the summits of mountains than in the valley, and the higher parts of the atmosphere would be warmer than those near the earth;

whereas in the first case the summits of the highest mountains are in general covered with continual ice and snow, and in the latter, it has been found by means of the air balloon, that the higher parts of the atmosphere are too cold for the sustentation of life.

Q. How is it supposed that heat is generated by the luminous atmosphere?—*A.* By its coming in contact with the atmosphere of the planets.

Q. What operations of nature support this supposition?—*A.* Flint and steel are cold bodies, yet by collision or striking them together, they produce fire. So quick-lime is cold, but when mingled with water it becomes hot. Also heat itself is produced by the mixture of several chemical fluids.

Q. How does it happen that the sun, and the fixed stars, though fixed bodies, appear to move westward, and have an apparent elevation above the earth?—*A.* As each part of the earth's surface turns alternately towards the east, and as that body is of a globular shape, and, in its motion, falls gradually lower, till the sun comes to the meridian, it thereby gives to the sun, and the other heavenly bodies, an apparent motion westward, and in respect of itself, an apparent elevation.

Q. What causes the rising and setting of the sun?—*A.* The motion of the earth on its axis from west to east every twenty-four hours.

Q. Describe the planets.—*A.* They are of two kinds, the primary and the secondary.

Q. Which are the primary?—*A.* Mercury; Venus; the Earth; the Moon; Mars; Jupiter; Saturn; Herschell, called also the Georgium Sidus, and Uranus, on the Continent; Ceres, or Ferdinandea; Pallas; Juno; and Vesta; all which revolve round the sun in elliptical orbits,—that is, in a form more oval than circular.

Obs. The order in which the primary planets move round the sun may be recollected by means of the following lines from the poems of the highly gifted, but ill-fated Chatterton:—

The Sun revolving on his axis turns,
And with creative fire intensely burns;
First Mercury completes his transient year,
Glowing, refulgent, with reflected glare;
Bright Venus occupies a wider way,
The early harbinger of night and day;

More distant still our globe terraqueous turns,
Nor chills intense, nor fiercely heated burns;
Around her rolls the lunar orb of light,
Trailing her silver glories through the night.
Beyond our globe the sanguine Mars displays
A strong reflection of primeval rays;
Next belted Jupiter far distant gleams,
Scarcely enlightened with the solar beams,
With four unfixed receptacles of light,
He tours majestic through the spacious height:
But farther yet the tardy Saturn lags,
And six attendant luminaries drags;
Investing with a double ring his pace,
He circles through immensity of space.

Q. Describe the secondary planets.—*A.* The secondary planets, called also the satellites, from their attending on the primary ones, revolve round the primary planets, and partake of their motion round the sun.

Q. How do the planets move?—*A.* From east to west.

Q. By what power are they retained in their orbits, or paths, round the sun?—*A.* By the power of gravitation and attraction, which power is called their centripetal and centrifugal force.

Q. Describe the planet Mercury.—*A.* It is a small star, but emits a very bright bluish light; though, by reason of its being the nearest planet to the sun, it is seldom to be distinctly seen. It appears a little after sun-set, and again a little before sun-rise. Its rotation on its axis is unknown, but its periodical revolution round the sun is nearly 88 days.

Q. Describe the planet Venus.—*A.* This is the most beautiful star in the heavens, being remarkable for her brilliancy, and is sometimes to be seen at noon-day. She is called the *evening* and *morning star;* in the morning she is situated to the west of the sun, and consequently rises before him, and in the evening to the east of that luminary, and consequently sets after him; being in each situation about 290 days, alternately. When the morning star, she is called Phosphorus, or Lucifer; when the evening, Hesperus, or Vesper. Her rotation on her axis is 23$\frac{1}{3}$ hours, and her revolution round the sun nearly 225 days.

Q. What are the phenomena which have been discovered in Venus?—*A.* Spots similar to those on the

Moon, as also mountains considerably higher than those of the earth, have been discovered upon her surface.

Q. Describe the earth's motion and situation in the solar system.—*A.* The earth is the next planet to Venus in the solar system. It has two motions, a diurnal one on its own axis from west to east, in the space of 23 hours $56\frac{1}{15}$ seconds, which occasions day and night; and the other an annual motion round the sun in 365 days, 5 hours, 48 minutes, and 48 seconds; the latter of which occasions the diversity of the seasons, viz. Spring, Summer, Autumn, and Winter.

Q. What is the motion of the earth on its axis?—*A.* Fifty-eight thousand and a quarter miles per hour.

Q. Why do not the inhabitants of the earth perceive its rapid motion?—*A.* Because the atmosphere, the clouds, and all surrounding objects move with it at the same time.

Q. How is it, since the earth is globular, that its inhabitants can stand on its surface?—*A.* By the property of attraction, which is inherent in all nature; for, by the influence of attraction, bodies, or their constituent parts, accede, or have a tendency to accede, to each other, without any sensible material impulse.

Q. Describe the moon.—*A.* The moon, next to the sun, is the most conspicuous and useful of all the heavenly bodies to the inhabitants of the terrestrial sphere. She is an opaque body like the earth, and shines by reflecting the light of the sun; consequently, during the time while that half of her which is turned towards the sun is enlightened, the other half must be dark and invisible to the inhabitants of the earth. Her rotation on her axis is $27\frac{1}{3}$ days nearly, and her revolution about the sun occupies the same period of time.

Q. Of what is the moon supposed to consist?—*A.* Of the same materials as the earth. Three volcanic mountains, besides seas, have been discovered in this planet by Herschel.

Q. What is the size of the moon?—*A.* About fifty times less than the earth.

Q. What distance is the moon from the earth?—*A.* About 240,000 miles.

Q. Of what use is the moon in the planetary system?—

A. To enlighten the earth by night, by reflecting the light of the sun, and in conjunction with that body to occasion the tides. By her revolution also, she subdivides the year into months.

Q. How is it that the moon is not always visible?—*A.* When she intervenes between the earth and the sun, or when she is below the horizon, she is not visible to the inhabitants of the earth.

Q. What are the different appearances of the moon?—*A.* She is either *horned, semicircular, gibbous*, or *full.*

Q. Explain these terms.—*A.* She is said to be *horned*, when only a small part of her enlightened side is turned towards the earth; *semicircular*, when but half of her illuminated side appears; *gibbous*, when more than half of her body appears enlightened; and *full*, when the whole of her illuminated side appears.

Q. What is meant by a new moon?—*A.* When the dark side of the moon is opposite to the earth.

Q. When does the new moon happen?—*A.* When that planet is between the sun and the earth.

Q. Describe the planet Mars.—*A.* The analogy between this planet and the earth is, perhaps, the greatest in the whole solar system. This planet revolves round its own axis in one day and forty minutes, and his periodical revolution round the sun is nearly two years. He gives a much duller light than Venus, and appears of a dusky red colour, which is supposed to arise from the density of his atmosphere.

Q. Describe the planet Jupiter.—*A.* Jupiter is by far the largest of all the planets, and, except Venus, is the brightest. His diameter is 90,000 miles, which is eleven times greater than that of the earth; consequently, he is 1,000 times as large as that body. His rotation is from west to east, like that of the sun; and his figure is more oblate than that of the earth. He revolves round his own axis nearly every ten hours, and his revolution round the sun occupies 4,332½ days.

Q. What is remarkable of Jupiter?—*A.* He is attended by four moons, called his *satellites*, nearly as large as our earth, and which revolve about him, affording him a constant light during the night. He is also surrounded by faint substances, which astronomers have denominated

belts, and which are supposed to be formed from clouds and vapours.

Q. Describe Saturn.—*A.* Saturn is the remotest from the sun of all the planets, except the Georgian. He is not so brilliant as Jupiter; is encompassed by two broad, circular, luminous arches, denominated his rings; is attended by seven satellites or moons; and has belts almost resembling those of Jupiter. He revolves round his own axis in 10¼ hours nearly, and his periodical revolution round the sun occupies 10,759½ days.

Q. Mention the respective diameters of Mercury, Venus, the Earth, the Moon, Mars, Jupiter, and Saturn. —*A.* The diameter of Mercury is 3,200 miles; that of Venus 7,906 miles; that of the Earth, 7,900 miles; that of the Moon, 2,172 miles; that of Mars, 4,189 miles; that of Jupiter, 90,000 miles; and that of Saturn, 78,000 miles.

Q. What are the respective distances of Mercury, Venus, the Earth, the Moon, Mars, Jupiter, and Saturn, from the Sun?—*A.* Mercury is nearly 37,000,000 of miles distant; Venus nearly 69,000,000; the Earth above 97,000,000; the Moon, 95,000,000; Mars, 145,000,000; Jupiter, nearly 500,000,000; and Saturn above 900,000,000.

Q. By whom was the planet Herschel discovered?—*A.* By Dr. Herschel, in the year 1781. In honour of the then king George III. he called it the Georgium Sidus. Among foreign astronomers it is known by the name of Uranus.

Q. Describe the Georgium Sidus.—*A.* This planet is the most remote in the system, being above 1,800 millions of miles distant from the sun. Its rotation on its own axis is unknown, but its diameter is about 35 thousand miles, and its revolution round the sun is performed in 83⅘ years nearly. It is attended by six satellites, and is above four times as large as the earth.

Q. Describe the planets Ceres, Pallas, Juno, and Vesta. —*A.* Ceres was discovered by Piazzi, at Palermo, in the year 1801; and Pallas, by Olbers, at Bremen, in the following year; Juno, by Harding, in 1804; and Vesta, by Olbers, in 1807. The distance of Ceres from the sun is 260 millions of miles, and her diameter 160 miles. Pallas is distant 266 millions of miles, and her diameter is 80

miles. Juno is distant 300 millions of miles, and her diameter is nearly 1,500 miles. The magnitude and distance of Vesta have not as yet been ascertained.

Q. In what order do the primary planets move round the sun?—*A.* First, Mercury; next Venus; then the Earth, with its attendant the Moon; then Mars; next to him Ceres, Pallas, Juno, and Vesta; then Jupiter; afterwards Saturn; and, lastly, the Georgium Sidus.

Q. How are the planets known to the naked eye?—*A.* Mercury is known by being of a sparkling red hue; Venus by a yellowish white; Mars by a fiery red; Jupiter by a splendid white; and Saturn by a dimmish red.

Q. What are the proportionate weights and magnitudes of the bodies which compose the solar system supposed to be?—*A.* M. la Place, following, in his Exposition du Système du Monde, the principles laid down by Newton, has endeavoured to solve the problem. He concludes, that Jupiter is not quite the thousandth part of the sun; Saturn about one-third the mass of Jupiter; and Uranus about one half. The earth, he imagines, is less than the three thousandth part of the sun; Venus is not much less; Mars about twice as large as the earth; and Mercury about a seventh part.

Q. Besides the eleven primary planets before enumerated, are there no other bodies in the solar system?—*A.* Yes; the stars and the comets.

Q. How are the stars distinguished?—*A.* They are divided into three classes; first, the fixed stars; secondly, the wandering or moving stars; and thirdly, the blazing stars.

Q. What are the fixed stars?—*A.* They are so called, because they are not subject to motion; but always keep the same distance with regard to the earth and to each other; their apparent diurnal revolution being solely caused by the earth's revolution on its own axis.

Q. Of what use are the fixed stars in the system of the universe?—*A.* They are probably the centres of so many planetary systems, or are suns enlightening more distant worlds than our earth.

Q. Of what use are the stars to the inhabitants of the earth?—*A.* In the absence of the moon, they serve to

lessen the gloom of the night; they are likewise of use in navigation. Among the other advantages derived from them is, that by knowing the North Pole Star, we can at all times at night tell what direction is north, and therefore can easily ascertain the south, east, west, and the intermediate points: a knowledge which may prove highly useful in walking over a large plain, or in sailing on the water by night, or in the various accidents which befall a person who makes voyages to foreign climes.

Q. How are the planets and fixed stars distinguished? —*A.* The fixed stars are brighter and more luminous than the planets, and have a twinkling appearance, which proves that they shine by their own light. The planets are continually changing their positions in the heavens, and, as they derive their light from the sun, always shine with a steady light.

Q. What occasions the twinkling of the stars?—*A.* The floating of vapours, or other minute bodies, in the air.

Q. What is the distance of the fixed stars from the earth?—*A.* They are so exceedingly remote, that the nearest to our earth is supposed to be at the distance of 7,600,000,000,000 miles from it.

Q. Into what classes do astronomers divide the fixed stars?—*A.* Those which appear largest are called stars of the *first magnitude;* the next to them in lustre, *stars of the second magnitude;* and so on to those of the *sixth magnitude*, which are the smallest which can be seen by the naked eye. Those which cannot be seen but by the help of instruments are called *telescopic stars.*

Q. What occasions the difference which we observe in the size of the stars?—*A.* It is supposed to arise from the different distances they are from the earth.

Q. What number of stars is visible to the naked eye? —*A.* The greatest number which can be seen by the eye is 1,000; for of the 3,000 stars contained in Flamstead's catalogue, many are only visible through a telescope. In the late discoveries of Lalande, the places of 50,000 stars have been determined from the pole to two or three degrees below the tropic of Capricorn. In the Galaxy, or Milky-way, the stars are in prodigious numbers: in the year 1792 not less than 258,000 passed through the field of

view, in Dr. Halley's telescope, in the space of forty-one minutes. According to Lalande, there are no less than seventy-five millions in the heavens.

Q. What is meant by the Galaxy, or Milky-way?—*A.* The Galaxy, or Milky-way, (Via Lactea,) is a remarkably whitish luminous tract, which seems to encircle the heavens, like a girdle, and is occasioned by a prodigious number of very small stars, appearing in some places with a double path, but in most with a single one. The breadth of the girdle varies from four to twenty degrees.

Q. Have astronomers assigned any other distinctions to the stars, besides those of magnitudes?—*A.* Yes; those of constellations.

Q. What is meant by a constellation?—*A.* An assemblage of stars on the surface of the celestial globe, circumscribed by the outlines of some assumed figure, such as a ram, a dragon, a bear, &c. for the purpose of ascertaining with more facility the precise situation of the stars.

Q. What are comets?—*A.* They are solid luminous bodies, of spherical forms, and are distinguished into two sorts, *hairy comets* and *bearded comets*, from their having beams like hair or beards all around them. The fume or vapour which the fore part of a comet emits is called its *coma;* the fiery meteoric appearance of the hind part, its *tail.*

Q. What are the properties of comets?—*A.* They are of a much greater density than the earth; for some of those which have appeared have been found to be heated to such a degree, as would vitrify or dissipate any substance known to us. The heat of the comet which appeared in the year 1680, and which will re-appear at the end of 575 years, was estimated, by Newton, to have been about 2,000 times hotter than red hot iron; and he supposed that it might retain its heat during a period of twenty thousand years! Comets are supposed to shine by their own native light, and not by the reflected rays of the sun, as was formerly imagined.

Q. What number of comets is supposed to belong to the planetary system?—*A.* About one hundred; but of these, it is probable that some of them have re-appeared several times; for Dr. Halley, by comparison, found that

the comet, which appeared in the year 1759, had before appeared in the years 1456, 1531, 1607, and 1682.

Q. Mention the most remarkable comets which have been observed.—*A.* That of 1811, which first appeared in March of that year, and did not disappear till January 1812. When Dr. Herschel first observed it, its distance from the earth was 114 millions of miles; and the length of its tail, which resembled the Milky Nebula in the constellation of Orion, reached upwards of 100 millions of miles, and its breadth nearly 15 millions of miles. Its distance from the sun was 97 millions of miles, being 36 millions of miles farther distant from that luminary than the comet of 1807 was.

Q. What are the tails of comets supposed to contain?—*A.* Dr. Halley imagined, that they contain an immense quantity of humid vapours.

Q. What is the opinion of celebrated astronomers respecting comets?—*A.* Dr. Halley, who endeavoured to show, that the comet which appeared in the year 1680 was the same as that which was seen soon after the death of Julius Cæsar, was of opinion that the universal deluge was occasioned by it. Whiston is of opinion that the tail of this same comet, when sufficiently heated by the sun, will occasion the general destruction of the world.—Sir Isaac Newton is of opinion, that comets are intended to serve as aliment or food to the sun, to supply the loss of matter which that body sustains from its continual emission of the particles of light. Some have imagined, that comets are the receptacles of reprobated spirits. But these are all conjecture.

Q. Are comets supposed to be habitable?—*A.* No: the great degree and prodigious vicissitudes of heat and cold to which they are subject, seem to prevent them from being adapted for the habitation of animated beings, at least according to our organization.

Q. What is a halo?—*A.* A meteor in form of a luminous ring round the sun and moon, occasioned by the refraction and reflexion of the rays of light striking on globular moist particles in the atmosphere.

Q. What is a parhelion?—*A.* A mock sun or meteor, appearing like a bright spot near the sun, and formed by the reflection of his beams in a hollow waterish cloud.

When these appearances are seen round the moon, they are called paraselenæ.

Q. How many kinds of constellations are there?—*A.* Three: the zodiacal, the northern, and the southern constellations.

Q. What is the number of the zodiacal constellations?—*A.* Twelve.

Q. Mention them.—*A.* Aries, *the Ram;* Taurus, *the Bull;* Gemini, *the Twins;* Cancer, *the Crab;* Leo, *the Lion;* Virgo, *the Virgin;* Libra, *the Balance;* Scorpio, *the Scorpion;* Sagittarius, *the Archer;* Capricornus, *the Goat;* Aquarius, *the Water Bearer;* and Pisces, *the Fishes.* The first six are the summer, or the spring and summer signs; the last the winter, or the autumn and winter signs.

The learner may be enabled to recollect the order of the signs of the zodiac by the following simple lines of Dr. Watts:—

The ram, the bull, the heav'nly twins,
And next the crab the lion shines,
The virgin and the scales;
The scorpion, archer, and she-goat,
The man that holds the water-pot,
And fish with glittering tails.

Obs. It is not easy to say why the ancient astronomers affixed such images as the Ram, the Bull, &c. to the twelve signs of the zodiac. The symbols, however, do not appear to have been altogether whimsical and useless, as there is great reason to suppose that they were adopted as hieroglyphics of the seasons of the year, and in allusion to the annual course of the sun.

Cancer, or the Crab, an animal which possesses the faculty of walking backwards, or obliquely, was selected as a proper emblem of the sun, who on his arrival at the summer solstice, commences his retrograde movement. Capricorn, or the Wild Goat, from its propensity to climbing the rocks, was placed as an emblem of December, as the sun on reaching the winter solstice, begins to ascend again towards the equinoctial. Aries, Taurus, and Gemini represent March, April, and May, and were selected to represent the sun's course during the spring quarter of the year, when the different kinds of young cattle are produced in the rotation of nature, namely, lambs, calves, and kids, the latter generally bringing forth twins. The fury of Leo, or the Lion, was expressive of the raging heat of the sun in July. Virgo, or the Virgin, crowned with ears of corn, or having a spike or ear of the same in her hand, exhibited a lively emblem of the harvest. Libra, or the Balance, denoted the equality of days and nights in all parts of the globe, when the sun is at the autumnal equinox; while in October, the diseases that generally occur on the fall of the leaf were significantly characterized by the hieroglyphic noxiousness of the Scorpion. As November was the season for the pursuit of wild beasts, as it is now for hunting, Sagittarius, or

an archer mounted on horseback, was no improper designation for the course of the sun during this month. Aquarius served to denote the rains which are incessantly falling during January; and Pisces, or the two fishes, were emblems of the fishing season, on the approach of the spring.

Q. What is the number of the northern constellations? —*A.* Thirty-five.—Mons Mænalus, *the Mountain Mænalus;* Serpens, *the Serpent;* Serpentarius, *the Serpent Bearer;* Taurus Poniatowski, *the Bull of Poniatowski;* Scutum Poniatowski, *the Shield of Poniatowski;* Aquila or Antinöus, *the Eagle;* Equulus, *the Little Horse;* Leo Minor, *the Little Lion;* Ursa Minor, *the Little Bear;* Ursa Major, *the Great Bear;* Bootes, *the Keeper of the Bear;* Coma Berenices, *Berenice's Hair;* Asterion et Chara, vel Canes Venatici, *the Greyhounds;* Corona Borealis, *the Northern Crown;* Hercules; Cerberus, *the Three-headed Dog;* Vulpecula et Anser, *the Fox and Goose;* Sagitta, *the Arrow;* Delphinus, *the Dolphin;* Pegasus, *the Flying Horse;* Andromeda; Triangulum, *the Triangle;* Triangulum Minus, *the Little Triangle;* Musca, *the Fly;* Cor Caroli, *Charles's Heart;* Draco, *the Dragon;* Cygnus, *the Swan;* Lacerta, *the Lizard;* Cepheus; Cassiopeia; Perseus; Caput Medusæ, *Head of Medusa;* Camelopardalus, *the Cameleopard;* Auriga, *the Charioteer, or Waggoner;* and Lynx, *the Lynx.*

Q. What is the number of the southern constellations? —*A.* Forty-seven.

Q. Mention them.—*A.* Cetus, *the Whale;* Eridanus, *the River Po;* Orion; Monoceros, *the Unicorn;* Canis Major, *the Great Dog;* Canis Minor, *the Little Dog;* Hydra; Sextans, *the Sextant;* Microscopium, *the Microscope;* Pisces Notius vel Australis, *the Southern Fish;* Officina Sculptoria, *the Sculptor's Shop;* Fornax Chemica, *the Furnace;* Brandenburgium Sceptrum, *the Sceptre of Brandenburg;* Lepus, *the Hare;* Columba Noachi, *Noah's Dove;* Pyxis Nautica, *the Mariner's Compass;* Machina Pneumatica, *the Air Pump;* Crater, *the Cup, or Goblet;* Corvus, *the Crow;* Centaurus, *the Centaur;* Lupus, *the Wolf;* Norma, or Quadra Euclidis, *Euclid's Square;* Circinus, *the Compasses;* Triangulum Australe, *the Southern Triangle;* Crux, *the Cross;* Musca Australis, vel Apis, *the Southern Fly, or Bee;* Chamælion, *the Cha-*

meleon; Ara, *the Altar;* Telescopium, *the Telescope;* Corona Australis, *the Southern Crown;* Indus, *the Indian;* Grus, *the Crane;* Pavo, *the Peacock;* Apus, vel Avis Indica, *the Bird of Paradise;* Octans Hadleianus, *Hadley's Octant;* Phœnix, *the Phœnix;* Horologium, *the Clock;* Reticulus Rhomboidalis, *the Rhomboidal Net;* Hydrus, *the Water Snake;* Touchan, *the American Goose;* Mons Mensæ, *the Table Mountain;* Praxiteles, vel Cela Sculptoria, *the Graver's or Engraver's Tools;* Equulus Pictorius, *the Painter's Easel;* Dorado, or Xiphias, *the Sword Fish;* Argo Navis, *the Ship Argo;* Piscis Volans, *the Flying Fish;* and Robur Caroli, *Charles's Oak.*

Obs. Some of the principal stars have particular names given them: as, Aldebaran, in the Bull's Eye; Regulus, in the Lion's Heart; Arcturus, in Bootes; Sirius, in the Great Dog; Spica, or the Ear of Corn, in Virgo; Pleiades, or the Seven Stars.

Q. Were all these constellations in use among the ancients?—*A.* No: they reckoned but the twelve zodiacal constellations, and twenty-one northern, and twelve southern.

Q. Why did the stars receive these fanciful names and figures?—*A.* The figures are Egyptian hieroglyphics, designed to represent some remarkable natural circumstance or occurrence in each month, as the sun passed progressively through the signs; and the names were at first given to them by the Babylonian astronomers, for the convenience of finding or referring to them: other nations adopted the same practice.

ASTRONOMICAL DEFINITIONS.

Q. What is meant by aberration?—*A.* An apparent change of place in the fixed stars; produced by the progressive motion of light, and the earth's annual motion.

Q. What by acronical?—*A.* A term given to the rising of a star above the horizon at sun-set, or to its setting, when the sun rises.

Q. What is altitude?—*A.* The height of the sun, moon, or stars, above the horizon.

Q. What is meant by anomaly?—*A.* An irregularity in the motion of the planets, whereby they deviate from the aphelion or apogee.

Q. What by antecedence?—*A.* An apparent motion of a planet towards the west, or contrary to the order of the signs of the zodiac.

Q. What by apogee?—*A.* That point of the orbit of a planet, or of the sun, which is the farthest from the earth.

Q. What by ascension?—*A.* The rising of the sun or star, or any other part of the equinoctial with it, above the horizon.

Q. What by ascensional difference?—*A.* The time the sun rises or sets before or after six o'clock.

Q. What by belts?—*A.* Those zones or girdles which surround planets, and are brighter than the rest of their bodies.

Q. What is the meaning of the term aphelion?—*A.* That point of the orbit of a planet or comet when it is at its greatest distance from the sun.

Q. What is the meaning of the term complement?—*A.* The distance of a star from the zenith.

Q. What is the meaning of the term conjunction?—*A.* The meeting of two stars or planets, in the same degree of the zodiac.

Q. What is meant by a constellation?—*A.* A system of several stars seen in the heavens near to one another.

Q. When is a star or planet said to be cosmical?—*A.* When it rises or sets with the sun.

Q. What is meant by culmination?—*A.* The passage of any heavenly body over the meridian, or its greatest altitude for the day.

Q. What by declination?—*A.* The distance of any celestial object from the equator or equinoctial, either northward or southward.

Q. What by disc?—*A.* The appearance of the sun or moon as they are viewed from the earth, as they then look flat like a plane surface, on account of their great distance.

Q. What by the ecliptic?—*A.* A great circle of the sphere, supposed to be drawn through the middle of the zodiac, and in which the sun appears to move.

Q. What by elongation?—*A.* The digression or recess of a planet from the sun.

Q. What by emersion?—*A.* When a planet which is

eclipsed begins to emerge out of the shadow of the eclipsing body.

Q. What is the galaxy, or milky way?—*A.* A broad circle, sometimes double, surrounding the whole celestial concave.

Q. What is meant by the expression "geocentric?"—*A.* The appearance of a planet as viewed from the earth.

Q. What is the equator?—*A.* A circle which separates the northern from the southern hemisphere.

Q. What is the sensible or apparent horizon?—*A.* An imaginary circle which separates the visible hemisphere from the invisible; or it is that imaginary circle which is the boundary of human vision.

Q. What is the rational horizon?—*A.* A circle parallel to the sensible horizon, and which divides the earth into two equal parts.

Q. What is meant by the latitude of a planet or star?—*A.* Its distance north or south from the ecliptic.

Q. What by the longitude of a planet or star?—*A.* Its distance from the first point of Aries, reckoned eastward upon the ecliptic.

Q. What is meant by the term gibbous?—*A.* It is applied to the enlightened parts of the moon when moving from the first quarter to the full, and from the full to the last quarter; for then her dark parts appear horned or convex.

Q. What is the meaning of the term heliacal?—*A.* The time between the rising and setting of the stars, or the time between their emersion out of and immersion into the rays of the sun.

Q. What of the term heliocentric?—*A.* That motion which a planet would appear to have if viewed from the sun.

Q. What is meant by immersion?—*A.* When a planet is so near the sun with regard to our observations, that we cannot see it; being as it were enveloped and hidden in the rays of that luminary.

Q. What by libration?—*A.* An apparent irregularity in the motion of the moon, whereby she seems to librate about her axis.

Q. What by lunation?—*A.* The period or time between one new moon and another.

Q. What is the nadir?—*A.* That point which is directly under our feet.

Q. What is the meridian?—*A.* A great circle passing through the zenith and poles, perpendicularly to the rational horizon. When the sun comes upon this circle it is noon or mid-day.

Q. What are the nodes?—*A.* The two points in which the orbit of a planet intersects the ecliptic.

Q. What is meant by nutation?—*A.* A kind of tremulous motion of the axis of the earth, whereby, in each annual revolution, it is twice inclined to the ecliptic, and as often returns to its former position.

Q. What by occultation?—*A.* The time a star or planet is hidden from our sight, by the interposition of the body of the moon, or some other planet.

Q. What is meant by the orbit of a planet?—*A.* The path of a planet or comet, or the curve which it describes in its revolution round its central body.

Q. What is the meaning of parallax?—*A.* A change of the apparent place of any heavenly body, caused by its being seen from different points of view; or, it is the difference between the true and apparent distance of any heavenly body from the zenith. The parhelion of the heavenly bodies makes objects appear lower than they really are.

Q. What is the meaning of a parhelion?—*A.* A mock sun, or meteor, in form of a very bright light, appearing on one side of the sun.

Q. What is a penumbra?—*A.* A partial shade between the perfect shadow and the full light in an eclipse.

Q. What is the meaning of perigee?—*A.* That point of the orbit of the sun or a planet, when they are at their least distance from the earth.

Q. What of parhelium or parihelion?—*A.* That point of the orbit of a planet or comet when it is at its least distance from the sun.

Q. What are the pleiades?—*A.* An assemblage of seven stars in the neck of the constellation Taurus.

Q. What is meant by the phases?—*A.* The different appearances of planets.

Q. What is meant by refraction?—*A.* That deviation from a straight line which the rays of light suffer in passing

through our atmosphere, in different densities; by which the apparent altitudes of the heavenly bodies are increased.

Q. What by retrogradation?—*A.* An apparent motion of the planets, by which they seem to go backwards in the ecliptic, and to move contrary to the order of the signs.

Q. What by revolution?—*A.* The period or course of any planet, comet, &c. from any point of its orbit till it returns to the same again.

Q. What are satellites?—*A.* Secondary planets moving round other planets, as the moon round the earth.

Q. What is meant by the southing of a star?—*A.* When it comes to the meridian.

Q. What is meant by a sideral day?—*A.* That time in which a star appears to revolve from the meridian to the meridian again.

Q. What is meant by the solstices or solstitial points?—*A.* When the sun is at the greatest distance from the equator. They are called the solstices, because when the sun is there he appears to stand still for some time; an appearance occasioned by the obliquity of the earth. The solstices are two, the summer and the winter; and when the sun is in them the longest and shortest day of the year occur.

Q. What by syzygy?—*A.* A term used for the conjunction and opposition of a planet with the sun.

Q. What by a transit?—*A.* When one celestial body passes before another, so as to make any part of it invisible.

Q. What is meant by the zenith?—*A.* The point in the heavens directly over our heads.

Q. What is the zodiac?—*A.* A zone or girdle surrounding the heavens, and extending about nine degrees on each side of the ecliptic; in it the orbits of all the planets are included.

Q. What is the zodiacal light?—*A.* A pyramid of light which sometimes appears before sun-rise, having the sun for its basis, and in appearance resembling the Aurora Borealis, or the tail of a comet. The cause of this phenomenon is not known, but it is supposed to proceed from the rays of light thrown off from the sun by his rotation on his axis.

NATURAL PHILOSOPHY.

How charming is divine Philosophy!
Not harsh and crabbed, as dull fools suppose,
But musical as is Apollo's lute,
And a perpetual feast of nectar'd sweets
Where no crude surfeit reigns.

MILTON.

Q. WHAT is light?—*A.* That principle or thing by which objects are made perceptible to our sense of seeing.

Q. From whence is light derived?—*A.* From the sun.

OBS. This is the commonly received opinion. But it is necessary to state, that the nature and cause of light has not yet been ascertained: two opinions of very opposite kinds have been maintained by philosophers respecting its origin and propagation. By some it is supposed to consist of material particles, thrown off from the sun with great velocity, and in all directions; while others believe it to be a fluid diffused through all nature, and in which waves or undulations are produced by the action of the sun, and propagated in the same manner as sound is propagated through air.

Q. How long is light travelling from the sun to the earth?—*A.* About eight minutes.

Q. What is meant by crepusculum, or morning and evening twilight?—*A.* That time, or faint light, which intervenes between the first dawn of the morning and the rising of the sun; and again between the setting of the sun and the last remains of day.

Q. How is the crepusculum or twilight produced?—*A.* By the reflection of the sun's rays upon the upper regions of the atmosphere, or, in other words, by the refraction of the rays of light in their passage from the earth's atmosphere, and their reflection from the different particles thereof.

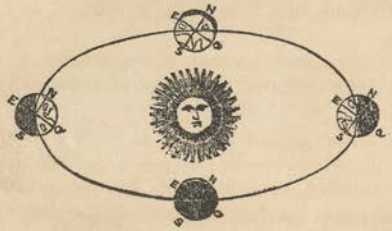
Q. What would be the consequence if there was no crepusculum?—*A.* We should pass instantly out of darkness into light, and the light would as suddenly disappear.

Q. When does the evening twilight end?—*A.* When the sun is eighteen degrees below the horizon.

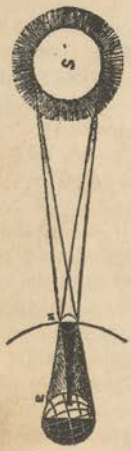
Q. When does the morning twilight begin?—*A.* When the sun is again within eighteen degrees of the horizon.

Q. What is refraction?—*A.* See p. 114.

Seasons, Day and Night.---Page 117.



Eclipse of the Sun.
Page 118.



Eclipse of the Moon.
Page 118.



Q. What occasions day and night?—*A.* The motion or revolution of the earth on its axis, every twenty-four hours; for to the inhabitants of that part of the earth which is opposite to the sun, it is day; and night to those on the other side.

Q. What occasions the difference of the length of days and nights?—*A.* The different positions of the earth with respect to the sun.

Q. Is the difference of the lengths of days and nights the same in all countries?—*A.* No; the farther we advance from the equator, or middle of the earth, towards the poles, the difference in the lengths of the days and nights is the greater.

Q. What is the difference in the lengths of days and nights of countries which lie immediately under the equator?—*A.* Nothing; for to countries so situated they are always equal.

Q. What are the lengths of days and nights in countries situated at the poles?—*A.* The length of days and nights in countries so situated is always the same; for as they have but one day and one night, the sun continues to shine for six months in the year; the other six they are in total darkness.

Q. What occasions the variety of seasons in the year; as spring, summer, autumn, and winter?—*A.* The annual revolution of the earth round the sun, together with the inclination of the earth's axis.

Q. How is this difference produced?—*A.* By the different positions of the earth in respect to the sun; namely, the inclination of the axis of the earth to the sun.

Q. Is the earth always at the same distance from the sun?—*A.* No; for as the earth moves in an elliptical orbit, and as the sun is always stationary, it must necessarily happen that in its course, it must at certain times be nearer the sun than at other times.

Q. Whether is it nearer to the sun in summer or winter?—*A.* In winter.

Q. How does it happen then that the winter season is colder than the summer?—*A.* As the sun is above the earth during the summer-season, his rays then fall more perpendicularly upon the earth than in the winter-season, when he is below the earth, in the course of her revolu-

tion round him; and, therefore, the heat is more augmented than when his rays fall obliquely, as they do during the winter-season. Another reason is, that during the summer-season, the sun is much longer above the horizon than he is in winter, and consequently imparts a degree of heat to the atmosphere, which the long winter cold nights tend greatly to decrease.

Q. How much nearer is the earth to the sun during the winter than the summer months?—*A.* In the month of December, it is two millions seven hundred and fifty-four thousand miles nearer than in the month of June.

Q. What is meant by the term climate?—*A.* A space upon the terrestrial globe, contained between two parallels.

Q. What occasions the variations of climate?—*A.* Their respective distances from the sun.

Q. What occasions eclipses of the sun?—*A.* The intervening or passing of the moon between the sun and the earth, so that the moon's shadow falls upon the earth, and thus intercepts the sun's light.

Q. How is an eclipse of the moon occasioned?—*A.* By the earth's intervening or passing between the sun and moon, so that the earth's shadow falls upon the moon, and thus prevents the light of the sun from reflecting upon the moon.

Q. When do eclipses of the sun happen?—*A.* Only at new moon.

Q. When do eclipses of the moon happen?—*A.* Only when the moon is at its full.

Q. What are falling stars supposed to be?—*A.* Exhalations raised up from different bodies on the earth by the heat of the sun; catching fire they shoot forth in a blaze, till the inflammable matter of which they are composed is consumed.

Q. What is the ignis fatuus supposed to be?—*A.* Naturalists have not on any certain principles been able to account for this meteor, which is vulgarly called Will with-a-whisp, or Jack with-a-lantern. It is probable that it consists of inflammable air, or oleaginous matter, emitted from a putrefaction and decomposition of vegetable substances, in marshy grounds, and set on fire by an electric spark.

Q. What is a meteor?—*A.* An imperfect body formed

by the inflammation of different species of hydrogen in the air, as fireballs, shooting stars, and ignes fatui.

Q. How are meteors and other luminous appearances occasioned?—*A.* By the hydrogen which ascends into the superior regions of the atmosphere, being ignited by a casual electric spark.

Q. How do philosophers account for the fall of stones and other substances which attend the explosion of meteors or fireballs?—*A.* No physical explanation of the origin or formation of these bodies has yet been found. Some have supposed them to arise from terrestrial volcanoes; others from those of the moon; while modern chemists have supposed them to be concretions formed in the air.

Q. What is the most probable explication of the phenomenon of falling stones?—*A.* The stones are supposed to have been formed in the air by a combination of mineral substances which had risen from the earth.

Obs. Mr. King, in his "Remarks concerning Stones," is of opinion that the shower of stones which fell in Tuscany, in the year 1794, was occasioned by the projected ashes, pyritical dust, and particles of iron, which the volcano of Vesuvius had thrown out the day before, forming an immense cloud, which, taking fire on its descent, melted those heterogeneous matters, and these by sudden crystallizations were compacted into hard masses or stones.

Q. Mention the most remarkable falls of stones.—*A.* That related by Cardan, in the year 1510, when 120 stones fell at Padua, in Italy, one of which weighed 120 lbs. Captain Topham's account, according to which, one stone of fifty-six pounds weight fell, in the year 1795, at Wold Cottage, Yorkshire; and Fourcroy's account, by which we are informed, that several stones, from ten to seventeen pounds, fell in the year 1803, in Normandy. In 1819, a meteoric stone fell near the village of Dooralla, in India, rather more than 25 lbs. in weight.

Obs. To those who wish for ocular demonstration of these phenomena of nature, the collection preserved in the British Museum may afford much interest. In the thirty-sixth case of the collection on natural history are preserved two fragments of the stone which fell at Ensisheim, in Alsace, Nov. 7th, 1492, in the presence of the emperor Maximilian, then king of the Romans, when on the point of engaging with the French army: this mass, which weighed 270 pounds, was preserved in the cathedral of Ensisheim till the beginning of the French revolution, when it was conveyed to the public library of Colmar.

Q. What is air, or the atmosphere?—*A.* An elastic, transparent, invisible fluid, surrounding the earth to the height of nearly fifty miles, and partaking of its motions, annual and diurnal.

Q. What is the use of the air?—*A.* It conveys sound, and preserves animal and vegetable life; as without it nothing could live or breathe, nor could any thing be heard. Were it not also for the air, which abounds with particles capable of reflecting light in all directions, only that part of the heavens would appear bright in which the sun is situated, and the stars and planets would be visible at mid-day.

Q. Of what does air consist?—*A.* Of three ingredients, called by philosophers, *oxygen* air, *nitrogen*, and *carbonic acid gas.* Besides these component parts, it contains a variety of other substances, as carbonic acid,—animal and vegetable perspirations,—exhalations from water, from the earth,—and from different minerals,—saline particles,—dew, and products from combustion.

Q. What are the proportions of these ingredients in the composition of air?—*A.* In 100 gallons of common air there are 77 gallons of nitrogen, 22 of oxygen, and one of carbonic acid gas.

Q. What is gas?—*A.* Any fluid capable of existing in an *aeriform* state, under the pressure and at the temperature of the atmosphere.

Q. How much lighter is air than water?—*A.* Eight hundred and sixteen times.

Q. What weight of air is supposed to rest on the body of a middling-sized person?—*A.* About one ton and a half.

Q. How does it happen that this weight is not perceptible?—*A.* Because the spring of the air, which is within the human body, reacts with an equal force against the outward pressure of the air.

Q. What is the whole weight of the atmosphere computed to be?—*A.* 11,522,211,494,201,773,089 lbs.

Q. What is water?—*A.* An incompressible transparent fluid, composed of eighty-five parts of oxygen, and fifteen parts of hydrogen.

Q. What is ice?—*A.* Water congealed by cold. It is considerably lighter than water, namely, about one-eighth.

Consequently ice occupies a larger space than the water of which it is formed would occupy; but this increase of dimensions gives it prodigious additional force; in its transformed state, it will burst the strongest iron vessels, and even pieces of artillery.

Q. What are the clouds?—*A.* Quantities of vapour drawn up by the heat of the sun from the sea and the surface of the earth.

Q. How high do the clouds extend above the surface of the earth?—*A.* From about half a mile to two miles.

Q. What produces the various figures and colours of the clouds?—*A.* The reflection of the sun occasions the variety of colours which we observe the clouds to take, according to their density and position with respect to that body; and their various forms are produced by the impulse of the winds.

Q. How does it happen that the general colour of the sky is blue?—*A.* From the vapours being mixed with air, and which then have the property of reflecting the blue rays of the sun more abundantly than those of the other primary colours.

Q. How is the rainbow formed?—*A.* By the reflection of the rays of the sun upon the drops of falling rain.

Q. How are the various colours of the rainbow produced?—*A.* By the different refractions of the rays of the sun; the rays the least refracted producing red; those the most refracted, violet; and the intermediate ones, the other colours.

Obs. The infinite variety of colours in which the whole creation is superbly arrayed are not in the things, but in the light which surrounds them; every beam or pencil of light being composed of particles of different colours.—"The blushing beauties of the rose, the modest blue of the violet," says Goldsmith, "are not in the flowers themselves, but in the light that adorns them: odour, softness, and beauty of figure are their own; but it is light alone that dresses them up in those robes which shame the monarch's glory."

Q. What are the auroræ boreales, or northern lights, and the auroræ australes, or southern lights, supposed to be?—*A.* They are supposed to be coruscations generated by electric matter, or to be exhalations arising from the combustion of inflammable air, or nitrous and sulphureous vapours, produced from the putrefaction of animal or vegetable substances.

Q. How are fallen stars occasioned?—*A.* From the fermentation of the effluvia of acid and alkaline bodies, which float in the atmosphere.

Q. How is rain occasioned?—*A.* By the small particles of vapour, of which the clouds are composed, collapsing or uniting together, and then becoming too heavy to be supported in the air, they fall in drops to the earth. When these drops are formed in the higher regions of the atmosphere, as is the case in the summer, many of them uniting before they fall to the ground, the drops of rain are very large. Mr. Walker, in his Familiar Philosophy, informs us, that the drops of rain increase so much in their bulk during their descent, that a vessel placed on the ground will receive in a shower of rain almost double the quantity of water which a vessel of similar dimensions placed on the summit of a neighbouring steeple will catch. Philosophically considered, the cause of rain is the electrical action of the clouds on each other; for when two masses of air, of unequal temperatures, are, by the ordinary currents of winds, intermixed, when saturated with vapour a precipitation ensues.

Q. What is the benefit produced by rain?—*A.* It makes the earth fruitful, tempers and purifies the air, and supplies nourishment for springs and rivers.

Q. What depth of rain is supposed to fall upon the surface of the earth annually?—*A.* It varies according as places are situated from the equator. The mean annual quantity of rain is greatest at the equator, and decreases gradually in the following scale, as we approach the poles. Thus at

Grenada, West Indies, it is at.....	126 inches.
Cape François	120
Calcutta	81
Rome	39
England	35
Petersburgh	16

But though the mean annual quantity of rain is greatest at the equator, the number of rainy days is smallest there, and it increases in proportion as we move north or south. From north latitude 12° to 43° the mean number of rainy days is seventy-eight; from 43° to 46° the mean number

is 103; from 46° to 50° it is 134; from 51° to 60° it is 161.

Q. What quantity of water is supposed to be evaporated off the earth's surface annually?—*A.* The mean annual evaporation is estimated at thirty-five inches; in England Dalton estimates it at thirty-one inches.

Q. What is snow?—*A.* Water deprived of a part of its caloric.

Q. What occasions snow?—*A.* The freezing of the particles of vapour of which the clouds are formed before they have collapsed into water. The whiteness of snow is occasioned by the smallness of the particles of which it is composed; for ice when pounded will become equally white.

Q. What benefit is snow to the earth?—*A.* It fructifies the earth and prevents its seeds from being chilled by the frost and the cold piercing winds.

Q. What is the use of frost?—*A.* It clears or purifies the atmosphere, braces and strengthens the human frame, destroys noxious insects, and fertilizes the earth.

Obs. Frost has often the effect of the most excessive heat; in consequence of the separation of water from the air by its operation, the trunks of the largest trees are often split and cleft, so that they may be seen through (as was the case in the great frost in the year 1683;) and are not unfrequently scorched and burnt up, on account of the dryness of the air, as if they had been subject to the agency of fire. It is also very penetrating. In the course of sixteen or seventeen days' frost, Boyle found it had penetrated fourteen inches into the ground. At Moscow, in a hard season, the frost will have penetrated two feet deep; and Captain James found that it had penetrated ten feet deep in Charlton island, and that the water in the same island was frozen to the depth of six feet.

Q. What occasions hail?—*A.* The freezing of the drops of rain in their descent to the earth.

Q. What are fogs or mists?—*A.* Collections of vapour drawn up from the earth by heat, but prevented, by their weight, from rising high enough in the air to form clouds.

Q What is vapour?—*A.* A collection of the small particles of water, which are separated by heat, and ascend into the air.

Q. How is dew produced?—*A.* From vapours which continue to rise after sun-set, on account of the heat of the earth, but which, for want of sufficient warmth in the atmosphere, are condensed, and fall again to the earth. When dew freezes hoar frost is produced.

Q. Of what use are dews and mists?—*A.* In time of drought they refresh and invigorate weak and withering plants and the exhausted herbage of the earth.

Q. What is lightning?—*A.* A stream of electric fire passing from the clouds to the earth, or from one cloud to another.

Q. What benefit is produced by lightning?—*A.* It consumes noxious vapours, promotes a circulation of the air, produces rain, and tempers the summer heats.

Q. What produces thunder?—*A.* The explosion of electric clouds, composed of sulphureous and nitrous, or other combustible substances, exhaled from the earth by the solar heat, and raised into the atmosphere. Thunder is also occasioned by the concussion of two bodies of air separated by the rapid motion of lightning

Q. What occasions thunder to make a rumbling noise?—*A.* The echoes of the explosion.

Q. What is the reason that thunder is not heard until some time after the lightning is seen?—*A.* Because sound is much longer in reaching our hearing than light our sight.

Q. How does it happen, that during violent storms of thunder and lightning, men and cattle are killed, and other considerable damage done?—*A.* When the inflammable matter of which the electric clouds consist is thin and light, it will rise to the upper part of the atmosphere, where it will flash without occasioning any harm; but if it be dense, it will lie near the surface of the earth, where taking fire, it explodes with a surprising force, rarefying the air to so great a degree as to occasion a loss of life to objects within the medium of its immediate action, or to do other considerable damage.

Q. By what means can you judge of the distance of thunder?—*A.* By the interval which occurs between the flash and the thunderclap. Should the interval be considerable, the thunder is distant, and then it is not dangerous; but when the clap instantly succeeds the flash, the thunder is then near, and the danger is consequently greater.

Q. What is the thunderbolt?—*A.* Lightning acting with extraordinary violence.

Q. What is wind?—*A.* The motion of the air.

Q. How is wind produced?—*A.* Either by the rarefaction or condensation of the air. Heat rarefies and expands the air, and cold condenses or makes it heavier. When any part of the air is heated by the sun, or otherwise, it is rendered lighter than the surrounding air, and ascends into the higher regions, when the surrounding or circumjacent air rushing in to supply its place, that motion is occasioned which is called wind. The cause is the same when any portion of the air is condensed or contracted into a smaller space than the circumambient air.

Q. Whether does air occupy more space when it is rarefied or condensed?—*A.* When it is rarefied.

Q. How is this occasioned?—*A.* As heat has the power of dilating, that is, of enlarging, all bodies, and is so extremely subtle that it pervades all substances, by forcing itself between their particles, it causes them to occupy a greater space than they naturally would.

Q. Of what use is wind?—*A.* It purifies the air, moderates the heat, dries up wet, and brings rain. Were it not for the agitation of the air occasioned by its agency, the putrid effluvia arising from the habitations of man, and from vegetable substances, besides the exhalations from water, would soon render the air unfit for respiration, and a general mortality would ensue.

Q. What is the velocity of wind?—*A.* From one to sixty miles per hour. The motion of wind at one mile per hour is hardly perceptible, while that at sixty miles per hour occasions a great storm. A common brisk wind travels about fifteen miles an hour; a hurricane which tears up trees, destroys buildings, &c. 100 miles an hour.

Obs. The velocity of the wind has been frequently measured with great accuracy, and varies under different circumstances. It has been said of swift horses, such as Childers and Eclipse, that they outstripped the wind, and so they did even at its mean rate; for they are known to have run at the rate of nearly one mile in a minute, which is equal to the velocity of a very great storm.

Q. How many kinds of winds are there?—*A.* Three, the general trade or constant winds, the monsoons or periodical winds, and the sea and land breezes.

Q. What occasions the general trade winds and the monsoons?—*A.* The action of the sun upon the air, which being rarefied, the circumambient cold air rushes in, to restore the proper equilibrium.

Q. How are sea and land breezes occasioned?—*A.* As in all maritime countries, the air, during the day, above the land is hotter and more rare than above the sea, the sea-air flows in upon the land, and supplies the place of the rarefied air; and thus the sea breeze is occasioned. Again, as the night approaches, the denser air of the hills and mountains falls down upon the plains, and pressing upon the air of the sea, which has now become comparatively lighter than the land air, the land breeze is occasioned.

Q. Which are the four principal winds in the compass?—*A.* The east, west, north, and south.

Q. What are the properties of these winds?—*A.* The south wind is the warmest, the north the coldest, the east the driest, and the west the dampest.

Q. How are these properties occasioned?—*A.* The south wind is warm, because it comes from the torrid zone, or countries where the sun is most vertical; the north wind is cold, because it comes from the frigid zone, or countries remote from the influence of the sun; the east is dry, because it comes from the great continent of Asia, where there are few rivers or seas; and the west is moist, because it comes from the Atlantic Ocean, where it imbibes a great quantity of vapour

Q. How is it possible to ascertain from what point of the compass the wind blows, when no objects are near to direct you?—*A.* If, at noon, you stand with your back to the sun, you will have the east on your right hand, the west on your left, the north will lie directly before you, and the south behind you. At night, if you stand with your face to the polar star, the east will, as before, then be on your right hand, the west on your left, and the north and south before and behind you.

Q. How are whirlwinds occasioned?—*A.* By the meeting of contrary currents of air in the same point of the compass, and a sudden rarefaction of the air, or any other cause. Tempests also arise from similar causes.

Q. What are the tides, and how are they occasioned?—*A.* The tides, or the flux and reflux of the sea, are a regular and constant motion of the waters occasioned by the joint attraction of the moon and sun, and which occurs once in every twelve hours. This motion of the sea con-

tinues rising for six hours from south to north, and after seeming at the highest for about twelve minutes, is again six hours falling from north to south, when it remains twelve minutes at rest before it rises again. The time it is at rest after its influx and reflux is called *high water* and *low water*.

Q. What is the influence of the sun in proportion to that of the moon in attracting the waters of the earth?—*A.* According to Sir Isaac Newton's calculation, it is about one-third of that of the moon.

Q. What is meant by spring and neap tides, and how are they occasioned?—*A.* A spring tide is occasioned when the action of the sun and moon conspire together, as at the time of new and full moon, when they are both upon the meridian, either in conjunction or in opposition; and then the tides, or the flux and reflux, are at their highest: but when the sun and moon act crosswise, or are ninety degrees asunder, the one tends to elevate the waters, while the other depresses them, and the tides will consequently be lessened in proportion to the difference of their powers of attraction; and thus the neap tides are produced, which happen at the first and third quarters of the moon.

Q. How are the different times of the tides distinguished?—*A.* When the water rises it is said to flow, and to ebb, when it falls; when at the highest it is called high-water, and low-water when at the lowest.

Q. What is the use of the tides?—*A.* They preserve the waters of the earth from corruption, which would take place were they left in a state of rest and stagnation.

Q. How are earthquakes occasioned?—*A.* By the accidental explosion or inflammation of nitrous and sulphureous vapours, or by the expansion of wind or vapours inclosed or pent up in the bowels of the earth.

Q. Mention the greatest earthquakes recorded in history.—*A.* 1st, That which happened during the reign of Tiberius Cæsar, when twelve cities of Asia were laid level in one night; 2dly, the eruption of Mount Vesuvius, A.D. 79, when the famous cities of antiquity, Pompeii and Herculaneum, were overwhelmed; 3dly, that which happened in the year 1755, when Lisbon was destroyed; and

4thly, the last eruption of Vesuvius, which happened in the year 1794.

Q. What is electrical matter?—*A.* A subtile force which pervades all nature.

Q. What is meant by the term galvanism?—*A.* A peculiar method of exciting electricity.

Q. Specify the difference between electricity and galvanism or voltaism.—*A.* Electricity is produced by friction, and even by the contact of bodies; but in voltaism or galvanism, it is necessary that the bodies by which it is exhibited should have some chemical agency on each other.

Q. How are rivers formed?—*A.* From springs or fountains formed by vapours carried from off the surface of the sea, rivers, &c. to the ridges of mountains. These vapours sinking through the chinks or crannies of the mountains till they meet with a stratum of earth or stone or other substance, of a nature sufficiently solid to contain them, continue lodged there, until they are of sufficient capacity to form a reservoir, which finding a passage forms a spring; and several of these uniting at length constitute the source of a river.

Q. What is the use of mountains?—*A.* To collect and receive the vapours, the rain, and the snow, which supply with water the springs from which rivers are formed.

Q. What is the general depth of the sea?—*A.* Its mean depth is supposed to be about a quarter of a mile; in some places a line of more than 780 fathoms, or 1560 yards, has not reached the bottom.

Q. How does it happen that the waters of the sea are not increased by the numerous rivers which are constantly flowing into it?—*A.* Because as much water is evaporated off its surface by the action of the sun as all the rivers discharge into it.

Q. What is the extent of the sea?—*A.* It occupies more than two-thirds of the surface of the earth.

Q. What occasions the sea to be salt?—*A.* The quantity of mineral and saline particles, which rivers wash from the different soils through which they pass, and carry into the sea.

Obs. It is well known that sea water, being heavier, will support a greater weight than fresh water; their relative power is as follows:—

It has been found by experiment, and is admitted in hydrostatics, that a cubic foot of river or fresh water weighs about 70 lbs., and a cubic foot of sea water about 73 lbs. Now suppose a man, weighing 150 lbs. in air or on land, be immersed in fresh water, he will displace two cubic feet of it, and consequently he loses 140 lbs., and retains only 10lbs. of his own weight. If the same man be immersed in sea water, he displaces two cubic feet of it, and consequently loses 146 lbs; and retains only 4 lbs. of his own weight.

Q. For what cause does it appear that nature designed the waters of the sea to be salt?—*A.* In order to prevent, in conjunction with the flux and reflux of the tides, the corruption of the water.

Q. Is sea-water equally salt all over the globe?—No. Sea-water, in its natural state, is but a weak brine; but its saltness varies in different seas and at different depths. In the Baltic the proportion of common salt, and other saline ingredients, to the water in which it is held in solution, is as one to forty; in the British channel, as one to thirty; and at a great depth near the equator, as one to twenty-three: but the average may be estimated as one to twenty-eight.

Q. Why is not rain which falls at sea salt?—*A.* Because the saline particles with which the sea water is impregnated being heavier than the water, the sun has not power sufficient to draw them up with the vapour.

Q. How does it happen that river water is not salt?—*A.* For the same reason that rain formed of sea water is not salt.

Q. What is the comparative force of steam and gunpowder?—*A.* The force of steam is twenty-eight times greater than that of gunpowder.

Q. What is the comparative motion of light and gunpowder?—*A.* The motion of light is nearly three hundred and fifty times greater than that of gunpowder.

Q. What is the velocity of sound in the medium of common air?—*A.* Sound, not interrupted, travels 1130 feet in common air, in one second of time.

Q. What is the comparative motion of sound and that of a cannon ball?—*A.* That of sound is twice as swift as that of a cannon ball.

Q. How is echo produced?—*A.* From the undulation of the air, or the reflection of sound upon walls, rocks, and other bodies, whose surfaces have considerable irregularities.

Obs. The most celebrated echoes are as follows:—That at Milan, which is said to report fifty-six times. That at Castle Comber in Ireland; and that of the Eagle's Nest, near Mucross Abbey, on the banks of the lake of Killarney.—This celebrated rock sends forth the most fascinating repercussions. "Sound a French or bugle horn, echoes equal to a hundred instruments, answer to the call!—Report a single cannon,—the loudest thunders reverberate from the rock, and die, in endless peels, along the distant mountains!" At Rosneath, near Glasgow, there is an echo that repeats a tune played with a trumpet three times distinctly and completely. At Thornborough Castle, Gloucestershire, an echo repeats ten or eleven times very distinctly. At Brussels, an echo answers fifteen times. In Norway, upon the lake Ontorio, and in many of the West India Islands, the echoes are enchanting. And in the cemetery of the Abercorn family, at Paisley, in the county of Renfrew, there is an echo exceedingly beautiful and romantic.—When the door of the chapel is shut, the reverberations are equal to the sound of thunder. Breathe a single note in music, and the tone ascends gradually, with a multitude of echoes, till it dies in soft and bewitching murmurs. If the effect of one instrument is delightful, that of several in concert is captivating, inciting the most tumultuous and rapturous sensations! In this chapel, lulled by ethereal echoes, sleeps Margery, the daughter of Bruce, the wife of Wallace, and the mother of Robert, king of Scotland. The famous echo, in Woodstock Park, retains seventeen syllables in the day-time, when the wind is brisk; and twenty in the night-time: for then the air being denser, the vibrations become slower, and a repetition of more syllables is heard. We are also assured, that there is a much finer echo from the north side of Stepney church, in Sussex, which, in the night-time, will repeat the following words:—

Os homini sublime dedit, cælumque tueri
Jussit, et erectos.—

Some buildings have a remarkable property in conveying sound. In buildings of an elliptical shape a whisper in one focus will be distinctly heard in the other focus. The concert-rooms at Edinburgh are so contrived, that the performers sit in one focus, and the audience in the other. In the whispering-gallery of St. Paul s, a person speaking in the lowest tone of voice is distinctly heard at the opposite side. A person sitting in one of the recesses of Westminster bridge, readily hears the sound of a person speaking in the opposite recess.

Q. Why is reflected sound more distinctly heard than direct sound?—*A.* Because when sound, issuing from a distant point, impinges on a concave surface, or several plain surfaces properly situated, it converges to a certain point after reflection: a person, therefore, situated near that point, will hear the reflected sound more distinctly than the direct sound. If the reflecting surface be of an elliptical form, all the sound which proceeds from one of its foci is reflected to the other. To such a reflection, the phenomenon which takes place in the whispering gallery of

St. Paul's Cathedral, and several other places, is to be ascribed.

Q. What produces petrifaction, or that bodies when left in streams of water are converted into stone, copper, &c.? —*A.* According as the water is impregnated with stone, copper, &c. any body deposited therein will, in course of time, be incrusted with such particles.

Q. How does it happen that heavy bodies sink, while light bodies swim in water?—*A.* A body that is heavier than an equal bulk of a fluid, will sink in that fluid; while a body lighter than an equal bulk of a fluid will swim on its surface; but if the body and the fluid be of equal gravity, the body will neither swim nor sink, but will remain suspended in the fluid.

THE SCIENCES;

OR,

TECHNOLOGICAL EXPOSITOR.

Q. What is the meaning of the word acoustics?—*A.* The science which teaches the nature of sounds.

Obs. On this and other subjects much information and amusement may be found in the way of experiment, in Ozanam and Montucla's Recreations in Mathematics and Natural Philosophy, Hutton's edition.

Q. What of the word catacoustics?—*A.* The doctrine of reflected sound.

Q. What of the word achromatic?—*A.* A term signifying want of colour.

Q. What is meant by aerostation?—*A.* The art of navigation through the air. This word in its proper and derivative sense signifies the science of weights, suspended in the air.

Q. What by algebra?—*A.* Literal arithmetic; or the art of treating an unknown quantity as if already known, and then, by means of analysis, to disentangle the quantity required.

Q. What by altimetry?—*A.* The art of measuring heights.

Q. What by anatomy?—*A.* The examination of the structure and functions of animal bodies by dissection.

Obs. The true perfection and utility of mechanical philosophy is finely illustrated in the animal body. "Where is there, to illustrate mechanics, a system of levers and hinges, and moving parts, like the limbs of an animal body; where such an hydraulic apparatus, as in the heart and blood-vessels; such a pneumatic apparatus, as in the breathing chest; such acoustic instruments, as in the ear and larynx; such an optical instrument, as in the eye; in a word, such mechanical variety and perfection, as in the whole of the visible anatomy!"—*Dr. Arnott's Elements of Physics, or Natural Philosophy.*

Q. What by astrology?—*A.* The absurd art of foretelling future events by the situation and different aspects of the heavenly bodies, and their influence on human affairs.

Q. What by botany?—*A.* That science which teaches the knowledge of the vegetable kingdom, that is, the kinds, forms, virtues, and uses of plants or vegetables.

Obs. Linnæus divided all vegetables into 24 classes or divisions. These classes he subdivided into nearly 100 orders; these orders he made to include about 2000 families or genera; and these families about 20,000 species, besides the innumerable varieties produced by the accidental changes of cultivation, soil, and climate.

Q. What by brachygraphy?—*A.* The art of short-hand writing.

Q. What by chiromancy?—*A.* The art of fortune-telling, by means of the different lines and lineaments of a person's hand.

Q. What is chemistry?—*A.* The science of separating the different substances which are found in mixed bodies, as plants, minerals, &c. so as to reduce them to their first principles, and discern their hidden virtues, by means of fire; and of recomposing new bodies by the mixture of different substances or ingredients

Q. What is the meaning of craniology?—*A.* That science which teaches us to investigate the form, structure, and uses of the skull in various animals, by which we learn their specific differences and various powers.

Q. What is meant by craniometry?—*A.* The art of measuring the skulls of animals so as to discover their specific differences.

Q. What by cranioscopy?—*A.* The science which teaches us to investigate the eminences produced in the cranium of the brain, and to discover, by such examinations, the particular part of the brain in which the individual organs, influencing our passions or economy, reside.

Q. What by chorography?—*A.* The art of delineating or describing of particular counties or provinces.

Q. What by chromatics?—*A.* That part of optics which explains the properties of colours, of light, and of natural bodies.

Q. What is the meaning of conchology?—*A.* The study of shells, or testaceous animals.

Q. What is meant by cosmogony?—*A.* An account of the creation of the world.

Q. What by crystallography?—*A.* That science which treats of the forms and structure of crystals.

Q. What is distillation?—*A.* The separation of the volatile parts of bodies from those which are fixed, by the application of heat.

Q. What are dynamics?—*A.* That branch of mechanics which treats of the action of forces which give motion to solid bodies.

Q. What is meant by electricity?—*A.* Attraction produced, mechanically or chemically, by means of conductors.

Obs. The simple facts of electricity are highly entertaining in their own nature, without any reference to the many objects of practical utility to which it may be rendered subservient. Various simple experiments might be detailed, illustrating the principles of electric attraction and repulsion. Thus, if we rub a piece of sealing-wax and a dry warm flannel together, they will both become, by the process of friction, capable of attracting and repelling light bodies. A dry and warm sheet of common writing paper, rubbed upon Indian rubber, or a glass tube rubbed upon silk, exhibit the same curious phenomena.

Q. What by entomology?—*A.* That branch of natural history which treats of insects.

Q. What is the meaning of ethics?—*A.* That branch of knowledge which points out to us our duties.

Q. What is meant by christian ethics?—*A.* That branch of knowledge which points out to us our duties, and which has been inculcated by inspiration, and enforced by miracles.

Q. What by geology?—*A.* The doctrine of the structure and formation of the earth, and the various changes which it has undergone since its creation.

Q. Of what does the science of geometry treat?—*A.* Of lines, surfaces, and solids, and it is the doctrine of extension and magnitude in general.

Q. What is meant by herpetology?—*A.* The science which treats of the natural history and economy of reptiles.

Q. What by horology?—*A.* That science which teaches to measure the portions of time.

Q. What does the science of hydraulics teach?—*A.* To ascertain the velocity and impetus of fluids when in motion.

Q. What is the meaning of the term hydrodynamics?—*A.* The science which treats of the powers, forces, and velocities of fluids in motion. This science is generally divided into hydrostatics and hydraulics; the former of which considers the pressure, equilibrium, and cohesion of fluids; and the latter their motion, the resistance which they oppose to moving bodies, and the various machines in which they are the principal agent.

Q. What is hydrography?—*A.* The art of measuring and describing the sea, rivers, lakes, and canals.

Q. What is the meaning of hydromancy?—*A.* The method of divination by means of water.

Q. What is meant by hydrostatics?—*A.* The science of ascertaining the weight or gravity of fluids, or of solid bodies immersed or placed in fluids.

Q. What is ichthyology?—*A.* That part of natural history which treats of fishes.

Q. What is the meaning of idealogy?—*A.* That science which teaches the philosophy of the human mind.

Q. What of longimetry?—*A.* The art of measuring lengths, as roads, &c.

Q. What is meant by the mathematics?—*A.* The science which teaches the quantities and proportions of magnitudes in general.

Q. How are the mathematics divided?—*A.* Into pure and mixed.

Q. Of what do pure mathematics treat?—*A.* Of number and magnitude; as arithmetic, algebra, geometry, and trigonometry.

Q. Of what do mixed mathematics treat?—*A.* Of the properties of quantity applied to matter; as mechanics, pneumatics, hydrostatics, optics, astronomy, and navigation

Q. Is there not another subdivision of mathematical science?—*A.* Yes; into *speculative* and *practical.*

Q. Of what use are these?—*A.* Speculative mathematics contemplate the proportions, relations, &c. of bodies in the abstract; practical mathematics is that branch which is employed in the practical uses of life.

Q. What does the science of mechanics teach?—*A.* The nature and laws of motion, the action and force of moving bodies, the construction of machines, &c.

Q. What are the mechanical powers?—*A.* The lever, the wheel and axle, the pulley, the inclined plane, the wedge, and the screw. But these six powers are reducible to two, for the pulley and wheel are only assemblages of levers, and the wedge and screw compose inclined planes.

Q. What is the meaning of meteorology?—*A.* The science which teaches the phenomena of the atmosphere.

Q. What of mineralogy?—*A.* The science which teaches the properties of mineral bodies, and their classification.

Q. What of metoposcopy?—*A.* The art of discovering the temperament, inclinations, and manners of persons, by inspecting their features.

Q. What of optics?—*A.* The science of vision, which explains the causes of the several modifications or alterations which the rays of light undergo in the eye; and it demonstrates why objects at different distances, and in different situations, appear greater or smaller, more distinct or more confused, nearer or more remote.

Q. Which are the principal optical instruments?—*A.* The mirror, the prism, the microscope, the telescope, &c.

Q. What are catoptrics?—*A.* The science of reflected vision.

Q. What are dioptrics?—*A.* The science of refracted vision.

Q. What is meant by ornithology?—*A.* That branch of natural history which treats of birds.

Q. What by oryctology?—*A.* The science which teaches the natural history of fossils, or those animal and vegetable substances which are dug out of the earth in a mineral stat..

Q. What by osteology?—*A.* That branch of anatomy which treats of the bones.

Q. What by pharmacy?—*A.* The art of preserving, arranging, compounding, and intermixing medicines.

Q. What by phlebotomy?—*A.* The opening of veins for the purpose of letting of blood.

Q. What is the meaning of phonics?—*A.* The doctrine or science of sounds; it is divided into two parts, diaphonics, and cataphonics: the former explains the properties of those sounds which come directly from the sonorous body to the ear; the latter treats of reflected sounds, or is the science of echoes

Q. What of physiognomy?—*A.* That peculiar combination of features which designates the feelings and dispositions of the mind.

Q. What of physiology?—*A.* The doctrine of physics or nature.

Q. What is meant by physics?—*A.* Natural philosophy.

Q. What is the meaning of politics?—*A.* The science of governing and administering the affairs of a state or kingdom, for the maintenance of public safety, order, and tranquillity.

Q. What of phytology?—*A.* A description of the kinds and virtues of plants.

Q. What are pneumatics?—*A.* That branch of natural philosophy which treats of the weight, pressure, and elasticity of the air, with the effects arising from them.

Q. What is pyrotechny?—*A.* The composition, structure, and use of artificial fireworks.

Q. What is scenography?—*A.* The representation of a body on a perspective plane.

Q. What is the meaning of sciagraphy?—*A.* The profile or vertical section of a building, designed to show the inside of it.

Q. What of statics?—*A.* The science of weighing bodies.

Q. What of statistics?—*A.* That branch of political arithmetic which treats of the composition, government, revenues, expenditure, commerce, and manufactures of a state.

Q. What of tachygraphy?—*A.* The art or practice of quick writing.

Q. What is trigonometry?—*A.* That branch of geometry which teaches the mensuration of the sides and angles of triangles.

Q. How is trigonometry divided?—*A.* Into plane and

spherical. Plane trigonometry teaches the mensuration of plane triangles; spherical trigonometry teaches the mensuration of arcs or circles, as described on the surface of a sphere.

Q. What is the meaning of topography?—*A.* The description of tracts of countries.

Q. What of typography?—*A.* The art of printing.

Q. What of zoology?—*A.* That branch of natural history which relates to animals.

PHILOSOPHICAL AND MATHEMATICAL INSTRUMENTS.

Q. What is the use of the instrument called an anemoscope?—*A.* To foretell the changes of wind or weather, and sometimes showing by an index what the present direction of the wind is.

Q. What of the aerometer?—*A.* To measure the force and velocity or the direction of the wind.

Q. What of the areometer?—*A.* To measure the density and gravity of fluids

Q. What of the astrolabe?—*A.* To take the altitude of the sun or stars at sea.

Q. What of the astroscope?—*A.* To ascertain the stars.

Q. What of the barometer?—*A.* To measure the weight or pressure of the atmosphere, and by that means to foretell the changes in the weather. It is also of use in measuring heights, depths, &c.

Q. What of the baroscope?—*A.* To show the weight of the atmosphere.

Q. What is the calorimeter?—*A.* A vessel for ascertaining the specific heat of a body.

Q. What is the chronometer?—*A.* An instrument for measuring time.

Q. What the clepsydra, or hour-glass?—*A.* An instrument to measure time by the fall of a certain quantity of water.

Q. What is the cyanometer?—*A.* An instrument for estimating the intensity of the blue colour of the sky.

Q. What is the use of the diaphanometer?—*A.* An in-

strument for measuring the transparency of a portion of the atmosphere.

Q. What is the dendrometer?—*A.* An instrument to measure the trunk, branches, and the height of a tree without coming near it.

Q. What is the use of the dynamometer?—*A.* To measure the relative strength of men and animals.

Q. What of the echometer?—*A.* A scale or rule to measure the duration and lengths of sounds, and to find their intervals or ratios.

Q. What of the electrometer?—*A.* An instrument by which the intensity of an electric state is shown.

Q. What of the eclipsareon?—*A.* To exhibit the time, quantity, duration, and progress of solar eclipses.

Q. What of the heliometer?—*A.* To measure the diameters of the heavenly bodies.

Q. What is the helioscope?—*A.* An instrument fitted to view the sun, without injuring the eyes.

Q. What is the holometer?—*A.* An instrument which serves universally for taking all measures both on earth and in the heavens.

Q. What is the use of the hydrometer?—*A.* To weigh or determine the specific gravities of fluids.

Q. What is the hydroscope?—*A.* An instrument to measure time by means of a quantity of water.

Q. What is the use of the hygrometer?—*A.* To measure the degrees of dryness or moisture of the atmosphere.

Q. What is the kaleidoscope?—*A.* An instrument which creates and exhibits an infinite variety of beautiful and perfectly symmetrical forms by successive reflections between plates of glass.

Q. What is the manometer, or manoscope?—*A.* An instrument to show or measure the alterations in the rarity or density of the air.

Obs. The difference between the manometer and barometer is this: the latter serves to measure the weight of the atmosphere, or of the column of air over it; the former, the density of the atmosphere, or of the column of air over it.

Q. What is the use of the micrometer?—*A.* To measure small distances.

Q. What of the microscope?—*A.* To make objects appear to the eye larger than they really are.

Q. What is the use of the orrery?—*A.* To represent the motions and appearances of the heavenly bodies.

Q. What is the pantometer?—*A.* An instrument to take all sorts of angles, distances, and elevations.

Q. What is the pentagraph?—*A.* An instrument by which designs of any kind may be copied in any proportion, without any skill in the art of drawing.

Q. What is the use of the pedometer, or perambulator?—*A.* To measure distances upon the ground.

Q. What of the photometer?—*A.* To indicate the different quantities of light between bodies illuminated in different degrees.

Q. What is the pluviameter?—*A.* An instrument to gauge rain.

Q. What is the pyrometer?—*A.* An instrument for measuring the expansion of bodies by heat.

Q. What is the scotograph?—*A.* An instrument to enable a person to write in the dark.

Q. What the tachometer?—*A.* An instrument used to ascertain the velocities of machinery.

Q. What is the use of the telescope?—*A.* To discover or view objects at a distance. This instrument has, of all others, most materially contributed to the advancement of astronomy.

Q. How many kinds of telescopes are there?—*A.* Three: the reflecting telescope, the refracting telescope, and the achromatic telescope.

Q. What is the ombrometer?—*A.* A rain gauge.

Q. What is a theodolite?—*A.* An instrument used in surveying, for the taking of angles, distances, &c.

Q. What is the use of the thermometer?—*A.* To measure the degree of heat or cold in any body.

Q. What is the thermoscope?—*A.* An instrument to show the changes which happen in the air with respect to heat and cold.

THE FINE ARTS.

O, heaven born sisters!
Who charm the sense, or mend the heart;
Who lead fair virtue's train along.

POPE.

Q. WHICH are the fine arts?—*A.* The fine, or elegant arts, as they are called, are poetry, music, painting, sculpture, and engraving. To which may not improperly be added, architecture and dancing.

Q. What is poetry?—*A.* The language of passion, or of enlivened imagination, formed most commonly into regular numbers.

Q. How many kinds of poetry are there?—*A.* Seven.

Q. Mention them.—*A.* Pastoral poetry, lyric poetry, didactic poetry, descriptive poetry, epic poetry, dramatic poetry, and satirical poetry.

Q. Which are the most distinguished epic poems?—*A.* The Iliad and Odyssey of Homer, the Æneid of Virgil, the Paradise Lost of Milton, and the Jerusalem of Tasso. In this species of composition are ranked, the Messiah of Klopstock, the Lusiad of Camoens, the Henriade of Voltaire, Glover's Leonidas, Cumberland's Calvary, &c.

Q. Mention the most eminent lyric poets.—*A.* Pindar, Horace, Anacreon, Sappho, &c. Under this head are ranged Dryden's Ode on St. Cecilia's Day, Collins's Ode on the Passions, many of Gray's Odes, and the lyric compositions of Warton, Barbauld, Coleridge, &c.

Q. Which are the most eminent elegiac poets? *A.* Ovid, Tibullus, Catullus, Shenstone. Gray's Elegy, and Hammond's Version of Tibullus's elegies, are elegiac compositions.

Q. Mention the best pastoral poems.—*A.* Those of Theocritus and Virgil, Gay's Shepherd's Week, Collins's Eclogues, Shenstone's Pastoral Ballad, Gesner's Idylls, Ramsay's Gentle Shepherd, and Beattie's Hermit.

Q. Which are the best examples of descriptive poetry?—*A.* The Allegro and Penseroso of Milton, the Seasons of Thomson, Goldsmith's Traveller and Deserted Village, Pope's Windsor Forest, Parnell's Hermit, Rogers's Pleasures of Memory, Campbell's Pleasures of Hope, Bloomfield's Farmer's Boy, and Falconer's Shipwreck

Q. Which of didactic, or perceptive poetry?—*A.* Pope's Essay on Criticism, Akenside's Pleasures of the Imagination, Blair's Grave, and Beattie's Minstrel.

Q. Which of satirical poetry?—*A.* The works of Horace, Juvenal, Boileau, Dryden, Pope's Dunciad, Churchill's Rosciad and Prophecy of Famine, Johnson's London, Cowper's Table Talk and Progress of Error.

Q. Which of dramatic poetry?—*A.* The works of Shakspeare, Congreve's Mourning Bride, Young's Revenge, Addison's Cato, Rowe's Fair Penitent and Jane Shore, Moore's Gamester, Colman's Clandestine Marriage, Cumberland's West Indian, and Sheridan's School for Scandal, his Rivals, and Critic.

Obs. The most eminent examples of heroic-comic, or mock-heroic poetry, are Homer's Battle of the Frogs and Mice, the Lutrin of Boileau, Pope's Rape of the Lock, and the Splendid Shilling of Phillips; and those of burlesque poetry are Butler's Hudibras, the Iliad Burlesqued, Cotton's Virgil Travestie, and Prior's Alma.

Q. What is meant by music?—*A.* A succession of sounds which excite certain agreeable sensations.

Q. How many sounds are there in music?—*A.* Seven, which are distinguished by the letters A, B, C, D, E, F, and G.

Q. How is music divided?—*A.* Into vocal and instrumental. The musical glasses, the harmonica, and the euphon, are celebrated for the incomparable sweetness of their tones, and their capacity of being swelled or softened at pleasure.

Q. What are the different kinds of music?—*A.* The principal are the overture, the symphony, the concerto, and the sonata. A solo is when only one instrument or voice is employed; a duetto when two; and a trio when three.

Q. Whether are vocal or instrumental tones most pleasing to the ear?—*A.* Vocal affords the greatest pleasure. Of instrumental music the violin, the flute, and the hautboy are the most grateful; but the organ is the most powerful, though it wants expression and flexibility of intonatio..

Q. Mention the most eminent musicians.—*A.* In Germany, Haydn, Handel, Pleyel, and Mozart. In England, Arne, Arnold, Burney, and Crotch.

Q. How many sorts of painting are there?—*A.* Eleven.

1st, in oil; 2dly, in fresco; 3dly, in water colours; 4thly, on glass; and 5thly, in enamel. The other methods are crayon, fresco, distemper, elydoric, encaustic and mosaic painting.

Q. What is meant by painting in fresco?—*A.* Drawing with colours diluted with water, on a wall or ceiling newly plastered, and with which they so incorporate, that they perish only with the stucco itself.

Q. How is enamel painting performed?—*A.* It is done either on copper or gold, with mineral colours dried by fire. By this method colours are rendered very durable.

Obs. Crayon painting is performed with colours ground in water mixed with gum and made into small rolls. Fresco painting is performed with water colours on fresh plaster, or mortar not dry. Elydoric painting is performed with oil and water. Encaustic painting is performed in wax; and mosaic painting consists of a variety of pieces of marble of different colours, joined together with stucco.

Q. What is meant by the term "school" in painting?—*A.* It denominates a class of artists who imitate or adopt the manner of some particular painter.

Q. Which are the most distinguished schools of painting?—*A.* The Grecian, the Italian, and the Flemish.

Q. Who were the most distinguished painters of the Grecian school?—*A.* Zeuxis, Apelles, Parrhasius, Protogenes, and Timanthes. Of their productions nothing remains

Q. For what productions was Zeuxis distinguished?—*A.* For his Jupiter sitting upon a throne surrounded by the gods; his Hercules strangling the serpents in the presence of his affrighted parents; his modest Penelope; and his Helen, which was considered his greatest production.

Q. For what was Apelles particularly distinguished?—*A.* For his inimitable painting of Venus issuing out of the sea; and his portrait of Alexander holding thunder in his hand, which Pliny says was so like life that the hand of the king with the thunder seemed to come out of the picture.

Q. Do you recollect no anecdote of Apelles s inoependence of mind?—*A.* Yes: he painted another picture of Alexander, but the king expressed dissatisfaction at it; at that moment a horse passing by, neighed at the horse which was represented in the piece, supposing it to be alive; upon which Apelles said, "One would imagine

that the horse is a better judge of painting than your majesty."

Q. Can you give any account of Parrhasius's skill?—*A.* Having entered the lists with Zeuxis, when they had produced their respective pieces, the birds came to pick the grapes which Zeuxis had painted. Immediately Parrhasius exhibited his piece, and Zeuxis said, "Remove your curtain, that we may see the painting." The curtain was the painting, and Zeuxis acknowledged himself conquered by exclaiming, "Zeuxis has deceived birds, but Parrhasius has deceived Zeuxis himself."

Q. For what is Protogenes celebrated?—*A.* After being engaged for seven years in finishing a picture of Jalysus, a celebrated huntsman, he wished to represent in the piece a dog panting, and with froth at his mouth, but this he could never do with satisfaction to himself; and when all his labours seemed to be without success, he threw his sponge in anger upon the piece. Chance alone perfected what labour could not; the fall of the sponge upon the picture represented the froth in the dog's mouth in the most natural manner.

Q. For what was Timanthes celebrated?—*A.* For his representation of Ajax with all the fury which his disappointment could occasion, when deprived of the arms of Achilles.

Q. Mention the most distinguished painters of the Italian school?—*A.* Michael Angelo, Raphael, Titian, Corregio, Guido, the four Carracci, Albani, Giorgione, the two Veronese, Guercino, Dominichino, Julio Romano, Leonardo da Vinci, Salvator Rosa, Mengs, and several others.

Q. How is the Italian school distinguished?—*A.* It is subdivided into the Venetian school, or that of Lombardy; the Florentine; and the Roman.

Q. What painter was the most celebrated in the Venetian school?—*A.* Titian.

Q. Who in the Florentine?—*A.* Michael Angelo, born in 1474.

Q. Who in the Roman?—*A.* Raphael d'Urbino, born in 1483.

Q. What are the distinguishing features of Titian's productions?—*A.* Truth of colouring, and a due observance of the proportion of his figures.

Q. What of Michael Angelo's?—*A.* Though his works exhibit the grand, the sublime, and the terrible, they are deficient in the anatomy of the human figure.

Q. What of Raphael's?—*A.* Correctness of design, force and justness of expression, and elevation of idea.

Q. Mention the most celebrated productions of Raphael.—*A.* The Holy Family, the Virgin and Child, and the Transfiguration of Christ on Mount Tabor.

Q. Who were the most distinguished painters of the Flemish school?—*A.* Rubens, the two Teniers, Vandyck, Holbein, Rembrandt, the two Ostades, Sneyders, Albert Durer, Gerhard Dow, Heemskirk, Vander Velde, Kneller, Berghem, Woovermans, Matsys, and Mengs. Hans Holbein is the head of the Swiss school.

Q. What are the distinguishing merits of Rubens?—*A.* His figures, though too corpulent, are drawn with great truth and nature, and he possesses great skill in the expression of the passions.

Q. Who are the most celebrated painters in the English school?—*A.* Sir Joshua Reynolds, Lely, Hogarth, Thornhill, Gainsborough, Wright of Derby, Wilson, West, Barry, Northcote, Romney, Lawrence, Stubbs, Reinagle, Morland, Westall, Wilkie, Opie, &c.

Q. Who in the French?—*A.* Poussin, Le Brun, Claude Lorrain, Le Sueur, the Vanloos, Vernet, Vouet, Vincent, and David.

Q. What are the distinguishing features of each school?—*A.* The character of the Florentine school is grandeur and sublimity, with great excellence of design; but a want of grace, of skill in colouring, and effect of light and shade. The character of the Roman school is equal excellence of design, and a superior knowledge in colouring. That of the Venetian is the perfection of colouring, and the utmost force of light and shade, with an inferiority in every other particular.

Q. Who were the most eminent imitators of Titian?—*A.* Giorgione, Corregio, and Parmeggiano.

Q. Who of Raphael?—*A.* The three Carracci, Guercino, Domenichino, and Guido. The strength, sweetness, grace, and majesty of Guido are unrivalled.

Q. What is sculpture?—*A.* The art of cutting or carving wood and stone into images, or of fashioning wax,

earth, plaster, &c. to serve as models, or moulds, for the casting of metallic figures.

Q. What nation is the most distinguished for its works of sculpture?—*A.* The Grecian.

Q. Who were the most famous sculptors of Greece?—*A.* Phidias, Praxiteles. Agesander, Polydorus, and Athenodorus.

Q. For what productions was Phidias celebrated?—*A.* For his statue of Minerva, formed of ivory and gold, thirty-nine feet high, and placed in the temple of that goddess at Athens; and his statue of Olympic Jupiter, made for the Elians of ivory and gold, sixty feet high, and which was reckoned one of the wonders of the world.

Q. For what was Praxiteles distinguished?—*A.* For his two statues of Venus, one of which represented the goddess naked, and the other covered with drapery. Both of these were of exquisite workmanship. Although the former was esteemed the most beautiful, nevertheless the inhabitants of the isle of Cos, for whom they were produced, had the wisdom to give the preference to the latter. What a reproach is this to some who call themselves Christians!

Q. Mention the most esteemed productions of the Grecian school.—*A.* The Apollo Belvidere; the Venus di Medicis of Praxiteles; the Dying Gladiator, in which the delineation of the muscles and the visible failure of strength and life are finely portrayed; the Laocoon of Agesander, Polydorus, and Athenodorus, which is one of the most perfect groups of figures ever produced by the statuary; the Meleager; the Mercury, or the Antinous of Belvidere; and the group of Niobe and her Daughters.

Q. Who are the most distinguished modern sculptors?—*A.* In Italy, Canova and Algarde. In England, Bacon, Nollekins, Flaxman, and the honourable Mrs. Damer.

Q. Mention some of the remains of the magnificent productions of Roman art.—*A.* The venerable remains of the amphitheatres of Nero and Titus, of the triumphal arches, the column of Trajan, the mausoleum of Hadrian, near the castle of St. Angelo, and of the baths of Dioclesian.

Q. What is meant by relievo, or relief?—*A.* Relievo, or

relief, is a term used in sculpture to express the projection of figures from the ground or body on which they are formed.

Q. How many kinds of relievo, or relief, are there?—*A.* Four: 1. alto relievo, or haut relief, or high relief; 2. messo relievo, or mean relief; 3. basso relievo, or bas relief, or low relief; and 4. demi relievo, or half relief.

Q. What is meant by alto relievo?—*A.* Alto relievo, or high relief, is when the figure is formed after nature, and projects as much as the life, according to the natural proportions.

Q. What by messo relievo?—*A.* Messo relievo, or mean relief, is when but one half or side of the figure rises from the ground, or the plane on which it is cut.

Q. What by basso relievo?—*A.* Basso relievo, or bas relief (low relief), is when the figure rises but little off the ground. This kind of sculpture is used chiefly on medals.

Q. What by demi relievo?—*A.* Demi relievo, or demi relief, or half relief, is where only one half of the figure rises from the plane.

Q. What is engraving?—*A.* The art of excavating metals, wood, or precious stones, so as to represent on them figures, letters, &c.

Q. How many kinds of engraving are there?—*A.* Six: 1st, on copper, steel, stones, glass, or wood; 2dly, by aqua fortis, or etching; 3dly, magnatinta; 4thly, in mezzotinto; 5thly, steppling; or 6thly, calcography.

Q. What is meant by architecture?—*A.* The art or science of building, according to certain rules and proportions called *orders*.

Q. How many are the kinds of architecture?—*A.* Three; civil military, and naval.

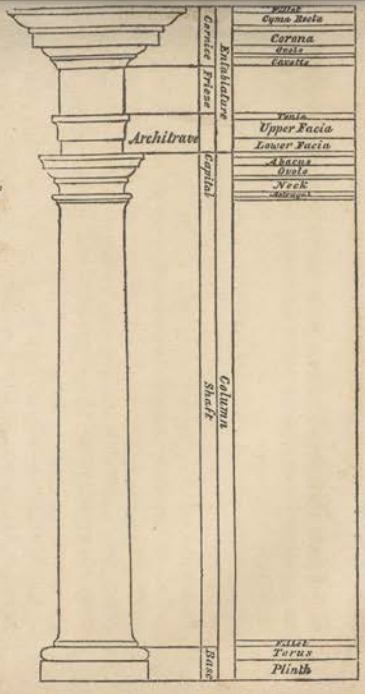
Q. From what period does architecture date its origin?—*A.* It seems to have been nearly coeval with the creation of the world; for, according to the testimony of Moses, Cain built a city, though what were the materials, or how the building was constructed, we are not informed.

Q. Into how many orders is the science of architecture divided?—*A.* Into five.

Q. Mention them.—*A.* The Tuscan, the Doric, the Ionic, the Corinthian, and the Composite.

Architecture.





Q. By what nations were these orders invented?—The three first were invented by the Grecians; the two latter by the Romans.

First unadorn'd,
And nobly plain, the manly Doric rose;
The Ionic then, with decent matron grace,
Her airy pillar heav'd; luxuriant last,
The rich Corinthian spread her wanton wreath.

Q. Describe the Doric order of architecture.—*A.* The Doric, so called from Dorus, its inventor, has a masculine grandeur, and a superior strength to the Ionic. It is, therefore, best adapted to works of great magnitude, and a sublime character. Of this order is the temple of Theseus, at Athens, built ten years before the battle of Marathon, and at this day almost entire.

Q. What are the properties of the Ionic order?—*A.* The Ionic, so called from its inventors, the Ionians, is light and elegant; and its ornaments are between the richness of the Corinthian and the plainness of the Tuscan. Of this order were the temple of Apollo, at Miletus; that of the Delphic oracle; and the temple of Diana, at Ephesus.

Q. How is the Corinthian order distinguished?—*A.* The Corinthian, first used at Corinth, attempts an union of the beauty and simplicity of the two other Grecian orders. The most perfect model of this order extant is to be found in the three remaining columns of the temple of Jupiter Stator, at Rome.

Q. What is the origin of the Corinthian order?—*A.* The origin of the beautiful capital with which this order is adorned, is attributed to the following circumstance. A young Corinthian female, who was at the point of marriage, fell sick and died. Full of affection and compassion, the nurse, under whose care she had been brought up, hurried to the tomb of the departed beauty, and placed upon it a basket, containing some vases filled with the flowers of Acanthus, a flower which the dear deceased valued during her life, and which had been cherished by her fostering hand. To preserve from the injury of the weather the tender plants which adorned the untimely grave of the young bride, she covered the basket with a tile, through the extremities of which in the ensuing spring, when vegetation was renewed, the stalks and leaves of the growing plants forced themselves; but being kept down by the

weight of the tile, assumed a form similar to the sweeps of the volutes in architecture. Callimachus, a famous sculptor of that age, passing by the tomb, admired the manner in which the flower encompassed the basket, and immediately formed after that model the capital of the Corinthian column, in which the tile was represented by the abacus, the leaves of the acanthus by the volutes, and the basket by the body of the capital.

Q. Describe the Tuscan order of architecture.—*A.* The Tuscan, first used in Tuscany, appears to be nearly allied to the Doric, but to possess an inferior degree of elegance. In its proportions, it is strong and massive, like the Doric, but is not enlivened with the ornaments of the frieze and capital which belong to that order. The Trajan column at Rome is of this order.

Q. Describe the Composite order.—*A.* The Composite is what its name implies; for it partakes of the properties of the Ionic and Corinthian orders, but principally of those of the latter. By its introduction, it is evident that the Greeks had, in the three orders of which they were the inventors, exhausted all the principles of grandeur and beauty; and that it was not possible to form a fourth, but by combining those already discovered.

Q. What are the characteristics of the five orders of architecture?—*A.* Of the Ionic, grace and majesty; of the Tuscan, simplicity; of the Corinthian, magnificence; of the Doric, solemnity; and of the Composite, profuseness.

Q. From whence were the symmetry and proportions of architecture derived?—*A.* According to Vitruvius, from the human figure; the capital representing the head, the base the feet, and the shaft the body: from which comparison the Tuscan has been denominated the gigantic, the Doric the Herculean, the Ionic the matronal, and the Corinthian the virginal order.

Q. Are all buildings constructed according to the five orders of Grecian and Roman architecture?—*A.* No: notwithstanding the beauty and proportion of those orders, the greater part of the buildings throughout Europe are constructed according to the Gothic, the Saxon, the Norman, or the Saracenic styles.

Q. Describe the Gothic style.—*A.* The Gothic method of building consists in vastness, gloominess, and solem-

nity, rather than in the regularity of its structure, or the propriety of its ornaments.

Q. What are the characteristics of the Saxon architecture?—*A.* The Saxon style is distinguished for its semicircular arch, and short, thick, massive columns. It has no pinnacles, nor any statues, except in relief. The best specimen of this style is in the north transept of Winchester cathedral.

Q. How is the Norman architecture known?—*A.* Its walls are very thick, generally without buttresses; the arches, which are highly ornamented with figures, are both over the doors and windows semicircular, and supported by clumsy, massive pillars, with a regular base and capital. The most beautiful and perfect specimen in England of this style of building may be seen in the crypt, or under-croft, of Canterbury cathedral. Other instances may be seen in the monastery of Lindisfarn in Holy Island, in the cathedral at Durham, and the ruined chair at Orford in Suffolk.

Q. How is the Saracenic style distinguished?—*A.* The Saracenic, or, as it is improperly called, the modern Gothic architecture, is distinguished by its numerous and prominent buttresses, its lofty spires and pinnacles, its large and ramified windows, its ornamental niches or canopies, its sculptured saints, the delicate lace-work of its fretted roofs, and an indiscriminate profusion of ornaments over the whole building. But its peculiar marks are the small clustered pillars, and pointed arches formed by the segments of two intersecting circles. The most beautiful specimen of this species of architecture is the cathedral of Salisbury.

Q. What is the origin of the Saracenic architecture?—*A.* It is supposed to have originated in Arabia, and to have been introduced into Europe by some persons returning from the Crusades in the Holy Land.

Q. Are the nine orders already enumerated all that have been in use?—*A.* No: besides them the Attic, the Persic, and the Caryatides were adopted.

Q. Describe the Attic order.—*A.* The Attic order, which derives its name from its being invented by the people of Attica, is nothing more than a small order of pilasters, or square pillars of the shortest proportions,

having a cornice raised in the form of an architrave, in the room of an entablature.

Q. Describe the Persic order.—*A.* The Persic is an order in which the columns are represented in the form of men supporting the entablature.

Q. What is the origin of the Persic order?—*A.* The Lacedemonians having, under the command of Pausanias, defeated the Persians, as a mark of their triumph, they erected trophies of the arms of their enemies representing the Persians as slaves, supporting the porticoes, arches, or houses of their victors.

Obs. *Architectural Terms.*—A baluster is a small pillar of wood, stone, &c., used to ornament the tops of buildings, and to support railing. Pilasters are square columns, either insulated or let into the wall. Sometimes they are wholly detached from the wall; at other times three of their faces clear out of the wall; again, at times, only two, or only one of their sides are seen. Columns are the shafts of the pillars. Termini are the trunks or pedestals. The Caryatides are columns representing the form of women without arms, and dressed in long robes after the Asiatic manner. The Caryatides and Persians are employed to support entablatures in buildings, the Termini to support the entablatures of monuments, chimney-pieces, and similar compositions.

Q. What was the origin of the order of the Caryatides?—*A.* The inhabitants of Caria, in Peloponnesus, having joined the Persians against their fellow-countrymen the Greeks, were, on their defeat, put to the sword, and their women carried off in triumph; and to perpetuate the memory of the action, the captive women were represented in their triumphal vestments, supporting the heavy weight of their edifices.

Q. What are the distinguishing features of the different orders of architecture?—*A.* The proportion between the thickness and height of the pillar or column, and the form or conformation of the chapiter or capital.

Q. Of how many parts does every order consist?—*A.* Of three principal ones: the pedestal, the shaft, and the chapiter or capital. The other parts of a complete order are the base, the plinth, the dado or die, the abacus, the torus, the astragal, the scotia, the entablature, the architrave, the frieze, and the cornice.

Q. Describe these parts of an order.—*A.* The *pedestal* is the foundation of a column, or pilaster; the *base* is that part which is between the shaft and the pedestal; the *shaft*

is comprehended between the capital and the base; the *chapiter* or *capital* is the highest part of the pillar, rising directly out of the shaft, and is that part which distinguishes or characterises the order; the *plinth* is the brick or stone upon which the column rests; the *entablature* is immediately over the capital, and consists of the architrave, the base, and the cornice; the *architrave* is the chief support of the whole entablature, and lies immediately upon the capital; the *frieze* is a large flat space, which is sometimes enriched with figures, and lies between the architrave and the cornice; the *torus*, or swell, is a round ring, encircling the base, and rests upon the plinth; the *astragal* is a round member, which terminates the extremities of the column; the *scotia* is a hollow moulding used in bases; the *abacus* is the highest part of the capital, and serves as a covering; and the cornice crowns the whole.

Q. How are the different orders distinguished?—*A.* Each column has its particular base: the Tuscan is the most simple, having only a torus and plinth; the Doric has an astragal more than the Tuscan. To the Ionic base the torus is larger, and a double scotia is added, with two astragals between. The Corinthian base has two toruses, two scotias, and two astragals. The Composite has one astragal less than the Corinthian.

Q. What is the noblest specimen of architecture in the world?—*A.* St. Peter's church, at Rome; built under the direction of Bramante, San Gallo, Raphael, and Michael Angelo.

RHETORICAL FIGURES.

Q. WHAT is meant by style in writing?—*A.* The peculiar manner in which conceptions are expressed by means of language.

Q. How many kinds of style are there?—*A.* Some critics mention four kinds; namely, the *concise*, the *diffuse*, the *nervous*, and the *feeble*; while others have adopted a different division, namely, the *dry*, the *plain*, the *neat*, the *elegant*, and the *florid*.

Q. What are the properties of a correct style?—*A.* The two chief qualities of a good style are *perspicuity* and *ornament.*

Q. In what does perspicuity of style consist?—*A.* In purity, propriety, and precision.

Q. In what does purity of style consist?—*A.* In avoiding all foreign idioms and new words

Q. In what propriety of style?—*A.* In avoiding all vulgarisms, or low expressions, and using such words and expressions as are chosen by the best writers and speakers in the language to express their sentiments.

Q. In what does precision of style consist?—*A.* In retrenching all synonymous words and superfluity of expression.

Q. What is meant by figurative language?—*A.* The language of the imagination or passions.

Q. How is figurative language generally divided?—*A.* Into figures of words, or tropes, and figures of thought.

Q. What is meant by a trope?—*A.* When a word is used to signify something that is different from its original meaning.

Q. What by a figure of thought?—*A.* A figure of thought consists in the sentiment only, while the words are used in their literal signification.

Q. Which are the principal tropes or figures of language?—*A.* The metaphor, the simile, the metonymy, the synecdoche, the hyperbole, the prosopopœia or personification, the apostrophe, the comparison, the antithesis, the interrogation, the expostulation, the exclamation, the amplification, climax or gradation, vision or image, irony, and allegory.

Q. What is a metaphor?—*A.* When one thing is used to signify another; as when we say, "An able minister is the pillar of the state."

Obs. No figure is in more general use than the metaphor. It is so common, that its application in the current expressions of life almost passes unobserved. In the expressions, *an arm of the sea, the foot of the hill, the raging of the sea, the light of truth, the flowers of rhetoric, the trumpet of rebellion, the voice of fame, a torrent of eloquence, striking effect, branches of learning, solid judgments, grounds of apprehension, meretricious ornaments, strait-laced notions, corrupt administrations, currents of opinion, errors exploded, doors opened to abuses,* &c. &c. we scarcely recollect that we are making use of metaphorical language.—*Williams's First Lessons in Composition and Rhetoric.*

Q. What is the meaning of metonymy?—*A.* The relation between cause and effect; as when we say, "He loves his bottle," instead of saying, "He is a drunkard."

Obs. "To bring one's grey hairs with sorrow to the grave" is a metonymy for old age. It is by this figure that passion is said to be *blind;* anger, *hasty;* groves, to be *vocal;* a state, *tottering;* the ocean, *imperious;* a flood, *angry;* a tempest, *raging.* To this figure also are referable Milton's "adventurous song," Shakspeare's "coward swords," and Thomson's "agonizing ships." So "the skirts of a wood," "the hand of fame," "the brow of a hill," "the wing of an army," &c. are metonymical expressions. By the same figure "mitre" is used for priesthood; "sword" for the military profession; "throne" for the kingly office; and "the gown" for theology, law, or physic. "He has a good heart," i. e. courage; "the firm, or house of ——, stopped payment;" "the city or university went up with the address;" "drink this cup," i. e. wine; "the kettle boils," i. e. the water, are also metonymical expressions; and even the cant expressions "boots" for the person who cleans boots, "cockneys" for Londoners, and the like, are referable to this figure.—*First Lessons in Composition and Rhetoric.*

Q. What is meant by synecdoche?—*A.* It is when part is put for the whole, or the whole for a part; as when we say, "We descried a sail," instead of saying, "We descried a ship."

Obs. The current expressions, "to receive a person under one's roof," and "to pay so much a head," are synecdoches for to receive into one's house, and to pay so much a man. In the familiar expression, "he has but one shirt to his back," the word "back" is used by this figure for body. By this figure "daily bread" is used in the Lord's prayer for the necessaries of life; "youth and beauty" for young and beautiful; and Milton's appellation of "grim feature" for death.—*First Lessons in Composition and Rhetoric.*

Q. What is meant by hyperbole?—*A.* It is when we go beyond the bounds of strict truth, in representing things greater or smaller, better or worse, than they really are, in order to raise admiration or love, fear or contempt; as when we say, "as swift as the wind," "as white as snow," "as slow as a snail," and the like.

Q. What is the meaning of an apostrophe?—*A.* The bestowing an ideal presence upon the absent or the dead; or it is an address to inanimate nature, as if endowed with sense and reason. Thus, Cicero, in his oration for Milo, addressed himself to the great patriots who had shed their blood for the public; and calls them to the defence of his client. Of the application of this figure to inanimate

nature, the Poems of Ossian abound with beautiful instances.

Q. What is the meaning of the figure simile or comparison?—*A.* Simile or comparison beautifully sets off and illustrates one thing by resembling and comparing it to another, to which it bears a relation and resemblance; as "the music of Carryl was, like the memory of joys that are past, pleasant and mournful to the soul."—*Ossian.*

Or, this from Young's Revenge:

"The maid that loves
Goes out to sea upon a shatter'd plank,
And puts her trust in miracles for safety."

Q. What is meant by an antithesis?—*A.* Antithesis is a figure whereby words and sentiments very different or contrary are compared or contrasted: such is that of Cicero, in his second Catilinarian. "On one side stand modesty, on the other impudence; on one fidelity, on the other deceit; here pity, there sacrilege; here continency, there lust," &c.

Q. What by the figure exclamation?—*A.* The figure exclamation expresses the breaking out and vehemence of any passion; as

"O unexpected stroke, worse than of death!
Must I thus leave thee, Paradise? Thus leave
Thee, native soil; these happy walks and shades,
Fit haunt of Gods!"

Q. What by the figure amplification?—*A.* Amplification is when every chief expression in a period adds strength and advantage to what went before: and so the sense all along heightens, till the period is vigorously and agreeably closed; as "'Tis pleasant to be virtuous and good, because that is to excel many others: 'Tis pleasant to grow better, because that is to excel others: Nay, 'tis pleasant even to mortify and subdue our lusts, because that is victory: 'Tis pleasant to command our appetites and passions, and to keep them in due order, within the bounds of reason and religion, because that is empire."

Q. What by climax or gradation?—*A.* Climax or gradation is an ingenious exaggeration of all the circumstances of some object or action which it is the intention

to place in the most striking point of view. Thus, "But if credit, if interest, if happiness, are of no estimation in your eyes, think on future consequences; think on the precepts of religion; think on the hopes of immortality."

Q. What by vision or imagery?—*A.* Vision or imagery is a vivid representation of things, so as to bring the scene described before the eyes of the hearer, and thus impress it more strongly on his imagination. Such is the poet's description of Conrad's character in the Corsair:

> "Steer to that shore!—they sail. Do this—'tis done:
> Now form and follow me!—the spoil is won."

Q. What by personification, or prosopopœia?—*A.* The personifying or assigning to qualities or things, inanimate or irrational, speech, action, or feeling; as when we make use of the expressions, "a raging storm," "a furious dart," "a deceitful disease," "a cruel disaster," "the thirsty ground," "the angry ocean," "a murmuring brook," "the stormy wind," "jovial wine," and the like.

Q. What by irony?—*A.* Irony is when we speak contrary to our thoughts, in order that we may speak with more force and advantage; as when we call a silly person a Solomon, or an unchaste woman a Penelope.

Q. What by allegory?—*A.* A figure of speech, which consists in choosing a subject having properties or circumstances analogous to the subject treated of, and describing at length the particulars belonging to the former, in such a manner as to illustrate what we mean to enforce respecting the latter. There cannot be a finer or more correct allegory than that in Psalm lxxx. where every word is made to represent the Jews.

Q. What by onomatopœia?—*A.* An expression which more strongly conveys its meaning by its sound; as when one wind is said to *whistle;* another to *roar;* when a serpent is said to *hiss;* a fly to *buzz;* bees to *hum;* and the like.

Q. What by catachresis?—*A.* The using one word for another, for the want of a proper one, owing to the poverty of language. Thus, a glass inkhorn, a sheet of paper, a wooden tomb-stone, the feet of a table, are catachres-

tical expressions. So are "a man of war," for a ship of war; and "a merchant man," for a trading vessel.

Obs. Perhaps the following easy verses will assist the memory of the learner in the recollection of the foregoing answers:—

A *metaphor* in borrow'd words compares;
Thus, for excess, we say, "a *flood* of tears."

An *allegory* is a chain of tropes;
"I've pass'd the *shoals;* fair *gales* now *swelling* hopes."

A *metonymy* takes some kinder name;
Just *Heav'n* (for God) confounds their pride with shame."

Synecdoche the whole for part doth take,
Or part for whole, just for the metre's sake;
"While o'er thy *roof* (for house) loud thunders break."

An *irony* quite the reverse intends
Of what it speaks. "*Well done! right trusty friends.*"

Onomatopœia forms words from sound;
"Flies *buzz*, bees *hum*, winds *whistle* all around."

Hyperbole soars high, or sinks too low;
"*He touch'd the skies.—Snails do not crawl so slow.*"

A *climax* by gradation still ascends;
"They were *my countrymen, my neighbours, friends.*"

A *catachresis* words abused applies;
"Over his grave a *wooden tombstone* lies."

Q. Of what parts does a speech or oration in general consist?—*A.* 1st, of the exordium or introduction; 2dly, of the narration or explication; 3dly, of the proposition or division; 4thly, of the reasoning or arguments; 5thly, the pathetic part; and 6thly, the conclusion.

THE FOUR LEARNED AGES,

OR

PRINCIPAL EPOCHS IN LITERATURE.

Q. How many have been the principal epochs which have been distinguished for the production of genius?—*A.* Four.

Q. Mention them.—*A.* The Grecian age, which commenced near the time of the Peloponnesian war, and extended to the death of Alexander the Great; the Roman, or, as it is commonly called, the Augustan age, was included nearly within the days of Julius Cæsar and Augustus; the third age, or that of the restoration of learning, subsisted during the lives of popes Julius II. and Leo X.; and the fourth age comprehended the reigns of Louis XIV. and queen Anne.

Q. Who were the principal authors that flourished during the Grecian age?—*A.* Herodotus, Homer, Thucydides, Xenophon, Socrates, Plato, Aristotle, Demosthenes, Æschines, Lysias, Isocrates, Pindar, Æschylus, Euripides, Sophocles, Aristophanes, Menander, Anacreon, Theocritus, Lysippus; and the artists Apelles, Phidias, and Praxiteles.

Q. Mention those of the Roman or Augustan age.—*A.* Catullus, Lucretius, Terence, Virgil, Horace, Tibullus, Propertius, Ovid, Phædrus, Cæsar, Cicero, Livy, Sallust, Varro, and Vitruvius.

Q. Who were those of the third age?—*A.* Ariosto, Tasso, Sannazarius, Vida, Machiavel, Guicciardini, Davila, Erasmus, Paul Jovius; and the artists Michael Angelo, Raphael, and Titian.

Q. Who were those of the fourth age?—*A.* In France, Corneille, Racine, De Retz, Moliere, Boileau, Fontaine, Baptiste, Rousseau, Bossuet, Fenelon, Bourdaloue, Pascal, Malebranche, Massillon, Bruyere, Bayle, Fontenelle, and Vertot; in England, Dryden, Pope, Addison, Prior, Swift, Parnell, Arbuthnot, Congreve, Otway, Young, Rowe, Atterbury, Shaftesbury, Bolingbroke, Tillotson, Temple, Boyle, Locke, Newton, and Clarke

Q. Who are the oldest authors of whom we have any account?—*A.* The writers of the Scriptures; Sanchoniatho, the Phœnician; and Manetho, the Egyptian.

Q. Who are the men to whom science is most indebted?—*A.* Bacon, Locke, and Newton.

Q. Who is considered the father of poetry?—*A.* Homer.

Q. Who of history?—*A.* Herodotus.

Q. Who of physic?—*A.* Hippocrates.

Q. Why are these learned men so called?—*A.* Because their works on the respective sciences of which they treated are the oldest extant.

Q. What particular honour did Alexander pay to the memory of Homer?—*A.* Every night he caused the Iliad and Odyssey to be placed under his pillow, with his sword, in a golden casket, enriched with stones of inestimable value.

Q. What other particular honour was paid to the memory of Homer?—*A.* The states of Argos sent a solemn deputation, every five years, to offer libations to the tomb which contained the venerated remains of this poet, in the island of Chios.

Q. Who were the greatest philosophers of antiquity?—*A.* Socrates and Plato.

Q. Who of modern times?—*A.* Bacon and Locke.

Q. Mention the most celebrated mathematicians of antiquity.—*A.* Archimedes and Euclid.

Q. Which are those of modern times?—*A.* Newton, La Lande, and La Place. Black, Fourcroy, and Davy are the most distinguished chemists.

Q. Who were the most ancient poets of whom history makes mention?—*A.* Orpheus, Linus, and Musæus, who flourished about thirteen centuries before the Christian era.

Q. When did Homer and Hesiod live?—*A.* About nine centuries before the Christian era.

Q. When Alcæus and Sappho?—*A.* The beginning of the seventh century before the Christian era.

Q. What persons, illustrious for their learning, flourished during the sixth century before that epoch?—*A.* Jeremiah, the prophet; Æsop, the fabulist; the Grecian philosophers Solon, Thales, Anaximander, and Diogenes; the Persian philosopher Zoroaster; the poets Bion and Anacreon; and the comedian Thespis.

Q. Who during the fifth century?—*A.* The Greek philosophers Heraclitus, Zeno, Democritus, and the Chinese philosopher Confucius; the poets Simonides, Æschylus, Pindar, Euripides, and Sophocles; the mathematician Meton; Phidias, the sculptor; and Herodotus, the historian.

Q. Who during the fourth century?—*A.* The historians Thucydides, Xenophon, Theopompus, and Ctesias; the philosophers Socrates, Plato, Democritus the Abderite, Diogenes, Aristotle, and Pyrrho; the orators Lysias, Isocrates, Æschines, and Demosthenes; Aristophanes, the comic poet; Hippocrates, the physician; and the painters Zeuxis and Apelles.

Q. Who during the third century?—*A.* The mathematicians Euclid, Apollonius, and Archimedes; Praxiteles, the sculptor; the poets Menander, Callimachus, Theocritus, and Lycophron; Zoilus, the critic; the historians Berosus, Manetho, and Fabius Pictor; and the philosophers Epicurus, Zeno the younger, and Cleanthes.

Q. Who during the second century?—*A.* The poets Apollonius Rhodius, Plautus, Bion, Moschus, Ennius, and Terence; the philosophers Hipparchus and Carneades; the historians Portius Cato and Polybius; the grammarians Aristarchus and Apollodorus; and the illustrious Philopœmen.

Q. Who during the first century?—*A.* The orators Hortensius and Cicero; the poets Lucretius, Catullus, Propertius, Virgil, and Horace; the historians Diodorus Siculus, Aulus Hirtius, Sallust, and Cornelius Nepos; Vitruvius, the architect; and Julius Cæsar and Junius Brutus.

Q. Mention those persons who were illustrious for their learning during the first century of the Christian era.—*A.* Seneca, the moral philosopher; the poets Phædrus, Ovid, Tibullus, Persius, Lucan, Silius Italicus, Valerius Flaccus, Martial, and Statius; the historians Dionysius Halicarnassensis, Livy, Curtius, Josephus, and Tacitus; the natural historians Columella and Pliny the elder; Celsus, the physician; the geographers Strabo, Pomponius Mela, and Isidorus; Quintilian, the orator; and Chrysostom, the Christian father.

Q. Those of the second century.—*A.* Florus, Suetonius, Arrian, Ælian, Appian, Pausanias, Justin, and

Herodian; the epistolist Pliny the younger; Plutarch, Epictetus, Maximus Tyrius, Aulus Gellius, Lucian, and Plotinus, the philosophers; Juvenal, the poet; Ptolemy, the geographer; the Christian fathers Justin Martyr, Polycarp, and Tertullian; Diophantes, the mathematician; and Galen, the physician.

Q. Those of the third century.—*A.* The historians Hegisippus, Julius Africanus, and Pollio; the poets Dionysius, Cato, and Oppian; the Christian fathers Clemens of Alexandria, Origen, and Cyprian; Longinus, the rhetorician; Diogenes Laertius, Dion Cassius, and the Roman jurist Ulpian.

Q. Those of the fourth century.—*A.* The poets Hierocles, Ossian, and Claudian; Eusebius, Eutropius, Vegetius, and Ammianus Marcellinus, the historians; the Christian fathers Lactantius, St. Athanasius, St. Basil, and Gregory Nazianzen.

Q. Those of the fifth century.—*A.* The Christian fathers St. Chrysostom, St. Jerome, St. Cyril, and St. Patrick; the historians Orosius and Zosimus; and Macrobius.

Q. Those of the sixth century.—*A.* Proclus and Boethius, philosophers; Tatius, Procopius, Gildas, and Gregory of Tours, historians; and the celebrated Roman general Belisarius.

Q. Those of the seventh.—*A.* Augustine, the monk; and Mahomet, the false prophet.

Q. Those of the eighth.—*A.* Bede and Alcuin, the historians.

Q. Those of the ninth.—*A.* Eginhart the historian, and the illustrious Alfred the Great.

Q. Those of the eleventh.—*A.* Guido Aretino, the musician; Suidas, the learned lexicographer; Guido of Amiens, the poet; and Avicenna, the Arabian physician.

Q. Those of the twelfth.—*A.* William of Malmsbury, Geoffry of Monmouth, Giraldus Cambrensis, and Hoveden, historians; and Abelard and Heloisa, famous for their epistolary correspondence.

Q. Those of the thirteenth.—*A.* The philosophers Roger Bacon, Albertus Magnus, and St. Thomas Aquinas; the historians Peter of Blois and Matthew of Paris; Cimabue, the painter; and the poets Gaultier of Chatilfon and William of Brittany.

Q. Those of the fourteenth.—*A.* John Scotus, the grammarian; Lilly, the philosopher; Joinville, Matthew of Westminster, Henry Knighton, and Froissart, historians; Dante, Alighieri, Petrarch, Boccace, and sir John Gower, poets; and Wickliffe, the reformer.

Q. Those of the fifteenth.—*A.* Chaucer and Rowley, poets; Walsingham and Monstrelet, historians; Thomas à Kempis; Regiomontanus, the astronomer; and Fust and Caxton, printers.

Q. Those of the sixteenth.—*A.* Philip de Comines, Fabian, Machiavel, Guicciardini, Olaus Magnus, Sleidan, Buchanan, and Polydore Virgil, historians; Ariosto, Vida, Caro, Tasso, Camoens, Buchanan, and Spenser, poets; Raphael, Durer, Leonardi da Vinci, Michael Angelo, Titian, Veronese, painters; the two Stephens and Aldus, printers; Leland, the antiquary; Melancthon, Zuinglius, Martin Luther, Calvin, and Knox, reformers; Paracelsus and Linacre, physicians; Scaliger, the critic; Palladio the architect; sir Thomas More, Erasmus, Copernicus, Rabelais, Gesner, Montaigne, and Hooker, philosophers; and Martin Bucer.

Q. Those of the seventeenth.—*A.* Tycho Brahe, Kepler, Galileo, Napier, Bacon lord Verulam, Des Cartes, Gassendi, Spinosa, Hobbes, Boyle, and Puffendorf, philosophers; De Thou, sir Walter Raleigh, Camden, Marianna, Davila, Strada, Bentivoglio, Clarendon, and Mezeray, historians; Shakspeare, Lopez de Vega, Ben Jonson, Massinger, Heinsius, Scarron, Cowley, Moliere, Milton, Butler, Otway, the two Corneilles, Waller, Racine, La Fontaine, and Dryden, poets; Carracci, Rubens, Vandyke, Poussin, and Le Brun, painters; Vossius, the critic; Stow, Spelman, Selden, and Gronovius, antiquaries; Inigo Jones, the architect; Casaubon, Cervantes, Usher, W. Harvey, sir Matthew Hale, and sir William Temple.

Q. Those of the eighteenth century.—*A.* The philosophers Locke, Cassini, Malebranche, Leibnitz, sir Isaac Newton, lord Bolingbroke, lord Kames, D'Alembert, and Montesquieu; the poets Boileau, Prior, Gay, Pope, Thomson, Fontenelle, Shenstone, Churchill, Young, Akenside, Gray, Lyttleton, Goldsmith, Voltaire, Rousseau, Armstrong, Metastasio, Johnson, Glover, Burns, Mickle, Logan, Warton, sir William Jones, Sheridan,

Cowper, Darwin, Beattie, and Chatterton; the historians Rollin, Rapin, Hooke, Gibbon, Hume, Robertson, and Henry; the mathematicians Sanderson, Halley, Maclaurin, De Moivre, Simson, Euler, and Waring; the architect sir Christopher Wren; the antiquarian Grose; the physicians Sloane, Mead, and Hunter; the painters Gainsborough and Reynolds; the musician Handel; the comedians Garrick and Siddons; Bossuet, Fenelon, Shaftesbury, Dacier, Addison, Swift, Barbeyrac, Watts, Harvey, Richardson, Fielding, Smollett, Chesterfield, Buffon, Adam Smith, Price, Burke, Lavater, Blair, Priestley, Franklin, Paley, Porson, Cumberland, and Horne Tooke.

PHILOSOPHY.

Q. WHAT is the meaning of the word philosophy?—*A.* The love or pursuit of knowledge and wisdom.

Q. Who was the first person who assumed the title of philosopher?—*A.* Pythagoras; who declining the title of Wise, which had been given to his predecessors, Thales, Pherecydes, and others, contented himself with the title of philosopher; that is, the friend or lover of wisdom.

Q. Into how many branches is philosophy divided?—*A.* Into four. First, metaphysical philosophy; secondly, mental or intellectual philosophy; thirdly, physical or natural philosophy; and fourthly, moral or ethical philosophy.

Q. Of what does metaphysical philosophy treat?—*A.* Of the Deity and his attributes.

Q. Of what does mental or intellectual philosophy treat?—*A.* Of the laws of our mental frame, whereby we discover the origin of our various modes and habits of thought and feeling; how they operate on one another; and how they are cultivated and repressed.

Q. Of what does physical or natural philosophy treat?—*A.* Physical or natural philosophy is divided into experimental and mechanical philosophy. Experimental philosophy inquires into the various appearances and phenomena of nature, and by experimental observation deduces its laws, the properties and powers of bodies, and

their actions upon each other. Mechanical philosophy explains the phenomena of nature on the principles of mechanics.

Q. Of what does moral or ethical philosophy treat?—*A.* Moral philosophy, or ethics, is the science of manners and duty. It contemplates human nature, its moral powers and connections, and from them it deduces the laws of action, which conduce to the happiness of man.

Q. How many systems of philosophy have been propagated in the world?—*A.* Nine.

Q. Mention them.—*A.* 1st, The Epicurean; 2dly, the Corpuscular; 3dly, the Platonic; 4thly, the Stoic; 5thly, the Pythagorean; 6thly, the Socratic; 7thly, Aristotelean, or the Peripatetic; 8thly, the Cartesian; and 9thly, the Newtonian.

Q. What did the Epicurean philosophy teach?—*A.* It taught that happiness, or the supreme good, consisted in pleasure. Its founder was Epicurus, an Athenian.

Q. What did the Corpuscular philosophy teach?—*A.* That all bodies are composed of minute corpuscles or atoms. This system at present flourishes under the name of the mechanical philosophy.

Q. What did the Platonic system teach?—*A.* The existence of one Supreme God; the immortality of the soul; the resurrection of the dead; the everlasting reward of righteousness; and the punishment of sin. Its author, Plato, also taught, that the world was created by the *Logos*, or *Word;* and that through knowledge of the Word men live happily on earth, and obtain eternal felicity hereafter.

Q. What were the tenets of the Stoic philosophy?—*A* The Stoics believed in one God, whom they denominated Mind, Fate, Jupiter, &c.; and in the future existence of the soul. Wisdom they placed in the absence of all passion and perturbation of mind; and the wise man they deemed the only great and happy man. Zeno was the founder of this sect. They were called Stoics, from the Greek word *stoa*, a porch, or portico, the place where Zeno generally taught his disciples.

Q. What were the peculiar doctrines of the Pythagorean philosophy?—*A.* Pythagoras, the founder, described the Deity as one, incorruptible, invisible being; he asserted

the immortality of the soul; and taught the doctrine of a superintending Providence. One of the leading features of the Pythagorean system was the doctrine of the metempsychosis, or transmigration of souls; a doctrine founded on the supposition that a soul once tainted could never return to the Deity, from whom it first emanated, till it had arisen, by degrees commensurate to its merit, to the animation of a body worthy of a union with its Creator.

Q. What were the tenets of the Socratic philosophy?—*A.* The principal tenet of the Socratic philosophy, instituted by Socrates the Athenian, the founder of moral philosophy in Greece, and who died a martyr in the cause of natural religion against Paganism, consisted in the doctrine of the immortality of the soul. This illustrious philosopher taught the perfection of a Supreme Being, from whom he deduced the government of the universe.

Q. What does the Peripatetic philosophy teach?—*A.* This system, which was taught and established by Aristotle, and from him is also called the Aristotelian philosophy, acknowledged the dignity of human nature, and placed the *chief good* in the due exercise of the moral and intellectual faculties. The votaries of this system were called peripatetics, or walkers, because they disputed walking in the lyceum, or school; but in all their other points the doctrines of Aristotle were false and inconclusive, and have consequently been exploded, after having enthralled the human mind in their mazes for nearly two thousand years.

Q. What are the peculiar features of the Cartesian philosophy?—*A.* The peculiar distinction of the Cartesian philosophy consists in applying geometry to physics, and accounting for natural phenomena from the laws of mechanics. The founder of this system was René des Cartes, a native of Brittany, in France, and who flourished about the beginning of the seventeenth century.

Q. What is the distinguishing feature of the Newtonian philosophy?—*A.* The grand and distinguishing feature of this system, which is founded on the basis of reason and truth, is the great principle of universal gravity. This system, which was rather demonstrated than discovered by the illustrious Newton, is also called the New Philo-

sophy, in opposition to the Cartesian, the Peripatetic, and the ancient Corpuscular systems.

Obs. Besides these systems, are the Sceptic, the Cynic, the Cyrenaic, and Academic systems. The doctrines and opinions of the Sceptics, called also Pyrrhonism, from its author Pyrrho, consisted in doubting of every thing, in affirming nothing, and in keeping the judgment in suspense on every thing. The Cynics valued themselves on a contempt of every thing, except morality. Of this sect was Diogenes. The leading tenets of the Cyrenaic sect were unfriendly to virtue and the welfare of society. The Academic sect, which took its name from the grove Academus, near Athens, were remarkable for their labour and caution in their researches.

CHRONOLOGY.

Q. What is the meaning of the word Chronology?—*A.* That science which has for its subject the doctrine of time, and is derived from the two Greek words *chronos* and *logos*, which signify a description of time

Q. How is time in civilized nations divided?—*A.* Into years, months, weeks, days, minutes, and seconds.

Q. What is meant by a year?—*A.* The time which the earth takes to revolve round the sun.

Q. What is the length of the year?—*A.* Three hundred and sixty-five days, five hours, forty-eight minutes, and forty-eight seconds.

Q. What is meant by the terms "a natural year" and "a civil year?"—*A.* A natural year is the period which the earth takes to revolve round the sun; a civil year consists of only 365 days, without the odd hours and minutes.

Q. What are the various denominations given to the word "year?"—*A.* It is variously called the solar or tropical year, the sidereal year, the lunar year, the civil year, and the bissextile year.

Q. What is the length of the solar or tropical year?—*A.* Three hundred and sixty-five days, five hours, forty-eight minutes, and forty-eight seconds.

Q. Of the sidereal year?—*A.* Three hundred and sixty-five days, six hours, nine minutes, and fourteen seconds and a half.

Q. Of the lunar year?—*A.* Three hundred and fifty-four days, eight hours, forty-eight minutes, and thirty-six seconds.

Q. Of the civil year?—*A.* Three hundred and sixty-five days.

Q. Of the bissextile or leap year?—*A.* Three hundred and sixty-six days.

Q. Why does the leap or bissextile year consist of one day more than the civil or common year?—*A.* Because as every year, or the course of the earth round the sun, consists of nearly six hours more than 365 days, at the end of every fourth year, one whole day is added to the month of February, in order to keep the seasons to correspond with the calendar.

Q. Why is the leap year called bissextile?—*A.* From the two Latin words *bis*, twice, and *sextilis*, belonging to the sixth; because the Romans reckoned the sixth of their calends of March, which corresponded to our 24th of February, twice over every fourth year.

Q. How do you know when any given year is or is not leap year?—*A.* By dividing the given year by four; if nothing remains, the given year is leap year; but if there be any remainder, such remainder shows the number of years after leap year.

Q. Has the year always consisted of the same number of days?—*A.* No; among the Romans it consisted of only 304 days, till the time of Numa Pompilius, who increased it by fifty additional days. Julius Cæsar, with the assistance of Sosigenes, a learned Egyptian astronomer, extended it to 365 days and a quarter, being nearly its true duration.

Q. How did Julius Cæsar correct the disagreement which had taken place between the calendar and the seasons, by the erroneous method of calculation which had been in use among his predecessors?—*A.* By making the first year of his calculation to consist of fifteen months, or 445 days. This year, on account of its length and object, is called "*the year of confusion.*"

Q. By what names are the reformation of the calendar by Julius Cæsar known in history?—*A.* By those of the *Julian Style*, or *the Old Style.*

Q. Was the Julian or Old Style found to be perfectly correct?—*A.* No: as the Julian year was made to consist of 365 days 6 hours, which exceeds the solar year by 11 minutes; and as this excess, in 131 years, was found

to amount to a whole day; in the year 1582, ten days were suppressed in the month of October, and in order that no variation might occur again in the calendar, it was ordained that three days should be left out in every four hundred years; by which the excess of eleven minutes yearly accumulating, making one day in 134 years, is adjusted thus: after the year 1600, every hundredth year (which, in the Julian form, would be leap year or bissextile) should be reckoned a common year of 365 days; but the 400th to be of 366 days. The years 1700, 1800, 1900, therefore were ordained to be common, the year 2000 bissextile, and so on. By this simple method, the difference of a single day cannot happen in less than 26,800 years.

Q. By what name is this correction of the calendar known?—*A.* By that of the *Gregorian*, or *New Style*; being made by order of Pope Gregory XIII.

Q. Can you tell me how the new style was received by the various nations of Europe?—*A.* The Catholic states adopted it almost as soon as it was in use at Rome; and by degrees it became general in the Protestant countries. In England it was legalized in the year 1752, by a statute in the reign of George III. Russia still uses the old style.

Obs. To conform the Russian dates to those of the other European nations, they are expressed like fractions, whose numerators point out the day of the month according to the Gregorian calendar, and denominators the day of the same or foregoing month according to the ancient calendar. For example, these fractions $\frac{11}{?}$ March, signify an event to have happened in Russia the 11th of March: to signify an event which happened the 21st of December, 1774, the following is the mode,—

1 January, 1775.

21 December, 1774.

Q. Who first discovered the imperfection of the Julian style?—*A.* Bede and Bacon, natives of England.

Q. When does the year begin?—*A.* On the first of January, called New Year's Day.

Q. Has the time of the commencement of the year been the same at all times and among all nations?—*A.* No: the ancient Chaldean and Egyptian years were dated from the autumnal equinox. The ecclesiastical year of the Jews began in spring; but in civil affairs they retained the epoch of the Egyptians. The Chinese and Japanese years begin with the new moon nearest to the winter sol

stice. Some of the Grecian states computed from the vernal equinox, others from the autumnal equinox, and others from the summer tropic. The year of Romulus commenced in March; that of Numa in January. The Turks and Arabs date the year from the 16th of July; and the Church of Rome has fixed New Year's day on the Sunday that corresponds with the full moon of the same season. The Venetians, Florentines, and Pisans in Italy, and the inhabitants of Treves in Germany, begin their year at the vernal equinox. The ancient clergy reckoned the year from the 25th of March; and this method was observed in Britain, until the introduction of the new style in the year 1752; after which the year commenced on the first of January

Q. Have all nations computed time in the same manner?—*A.* No: The ancient Greeks computed by olympiads, which were a space of four years; the Romans from the building of the city of Rome; but the ordinary mode of computing time among the western nations of Europe is from the Christian era. The Turks compute from the Hegira or flight of Mahomet; and the Jews from the creation of the world: which latter method of calculation was followed by the Christians until above 500 years after the commencement of the Christian era.

Q. Who first introduced the practice of calculating from the commencement of the Christian era?—*A.* The Roman abbot Dionysius, 532 A. D.; but the inventor erred in his calculations; nor was his error discovered for upwards of six centuries afterwards, when it was demonstrated to be deficient four years of the true period. But as the alteration of the system, which had been adopted by nearly all Europe, would have occasioned incalculable inconveniences in civil and ecclesiastical affairs, the error was, by general consent, suffered to remain, and we continue to reckon from what is called the vulgar era, which wants four years and six days of the true Christian epoch. The computation of time from the Christian era was not made use of in historical works till the middle of the eighth century.

Q. How many months make a year?—*A.* Twelve calendar, or thirteen lunar.

Q. What is meant by a calendar month?—*A.* That time

or number of days specified by the laws or civil institutions of any nation or society.

Q. What is meant by a lunar month?—*A.* That time which the moon takes to revolve round the earth.

Q. How many days are in a calendar month?—*A.* Some have thirty-one days, some thirty, and one has but twenty-eight, except in leap years, when it has twenty-nine.

Q. Which are the months which have thirty-one days?—*A.* January, March, May, July, August, October, and December.

Q. Mention those which have only thirty days.—*A.* April, June, September, and November.

Q. What is that month called which has only twenty-eight days?—*A.* February.

Q. How many days constitute a lunar month?—*A.* For the ordinary purposes of life it consists of twenty-eight days; but in truth it is only twenty-seven days, seven hours, forty-three minutes, and five seconds.

Q. What is meant by the term solar month?—*A.* That time which the sun occupies in passing through a sign of the ecliptic.

Q. From what did the months derive their names?—*A.* January, from Janus, one of the Roman divinities, because on one side the first day of January looked towards the new year, and on the other towards the old one.

February, from Februalis, a name of Juno, who presided over the purifications of women, which took place in this month; or from Februa, a feast celebrated in honour of the shades or manes of deceased persons.

March, from Mars, the god of war, whom Romulus supposed to have been his father, and therefore consecrated the first month of his year to him.

April, from aperio, to open; because the earth in this month begins to open her bosom for the production of vegetables.

May was so called by Romulus, in honour of the senators and nobles of his city, who were called majores, elders.

June, so called by the same legislator, in honour of the Roman youth *(in honorem juniorum)*, who had served in the wars.

July was so called from Julius the surname of Cæsar, the Roman dictator. Formerly it was called Quintilis, as being the fifth month in the Roman calendar as established by Romulus.

August was so called in honour of Augustus Cæsar, the first Roman emperor. In the calendar of Romulus it was called Sextilis, as being the sixth month of the ancient Roman year.

September, October, November, and December derive their names from their being the seventh, eighth, ninth, and tenth months in the old Roman calendar.

Q. How many weeks make a year?—*A.* Fifty-two.

Q. From what do the days of the week derive their names?—*A.* From the seven planets.

Q. How many days make a year?—*A.* Three hundred and sixty-five days make a common or civil year, and three hundred and sixty-six a leap year.

Q. Into what terms is a day divided?—*A.* Into those of natural or civil, and artificial. The natural or civil day is also called the astronomical day.

Q. What is the length of a day?—*A.* A natural or civil day consists of twenty-four hours, that is, one complete revolution of the earth on its axis; an artificial day consists of that space of time contained between the sun's rising and setting.

Q. When does the day begin?—*A.* From midnight.

Q. Has the time of the commencement of the day been the same among all nations?—*A.* No: by the ancient Babylonians, Syrians, Persians, and Indians, the beginning of the day was computed from sun-rise. The civil day of the Jews began from sun-rise, and their sacred one from sun-set; which latter mode of computing the day was followed by the Athenians, Arabs, ancient Gauls, and other nations of ancient Europe. The Bohemians, Silesians, the Chinese, and most of the eastern nations, begin the day at sun-rising. The Mahometans reckon from one twilight to another; but astronomers compute the day from midnight, which is now in use among all the modern nations of Europe, except the Italians, whose day commences at some indeterminate period after midnight; information of which is given by a printed calendar, which announces the time when noon begins at stated periods.

Q. Into what parts is a day divided?—*A.* Into twenty-four hours.

Q. What are the divisions of an hour?—*A.* Into minutes and seconds.

Q. How many minutes make an hour?—*A.* Sixty.

Q. How many seconds make a minute?—*A.* Sixty.

Q. How many years make a century?—*A.* One hundred.

Q. What is meant by the term an epoch?—*A.* Any point or period of time from which events are dated; as the creation of the world, the birth of Jesus Christ, &c.

Q. What by an era?—*A.* A portion of time from one remarkable event to another; as, the Christian era is the number of years which have elapsed from the birth of Jesus Christ to the present time.

Q. What by a cycle?—*A.* A period of time in which the same revolution begins again; as those of the sun and moon.

Q. What by an epact?—*A.* The number of days added to the lunar year, to make it equal to the solar year, in order to find its age.

Q. What is the use of the cycles of the sun and moon?—*A.* To show what day Easter and other remarkable feasts will fall for any period to come.

Q. What is the cycle of the moon?—*A.* A space of nineteen years, in which the conjunctions and appearances of that planet are nearly the same as they were nineteen years before.

Q. What is the cycle of the sun?—*A.* It is a revolution of twenty-eight years.

Q. What is meant by a jubilee?—*A.* The return of every fifty years.

Q. How many years make an age?—*A.* One hundred.

Q. What are the four seasons of the year?—*A.* Spring, Summer, Autumn, and Winter.

Q. Which are the four quarters of the year?—*A.* The Spring quarter, the Summer quarter, the Autumn quarter, and the Winter quarter.

Q. When does the Spring quarter commence?—*A.* On the 21st of March.

Q. When does the Summer quarter commence?—*A.* On the 21st of June.

Q. When does the Autumn quarter commence?—*A.* On the 21st of September.

Q. When does the Winter quarter commence?—*A.* On the 22d of December, which is called the winter solstice, being that day when the sun's distance from the zenith of the place is the greatest; and it ends on the 20th of March, when its distance is mean between the greatest and the least, that is, at the time of the equinox.

Q. Which are quarter days?—*A.* Lady Day, Midsummer Day, Michaelmas Day, and Christmas Day.

Q. In what month, and on what day of the month, does each quarter day happen?—*A.* Lady Day falls on the 25th of March, Midsummer Day on the 24th of June, Michaelmas Day on the 29th of September, and Christmas Day on the 25th of December.

Q. Which is the longest day in the year?—*A.* The 21st of June.

Q. Which is the shortest day in the year?—*A.* The 21st of December.

Q. What are the lengths of the longest and the shortest day?—*A.* The longest is about sixteen hours, and the shortest about eight hours long.

Q. When is the length of the day and night equal all over the world?—*A.* On the 21st of March, and the 22d of September

Q. In what part of the world are the days and nights of equal lengths throughout the year?—*A.* In those countries which lie immediately under the Equator.

Q. Into what terms is a day divided?—*A.* Into the terms natural and artificial.

Q. What is meant by a natural day?—*A.* The time from noon to noon, or from midnight to midnight. It consists of twenty-four hours, and is used in astronomical and nautical calculations. It is also called the civil or astronomical day.

Q. What is meant by the artificial day?—*A.* The time between the rising and the setting of the sun.

Q. How many days are in a week?—*A.* Seven.

Q. Has the week consisted of seven days among all nations?—*A.* No: the Greeks divided their week into portions of ten days; the Chinese into those of fifteen; and the Mexicans into thirteen days.

Q. What days are those called the dog-days?—*A.* The days between the 19th of July and the 28th of August.

Q. Why are they so called?—*A.* Because the great dog star in the heavens was observed by the ancients to rise and set with the sun during that period.

MYTHOLOGY.

"*Mythology is the basis of History.*"
BRYANT'S MYTHOLOGY.

Q. WHAT is meant by mythology?—*A.* The history and explication of the fabulous gods of the Heathen world.

Q. What is the mythology of the ancients supposed to be?—*A.* An allegorical superstructure, raised to the memory of the leaders and legislators of antiquity, who, by their exploits or their labours, had benefited their countrymen, and were in return deified by the gratitude of mankind.

OBS. The following remark of an ingenious writer on mythology serves, in some measure, as a key to the personifying allusions of the ancients: "Who would at first imagine, that by the wings of Dædalus and Icarus was only meant a ship under sail? That the Proteus-like changes of a river, signified nothing more than its frequent inundations? That by the encounter between Hercules and the Hydra of Lerna, it was intended to convey an idea of draining, by human labour, a marshy country? That Amphion erected Thebes by the sound of his lyre, implies, that, by means of his oratory, he prevailed on a barbarous people to build a city? Or that the celebrated fable of Pasiphaë and the bull simply signifies an intrigue between the queen of Crete and an officer named Taurus. According to the embellishing imaginations of the ancient poets, if a princess died of grief for the loss of an only son, she was said to be metamorphosed into a fountain, by way of allusion to the multitude of her tears—if pensive, she was Niobe, changed into a stone."

Q. Of what use is the knowledge of mythology?—*A.* To understand the writings of the ancients, and to explain the historical and fabulous representations of painting, statuary, and other monuments of antiquity.

Q. What nations have been celebrated for their systems of mythology?—*A.* The Egyptians, the Greeks, and the Romans.

Q. How did the ancients distinguish their deities?—*A* Into five classes; the celestial, the terrestrial and domes

tic, the sylvan, the marine, and the infernal. They were also styled Dii Majores and Dii Minores; or the greater and less gods.

Q. Who were the celestial deities?—*A.* Jupiter, Apollo, Mercury, Mars, Bacchus, Cupid, and the goddesses Juno, Minerva, Venus, and Aurora.

Q. Who were the terrestrial deities?—*A.* Saturn, Vesta or Cybele, Vulcan, Titan, Æolus, Momus, Diana, Janus, Ceres, Latona, Hymen, the Genii, the Penates or Lares, the three goddesses, Themis, Astræa, and Nemesis, the Graces, and the Muses, were the principal.

Q. Mention the sylvan deities.—*A.* Pan, Sylvanus, Silenus, Priapus, Vertumnus, Terminus, the Satyrs or Fauns, and the goddesses Pales, Flora, and Pomona.

Q. Who were the marine deities?—*A.* Neptune, his wife Amphitrite, and his attendants the Tritons, Oceanus, Thetis, Proteus, the Sirens, and the Nereides.

Q. Who were the infernal deities?—*A.* Pluto, his wife Proserpine, and his attendants the Fates, the Furies, the Harpies, the Gorgons; the judges of Hell, Æacus, Minos, and Rhadamanthus; the ferryman Charon, and the dog Cerberus; Plutus, Nox, the Giants, the Titans, Mors, and Somnus.

Q. Who were the demigods and heroes?—*A.* Æsculapius, Hercules, Jason, Theseus, Perseus, Ulysses, Achilles, Æneas, Cadmus, Castor and Pollux, Orpheus, and Amphion.

Q. To whom did the celestial deities owe their origin?—*A.* According to the poets, their father was Heaven, called by the Latins Cœlus, and by the Greeks Ouranos, or Uranus; their mother was the Earth, called by the Latins Terra or Vesta, and by the Greeks Gaia.

Q. Mention the principal children of Cœlus and Terra.—*A.* Oceanus, Tethys, Hyperion, Japetus, Mnemosyne, Titan, Saturn; the three Cyclops, Brontes, Steropes and Arges; and the hundred giants, Typhon or Typhæus, Gyges, Briareus, Ephialtes, &c.

Q. What is the explanation of the fable of Cœlus and Terra?—*A.* It signifies that the air and earth were the common parents of all created beings.

Q. Who were Jupiter, Juno, Neptune, and Pluto?—*A.* The children of Saturn and Cybele Cybele was also called

by the Latins Ops or Terra, and by the Greeks Rhea or Vesta.

Q. How is Saturn represented?—*A.* Usually as a bald-headed old man, holding in his right hand a sickle or scythe, and a serpent biting its own tail circumflexed in his left. He is sometimes represented with a key in his right hand; sometimes with six wings and feet of wool, to show how insensibly and swiftly time passes.

Obs. The poetical fictions and history of Saturn, or as he was called by the Greeks Chronos, (i. e. Jove), with his three sons, Jupiter, Neptune, and Pluto, seem to bear so strong a resemblance to the affairs of the family of Noah, and the dividing of the earth among his offspring, that we can hardly admit of a doubt of their having both originated in the same facts.

Q. How is Cybele represented?—*A.* Seated in a chariot with a key in her hand, because in winter the earth locks up her treasures, which in spring she unlooses and dispenses with a liberal hand. Sometimes she is represented as a matron, sitting and holding a drum.

Q. Who was Jupiter?—*A.* The father and king of gods and men.

Q. How is Jupiter emblematically represented?—*A.* As a majestic man sitting on a throne of ivory and gold; holding in his left hand a sceptre made of cypress, and in his right he grasps a thunderbolt. At his feet stands an eagle with his wings displayed. Sometimes the eagle is represented as sitting on the sceptre.

Obs. The worship of this god was universal, but under different names. He was the Osiris of Egypt, the Ammon of Africa, and the Belus of Babylon. The most celebrated of his oracles were stationed at Dodona, in Thessaly, and at Ammon, in Lybia.

Q. Who was Juno?—*A.* The queen of heaven, and the sister and wife of Jupiter.

Q. What are the emblematic representations of Juno?—*A.* She is commonly drawn in a car by peacocks, with a crown upon her head. She was the deity who presided in a peculiar manner over marriage and child-birth. Her usual attendants were Castor and Pollux, and Iris.

Q. Who was Iris?—*A.* The messenger of Juno. She is generally drawn as sitting on a rainbow, adorned with wings, as emblematic of her swiftness.

Q. Who were Jupiter's children?—*A.* Hebe the goddess of youth, Mars, Lucina, and Vulcan by Juno; Apollo

and Diana by Latona; the three Graces by Eurynome; the nine Muses by Mnemosyne; Mercury by Maia; Venus by Dione; Proserpine by Ceres; Æolus, Hymen, and Pallas or Minerva; the latter of whom is said to have been the offspring of Jupiter without the aid of a mother, the god having devoured his wife Metis, one of the Oceanides, while she was pregnant.

Q. Who was Apollo?—*A.* The son of Jupiter and Latona.

Q. How is Apollo emblematically represented?—*A.* Under the character of the sun, he is depicted in a chariot drawn by four horses. Sometimes he is drawn as a beardless youth, with dishevelled locks, and crowned with laurel, holding a bow and arrows in his right hand, and a lyre in his left. Apollo, sometimes called Phœbus or Sol, was the god of light, medicine, poetry, music, prophecy, and of the arts and sciences. He was also the president of the Muses.

Q. Who was Phaeton?—*A.* The son of Phœbus and Clymene, celebrated for his rashness in undertaking the guidance of the chariot of the sun, and setting the world on fire.

Q. Who was Mercury?—*A.* The son of Jupiter and Maia.

Q. What are the emblematic representations of Mercury?—*A.* He is symbolically represented as a young man with wings to his head and feet, and in his hand a wand or caduceus entwined with two serpents. He was the god of thieves and eloquence.

Q. Who was Mars?—*A.* The god of war, and the son of Jupiter and Juno.

Q. How is Mars emblematically represented?—*A.* He is usually described in a chariot drawn by furious horses, completely armed, and extending his spear with one hand, while with the other he grasps a sword imbrued with blood.

Q. Who was Bellona?—*A.* The sister of Mars, and the goddess of war. Sometimes she is depicted as driving his chariot with a bloody whip in her hand; sometimes she is represented holding a lighted torch or brand; at others with a trumpet, her hair composed of snakes clotted with gore, and her garments stained with blood, in a furious and distracted attitude.

Q. Who was Minerva or Pallas?—*A.* The goddess of wisdom, war, arts, and sciences.

Q. How is Minerva symbolically represented?—*A.* In a standing attitude completely armed, with a spear in her right hand, and her terrible ægis or shield in her left, having on it the head of Medusa, encircled with snakes. At her feet is usually placed the cock or the owl.

Q. How is the fable of Minerva's birth from Jupiter's brain to be explained?—*A.* It is to be considered as an emblem, that all human arts and sciences are the production of the mind directed by wisdom.

Q. Who was Venus?—*A.* The daughter of Jupiter and Dione.

Q. How is Venus emblematically represented?—*A.* Sometimes she is drawn in an ivory car, fashioned in the form of a shell, by swans, doves, swallows, or sparrows. Sometimes she is represented, attended by Cupid, Hymen, and the Graces.

Q. Who was Cupid?—*A.* The son of Mars and Venus, and the god of love. He is usually represented naked as an infant with wings, with a bow and quiver full of darts, and crowned with roses. Sometimes he is depicted with a bandage over his eyes.

Q. Who was Hymen?—*A.* The son of Bacchus and Venus, and the god of marriage. He is represented as crowned with amaricus, or the herb sweet marjoram, with a torch lighted in his hand.

Q. Who was Bacchus?—*A.* The god of wine and good cheer. He is represented as a corpulent youth, crowned with ivy and vine-leaves, and bearing in his hand a thyrsus encircled with the same. His car is drawn sometimes by lions, at others by tigers, leopards, or panthers; and surrounded by a band of Satyrs, Fauns, Bacchæ, Sylvanus, and Silenus.

Q. Who was Silenus?—*A.* The preceptor of Bacchus. He is usually depicted as a short, corpulent, old man, seated on an ass, upon which he supports himself with a long staff; while in the other he carries a cantharus or jug, with the handle almost worn out by constant use.

Q. Who was Vulcan?—*A.* The son of Jupiter and Juno, and the husband of Venus. His office was to forge thunderbolts for the gods; and he is represented as a

lame, deformed, squalid man, working at the anvil, and attended by his journeymen the Cyclops.

Q. Who was Janus?—*A.* The god who presided over all new undertakings, and had the prescience of all things past and future.

Q. What are the emblematic representations of this deity?—*A.* He is represented with two faces, as looking to the past and approaching year, and with a key in his right hand.

Q. Who was Diana?—*A.* The goddess of hunting, the daughter of Jupiter and Ceres, and the sister of Apollo.

Q. How is Diana emblematically represented?—*A.* As a huntress, with buskined legs, a bow in her hand, and a quiver at her back; and attended by nymphs in hunting dresses, with nets and hounds. Diana had a variety of names, as Phœbe, Cynthia, Delia, Luna, Hecate, &c. In heaven she was called Luna and Phœbe; on the earth, Diana; and in hell, Hecate.

Q. Who was Neptune?—*A.* The son of Saturn and Ops, and the brother of Jupiter and Pluto.

Q. What are the emblematic representations of Neptune?—*A.* He is represented as seated in a large shell drawn by whales or winged horses, with his three-forked brazen trident in his hand. His wife was Amphitrite.

Q. Who was Aurora?—*A.* The daughter of Terra and Titan, and the mother of all the stars, as also of the four winds, Argestes, Zephyrus, Boreas, and Notus.

Q. What is the explication of the fable of Prometheus's formation of a living man from an inanimated substance?—*A.* It implies, that Prometheus, who was the son of Japetus, was a wise prince, and reclaimed his subjects from a savage to a social life.

Q. How is the fable of Pandora's box to be accounted for?—*A.* It affords very distinct traces of the tradition of the fall of our first parents, and the seduction of Adam by his wife Eve.

Q. Who was Pandora?—*A.* According to the Theogony of Hesiod, the first mortal female that ever lived. Vulcan formed her of clay, at the request of Jupiter, who gave her a box, filled with all the evils which afflict the human race, to present to her husband on her marriage. She derives her name from the numerous gifts which the

gods conferred upon her; Pandora signifying every necessary gift.

Q. What is meant by the golden age?—*A.* That period of happiness enjoyed during the primæval state before the universal deluge, when it is supposed the earth flourished with perpetual spring, and the air was always temperate and serene, being neither discomposed by storms, nor darkened by clouds.

Q. How many ages do the poets reckon?—*A.* Four: the golden, the silver, the brazen, and the iron.

Q. Who was Esculapius?—*A.* The son of Apollo, and the god of physic. He is usually represented as leaning on a staff encircled by a serpent.

Q. Who was Orpheus?—*A.* The son of Apollo. He is said to have been so admirable a musician, that even stones and brutes danced to the notes of his lyre. He is remarkable in the accounts of the poets for his descent into the infernal regions to recover his lost wife Eurydice.

Q. What were the names of the Muses?—*A.* Clio, the goddess of history; Calliope, of eloquence and heroic poetry; Erato, of lyric poetry; Thalia, of comedy; Melpomene, of tragedy; Terpsichore, of dancing; Euterpe, of music; Polyhymnia, of song and rhetoric; and Urania, of divine poetry and astronomy.

Q. Are the Muses known by no other names?—*A.* Yes: they are also called Pierides, Heliconiades, Cytherides, and Castalides or Aganippides.

Q. What are the emblematical representations of the Muses?—*A.* Calliope is represented with the three well-known epic poems of antiquity in her hand; Clio holds in one hand a trumpet, and a book in the other; Erato is crowned with roses and myrtle, and holds a lyre in her hand; Thalia is represented with a mask in her right hand, and a shepherd's crook in her left; Melpomene holds a dagger in one hand, and a sceptre and crown in the other; Terpsichore holds in her hand a musical instrument; Euterpe is represented as holding a flute; Polyhymnia holds a sceptre in her left hand; and Urania is represented as holding in her left hand a globe.

Q. Who were the Graces?—*A.* Aglaia, Thalia, and Euphrosyne, attendants on Venus. According to some,

they were the daughters of Jupiter and Eurynome, or Venus.

Q. How are the Graces emblematically represented?—*A.* As young, beautiful, and modest virgins, naked, and holding each other by the hand.

Q. Who were the Lares and Penates?—*A.* Household deities. The Lares were represented as young boys with dogs' skins about their bodies, and their heads covered. They had always the image of a dog near them. The Penates were represented under the figure of two young men sitting, with spears in their hands.

Q. Who were the Genii?—*A.* The guardians or deities who peculiarly superintended human affairs.

Q. Who were the Cyclops?—*A.* They were the forgers of Jupiter's thunderbolts. They are depicted with but one eye, which is placed in the middle of their foreheads. They were the sons of Neptune and Amphitrite, and the principal of them were Brontes, Steropes, and Pyracmon.

Q. Who was Polyphemus?—*A.* The son of Neptune, a huge and cruel monster, with only one eye in the middle of his forehead.

Q. Who was Pluto?—*A.* The ruler of the dead, and the king of the infernal regions.

Q. Where did the ancients place the infernal regions?—*A.* Near Cuma, in the bay of Naples. According to their description it was surrounded by four rivers, namely, Acheron, Cocytus, Styx, and Phlegethon.

Q. How is Pluto emblematically represented?—*A.* Sometimes he is depicted as drawn in an ebony chair, by four black horses, and holding a rod instead of a sceptre; at other times he is drawn sitting on a dark throne, holding a key instead of a sceptre, with a crown of ebony or cypress.

Q. Who was Proserpine?—*A.* Pluto's wife, and the daughter of Ceres.

Q. Who was Hecate?—*A.* The goddess of the infernal regions, and often on that account confounded with Proserpine. She is represented of an excessive height, her head covered with frightful snakes, and her feet of a serpentine form, and surrounded with dogs.

Q. What was meant by Tartarus?—*A.* A vast deep pit in the recesses of the infernal regions, surrounded with walls and gates of brass, and totally deprived of light. Here was

the abode of wicked souls, the custody of whom was intrusted to the Eumenides or Furies.

Q. Who were the Furies?—*A.* Tisyphone, Alecto, and Megæra.

Q. How are the Furies depicted?—*A.* With hair composed of snakes, and eyes inflamed with madness, carrying in one hand whips and iron chains, and in the other flaming torches, yielding a dismal light.

Q. Who were the Parcæ, or Destinies, or Fates?—*A.* The infernal deities who presided over human life. They were three in number: Clotho held the distaff, Lachesis drew or spun the thread of life, and Atropos stood ready with her scissars to cut it asunder.

Q. How are the Parcæ or Fates represented?—*A.* They are depicted in robes of white, bordered with purple, and seated on thrones with crowns on their heads, composed of the flowers of narcissus.

Q. Who were the Harpies?—*A.* They were the daughters of Oceanus and Terra. Their names were Celeno, Aello, and Ocypete. They are depicted with the faces of virgins, the ears of bears, the bodies of vultures, with human arms and feet, and long claws.

Q. Who were the Manes?—*A.* The spirits of departed persons.

Q. Who were Minos, Rhadamanthus, and Æacus?—*A.* The judges in the infernal regions, who examined the dead, passed sentence on the departed souls whom Charon had ferried over the river Styx, and determined whether they should be assigned to the Elysian Fields, or the realms of Tartarus. Rhadamanthus and Æacus were inferior judges, and bore only plain rods as a mark of their office; but Minos, to whom all difficult cases were referred, was distinguished by a sceptre of gold.

Q. What were the Elysian Fields?—*A.* The abodes of the good and just after death. According to the fictions of the poets, an eternal spring of flowers and verdure, a sky always serene, and fanned by ambrosial breezes, and an universal harmony and joy reigned in those delightful regions.

Q. Mention the rivers of Hell.—*A.* Acheron, Styx, Cocytus, Phlegethon, and Lethe.

Q. What were the virtues of the river Lethe?—*A.* It had

the power of causing those who drank of its waters to forget whatever had passed previous to the potent draught; and, therefore, according to the mythology of the ancients, as the souls of the good and just were, after a certain period, to return from the regions of Elysium to the earth to reanimate new bodies, they were first obliged to drink of the water of this river, to prevent the recollection of the joys that they had tasted in those happy abodes.

Q. What was remarkable of the river Styx?—*A.* It was held in so great veneration by the Gods, that whoever broke the oath which he had once made by this river, was deprived of his divinity for one hundred years.

Q. Who was Charon?—*A.* The son of Erebus and Nox. His office was to ferry over the river Acheron the souls of the dead, in order to appear before the infernal judges. He is represented as a squalid old man, in tattered rags scarce covering his nakedness. His disposition is described as rough and morose, treating all his passengers with the same impartial rudeness, without regard to rank, age, or sex.

Q. Who was Cerberus?—*A.* The guardian of the infernal regions. He is depicted as a three-headed dog, with the tail of a dragon, and instead of hair, his body was covered with serpents of all kinds. His bark or howl is described as peculiarly dreadful, and the stench of his breath intolerable.

Q. Who were the fabulous persons punished for their crimes in Tartarus?—*A.* The principal were, 1. Tityus, who was chained down on his back, in which posture, while his body covered a space of nine acres of ground, a vulture continually preyed upon his liver, which still grew again as fast as it was consumed. 2. Phlegyas, who was sentenced to sit under a huge rock, which hanging over his head, threatened him with perpetual destruction. 3. Ixion, who was doomed to be fixed on a wheel, encompassed with serpents, and which turned without ceasing. 4. Sisyphus, who was adjudged to roll a great stone to the top of a hill, from which it constantly rolled down again, so that his labour was incessantly renewed. 5. Tantalus, who was afflicted with eternal hunger and thirst, having water and the most delicious fruits within his reach, but which incessantly vanished from his touch. 6. The

Danaïdes, the daughters of Danaus, who were condemned to draw water out of a well in a sieve, and pour it into a vessel ready to contain it.

Q. Who were the Syrens?—*A.* They were sea-nymphs, the daughters of Achelous. Their lower parts resembled those of a fish, their upper those of a woman. By the charms of their voices, they ensnared all who heard them to destruction. Their names were Parthenope, Ligæa, and Leucosia.

Q. Who were the Gorgons?—*A.* They were three sisters, Euryale, Medusa, and Stheno. They are depicted with hair like snakes, tusks like wild boars, and with brazen hands and golden wings. They changed into stones all who looked on them.

Q. Who was Circe?—*A.* The daughter of Phœbus, and a celebrated sorceress.

Q. Who were the Sybilline oracles?—*A.* Certain women, whom the ancients believed to be endued with the gift of prophecy.

Q. What were the Scylla and Charybdis of the ancients?—*A.* The former was a dangerous rock, the latter a destructive whirlpool.

Q. What was the Chimæra?—*A.* A hideous monster, the offspring of Typhon and Echydna, with three heads resembling those of a goat, a lion, and a dragon, all vomiting forth flames. Sometimes it is represented with the forepart like a lion, the middle like a goat, and the tail like a serpent.

Q. What was the Sphinx?—*A.* A monster in the neighbourhood of Thebes, who devoured those who could not explain her riddles. She is depicted with the body of a dog, the wings of a bird, the paws and the tail of a lion, with a human head and neck.

Q. For what is Argus celebrated?—*A.* For his hundred eyes, of which only two slept at a time.

Q. For what was Lyncæus celebrated?—*A.* For his sharpsightedness.

Q. Who was Proteus?—*A.* The son of Neptune. He had the gift of prophecy or divination, and the power of assuming whatever shape he pleased.

Q. Who was Momus?—*A.* The god of mirth and ridicule.

Q. Who was Morpheus?—*A.* The god of dreams and sleep, and the son of Somnus.

Q. Who was Harpocrates?—*A.* The god of silence.

Q. Who was Astræa?—*A.* The goddess of justice. She is represented with her eyes bound or blinded, having a sword in one hand, and in the other a pair of balances equally poised.

Q. Who was Plutus?—*A.* The god of riches.

Q. Who was Hygeia?—*A.* The goddess of health.

Q. Who was Themis?—*A.* The goddess of laws.

Q. Who was Nemesis?—*A.* The goddess of revenge. She is represented with a stern aspect, having in one hand a whip, in the other a pair of scales.

Q. Who was Flora?—*A.* The goddess of flowers. She is represented as adorned with garlands, and near her a basket of flowers.

Q. Who was Pomona?—*A.* The deity of orchards.

Q. Who was Vertumnus?—*A.* The god of Spring.

Q. Who was Priapus?—*A.* The god who presided over vineyards and gardens. He is usually depicted naked and obscene, with a wooden sword or sickle in his hand. Sometimes his body resembles a shapeless trunk or block of timber.

Q. Who was Terminus?—*A.* The god of boundaries.

Q. Who was Ceres?—*A.* The goddess of the earth. She is usually represented as crowned with poppies, or ears of corn, and holding in her left hand a bunch of the same materials, with a lighted torch in her right hand. When in a car or chariot, she is drawn by winged dragons, or lions.

Q. Who was Pan?—*A.* The tutelary deity of the country and rural affairs, and the son of Mercury and Penelope. He is represented half man and half goat, with two horns on his head, and clothed in a spotted skin, having a shepherd's crook in one hand, and his pipe of unequal reeds in the other. His usual attendants were the Satyrs, Sylvans, Fauns, and nymphs, or Dryades.

Q. Who were the Fauns?—*A.* Visionary beings.

Q Who were the Satyrs?—*A.* They were creatures, half man and half goat, having deformed heads, armed with short horns, crooked hands, rough and hairy bodies, goat's feet and legs, and long tails.

Q. Who were the Naiades?—*A.* The nymphs who presided over brooks and rivers.

Q. Who was Pales?—*A.* The goddess of shepherds and pastures.

Q. Who was Hercules?—*A.* The son of Jupiter and Alcmena.

Q. For what is Hercules celebrated?—*A.* For his twelve labours.

Q. What were his twelve labours?—*A.* 1. He overcame the Nemæan lion, whose skin he afterwards wore. 2. He destroyed the hydra with seven heads. 3. He conquered the Erymanthean boar. 4. He caught a hind with golden horns and brazen hoofs, after hunting her for a year. 5. He cleansed the stable of Augeas, king of Elis, in which 3,000 oxen had stood for many years. 6. He destroyed the harpies, or birds of prey. 7. He overcame the Minotaur, or Cretan bull, delivered Prometheus from Mount Caucasus, and killed the eagle which fed upon his liver. 8. He killed Diomede, and the horses which fed on human flesh. 9. He subdued the giant Geryon, and carried away his flock of cattle. 10. He conquered the army of the Amazons, and took from Hippolita, their queen, her girdle, and married her to Theseus. 11. He went down to hell, and destroyed the three-headed dog Cerberus.—And 12. He killed the dragon, which defended the garden of Hesperides, and brought from thence the golden apples.

MINERALOGY.

Q. What is meant by the word mineralogy?—*A.* That branch of the science of natural history, which treats of the numerous inanimate bodies which are found upon or in the interior of the earth.

Q. What does mineralogy teach?—*A.* The art of distinguishing minerals, of ascertaining their character and nature, and the mode of describing them.

Q. What is the origin of minerals?—*A.* They are derived either from animal or vegetable matter.

Q. Into how many classes are minerals divided?—*A.*

Into four: namely, 1st, earths and stones; 2dly, salts; 3dly, combustibles; and 4thly, metals. These constitute, in the language of naturalists, "the mineral kingdom."

Q. What is the number of the earthy minerals?—*A* The simple earths are ten.

Q. Mention them.—*A.* 1st, silex or silicious earth; 2d, alumine; 3d, zircon; 4th, glucine; 5th, yttria; 6th, barytes; 7th, strontian; 8th, lime, or calcareous earths, such as chalk and all calcinable earths; 9th, jargonia; and 10th, magnesia.

Q. What are the different substances which compose that branch of the first class of the mineral kingdom, called stones?—*A.* Marble, alabaster, granite, mill-stones, lime-stone, chalk, rock-crystal, adamantine-spar, quartz, flints, gris, sands, emery, felspar, lapis lazuli, and all precious stones or gems.

Q. What are the names of the stones called the precious stones or gems?—*A.* The principal are, the diamond, the ruby, the garnet, the emerald, the topaz, the amethyst, the sapphire, the hyacinth, the chrysolite, the chrysoberyl, the jargoon, and the crystal.

Q. Describe the diamond.—*A.* The diamond is the hardest of all bodies, is perfectly transparent, and generally colourless: though sometimes it partakes of a blue, green, yellow, or rose-coloured complexion.

Q. In what countries are diamonds found?—*A.* In the districts of Golconda and Visiapour in the East Indies, in the Island of Borneo, and in Brazil in South America. In Golconda, they are found in the crevices of rocks at Raolconda and Coulour; but at Soumelpour, in the district of Visiapour, they are found in the bed of the river. The Brazilian diamond is inferior in purity to the Oriental.

Q. Which is the largest diamond known in the world?—*A.* That which adorns the sceptre of the emperor of Russia, which is said to weigh 779 carats.

Q. Describe the ruby.—*A.* The ruby, which is found only in some streams near the town of Sirian, in Pegu, in the sand of the rivers of Ceylon, and in the Brazils, is of a deep crimson or blood red colour. The Brazilian ruby is of a pale rose red inclining to violet. Rubies of a large size are so scarce, that one of the weight of thirty carats is considered more valuable than a diamond of the same

weight. The ruby is of the second order of gems, and the topaz of the third, after the diamond.

Q. Describe the topaz.—*A.* The topaz, which derives its name from the island of Topaz, in the Red Sea, where it was first found, is generally of a beautiful straw colour, though sometimes of an orange, pink, or blue colour, and even sometimes colourless. It is found in the Brazils, the East Indies, and Siberia; but the Brazilian topaz is the best.

Q. Describe the garnet.—*A.* The garnet is of two kinds, the noble and the common. The noble garnet, which is found in various parts of the world, particularly in Bohemia, Ceylon, Brazil, Pegu, is of a violet purple colour, a dull poppy red, or a full crimson red. The common garnet is of a brown or greenish brown colour, and is found in the rocks near Huntly in Aberdeenshire.

Q. Describe the emerald.—*A.* The emerald, the best of which are brought from Peru in South America, is of a pure green colour, and, except the chrysolite, is the softest of all gems.

Q. Describe the amethyst.—*A.* The amethyst is of a violet colour, bordering on purple, and, like the emerald, is a very rare gem.

Q. Describe the sapphire.—*A.* The sapphire, which is brought from Ava and Peru, is of a bright Prussian blue colour, varying in its shades from a deep tint to nearly a colourless appearance.

Q. Describe the hyacinth.—*A.* The hyacinth, which is brought from the island of Ceylon, is of a dark orange-red colour, bearing a resemblance to the colour of the flower from which it takes its name.

Q. Describe the chrysolite.—*A.* The chrysolite, which is imported from the Levant, is of a dusky green colour, with a yellowish cast, and, next the emerald, the softest of all gems.

Q. Describe the chrysoberyl.—*A.* The chrysoberyl, which is brought from the Brazils and the Island of Ceylon, is of a yellowish or brownish green, sometimes transparent, and, when well polished, is in lustre nearly equal to the diamond.

Q. Describe the jargoon.—*A.* The jargoon, which is found in Ceylon, and also some parts of Europe, particularly France, is of a grey colour, with tinges of green, blue, red, and yellow, of various degrees of intensity.

Q. Describe the crystal.—*A.* The crystal, which is found principally in the island of Madagascar, is white like the diamond, but much inferior in lustre and hardness.

Q. Of what are pearls supposed to consist?—*A.* They are calcareous concretions formed of the liquid matter of which the inner surface of the shell of a fish, called the pearl oyster, is composed.

Q. Where are pearls found?—*A.* Chiefly in the Persian Gulf; and on the coasts of the island of Ceylon in the East Indies. The Persian pearl is considered more valuable than the Indian. The latter peels off, but the former is as firm as the rock upon which it grows; and though it loses in colour and water one per cent. annually, for about half a century, yet on the whole it loses less than the Indian.

Q. Which are the most celebrated pearl fisheries in the world?—*A.* Condatchy, in the island of Ceylon; and the islands of Bayrein and Kharrack in the Persian Gulf.

Q. Are there no other stones called precious stones?—*A.* Yes, several: the cornelian, the rock crystal, the agate, the chalcedony, the jasper, the spinelle and balass rubies, the beryl, the tourmaline, the onyx, the opal, the chysopras, and the blood-stone or heliotrope.

Q. Describe the colour of these stones.—*A.* The cornelian is generally of a red or flesh colour, though sometimes white, orange, or yellow; rock crystal is generally transparent, though sometimes shaded with grey, yellow, green, brown, or red; jasper is red, green, blue, or variegated; the spinelle ruby is of a dark red, the balass ruby of a rose colour; the beryl, which is a variety of the emerald, is of a light green; the tourmaline is of a smoky colour, but sometimes green, red, blue, or brown; the onyx is alternately marked with white and black, or white and brown; the opal is of a milky hue, and when held between the eye and the light, exhibits a changeable appearance of colour; the chysopras is of an apple green colour; and the blood-stone or heliotrope is of a dark green colour. Agates are nearly of all colours; the most beautiful are those called Scotch pebbles, and which are found on the sea-shore, near Dunbar. The finest cornelians are brought from Babylon.

Q. Which are those minerals which are called soft

stones?—*A.* Common or potter's clay, porcelain clay, pipe-clay, clay-slate or roofing slate, black chalk, hone or whetstone, mica or muscovy glass, basalt, bole, fullers-earth, soap earth, jade or nephrite, serpentine or mona marble, Venetian talc, and asbestos.

Q. Of what substances are the salts, or saline bodies, which form the second class of the mineral kingdom, composed?—*A.* Of mineral alkali or potash, salt, soda, borax, alum, sal-ammoniac, nitre or saltpetre, vitriol, and carbonate of soda or natron.

Q. Of what substances are the combustibles, or inflammable bodies, which form the third class of the mineral kingdom, composed?—*A.* Of sulphur, plumbago or black lead, naphtha or rock oil, petroleum, asphalt, coal, jet, amber, and ambergris.

Q. What is sulphur?—*A.* A simple and primary body, dug out of the earth in several places, particularly Italy, Switzerland, and South America.

Q. What is plumbago or black lead?—*A.* A mineral substance, found in separate loose pieces, and is composed of carbon and iron.

Q. What is coal?—*A.* A fossil which grows in the bowels of the earth.

Q. What is jet?—*A.* A kind of bituminous fossil.

Q. What is amber?—*A.* By some it is supposed to be a resinous gum oozing from pines, and falling on the earth, or into the sea; by others, a bituminous fossil formed in the earth, and washed ashore by the sea.

Q. Where is amber chiefly found?—*A.* It abounds particularly on the coasts of the Baltic, subject to Prussia. Dr. Girtanner supposes it an animal product, particularly of the ant.

Q. Of what colour is amber?—*A.* It is of several colours; but it is commonly yellow, varying from lemon to the orange. The yellow gold coloured is the most precious.

Q. Of what use is amber?—*A.* Besides its being subservient to the purposes of luxury, it has great medicinal virtues.

Q. What is ambergris?—*A.* It is a substance found floating on the sea, and in the intestines of the spermaceti whale. That which is extracted from the whale is soft,

and very offensive to the smell; but after having been exposed to the air for some time, it becomes like that found on the surface of the sea, hard, and admirably scented.

Q. Where is ambergris found?—*A.* On the coasts of India, Africa, and Brazil.

Q. Of what substances are the metals, or metallic bodies, which form the fourth class of the mineral kingdom, composed?—*A.* Of gold, platinum, silver, mercury, copper, iron, tin, lead, nickel, zinc, bismuth, antimony, tellurium, arsenic, cobalt, manganese, tungsten, molybdenum, uranium, titanium, cronium, columbium, and tantalium; being twenty-three in number.

Q. Of these how many are malleable, or capable of extension?—*A.* The ten first: the remainder are brittle.

Q. Which is the heaviest of metals?—*A.* Platinum, and then gold.

Q. Which is the lightest?—*A.* Tin, and then iron.

Q. Which is the most useful?—*A.* Iron.

Q. Where are the best iron-mines in England?—*A.* Those of Colebrook-Dale in Shropshire, and in Dean Forest, Gloucestershire.

Q. Which is the hardest of metals?—*A.* Iron, and then copper.

Obs. It is in the manufacture of articles constructed of iron that the English excel all other nations.

Q. Which is the softest and most beautiful?—*A.* Gold.

Q. How many kinds of gold are there?—*A.* Three, namely, gold yellow, found chiefly in America and Africa; brass yellow, met with in Bohemia, Transylvania, &c.; and greyish yellow.

Q. How are metals divided?—*A.* Into perfect, imperfect, and semi-metals.

Q. Which are the perfect metals?—*A.* Platinum, gold, and silver.

Q. Which are the imperfect?—*A.* Quicksilver, lead, copper, iron, and tin.

Q. Which the semi-metals?—*A.* Regulus, bismuth, nickel, arsenic, antimony, zinc, uranium, manganese, siderite, cobalt, &c.

Q. Which are the most perfect of metals?—*A.* Gold, silver, and platinum.

Q. What is meant by a perfect metal?—*A.* That which loses nothing by the heat of fire.

Q. What by an imperfect metal?—*A.* That which decreases by the heat of fire, or can easily be dissolved or corroded by acids.

Q. What is the peculiar property of gold?—*A.* It is the most ductile of all metals; for it may be drawn out into a wire finer than a hair; and an ounce of gold will gild a silver wire 1300 miles in length; or it may be extended so as to cover 160 square feet.

Q. Where is gold chiefly produced?—*A.* In South America, the East Indies, in Bohemia, Hungary, Transylvania, Siberia, Norway, Spain, Sweden, Ireland, the Spanish West Indies, and in Africa.

Q. In what form is gold generally found?—*A.* In Hungary, Transylvania, and Peru, it is found in solid masses; in the West Indies, in a vegetable form like the branches or twigs of plants; and in Siberia, in plates or pellicles covering other bodies.

Q. What properties are peculiar to gold?—*A.* Its metallic properties are not changed by the heat of the strongest furnace; but it may be calcined, and even reduced to glass, by collecting the beams of the sun in the focus of a burning glass.

Obs. Gold when pure is called virgin. Standard gold consists of 22 parts pure, and 2 parts of other metals. The standard for jewellers' gold contains one-fourth of other metals. Alloyed gold is red when most of the alloy is copper, and inclines to white when the alloy is silver.

Q. What is platinum?—*A.* A native metal, heavier than gold, and of the whitish colour of silver, but not so bright.

Q. Where is platinum found?—*A.* Only in South America: it was unknown in England before the year 1735. It is technically called *aurum album*, that is white gold; and in beauty, scarcity, ductility, and indestructibility, not inferior to gold and silver; and in other qualities far their superior, being extremely hard, and capable of resisting a very powerful action of fire.

Q. Where is silver chiefly found?—*A.* In the mines of Mexico and Peru, in South America.

Q. What is mercury or quicksilver?—*A.* A fluid ore,

of a white brilliant colour. The principal mines are in Bohemia, Germany, and Spain.

Q. In what country is the best copper produced?—*A.* In Sweden.

Q. What is nickel? — *A.* A native ore, of a white colour, like silver, softer than iron, and like iron attracted by the magnet.

Q. What is copper? — *A.* A native ore, the most sonorous of any metal, and the most elastic except iron.

Q. How many kinds of copper are there?—*A.* Three: the *common*, the *rose-copper*, and the *virgin-copper*.

Q. Which are the most valuable copper-mines in the world?—*A.* Those of Cornwall and the isle of Anglesea.

Q. What is iron?—*A.* A native metal, and according to the manner of its being wrought is denominated *cast* or *wrought* iron.

Q. Can you mention any of the peculiar properties of iron?—*A.* As well as being the hardest of metals, and next to tin the lightest, it is the most tenacious and ductile of metals, except gold; for it may be drawn into a wire as fine as hair, and an iron wire the tenth part of an inch in diameter is capable of sustaining 500 lbs. weight without breaking.

Q. What is lead?—*A.* A native ore, commonly found combined with sulphur, and a small portion of silver. In England the best lead-mines are in Cornwall, Devonshire, Derbyshire, Northumberland, Durham, and Anglesea.

Q. What is sugar of lead?—*A.* A preparation from white lead and distilled vinegar.

Q. What is arsenic?—*A.* A bluish white metal, and one of the most potent of poisons.

Q. What is zinc?—*A.* A native ore of a bluish white colour, and is composed of a number of thin plates adhering together.

Q. Of what is brass made?—*A.* Of copper and zinc; the alloy being three parts of the former metal, with about a fourth part of the latter.

Q. How is pewter made?—*A.* From lead and tin. Pewter may be used for vessels containing wine and even vinegar, provided there be from eighty to eighty-two parts of tin in the alloy.

Q. What is tin?—*A.* A native ore, and is the softest and lightest of metals.

Q. In what countries is tin found?—*A.* It is found in many parts of Asia and South America, but in Europe there are only three tin districts: the first is in Saxony and Bohemia, the second in Cornwall, and the third is that of Gallicia on the borders of Portugal.

Q. How is block-tin made?—*A.* By coating over thin sheets of iron with tin.

Q. What is solder?—*A.* A composition of tin and lead in the proportion of two parts of the first ingredient, and one of the last.

Q. What is bronze?—*A.* A composition of copper, and a small quantity of tin, about the tenth of the whole.

Q. Of what is bell-metal made?—*A.* Of copper and a larger quantity (about a fourth) of tin than is used in making bronze.

Q. Of what is pinchbeck made?—*A.* Of copper and zinc, in the proportion of three parts of the latter, and one of the former ingredient.

Q. Of what is prince's metal made?—*A.* Of nearly the same materials as bell-metal.

Q. How is steel made?—*A.* By heating iron bars with charcoal ashes and bone shavings; by which process the iron is rendered of a finer and closer grain.

Q. What is copperas?—*A.* Sulphate of iron.

Q. How is white lead obtained?—*A.* By corroding common lead with the steam of vinegar.

Q. What is asbestos?—*A.* A kind of mineral, which being split into threads and filaments, and wrought into cloth, is not consumable by fire.

Obs. The method of making asbestos is now entirely lost. A handkerchief or pattern of this material was long since presented to the Royal Society, a foot long, and half a foot broad. This specimen gave two proofs of its resisting fire; though in both experiments it lost above three drachms in the weight.

Q. What is the load-stone?—*A.* A magnetic species of iron, chiefly found in the iron-mines of England, Germany, Arabia, and Bengal.

Obs. Comparative weights of some metals and water:—

Platinum is 22½ times heavier than water.
Gold between 19 and 20 times the weight of water.
Silver about 10½ times the weight of water.

Mercury about 13½ times the weight of water.
Copper nearly 9 times the weight of water.
Lead more than 11 times the weight of water.
Steel and Iron 8 times heavier than water.
Tin 7 times heavier than water.
Diamonds about 3½ times heavier than water.
Glass about 3 times heavier than water.
Common Stones about 2½ times heavier than water
Common Salt about 2 times heavier than water.
Cork about ¼th the weight of water.
Atmospheric Air about $\frac{1}{850}$th the weight of water.
Hydrogen Gas about $\frac{1}{11000}$th the weight of water.

For the method of ascertaining the specific gravity of bodies, that is, ascertaining the exact comparative weights of the same bulk of different substances, or, in case of mixtures, of determining the proportion present of each, we are indebted for its discovery to the master mind of antiquity—that of Archimedes, who caught the idea one day while his limbs were resting on the liquid support of a bath; and as his godlike intellect, says Dr. Arnott, *Elements of Physics*, 278, darted into futurity, and perceived many of the important uses to which the knowledge was applicable, he is said to have become so moved with admiration and delight, that he leaped from the water, and, unconscious of his nakedness, pursued his way homewards, calling out εὑρηκα, εὑρηκα, I have found it, I have found it!

HERALDRY.

Q. WHAT is the meaning of heraldry?—*A.* The art of blazoning and marshalling coats of arms.

Q. What is meant by blazoning?—*A.* The art of displaying a coat of arms in its proper colours, or of deciphering the arms of families.

Q. What by marshalling?—*A.* The art of combining various coats of arms in a shield or escutcheon.

Q. How is each degree of nobility distinguished?—*A.* By a peculiar habit and coronet which they wear on solemn occasions.

Q. What is the habit which the nobility wear on solemn occasions?—*A.* The mantle.

Q. What is the etiquette observed among the nobility in the use of the mantle?—*A.* That a marquis may not wear his ceremonial mantle in the presence of a duke; nor an earl his in the presence of a marquis; nor a viscount his in the presence of an earl; nor a baron his in the presence of a viscount; except in the house of peers, or at the coronation of a king or queen.



Heraldry.

Page 195.



Regal Crown.



Prince of Wales's Coronet.



Duke.



Marquess.



Earl.



Viscount.



Baron.



Bishop.

Q. Describe the crown of the king of England.—*A.* It is a coronet bordered with pearls and precious stones, heightened up with four crosses pattee and four fleurs-de-lis, alternately; from which rise four arched diadems adorned with pearls.

Q. What is the difference between the crown of the king and queen?—*A.* That of the queen is smaller than the king's.

Q. What is the prince of Wales's coronet?—*A.* It resembles the king's, except that it has but one diadem, and that it is adorned with a plume of ostrich feathers.

Q. What are the coronets of the immediate sons and brothers of the king?—*A.* They resemble the king's, except that they have no diadem.

Q. How do you distinguish the coronets of the daughters and sisters of the king?—*A.* They differ from those of the princes, in having strawberry leaves between the crosses pattee instead of fleurs-de-lis.

Q. What is a duke's coronet?—*A.* It is a circle of gold, enriched with precious stones, and set round with eight large strawberry leaves.

Obs. A ducal coronet, which is borne by many commoners, differs from a duke's coronet, by being set round by only four strawberry leaves.

Q. What is a marquis's coronet?—*A.* A circle of gold, enriched with precious stones and pearls, and set round with four strawberry leaves, and as many pearls, raised on pyramidal points.

Q. What is an earl's coronet?—*A.* It is a circle of gold enriched like the former, from which issue eight points or rays, upon the top of each of which is a large pearl.

Q. What is a viscount's coronet?—*A.* It is a circle of gold enriched in like manner, round, and close to the rim of which, are set an unlimited number of pearls.

Q. Describe a baron's coronet?—*A.* It is a plain gold circle, set round with six pearls.

Q. What are the titles of the king of England?—*A.* King of Great Britain and Ireland, king of Hanover, elector of the Empire, duke of Lancaster, Defender of the Faith, &c. &c.

Q. Why are the words *Dieu et mon droit* used as the

motto of the royal arms of England?—*A.* From their being used by Richard I. as the parole for the day, when he defeated the French at the battle of Gihors, in the year 1198.

Q. Why were the words *Honi soit qui mal y pense* assumed as the motto of the order of the garter?—*A.* They were assumed by Edward III., who having laid claim to the kingdom of France, retorted shame and defiance upon him who should dare to think amiss of the enterprise that he had undertaken for the attainment of his design.

Q. What are the titles of the prince of Wales?—*A.* Prince of Wales, duke of Cornwall and Rothsay, electoral prince of Brunswick and Lunenburg, earl of Chester and Carric, baron of Renfrew, lord of the Isles, and great steward of Scotland.

Q. When was the motto *Ich Dien* assumed by the prince of Wales?—*A.* At the battle of Cressy, in the year 1346. Edward the Black Prince having slain the king of Bohemia, with his own hand took from his head a plume of feathers bearing this motto, and placed them upon his own head. In the German language these words signify *I serve.*

Q. Have the titles of the kings of England always been the same?—*A.* No: Henry IV. had the title of Grace; Henry VI. that of Excellent Grace; Edward IV. that of High and Mighty Prince; Henry VII. Highness; Henry VIII. Majesty, and this odious tyrant was the first and last of the English princes that was styled Dread Sovereign; and James I. that of Sacred, or Most Excellent Majesty.

Obs. See a note on this subject at page 271 *post.*

Q. When was the title of duke first created in England?—*A.* In the reign of Edward III., who conferred it on his eldest son Edward the Black Prince, by the title of the duke of Cornwall.

Q. When was the title of marquis created?—*A.* In the reign of Richard II., who created Robert de Vere, earl of Oxford, marquis of Dublin.

Q. When was the title of earl created?—*A.* It is unknown. This title is very ancient, and was an official dignity among the Saxons.

Q. On whom was the title of viscount first conferred?

—*A.* On John Beaumont, by Henry VI., who created him viscount Beaumont.

Q. Who was the first English baron?—*A.* This title, like that of earl, is very ancient; it was introduced into England soon after the Norman invasion.

Q. What is the title of the emperor of Austria?—*A.* Emperor of Austria, elect emperor of the Romans, king of Hungary, of Bohemia, of Lombardy, &c. He likewise takes the title of king of Spain, and is styled His Imperial and Royal Apostolic Majesty.

Q. What is the title of the king of France?—*A.* King of France and Navarre. He is styled Most Christian Majesty.

Q. What is the title of the king of Spain?—*A.* King of Spain, Castile, Arragon, the two Sicilies, of Jerusalem and Navarre, &c. &c. He is styled Most Catholic Majesty.

Q. What is the title of the king of Portugal?—*A.* King of Portugal and Algarve, this side and beyond the sea, and of Africa, lord of Guinea, &c. He is styled Most Faithful Majesty.

Q. What is the title of the emperor of Russia?—*A.* Emperor of All the Russias, king of Poland, &c.

Q. What is the title of the king of Denmark?—*A.* King of Denmark, of the Vandals and Goths, &c.

Q. What is the title of the king of Sweden?—*A.* King of Sweden and Norway, of the Goths and Vandals, &c.

Q. Do you recollect any anecdote which exposes the folly of sounding and senseless titles?—*A.* Yes: in the reign of queen Elizabeth, one of her majesty's ambassadors hearing, at an audience he had of the Czar of Muscovy, the titles of that prince repeated, which were numerous, he opened his embassy with the title of her Majesty, the Queen of England, France, and Ireland, Man, Northumberland, Cumberland, Westmoreland, Durham, York, Lancashire, and so naming all the fifty-two counties one after another; by which that prince taking her majesty for some more potent and renowned potentate than Europe usually afforded, granted free liberty and licence for her subjects to trade in his dominions, which continued till the death of Charles I.

MUSIC.

Music the fiercest grief can charm,
And fate's severest rage disarm:
Music can soften pain to ease,
And make despair and madness please:
Our joys below it can improve,
And antedate the bliss above.

POPE.

Q. WHAT is music?—*A.* That science which teaches the nature and properties of sounds, and comprises the art of combining them in a manner the most agreeable to the ear.

Q. How is music divided?—*A.* Into *vocal* and *instrumental.*

Q. Whether are vocal or instrumental tones most pleasing to the ear?—*A.* Vocal afford the greatest pleasure. Of instrumental music the violin, the flute, and the hautboy are the most grateful; but the organ is the most powerful, though it wants expression and flexibility of intonation.

Q. How many sounds are there in music?—*A.* Seven, which are distinguished by the letters A, B, C, D, E, F, and G.

Q. What are the different kinds of music?—*A.* The principal are the overture, the symphony, the concerto, and the sonata. A solo is when only one instrument or voice is employed; a duetto when two; and a trio when three.

Q. How are the different notes denominated when applied to time?—*A.* By the names of semibreves, minims, crotchets, quavers, semiquavers, and demisemiquavers.

Q. To whom is the invention of music assigned?—*A.* Some attribute it to Apollo; others to Mercury; while many assign it to Terpander. What we know for certain is that Jubal, the son of Lamech, was the inventor of the harp and the organ. Gen. chap. iv. ver. 21.

Q. Can you give any instances of the powerful effect of music?—*A.* Timotheus, a musician, is said to have been able to excite Alexander the Great to arms with the Phrygian sound, then to allay his fury with another tone,

and excite him to merriment. So, Eric, king of Denmark, by the skill of a certain musician, could be driven to such fury as to kill his friends and dependents.

Q. What does the term abattuta signify?—*A.* It is an expression employed after a break in the time of any piece, to apprize the performer that the measure is to be resumed and the time beaten as before.

Q. What does the word accelerando signify?—*A.* It signifies to accelerate time in the middle of a piece of music.

Q. What is meant by accent?—*A.* The emphasis or expression of the notes or parts of a bar.

Q. What by accompaniment?—*A.* Those instrumental parts in a composition which relieve the principal parts, supply the necessary chasms, and heighten and decorate the general effect.

Q. What by an acute?—*A.* A sharp or high sound.

Q. What does ad libitum imply?—*A.* It is an expression which signifies that liberty is given to the performer at that part of the composition where it is written, to give way to the directions of his own fancy.

Q. What does the word affettuoso imply?—*A.* That the notes to which it relates are to be played or sung in a soft and delicate manner.

Q. What is the signification of air?—*A.* The inflection of a musical composition, or that chain of sounds which is called a tune.

Q. What is the meaning of the word allegro?—*A.* That part of music which is to be played in a brisk lively manner.

Q. What of allemande?—*A.* A slow air or melody in common time of four crotchets in a bar.

Q. What is implied by alt?—*A.* It is a term applied to that part of the great scale of sounds which lies between F above the treble cliff note, and G in altissimo.

Q. What by alto?—*A.* The highest natural tenor voice.

Q. What by altissimo?—*A.* It is a term applied to all notes situated above F in alt.

Q. What by the term andante?—*A.* That part of a performance which is to be played in an impressive and tender manner.

Q. What by anomalies?—*A.* Those false scales or intervals which necessarily exist in all keyed instruments from their incapacity of a true and perfect temperament.

Q. What by amoroso?—*A.* A tender supplicating manner of singing and playing.

Q. What is the appoggiatura?—*A.* A grace or embellishment to a principal note.

Q. What is the use of the bar?—*A.* To divide into equal temporary quantities, and to regulate the keeping of time.

Q. What is meant by bass?—*A.* That part of a concert which is most heard, and which consists of the gravest, deepest and longest sounds.

Q. What by the beat?—*A.* A transient grace note, struck up immediately before the note it is intended to ornament.

Q. What by beating time?—*A.* The measuring or marking the time for performance in concert, by the motion of the hand and foot, up and down successively, and in equal times.

Q. What by beatings?—*A.* Those periodical jarring sounds often made by the irregular vibrations of two strings, pipes, &c. sounding together.

Q. What by bizarro?—*A.* It implies that the movement to which it is prefixed is to be played capriciously, fantastically, or irregularly, to correspond with the fancy of the composer who uses the term.

Q. What is bravura?—*A.* A song where considerable spirit and execution are necessary.

Q. What by cacophony?—*A.* A jarring disagreeable combination of sounds.

Q. What by cadence?—*A.* The termination of the parts of a song in a chord or note.

Q. What by a cantata?—*A.* A song or composition, intermixed with recitatives, airs, and different movements, chiefly intended for a single voice, with a thorough bass.

Q. What is a chord?—*A.* A string, by the vibration of which the sensation of sound is produced.

Q. What is a cleff or cliff?—*A.* A mark or key set at the beginning of the lines of a song or piece of music, which shows the tone or key in which the piece is to begin; or it is a letter marked on any line, which explains the rest of the notes.

Q. What is the signification of cantabile?—*A.* That the notes to which it refers are to be performed in a melodious and graceful manner.

Q. What is the meaning of the expression capricio?—*A.* A loose irregular method of composition.

Q. What is the meaning of the term concinnous?—*A.* When the band not only gives with mechanical exactness every passage of the composition, but enters into the design and sentiment of the composer, and preserving a perfect concord and unison of effect, moves as if one soul inspired the whole orchestra.

Q. What of consonance?—*A.* The union or agreement of two sounds produced at the same time, the one grave, and the other acute.

Q. What is meant by the expression con spirito?—*A.* That the notes are to be played strong and equal.

Q. What by crescendo?—*A.* That the notes are to be played gradually louder.

Q. What is a crotchet?—*A.* A note, or character of time, equal to half a minim, and double of a quaver.

Q. What is the meaning of the term counterpoint?—*A.* The art of disposing several parts or airs together, in such a manner as to make an agreeable whole or concert.

Q. What is counter-tenor?—*A.* A term applied to the highest natural male voice.

Q. What is the meaning of the words da capo?—*A.* They imply to begin again, and end with the first part.—Da capo is sometimes abbreviated thus D. C.

Q. What is meant by the expression diminuendo?—*A.* That the notes are to be played gradually softer.

Q. What by discord?—*A.* A dissonant and inharmonious combination of sounds.

Q. What by dissonance?—*A.* The effect which results from the unison of two sounds not in accord with each other.

Q. What by dolce?—*A.* That the notes to which it relates are to be played with taste and expression.

Q. What is a duo, duet, or duetto?—*A.* A song or composition to be performed in two parts only, the one sung, the other played on an instrument, or by two voices.

Q. What are entre-mets?—*A.* Inferior movements which are inserted, by way of relief, between the more important movements of a composition.

Q. What is meant by a fantasia?—*A.* A species of musical composition which is supposed to be struck off in the

heat of imagination, in which the composer has given a free scope to his imagination, without paying attention to the rules of art.

Q. What is the signification of forzando?—*A.* That the notes to which it has reference are to be played with emphasis or force.

Q. What are flats?—*A.* Additional notes, which together with sharps, serve to temper the defects of musical instruments.

Q. What do the terms forte and fortissimo imply?—*A.* Forte implies that the notes to which it relates are to be sung or played in a strong or loud manner; fortissimo in a very strong or loud manner.

Q. What does the term fugue imply?—*A.* A composition in which one part leads off some determined succession of notes, and after successive short intervals of time, other parts fly after it, as it were, repeating notes in a similar order, but at the distance of a fifth or octave.

Q. What is meant by the gamut?—*A.* A scale on which the musical notes, *ut*, *re*, *mi*, *fa*, *sol*, and *la*, in their several orders and dispositions, are learnt to be sounded.

Q. What is the meaning of a glee?—*A.* A vocal composition of three or more parts.

Q. What is meant by gravity?—*A.* The modification of any sound by which it becomes deep or low in respect of any other sound.

Q. What is meant by the guide?—*A.* The note in a fugue which leads off and announces the subject.

Q. What is the meaning of interval in music?—*A.* The difference between two sounds, in respect of acute and grave, or that imaginary space terminated by two sounds which differ in acuteness or gravity.

Q. What does intonation signify?—*A.* The giving to the tones of the voice or instrument that occasional impulse, swell, or decrease on which all musical impression depends.

Q. What is meant by inversion?—*A.* A changed position either of a subject or of a chord.

Q. What is meant by the key in music?—*A.* The fundamental note or tone, to which the whole of the movement has a certain relation or bearing, to which all its

modulations are referred and accommodated, and in which it both begins and ends.

Q. What by lagrissimo?—*A.* A plaintive manner of singing or playing.

Q. What by legato?—*A.* It implies that the notes over which it is placed are to be played or sung in a smooth or close manner.

Q. What is the meaning of measure?—*A.* The interval or space of time which the person who beats time takes between the raising and falling of his hand or foot, in order to conduct the movement, sometimes quicker and sometimes slower, according to the kind of music, or the subject which is sung or played.

Q. What is meant by the term mezzo?—*A.* Half, middle, mean. This word is generally used in conjunction with some other, as mezzo forte, moderately loud; mezzo piano, rather soft. When written alone, and applied to the grand piano forte, it denotes that the pedal is to be used, taking off one of the sets of strings.

Q. What by mezzo bravura?—*A.* An expression to signify an air of moderate passion and execution.

Q. What by mezzo voce?—*A.* An expression signifying that the movement before which it is written is to be sung or played with a moderate strength of tone, and in a delicate pleasing manner.

Q. What by mezzo soprano?—*A.* A treble voice of a moderate or somewhat low scale.

Q. What is a minim?—*A.* A note, or character of time, equal to two crotchets, or half a semibreve.

Q. What does the word moderato imply?—*A.* That the notes to which it relates are to be played with a moderately quick movement, but not too volatile or light.

Q. What is meant by the term molto?—*A.* It is a word used, in conjunction with some other, by way of augmentation; as molto allegro, very quick; molto adagio, very slow.

Q. What are the notes?—*A.* Characters which mark the sounds, that is the elevations and fallings of the voice, and the swiftness and slowness of its motions.

Q. What is the meaning of an octave?—*A.* An harmonical interval, consisting of eight notes, or degrees of sound.

Q. What is an oratorio?—*A.* A species of musical drama, the subject of which is generally taken from Scripture.

Q. What is the meaning of an overture?—*A.* An introductory piece of music played before the commencement of an opera, oratorio, &c.

Q. What is meant by a pause or rest?—*A.* A character which shows, that some part or person is to be silent, while the rest continue the song.

Q. What is meant by the terms piano or pianissimo?—*A.* Piano signifies that the notes to which it relates are to be sung in a soft manner; pianissimo, in a very soft manner.

Q. What by the term pomposo?—*A.* It implies that the notes to which it relates are to be played or sung in a grand and dignified manner.

Q. What by a prelude?—*A.* A flourish, or irregular air, played off hand, to try whether the instrument be in tune, and thus lead the player into the piece to be played.

Q. What is meant by the term presto?—*A.* That the notes to which it relates are to be played very quick.

Q. What is a quartetto?—*A.* A piece of music set for four voices or instruments.

Q. What a quintetto?—*A.* A musical composition in five parts, but performed by a single voice or instrument.

Q. What is meant by recitative?—*A.* An endeavour in musical composition to imitate the inflexions, accent, and emphasis, of natural speech.

Q. What by relatando?—*A.* To retard time.

Q. What does a repeat signify?—*A.* That the notes to which it relates are to be played over twice.

Q. What is a rondo?—*A.* A vocal or instrumental composition consisting of three strains, the first of which ends in the original key, while each of the others is so constructed as to conduct the ear in an easy and natural manner to the first strain.

Q. What is a roulade?—*A.* A trill or shake.

Q. What does the word segue imply?—*A.* That the notes over or under which it is written are to be played over again.

Q. What is a semibreve?—*A.* Half a breve.

Q. What is a semiquaver?—*A.* A note containing half the quantity of a quaver.

Q. What is a semitone?—*A.* One of the degrees of concords, or concinnous intervals.

Q. What is the meaning of sequence?—*A.* A regular alternate succession of similar chords.

Q. What is the shake?—*A.* A light grace note or embellishment, made by shaking the tone along with the principal note.

Q. What does the word siciliano imply?—*A.* That the notes to which it relates are to be played in a simple and unaffected manner.

Q. What is a slur?—*A.* It indicates that the notes over which it is placed are to be played in a smooth or gliding manner.

Q. What is a sonata?—*A.* An instrumental composition designed to display the powers and expression of the instruments for which it is designed.

Q. What is a solo?—*A.* A musical composition adapted only to one voice or instrument.

Q. What does the word staccato imply?—*A.* That the notes over which it is written are to be performed in a short and distinct manner.

Q. What is the meaning of the term syncopation?—*A.* It is that disposition of the melody of a composition, by which the last note of one bar is so connected with the first note of the succeeding bar, as to form but one and the same sound.

Q. What is the meaning of tenor?—*A.* The mean or middle part, or that which is the ordinary pitch of the voice, when neither raised to a treble, nor lowered to a bass.

Q. What is meant by tierce?—*A.* The interval of a third.

Q. What by time?—*A.* An affection of sound, by which it is denominated long or short, with regard to its continuance.

Q. What are the distinctions of musical time?—*A.* Grave, adagio, largo or lento, larghetto, vivace, allegro, allegretto, presto, prestissimo; which succeed each other in the order they are mentioned.

Q. What is the meaning of the word tremando?—*A.*

That the notes are to be played with a trembling movement.

Q. What is a trill?—*A.* A shake.

Q. What is a trio?—*A.* A musical composition adapted for three voices or instruments.

Q. What is meant by triple time?—*A.* Time consisting of three measures in a bar.

Q. What by undulation?—*A.* That rattling or jarring of sounds which is observed when discordant notes are sounded together.

Q. What by unison?—*A.* The effect of two sounds which are equal in degree of tone or in a point of gravity and acuteness.

Q. What by vivace?—*A.* That the tune is to be played in a brisk, lively, and animated manner.

Q. What do the words volti and volti subito mean?—*A.* Volti signifies turn over; volti subito, turn over quickly.

Q. What is a voluntary?—*A.* A written or extempore performance on the organ, and serving to relieve or embellish divine service.

AGRICULTURE.

"The wond'rous world of vegetables view!"

Go mark the workings of the Power,
That shuts within the seed the future flower;
Bids these in elegance of form excel,
In colour these, and those delight the smell;
Sends Nature forth, the daughter of the skies,
To dance on earth and charm all human eyes.

COWPER.

Q. WHAT is meant by agriculture?—*A.* The art of cultivating the ground in such a manner as to cause it to produce corn and all kinds of vegetables in greater abundance, and in higher perfection, than it would spontaneously.

Q. What nations of antiquity were distinguished for their agricultural pursuits?—*A.* The Jews, the Chal-

deans, the Egyptians, the Phœnicians, the Grecians, the Carthaginians, and the Romans.

Obs. The science of agriculture was held in such esteem by the Romans, that deities were appointed in their creed to take charge of the corn in every stage of preparation and growth. Stercutus directed the manuring, Occutor the harrowing, and Sator the sowing; Seia protected the seed while it remained in the ground, and when the blade first sprung from the earth, Rumeina directed its weeding; Robigus secured it from blasts and mildews; Nodosus guarded the joints of the stalks, and Volucia folded the blade round the ear. Flora watched it in the blossom, and Patelina in the pod: Hostilia observed that the ears grew long and even; and it was the care of Matuta that they came to maturity.

Q. Can you give any instance of the high estimation in which agriculture was held among the Romans?—*A.* Yes: in the virtuous times of the commonwealth, the magistrates were obliged annually to put their hands to the plough as a symbol of their veneration of agriculture. Many instances also occur in Roman History of their magistrates cultivating their limited jugera (farms) with their own hands. Quintius Cincinnatus was twice invested with the office and insignia of dictator while cultivating his little farm with his own hands.

Obs. The opinion of Rousseau, that every youth should learn a trade or be instructed in agriculture, which he calls an estate for life, because whatever befalls him he will be thus enabled to earn a livelihood, is worthy of observation.

Q. What nations among the moderns are distinguished for their agricultural pursuits?—*A.* The English and the Chinese, in particular.

Q. For what are the English particularly distinguished in agriculture?—*A.* For their enclosure of lands.

Q. What benefit results from enclosures?—*A.* They materially contribute to the improvement of the climate of a country, by defending it from inclement winds.

Q. Who are the most ancient writers of note on agriculture among the English?—*A.* Fitzherbert, Chief Justice of the Common Pleas, in the beginning of the 16th century; and Evelyn and Tull.

Q. Do you recollect the name of any national society which has been instituted in England for the encouragement of agriculture?—*A.* Yes: the Board of Agriculture.

Q. What is an agriculturist's first duty?—*A.* An attention to the nature of the soil which he intends to cultivate.

Q. What is meant by soils?—*A.* Earth, in reference to its different qualities.

Q. How are soils divided?—*A.* Into native and artificial.

Q. How is artificial soil produced?—*A.* By the decay or decomposition of animal and vegetable substances. This forms that rich mould or vegetable earth, which principally contributes to vegetation, and forms the superficial stratum or bed of all soils.

Q. How are the native soils distinguished?—*A.* 1st, Argillaceous, clayey or loamy soils; 2dly, calcareous or chalky soils; 3dly, silicious, sandy or gravelly soils; and, 4thly, peaty and mossy soils. These soils are also, according to their nature, distinguished into stiff or light soils.

Q. How is the nature of soils ascertained?—*A.* By chemical analysis.

Q. Is there no other simpler method of ascertaining their nature?—*A.* Yes: good soils, when newly dug up, emit a pleasant fresh smell, do not adhere to the fingers in handling, and when compressed between the thumb and finger appear of an unctuous nature. Another mode of ascertaining the nature of soils is from the growth and luxuriance of the plants or vegetables which they produce.

Q. How are soils generally improved?—*A.* By commixing one kind of soil with another; enriching them with manure of animal dungs, bones, horns, hoofs, blood, wool, hair, clippings of parchment, leather, decayed vegetables, salt, lime, marl, the weeds and mud of ponds and ditches, fish, offal, &c.; by draining such as have a superfluous moisture, and irrigating or watering such as are too dry.

Q. Has modern improvement devised no other method of improving land?—*A.* Yes: that of varying the crops; by which the old method of letting land lie fallow, that is, not cultivated every third or fourth year, is exploded. By the new process from two to four crops are obtained off the same soil which formerly was allowed to lie unoccupied every third or fourth year.

Q. What kinds of crops are generally cultivated on stiff soils?—*A.* Clover, beans, wheat, and cabbage, in succession.

Q. What on light soils?—*A.* Potatoes, turnips, pease, oats, and barley.

Q. What are the different kinds of corn?—*A.* Wheat, barley, rye, and oats.

Q. When is wheat sown?—*A.* Early in October. But the spring wheat is sown in March.

Q. When is barley sown?—*A.* In March and April.

Q. When is rye sown?—*A.* The spring rye is sown in March, and the winter rye in autumn.

Q. When are oats sown?—*A.* In February and March.

Q. How is corn sown?—*A.* Three ways; namely, by broadcast, by drill, and dibble. By the broadcast method it is sown or cast by the hand; by the drill, it is deposited in the ground at an uniform depth, and in regular rows at equal distances, by means of a machine called a drill plough; and by dibbling, it is deposited in holes made with setting irons in the ground.

Q. How are grasses divided?—*A.* Into natural and artificial.

Q. What is the most productive plant?—*A.* The parsnip; next to it the potato; then turnips and carrots; and after them wheat. The increase of the parsnip is double that of the potato; that of the potato nearly one dozen times greater than that of wheat.

*** Of the most proper kinds of vegetables to be reared for the purposes of feeding cattle, cabbages hold the first place, especially what are called the turnip rooted cabbages. Turnips likewise produce very bulky crops, though far inferior to those of cabbages; but carrots are more efficient in feeding cattle, than either cabbages or turnips. Cabbages produce on an average 36 tons per acre; turnips in the finest soil about five tons per acre; and carrots in a rich sandy soil about 200 bushels an acre, but in a finer soil more than treble that quantity.

Q. Which are the most profitable plants to cultivate?—*A.* Potatoes. The quantity of starch or nutriment in the potato is four times greater than that in wheat.

Q. What quantity of potatoes can be produced from an acre of ground at one crop?—*A.* Four hundred and fifty bushels.

Q. Which are the most profitable animals to breed?—*A.* Sheep, next to them cows, then pigs, and last of all horses.

Q. What are the native fruits of England?—*A.* The

acorn, the blackberry, the elderberry, and hips and haws. all others are exotics.

Q. Of what countries are rye and wheat the native produce?—*A.* Of Tartary and Siberia, where they are still indigenous. Buck wheat was introduced into England from Asia.

Q. Whence were barley and oats brought?—*A.* It is not known; but certainly they are not indigenous to England, for they do not grow without cultivation.

Q. Of what country are apples the native produce?—*A.* Of Syria.

Q. Whence are oranges and lemons brought?—*A.* From Nice and Genoa, in Italy; the Isle of Hieres and the adjacent parts of France; Portugal, the American islands, and the coasts of India.

Q. Of what country are apricots the native produce?—*A.* Of Epirus. They were first planted in England in 1540.

Q. Of what country are plums the native produce?—*A.* Of Damascus.

Q. Of what peaches?—*A.* Of Persia and Carthage.

Q. Of what were pears and figs?—*A.* Of Greece and Egypt.

Q. Of what were citrons?—*A.* Of Carthage.

Q. Of what quinces?—*A.* Of Syria.

Q. What cherries?—*A.* Of Pontus. Cherry-trees were first planted in England one hundred years before the Christian era.

Q. From what country were beans and peas introduced into England?—*A.* From Spain.

Q. Whence were kidney-beans?—*A.* From the East Indies.

Q. Whence gooseberries?—*A.* From Flanders.

Q. Whence currants?—*A.* From the island of Zante, where they grow on tendrils like grapes.

Q. Whence cabbage and lettuce?—*A.* From Holland. Cos lettuce was introduced from the island of Cos, near Rhodes, in the Mediterranean.

Q. From what country were potatoes first brought?—*A.* From Santa Fé, in New Spain or Mexico, by captain Hawkins, in the year 1565. Sir Walter Raleigh was the first cultivator in Europe of this useful vegetable.



Orange. p. 210. | India Rubber. p. 260. | Ginger. p. 250.



Nutmeg. p. 251. | Rice. p. 251. | Cotton. p. 254.



Tea. p. 248. | Coffee. p. 249. | Sugar. p. 249. | Tobacco. p. 255.



Q. Whence were turnips introduced?—*A.* From Hanover, by Lord Townsend, secretary to Charles I.

Q. When were salads, carrots, cabbage, artichokes, and other edible roots chiefly introduced into England?—*A.* In the reign of Henry VIII.

Q. When pippins, apricots, and gooseberries?—*A.* In the same reign.

Q. When were asparagus, cauliflowers, beans, and peas first introduced?—*A.* About the time of the restoration of Charles II.

Q. From what part of the world was tobacco first imported into England?—*A.* From America.

Q. Whence was the cauliflower introduced?—*A.* From the island of Cyprus.

Q. Whence asparagus?—*A.* From Asia.

Q. Whence artichokes?—*A.* From Holland.

Q. Whence was celery first introduced?—*A.* From Flanders.

Q. Whence cucumbers?—*A.* From Palestine.

Obs. Of all raw vegetables, cucumbers are the most unwholesome; and water cresses the most wholesome.

Q. Whence horseradish?—*A.* From China.

Obs. The epithet *horse* is a Grecism, and when it, or the word *bull*, is prefixed to any word, they are used to express comparative greatness. Thus horseradish and bullrush signify the *greater* radish, the *greater* rush.

Q. Whence were hops first introduced?—*A.* From Artois, in Flanders.

Q. In what counties are hops chiefly produced?—*A.* In Kent, Surrey, Sussex, and Hampshire.

Q. Whence cresses?—*A.* From the island of Crete.

Q. Whence chervel?—*A.* From Italy.

Q. From what country was fennel first brought?—*A.* From the Canary Islands.

Q. Whence anise and parsley?—*A.* From Egypt.

Q. From what part of the world was garlic introduced?—*A.* From Asia.

Q. Whence shallots?—*A.* From Siberia.

Q. Whence lentils?—*A.* From France.

Q. Whence were gourds brought?—*A.* From Astrachan, in Tartary.

Obs. The present state and perfection of vegetables are owing to cultivation. There is scarcely a vegetable which we at present employ that

can be found growing naturally. Buffon states that our wheat is a factitious production, raised to its present condition by the art of agriculture. Rice, rye, barley, or even oats, are not to be found wild; that is to say, growing naturally in any part of the earth, but have been altered, by the industry of mankind, from plants not now resembling them even in such a degree as to enable us to recognise their relations. The acrid and disagreeable apium graveolens has been thus transformed into delicious celery: and the colewort, a plant of scanty leaves, not weighing altogether half an ounce, has been improved into cabbage, whose leaves alone weigh many pounds, or into a cauliflower of considerable dimensions, being only the embryo of a few buds, which, in their natural state, would not have weighed many grains. The potato, again, whose introduction has added many millions to our population, derives its origin from a small and bitter root which grows wild in Chili and at Monte Video. The fairy bowers of horticulture have produced still greater metamorphoses. By her magic wand the tough coriaceous covering of the almond has been converted into the soft and melting flesh of the peach; by her spells the sour sloe has ripened into the delicious plum, and the austere crab of our woods into the golden pippin; and this again has been made to sport in almost endless variety, emulating in beauty of form and colour, in exuberance of fertility, and in richness of flavour, the rarer productions of warmer regions and more propitious climates. But it must be recollected that while cultivation exalts and extends the nutritive powers of vegetable bodies, it generally diminishes their bitterness (which is their most wholesome and digestible quality) in the same proportion.—*The Oracle of Health and Long Life.* By MEDICUS.

Q. From what country was the elder tree introduced?—*A.* From Persia.

Q. The lily?—*A.* From Syria.

Q. The tulip?—*A.* From Cappadocia.

Q. The tuberose?—*A.* From the islands of Ceylon and Java.

Q. The damask and musk rose?—*A.* From Damascus.

Q. The auricula?—*A.* From Switzerland.

Q. The province rose?—*A.* From Thoulouse, in France.

Q. The jessamine?—*A.* From the East Indies.

Q. The daffodil?—*A.* From Italy.

Q. The ranunculus?—*A.* From the Alps.

Q. The carnation and pink?—*A.* From Italy.

Q. The gilliflower?—*A.* From Thoulouse.

Q. From what country was the licorice root introduced?—*A.* From Spain.

Q. Whence saffron?—*A.* From Arabia.

THE ENGLISH CONSTITUTION.

Remember, O my friends! the Laws, the Rights,
The generous plan of power, delivered down
From age to age by your renown'd forefathers,
So dearly bought! the price of so much blood!
Oh, let it never perish in your hands!
But piously transmit it to your children.

ADDISON'S CATO.

Incomparable Gem! thy worth untold;
Cheap, though blood-bought, and thrown away when sold;
May no foes ravish thee, and no false friend
Betray thee, while professing to defend.
Prize it, ye Ministers; ye Monarchs, spare;
Ye Patriots, guard it with a Miser's care.

Q. WHAT is meant by the British Constitution?—*A.* A system of laws, institutions, and customs derived from the immutable principles of nature and reason, and founded upon the great basis of all law and government—*the natural rights of man.*

Q. Who may be considered the founder of the British Constitution?—*A.* Alfred the Great: Edward the Confessor may be called its restorer.

Q. Of what nature is the British Constitution?—*A.* Mixed; it partakes of the properties of a monarchy, an aristocracy, and a republic. In the person of the king, a monarchical form of government is represented; an aristocratical, in that of the nobles; and a republican, in the commons' house of parliament.

Q. How many forms of government are there?—*A.* Three; monarchical, aristocratical, and democratical.

Q. What is meant by a monarchical form of government?—*A.* When the power of governing is vested in one person.

Q. What by an arbitrary or absolute form of government?—*A.* When the power of the monarch is not limited.

Q. What by a despotic?—*A.* When the power of the monarch is very absolute or arbitrary.

Q. What is meant by an aristocratical form of government?—*A.* When the supreme power is possessed by the

nobles; but if only by a few of the nobles of a state, it is termed an oligarchy.

Q. What is meant by a democratical or republican form of government?—*A.* When the supreme power is lodged in an aggregate assembly appointed by all the free members of a community. When the people at large govern a state, the government is termed a democracy.

Q. What are the respective excellences of these forms of government?—*A.* A democracy is usually best calculated to direct the end of the law; an aristocracy to invent the means by which that end shall be obtained; and a monarchy to carry those means into execution.

Q. What are the benefits which the British Constitution affords?—*A.* Personal security, personal liberty, and the undisturbed right of private property. These are emphatically styled the rights and liberties, or the birthright of Englishmen.

Q. By what means are these rights and liberties secured?—*A.* By the constitution of parliament,—the limitation of the king's prerogative,—the right of applying to courts of justice, and of petitioning the king or either house of parliament, for redress of grievances,—and, lastly, the right of having arms allowed by law, for self-defence and preservation.

Q. Mention the particular laws or statutes on which the British Constitution depends.—*A.* 1st, Magna Charta, or the Great Charter of Liberties, and the Charta de Foresta, or the Charter of Forests, enacted in the reign of John; the Petition of Right, in that of Charles I.; the Habeas Corpus Act, in that of Charles II.; the Bill of Rights, in that of William and Mary; and the Act of Settlement, in that of William III.

Q. Mention the chief provisions of Magna Charta and the Charter of the Forests.—*A.* By these grants, both the person and the property of the subject were protected,—outlawry and exile prohibited,—the intervention of a jury provided for,—the humiliating condition to which females, as well as males, were subject by the severities of the feudal system, meliorated,—the administration of justice secured,—and the penalties of the game-laws mitigated.

Obs. But notwithstanding the solemn and repeated confirmation of these charters, they were never formally acknowledged by the judges as

constituting part of the law of the land, till the time of Edward I., who, by means of two famous acts, (the statutes Confirmatio Cartarum and De Tallagio non Concedendo,) at once recognised the privileges of the great body of the people, and abolished all taxes levied without the express consent of parliament. The statute Confirmatio Cartarum has been corroborated and confirmed by no less than thirty-two subsequent acts.

Q. Which is the principal provision of Magna Charta?—*A.* Article 29, which is the most valuable stipulation in the whole charter, and the grand security of the liberties, persons, and properties of the people of England. By this article every individual in the nation is protected in the free enjoyment of his life, his liberty, and his property, unless declared to be forfeited by the judgment of his peers, or by the law of the land.

Q. What of the Petition of Right?—*A.* The raising of money, or enforcing loans from the subject, without the sanction of parliament, is declared illegal.

Q. What of the Habeas Corpus Act?—*A.* No person must be sent to prison or beyond sea; and if any person be restrained of his liberty, he shall be brought before one of the judges of England, who may, if his offence be bailable, admit him to bail, and discharge him from such confinement.

Q. Mention the leading provisions of the Bill of Rights.—*A.* The power of suspending or dispensing with the laws or their execution by regal authority is declared illegal; the right of petition is established; protestants may have arms for their defence; the election of members ought to be free, and parliaments held frequently; jurors must be duly impanneled and returned; and excessive bail must not be required, nor excessive fines imposed, nor cruel and unusual punishments inflicted.

Q. What are the most important provisions of the Act of Settlement?—*A.* Besides repeating many provisions of the Bill of Rights, it enacts that a standing army cannot be kept up in time of peace, but by the consent of parliament; and besides fixing and determining the rights of the subject and the sovereign, settles the succession to the crown on the prince and princess of Orange, from which latter regulation the Act takes its name.

Q. How many kinds of law prevail in England?—*A.* 1st, the unwritten, or common law; 2dly, the written, or

statute law; 3dly, the civil law; 4thly, the canon law; 5thly, the martial law; 6thly, forest law; and 7thly, the law of custom.

Q. What is the common law?—*A.* A set of immemorial customs and usages derived from the ancient Saxon law, first collected by Ethelbert, and afterwards revised and improved by Alfred. This branch of English jurisprudence has always been considered as peculiarly favourable to the liberties and happiness of the subject.

Q. What is the statute law?—*A.* Those acts and ordinances which the two houses of parliament from time to time enact, and which when assented to by the king are laws. Statute law is either *general* or *special*, *public* or *private*.

Q. What is meant by a *general* or *public* act?—*A.* An universal law which regards the whole community, and of which the courts are bound to take notice judicially.

Q. What by *special* or *private* acts?—*A.* Those statutory provisions which operate only on particular persons and private concerns; and which the judges are not bound to notice, unless formally shown and pleaded.

Q. How are statutes construed?—*A.* Penal statutes are explained *strictly* as to the person, in order that no man may be punished, unless both the crime and forfeiture are accurately defined, as well as specified; but *liberally* and *beneficially*, as to the offence, so that no one may be sheltered by his own fraud. When the common law and statute law differ, the former gives place to the latter.

Q. What is meant by the civil law?—*A.* Those rules and ordinances which are comprised in the institutes, the code, the digests, and novels of the emperor Justinian and his successors.

Q. What by the canon law?—*A.* Those rules and ordinances relative to matters over which the church has jurisdiction; and which have been chiefly borrowed from the Popish ecclesiastical law, general councils, or the opinions of the fathers of the Christian church.

Q. How is the law of custom distinguished?—*A.* Into two kinds, *general customs* and *particular customs*.

Q. What is meant by general customs?—*A.* That law by which proceedings and decisions in the courts of justice are guided and directed.

Q. What by particular customs?—*A.* That branch of unwritten law which affects only the inhabitants of particular districts.

Q. Which are the principal of those particular customs?—*A.* Those of gavelkind, borough-English, and the customs of London.

Q. What is meant by gavelkind?—*A.* A custom which obtains in Kent and some other parts of England, whereby all the sons succeed to like portions of their father's inheritance. This custom was, during the Saxon polity in this island, the manner of descent throughout England.

Q. What by borough-English?—*A.* An ancient tenure still existing in Kent and some other parts of England, by which the youngest son inherits the family estate, in prejudice of his elder brothers.

Q. What courts decide according to the civil law?—*A.* The ecclesiastical courts, the military courts, the courts of admiralty, and the courts of the two universities.

Q. What according to the canon law?—*A.* The ecclesiastical courts.

Q. Of what constituent parts does the great social family of the British nation consist?—*A.* Of king, lords, and commons.

Q. What do you mean by the three estates of the realm?—*A.* The king, lords, and commons. The king in point of pre-eminence is the first, the lords the second, and the commons the third. The parliament consists of the second and third estates.

Q. In whose hands is the government of the British people vested?—*A.* In those of the king and parliament.

Q. Of what parts does the government consist?—*A.* Of the legislative and executive powers.

Q. In whom is the legislative power vested?—*A.* In the hands of the parliament and the king.

Q. What are the constituent parts of parliament?—*A.* The king, the lords spiritual and temporal, and the commons. The lords in their collective capacity are styled the House of Lords; the commons, the House of Commons.

Q. Who are the lords spiritual?—*A.* The two archbishops and the twenty-four bishops of England; and one archbishop and three bishops for Ireland.

Q. Who the lords temporal?—*A.* The nobility; namely,

all dukes, marquisses, earls, viscounts, and barons, whether by descent, creation, or election.

Q. How are peers created?—*A.* By writ or patent.

Q. What is the number of the nobility?—*A.* It is indefinite, being increased at the pleasure of the crown. In England, the nobility are about 320; in Ireland, about half that number; and, in Scotland, about 70. The baronets of the United Kingdom are about 800.

Q. How many peers sit in the House of Lords by election.—*A.* Forty-four; namely, sixteen for Scotland, and twenty-eight for Ireland.

Q. Mention the rights and privileges of peers.—*A.* They are hereditary counsellors of the crown, and, as such, are privileged from arrest, unless for treason, felony, or breach of the peace; their suits are tried in the House of Peers; in civil actions they cannot be outlawed; and, by the charter of the forest, they have the privilege of killing one or two of the king's deer while passing through his forests when summoned to parliament, provided they do so in the view of the forester, or on blowing a horn.

Q. Have peers no other privileges?—*A.* Yes: they are justices of the peace in all parts of the kingdom, where they happen to be present, and all sheriffs and peace officers must obey their warrant. They have a right to sit upon the bench of any court of judicature, and give their opinion and advice to the judge. They are exempted from all offices of service whatever; and, besides a number of other privileges, neither the sheriff nor his officers can search their houses without a warrant under the king's hand, and signed by six privy counsellors.

Q. Of whom is the House of Commons composed?—*A.* Of the representatives of the people.

Q. What number of representatives of the people sit in the Commons House of Parliament?—*A.* Six hundred and fifty-eight; namely, 513 for England, Wales, and the town of Berwick-upon-Tweed; 45 for Scotland; and 100 for Ireland.

Q. What qualifications are requisite to entitle a person to be elected a member of the House of Commons?—*A.* To represent a shire, a clear estate of freehold, or copyhold, to the value of 600*l.* per annum; and to represent a city, town, or borough, an estate of 300*l.* per annum. But of

the eldest sons of peers and of persons qualified to be knights of the shire, and also the representatives of the universities, these qualifications are not required.

Q. Who are disqualified from becoming members of the House of Commons?—*A.* All aliens and minors; clergymen; the twelve judges of England; persons attainted of treason, or felony; sheriffs, mayors, and bailiffs of boroughs, in their respective jurisdictions; all commissioners for prizes; agents for regiments; officers of the excise and customs; clerks of the treasury, navy, exchequer, &c.; and all who hold offices under the crown, created since 1705, or who have pensions during the pleasure of the king, or for any term of years.

Q. What is the extent of the power and jurisdiction of parliament?—*A.* Its power is absolute and uncontrollable, and it has the power of making, repealing, and expounding law: it can regulate, or new model, the succession of the crown: it can alter the established religion of the land: it can even change the constitution of the kingdom and of parliament itself: and has the power of impeaching the officers of the crown, and any person, how high or great soever he may be, before the lords.

Q. What are the privileges of members of parliament?—*A.* Freedom of speech; protection of their persons from arrest, except in cases of treason, felony, seditious libel, or offences in which sureties of the peace may be demanded; and of franking fifteen letters daily, and of receiving ten free of postage.

Q. What is the peculiar privilege of the House of Commons?—*A.* That all money-bills, that is, that all grants of subsidies, or taxes, to be raised on the subject, must begin in their house.

Q. What number of members constitute each house of parliament?—*A.* In the House of Commons, forty members must be present to constitute a house; but, in the House of Lords, two peers and the speaker constitute a house.

Q. Are members of parliament compelled to attend the discharge of their duty?—*A.* Yes; the commons are compelled by what is called a *call;* the attendance of the lords is enforced by summons.

Q. In what method is business conducted in each house?—*A.* Every bill must be read a third time in each house before it is said to be passed. In the Commons, if the bill is of a private nature, a petition is first preferred; but if of a public nature, a motion is first made for leave to bring in the bill; the bill is then read a first, second, and third time, unless rejected in some of its stages, and then it is carried to the other house for its concurrence, where, after passing through the same forms, it is deposited to receive the royal assent.

Q. What is meant by committing a bill?—*A.* The referring the bill, after the second reading, to a committee, either of the whole or part of the house, (according as the bill is of small moment or of consequence,) in which the bill is debated, clause by clause; when amendments are made, and the blanks, which are always left in bills, filled up.

Q. What is meant by adjournment of parliament?—*A.* A discontinuance of its sitting for a short time.

Q. What by prorogation?—*A.* A discontinuance of the sitting of parliament from one session to another.

Q. What by dissolution?—*A.* The civil death or extinction of parliament, effected either by the king's will, the expiration of the time appointed by law for its duration, or the pleasure of the new monarch on the demise of the crown.

Q. What is the signification of the Chiltern Hundreds?—*A.* Districts in Buckinghamshire, and the manor of East Hundred in Berkshire, which belong to the crown, and have officers belonging to them with the title of stewards.

Q. What is the duration of parliament?—*A.* Seven years, unless dissolved by the royal authority before the expiration of that period.

Q. What is the greatest interval which can intervene between each sessions of parliament?—*A.* Three years.

Q. What qualifications are required to entitle a person to vote for the election of members of parliament?—*A.* Voters for knights and shires must have freehold estates of the value of forty shillings per annum; voters for cities, towns, and boroughs, must, if freemen, have been admitted to their freedom twelve calendar months before

the election, or, if inhabitants, have paid scot and lot six calendar months before the election. Neither minors nor persons convicted of perjury are entitled to vote.

Q. In whose hands is the executive power vested?—*A.* In those of the king.

Q. What are the powers and prerogatives of the king?—*A.* He has the sole power of making peace and war; of concluding all treaties; of receiving and appointing ambassadors; of bestowing all civil, military, and naval offices in the kingdom; of conferring all honours and dignities; of coining money; of pardoning offences; of summoning, adjourning, proroguing, and dissolving parliament; of refusing his assent to any bill which has passed both houses of parliament; and he is the supreme head and governor of the church of England.

Q. What are his duties?—*A.* By his coronation oath, he solemnly pledges himself to govern according to the laws and customs of parliament and the realm; to cause law and justice to be executed with mercy; and to maintain the laws of God and the true profession of the Gospel and the Protestant reformed religion, as established by law.

Q. Is the crown hereditary? *A.* No; for there are incapacities by law, which would set aside the heir apparent; such as his being a Roman Catholic. Besides, English history has proved that it is elective; but generally, no incapacitation arising, the right of succession by primogeniture prevails.

Q. Who are the great officers of the crown?—*A.* First, the lord high steward; secondly, the lord high chancellor; thirdly, the lord high treasurer; fourthly, the lord president of the privy council; fifthly, the lord privy seal; sixthly, the lord high chamberlain; seventhly, the lord high constable; eighthly, the earl marshal of England; and ninthly, the lord high admiral.

Q. What is the office of the lord high steward?—*A.* To preside at coronations, and at the trials of peers and peeresses.

Q. What of the lord high chancellor?—*A.* He is the keeper of the great seal; judge of the court of chancery; speaker of the House of Lords; guardian of all infants, idiots, and lunatics; and appoints all justices of the peace

Q. What of the lord high treasurer?—*A.* This office, which is now vested in the five commissioners, entitled the lords of the treasury, is to take charge of the revenues of the crown, to grant leases of the crown lands, and to bestow all places belonging to the customs.

Q. What of the lord president of the privy council?—*A.* To propose and conduct all business in the council.

Q. What of the lord privy seal?—*A.* To affix the king's privy seal to all charters, grants, &c. before they pass the great seal.

Q. What of the lord high chamberlain?—*A.* To robe and attend the king at coronations; and to take charge of the palace and the House of Lords during the sitting of parliament.

Q. What of the lord high constable?—*A.* This office is executed only pro tempore at coronations or public solemnities.

Q. What of the earl marshal?—*A.* The superintendency of the herald's office, the determination of all questions of precedency, and the direction of public processions, &c.

Q. What of the lord high admiral?—*A.* This office, which is now vested in commissioners, styled the lords of the admiralty, relates to the regulation and direction of the naval power of the empire.

Q. Who are the privy council?—*A.* Certain noblemen and gentlemen appointed by the king to aid and advise him for the public good.

Q. Of what number does the privy council consist?—*A.* The number is indefinite.

Q. Who form the cabinet council?—*A.* The chief ministers of state.

Q. What officers are considered the ministers of state?—*A.* The lord chancellor; the lord president; the lord privy seal; the chancellor of the exchequer; the first lord of the treasury, or, as he is usually called, the prime minister; the three secretaries for foreign affairs, for the home, the war, and the colonial departments; the first lord of the admiralty; the treasurer of the navy; and the president of the board of control.

Q. What is the duty and power of the cabinet council?—*A.* Their duty is to consult and advise on the important and arduous discharge of the executive authority, and

arrange all business prior to its being submitted to the privy council; and their power is to inquire into all offences against the government, and to commit offenders to take their trial in the courts of law.

Q. What is the duty of the privy council?—*A.* The privy council supply whatever unforeseen deficiency may arise in the affairs of state, but at their own peril; for if the parliament does not, at its next meeting, grant an act of indemnity for whatever they may have done without licence of the law, the privy counsellors are individually liable to prosecutions for high treason and misdemeanours, or for treason itself.

Q. What is meant by the public revenue?—*A.* Those aids and taxes which are levied upon the subject to defray the expenses of supporting the government.

Q. By what terms is the revenue distinguished?—*A.* Ordinary and extraordinary.

Q. Of what do the ordinary revenues consist?—*A.* Of the lay revenues, lands, and tenements, of vacant bishoprics and archbishoprics; of the first fruits and tenths of all spiritual preferments; of royal fish, shipwrecks, treasure-trove, waifs, and estrays; of confiscations of property, deodands, and forfeitures of lands and goods for offences; and a variety of other sources; but all which are now almost reduced to nothing, or alienated.

Q. Of what do the extraordinary revenues consist?—*A.* Of the permanent taxes, comprising the customs, the excise, the land and malt taxes; the postage of letters; the house and window tax; the stamp, licence, office, and pension duties; the hackney-coach and chair duties; and the war taxes.

Q. What is meant by excise duties?—*A.* The assessments levied on all consumable commodities, such as soap, salt, tallow, &c.

Q. What by the custom duties?—*A.* The assessments levied on all commodities exported or imported, such as wines, brandies, rums, teas, coffee, tobacco, &c.

Q. What is meant by the sinking fund?—*A.* An inalienable fund, improved at compound interest, for the redemption or gradual extinction of the national debt.

Q. What is meant by the civil list?—*A.* The revenue appropriated for the use of the king; from which the sala-

ries of the officers of state, of the judges and officers engaged in the administration of justice, of the officers of the household, of ambassadors, secret service money, various bounties, pensions, and the maintenance of the queen and royal family, are paid.

Q. What sum is assigned by parliament for the maintenance of the civil list per annum?—*A.* About one million sterling.

Q. What is the entire income of the crown supposed to amount to?—*A.* Nearly two millions sterling.

Q. What are the peculiar privileges of the queen?—*A.* In law, she is considered as a single woman, and is not, like other women, subject to her husband. Besides many other privileges, she can sue and be sued alone, and has the sole power of managing her own affairs uncontrolled by her husband.

Q. Of what officers does the magistracy of England consist?—*A.* Principally of lord lieutenants, high sheriffs, under sheriffs, coroners, justices of the peace, high constables, constables, surveyors of highways, churchwardens, and overseers of the poor.

Q. What is the duty of lord lieutenants?—*A.* The military jurisdiction of their respective counties.

Q. What of sheriffs?—*A.* To execute the king's writs, respecting election of knights of the shire and other causes; to summon and impannel juries; to keep criminals in custody, bring them to trial, and execute the judgment awarded against them; and to collect all public fines, distresses, &c. into the exchequer.

Q. What of justices of the peace?—*A.* To examine and commit to prison for trial all who are suspected of having violated the laws, and to put in execution the laws relating to vagrancy, felony, breach of the peace, &c.

Q. What of coroners?—*A.* To inquire by a jury into the cause of sudden and violent deaths, of shipwrecks, treasure-trove, &c.

Q. What are the duties of constables?—*A.* To preserve the peace, apprehend offenders, and execute magistrates' warrants, &c. Constables are of two kinds, high constables and petty constables.

Q. What are the different orders of the clergy in the established church of England?—*A.* Archbishops, bishops,

deans, canons, prebendaries, archdeacons, rural deans, rectors, vicars, and curates.

Q. How many archbishops are there?—*A.* Two, the archbishops of Canterbury and York: the first is primate or metropolitan of all England, and has the privilege of crowning the kings of England; the other is primate or metropolitan of England, and has the privilege of crowning the queen-consort.

Q. How many bishops?—*A.* Twenty-four; of whom Durham, Winchester, and London, have the precedence.

Q. What peculiar privilege has the bishop of London?—*A.* He is patriarch of England, and, by virtue of letters patent, extends his jurisdiction over the Anglo-American colonies.

Q. How many deans are there?—*A.* Twenty-six.

Q. How many canons?—*A.* About one hundred.

Q. What is the number of prebendaries?—*A.* Five hundred and forty-four.

Q. What of archdeacons?—*A.* Sixty.

Q. What of the inferior clergy?—*A.* About twenty thousand; of whom nearly ten thousand are vicars and rectors.

Q. What is meant by the expression dean and chapter?—*A.* A council, consisting of the dean, the canons, prebendaries, and other ecclesiastical persons, to assist the bishop of the diocese with their advice in matters relating to the see.

Q. What are the number of parishes in England?—*A.* Nearly eleven thousand.

Q. What is the amount of the revenue of the church?—*A.* About three millions.

Q. What are the privileges of the clergy?—*A.* They cannot be compelled to serve on juries, or discharge the duties of any civil office. They are privileged, during their attendance on divine service, from arrests in civil suits. And, in cases of felony, they may have benefit of clergy for any number of clergyable offences; a privilege to which a layman is entitled only once.

Q. In what hands is the ecclesiastical government of England lodged?—*A.* In the convocation, which is a national synod of the representatives of the whole body of

the clergy, answering in some degree to a parliament, with which they are generally convoked. But since the reign of George I., though it has been always summoned with the parliament, it has never been permitted to sit for business, but, immediately on its meeting, has been dissolved.

Q. What was the business of the convocation?—*A.* To consider of the state of religion, and to call those to account who had advanced new opinions, contrary to the doctrines of the church. At present these duties are vested in the bishops, whose presence in the House of Lords is deemed sufficient to save the church from innovations.

Q. What is meant by the expression benefit of clergy?—*A.* An ancient privilege of the church, by which the clergy were exempted from being criminally proceeded against by lay judges, and, therefore, free from punishment for their crimes. In process of time this privilege was extended to all persons who were able, in days of ignorance, to read the verse *miserere mei Deus*, in the Psalms, that being deemed sufficient knowledge to qualify for the priesthood. But now, by express statute, no person, whether lay or ecclesiastical, is entitled to the clerical privilege, or the benefit of clergy, in any case whatever.

Q. What is the nature of the office of churchwardens?—*A.* They are the representatives of the parish and the guardians of the church. Their office is to attend to the repairs of the church, and, besides many other parochial duties, are joined with the overseers in the care and maintenance of the poor.

Q. What statutes particularly protect the established church of England?—*A.* The statutes 1 Elizabeth, chap. 1, and the 13 and 14 Charles II. chap. 4, called the acts of uniformity; and the statute 30 Charles II. chap. 1, called the declaration against popery.

Q. What statute particularly protects the exercise of religious worship of all persuasions?—*A.* The statute 1 William and Mary, chap. 18, called the toleration-act, and the 52 Geo. III. chap. 155.

Q. What statutes particularly protect the established government?—*A.* The oaths of allegiance and supremacy.

Q. What is the meaning of the word denizen?—*A.* One who is by birth an alien, but made an English subject by the king's letters patent.

Q. Have denizens all the same privileges as natural born subjects?—*A.* No: they cannot be members of the privy council, nor of parliament; neither can they hold any office, civil or military; nor receive any grant of lands from the crown.

Q. What is meant by naturalization?—*A.* The putting, by virtue of an act of parliament, of an alien just in the same state as a natural born subject, except, that like a denizen, he is incapable of being a member of the privy council or of parliament, and cannot hold any office, &c.

Q. What is meant by the expression, "liberty of the press?"—*A.* The right which every Briton enjoys to express his sentiments on political matters freely, either in writing or speaking, and to make his complaints known to his fellow-countrymen by means of an unshackled press.

Q. How many kinds of corporations does the law of England regard?—*A.* Two; aggregate and sole. An aggregate corporation consists of many persons, as the mayor and commonalty of a city or borough; a sole corporation consists of a single person, as a bishop, a rector, vicar, &c.

Q. How many kinds of courts of law are there in England?—*A.* Five: namely, the courts of common law, the courts of equity, the ecclesiastical courts, the admiralty and military courts, and the university courts.

Q. Are there no other courts?—*A.* Yes: the piepoudre courts held in fairs and markets; courts baron; hundred courts; county courts; forest courts; courts of conscience, &c.

Q. Mention the common law courts.—*A.* The court of common pleas, of king's bench, of exchequer, and the courts of assize and nisi prius.

Q. How are courts distinguished?—*A.* Into *courts of record*, and *courts not of record.*

Q. What is meant by the term a court of record?—*A.* Those courts where the acts and judicial proceedings are enrolled on parchment, for a perpetual memorial and testimony.

Q. What by a court not of record?—*A.* Such courts where the proceedings are not enrolled or recorded; as is the case in courts baron of manors, and other inferior jurisdictions.

Q. What is the distinguishing power between courts of record and courts not of record?—*A.* That none other but a court of record has power to fine and imprison.

Q. What is the jurisdiction of the common pleas court?—*A.* Over all matters of law arising in civil causes between subject and subject. In this court none but sergeants at law can make motions, and sign pleas: it is only in trials and the examination of witnesses that other counsel can be concerned. The chief judge of this court is styled the lord chief justice of the common pleas.

Q. What of the court of king's bench?—*A.* The authority of this court, which is the supreme court of common law in the kingdom, is not confined to civil, but it takes cognizance also of criminal causes, and its jurisdiction extends all over England. It is a court of appeal from all other courts, except the chancery and equity side of the exchequer; superintends all civil corporations throughout the kingdom; and commands magistrates and others to do their duty in every case where there is no other specific remedy. The chief judge of this court is styled lord chief justice of England.

Q. What is the jurisdiction of the court of exchequer?—*A.* This court, which is a court both of law and equity, takes cognizance not only of matters relating to the revenue, but, also by a fiction of law, by supposing the plaintiff the king's debtor, decides in actions between one private person and another. The chief judge of this court is styled the lord chief baron.

Q. What is meant by the courts of assize and nisi prius?—*A.* Courts composed of two judges, who are sent twice every year by the king's special commission all round the kingdom, to try, by a jury of the respective counties, the truth of such matters as are then under dispute in the courts of Westminster-Hall.

Q. Which are the courts of equity?—*A.* The high court of chancery, and the court of exchequer.

Q. What is the jurisdiction of the court of chancery?—*A.* The jurisdiction of this court is divided into two de-

partments,—the ordinary or legal court, which has jurisdiction in personal actions, matters of patent, charities, bankruptcies, &c.; and the extraordinary or equitable court, which proceeds by the rules of equity and conscience.

Q. What jurisdiction have the equity courts?—*A.* To expound the true meaning of law; and, where the laws are too general, too special, or otherwise defective, to interpret and moderate them according to the rules of reason and justice.

Q. Which are the ecclesiastical courts?—*A.* The convocation, which is a national representative synod of the clergy, convoked at the same time with every parliament, and originally intended to consider of and regulate the state of the church, but in consequence of some occurrences which took place during the reigns of queen Anne and George I., regularly dissolved, without being allowed to proceed to business; the court of arches, which hears and determines appeals; the consistory court, for the trial of ecclesiastical causes within each particular diocese; the court of peculiars, the prerogative court, the court of delegates, and the archdeacon's court. These courts decide according to the principles of the civil and canon law.

Q. Which are the maritime courts?—*A.* The admiralty court, and its courts of appeal; which are regulated chiefly by the law of nations.

Q. How are the twelve judges of England distributed?—*A.* Four in each court, viz. in the court of king's bench, the lord chief justice and three puisne judges; in the common pleas, the lord chief justice and three other judges; and in the exchequer, the lord chief baron and three other barons.

Q. What is meant by the term puisne judge?—*A.* An inferior judge.

Q. Who are the judges in the high court of chancery?—*A.* The lord chancellor, the vice chancellor, and the master of the rolls.

Q. What number of jurors are summoned on a special jury?—*A.* Forty-eight; of whom each side has a right to challenge or object to twelve.

Q. What number on a common jury?—*A.* Not less

han forty-eight, nor more than seventy-two; of whom the first drawn twelve constitute a common jury.

Q. What number constitutes a grand jury?—*A.* Twenty-four; twelve of whom must agree as to the criminality of the charge before an indictment can be found against a prisoner.

Q. What number of persons impanneled on a jury has a prisoner a right to challenge in cases of treason and felony?—*A.* In case of treason, thirty-five, and in felony, twenty, without the assignment of any reason; he may also, on showing sufficient cause, disqualify others.

Q. What is meant by a misdemeanour?—*A.* Any indictable offence which is less than felony; such as perjury, libel, conspiracy.

Q. What is homicide?—*A.* The commission of murder, without a felonious or malicious intent.

Q. What felo-de-se?—*A.* Self-murder.

Q. What manslaughter?—*A.* The unlawful killing of another, without malice either expressed or implied.

Q. What is petit treason?—*A.* The murder of a master by his servant, of a husband by his wife, or of a bishop by a clergyman.

Q. What is meant by corruption of blood?—*A.* The incapacity of a person attainted of treason to inherit lands, &c. from his ancestor; or to retain those he possesses, or to transmit them by descent to any heir.

Q. What is the meaning of the term deodand?—*A.* The forfeiture to the crown of whatever may occasion a person's death.

Q. What is meant by misprision of treason?—*A.* Neglecting to discover any treason of which the party has any knowledge.

Q. What by misprision of felony?—*A.* Suffering a person committed on suspicion of felony or treason to escape before indictment.

Q. What by a mandamus?—*A.* A writ of the court of king's bench commanding the admission of a person to an office from which he is excluded.

Q. What by a mittimus?—*A.* A warrant granted by a justice of the peace to commit to prison.

Q. What is the meaning of the term custos rotulorum?—*A.* The keeper of the records of the county.

OF RELIGION,

PARTICULARLY THE CHRISTIAN RELIGION.

PROOFS OF THE EXISTENCE OF THE DEITY.

Hail, wondrous Being! who in pow'r supreme
Exists from everlasting! whose great name,
Deep in the human heart, and ev'ry atom
The air, the earth, or azure main contains,
In undecipher'd characters is wrote—
INCOMPREHENSIBLE!

SMART.

FATHER *of light and life! thou* GOOD SUPREME!
Oh teach me what is good! teach me THYSELF!
Save me from folly, vanity, and vice,
From every low pursuit! and feed my soul
With knowledge, conscious peace, and virtue pure!
Sacred, substantial, never fading bliss!

THOMSON'S SEASONS.

Q. WHAT is meant by religion?—*A.* Religion, which is a sentiment deeply rooted in the human heart, is that general habit of reverence towards the Divine Being, whereby we are sensible of our obligations to him, and are inclined to worship and serve him, after that manner which we conceive the most agreeable to him.

Q. What is the design of religion?—*A.* To improve the mind, purify the heart, mitigate by heavenly consolation the calamities of life, and inspire us with the hopes of a blessed immortality.

Q. How is religion divided?—*A.* Into natural and revealed.

Q. What is meant by natural religion?—*A.* That obligation to a religious and moral life which men know by the light of nature and the common principles of right reason, improved by consideration and experience, without the assistance of divine revelation.

Q. What is meant by revealed religion?—*A.* Those

duties and obligations which the Deity has taught us to perform by the manifestation of his will, on the consideration of temporal or future rewards and punishments.

Q. Which are the principal religions in the world?—*A.* 1st, Christianity; 2dly, Judaism; 3dly, Mahometanism; and 4thly, Paganism. Such as profess neither of these four great systems are either Atheists, Deists, or Theophilanthropists.

Q. In what part of the world do the four great systems of religion predominate?—*A.* The Christian religion is professed throughout all Europe, (except in Turkey and the remotest regions of the north;) the greater part of North America; prevails over a considerable extent of South America and the East Indies; and has establishments in Africa and Australasia. There is scarcely any part of the earth in which the followers of Judaism are not to be found. Mahometanism is professed by the Turks, the Persians, by several nations in Africa, a considerable part of Tartary, and the Mogul Empire, in the East Indies. Almost the whole of Asia, the back settlements of North and South America, the greater part of Africa, and the extremest northern regions of Europe, are subject to Paganism or Polytheism.

Q. What was the progress of the Christian religion?—*A.* In the first century, the Christian church suffered severely under the Roman emperors Nero and Domitian, from an apprehension that its doctrines were dangerous to the state.

In the second century, persecution still attended the Christian church, and it moreover suffered much from an absurd endeavour of the more learned of its votaries to reconcile its doctrines to the tenets of the Pagan philosophers.

In this century the Greek churches began to form general rules of government and discipline; and it was then that the books of the New Testament were first collected into a volume by the elder fathers of the church, and received as a canon of faith.

In the third century, the progress of Christianity was less impeded by the arm of the civil power than by the pens of the Pagan philosophers.

In the fourth century, the Christian church was alter-

nately persecuted and cherished; but in the latter part of that age Paganism received its final extinction. During the reign of the Roman emperor Theodosius, the cause of Christianity and of Paganism was solemnly debated in the Roman senate, between Ambrose, archbishop of Milan, the champion of the former, and Symmachus, the defender of the latter. The cause of Christianity was triumphant; and the senate issued its decree for the abolition of Paganism, whose downfal in the capital was soon followed by its extinction in the provinces.

Q. When was the light of the gospel received into the different parts of Europe?—*A.* It was received into Britain, Ireland, Germany, and part of France, during the second century. Russia embraced the Christian religion in the eighth century. Sweden, after its conversion in the ninth, relapsed into idolatry; as did Hungary and Bohemia. To the diffusion of Christianity in the north of Europe, the conquests of Charlemagne principally contributed.

Q. What are the principles of the Christian religion?—*A.* The Christian religion inculcates devotion to God, faith in him through the atonement made by Jesus Christ for the guilt of mankind, and peace and good-will towards man.

Q. What are the duties of the Christian religion?—*A.* It requires that we should pardon the offences of others as we expect pardon for ours; and that we should no farther resist evil than is necessary for the preservation of personal rights and social happiness. It dictates every relative and social duty between parents and children, masters and servants, governors and subjects, and between man and his fellow-creatures. And lastly, it enjoins the most extensive exertion of charity for the relief and the improvement of the human species.

Q. Who was the founder of the Christian religion?—*A.* Jesus Christ.

Q. Who was Jesus Christ?—*A.* The eternal son of God, born of the Virgin Mary.

Q. When did Jesus Christ appear on the earth?—*A.* In the 4000th year after the creation of the world.

Q. For what purpose did Jesus Christ appear upon earth?—*A.* To save a sinful world; for mankind had

become so wicked and corrupt, and had so far forgotten those duties and obligations which the light of nature had implanted in the human heart, that they had sunk into the grossest superstition and idolatry, and the most abominable corruption and depravity of manners.

Q. How is it proved that Jesus Christ was the Messiah?—*A.* From the corroboration of the prophecies respecting his appearance and mission; from the miracles he performed; and from the testimony of the apostles and several profane writers of antiquity.

Q. Mention some of the prophecies of the sacred writers which point out that Jesus Christ was the Messiah.—*A.* He was to be born of a virgin of the tribe of Judah, of the house of David, in the town of Bethlehem;—he was to turn the hearts of the disobedient to the wisdom of the just;—though dignified with the character of a prince, he was to be a man of sorrows, and acquainted with grief;—though described to be without sin, he was to be numbered with transgressors;—his hands and his feet were to be pierced;—he was to be made an offering for sin;—he was never to see corruption;—and when the Messiah came the sceptre was to depart from Judah.

Obs. The various texts which prove the *coming*, *incarnation*, *birth*, *life*, *death*, and *resurrection* of the Saviour of mankind are as follows:—At what particular period he should appear, Gen. xlix. 18. Dan. ix. 26. That he should be born of a virgin, Isa. ix. 6. That the place of his *birth* should be the town of Bethlehem, Mic. v. 2. That at his birth all the *infants* round *Bethlehem* should be slain for his sake, Jer. xxxi. 15. That the kings of the east should come and adore him, and offer *gold* and other *gifts* unto him, Psa. lxxi. 10. That he should be presented by his mother in the temple of Jerusalem, Mal. iii. 1. That he should flee into Egypt, and be again recalled, Isa. xix. 1. That John the Baptist should go before him, and cry in the wilderness, Isa. xl. 3. Mal. iii. 1. After this, that he should begin his preaching with all humility, quietness, and clemency of spirit, Isa. xlii. 2. That he should work strange miracles, and heal all manner of diseases, Isa. xxix. 14. &c. That he should be betrayed by his own disciples, Psa. xl. 10. &c. That he should be sold for thirty pieces of silver, Zach. xi. 12. That with these thirty pieces should be bought the potter's field, Jer. That he should ride into Jerusalem upon an ass, before his passion, Zach. ix. 9. That the Jews should beat and buffet his face, and cover the same with spittle. That they should whip and tear his flesh, before they put him to death, Isa. liii. Psa. xxxvii. 18. That they should put him to death among thieves, Isa. liii. 12. That they should put him to death for the sins of the world, Isa. liii. That they should give him vinegar to drink, divide his apparel, and cast lots for his upper garment, Psa. lxviii. 22. That he should

rise again from the dead the third day, Psa. xv. 10. That he should ascend into heaven, and sit at the right hand of his Father for ever, Psa. lxvii. 19. cix. 1.

Q. Mention the most distinguished profane writers of antiquity who bear testimony of the life and death of Jesus Christ.—*A.* Suetonius, Tacitus, and Pliny, who were contemporary with the Saviour of the world. The Jewish historian Josephus also relates the ministry and death of Christ as an authentic fact; and several observations are to be met with in the writings of many of the heathen philosophers, historians, and poets, which evidently point out the expectation of some great instructor.

Q. What remarkable heathen testimony confirms the truth of the resurrection of Jesus Christ?—*A.* That mentioned by Justin Martyr and Tertullian, who in their apologies affirm, that Pontius Pilate sent the Roman emperor Tiberius a relation of the death and resurrection of Jesus Christ, which was recorded at Rome, as usual among other provincial matters. It is said that this intelligence made so great an impression on the emperor, that he referred the matter to the senate, whether Jesus Christ should not be enrolled in the number of the Roman gods.

Q. What period of time was Jesus Christ engaged in his mission upon earth?—*A.* Twenty-one years; namely, from his twelfth year, when he disputed with the doctors in the temple, to the time of his ascension to heaven.

Q. Why is Jesus Christ called our Lord?—*A.* Because he is coequal in dignity and power with the Deity, and is the supreme head of the Christian church.

Q. Why is he called our Saviour?—*A.* Because by his death and sufferings he saved a sinful world from that destruction which their wickedness had inevitably brought upon them.

Q. What does the word Jesus signify?—*A.* A Saviour.

Q. What the word Messiah or Christ?—*A.* Anointed.

Q. What is meant by Christ's incarnation?—*A.* His participation in human nature.

Q. What is meant by Christ's divinity?—*A.* His participation in the divinity of the Deity.

Q. What is meant by his nativity?—*A.* His birth by means of the Virgin Mary.

Q. What by his passion?—*A.* His death and sufferings.

Q. What is meant by Christ's being a propitiation or atonement for mankind?—*A.* His dying in behalf of a sinful world, and thereby pacifying the wrath of God.

Q. What is meant by the expression "the justification, which Christ procured mankind by his death?"—*A.* God's acceptation of a sinful world as righteous, on account of the satisfaction made by Christ for the sins of mankind.

Q. What by the expression "the redemption of the world by Christ's death?"—*A.* The ransoming or delivery of mankind from the punishment due to their sins by the death and sufferings of their Saviour Jesus Christ.

Q. What is meant by "the purification of the blessed Virgin?"—*A.* It is in some measure answerable to the churching of women in the Christian church: for the Virgin Mary made her first appearance in the temple, at the end of forty days after the birth of our Saviour, and offered the usual offerings of the poor, viz. two turtle-doves, or a pair of young pigeons.

Q. What is meant by "the annunciation of the blessed Virgin?"—*A.* The declaration which the angel Gabriel made to her, that she should be the mother of the Saviour.

Q. What is meant by the word "advent?"—*A.* It signifies *coming*, and is a festival observed in the Christian church, to preserve the remembrance of Jesus Christ's appearance on earth.

Q. Why is Christmas-Day observed as a festival?—*A.* To commemorate the birth of Jesus Christ.

Q. What does the word "epiphany" signify?—*A.* The manifestation or appearance of Jesus Christ to the Gentiles.

Q. Why is Good Friday observed?—*A.* To commemorate the death and sufferings of Christ.

Q. Why is this day called Good Friday?—*A.* Because of those good things and great blessings which we have obtained by the sacrifice which our Saviour made for us.

Q. Why is Easter Sunday observed as a festival?—*A.* To commemorate the resurrection of Christ from the grave.

Q. Why is the Sunday which precedes Easter called Palm-Sunday?—*A.* In commemoration of our Saviour's going in great triumph from Bethany to Jerusalem, when the multitudes that attended him cut down branches of palm trees, and strewed them in the way as he passed by, crying out "Hosannah to the son of David."

Q. Why is the Thursday before Easter called Maundy Thursday?—*A.* Either from the mandate or command which our Saviour gave his apostles to commemorate his supper, which, after the celebration of the Passover, he instituted on this day; or else from the new commandment which he gave to his disciples, to love one another, and to be ready to stoop to the lowest offices of kindness and charity for the good of their fellow Christians.

Q. What is meant by Septuagesima Sunday?—*A.* The third Sunday before Lent: it derives its name from the Latin word septuaginta, seventy; that is, seventy days before Easter.

Q. What by Sexagesima?—*A.* The second Sunday before Lent: it is derived from the Latin word sexaginta, sixty.

Q. What by Quinquagesima?—*A.* The first Sunday before Lent. It is also called Shrove Sunday. It is so called from the Latin word quinquaginta, fifty.

Q. What by Shrovetide?—*A.* The time of confession.

Q. When is Shrovetide?—*A.* The Tuesday before Lent.

Q. What is meant by Ascension Day?—*A.* The day on which we commemorate the ascension of Jesus Christ into Heaven.

Q. Why is Whitsunday observed as a festival in the Christian church?—*A.* To commemorate the descent of the Holy Ghost from Heaven upon the twelve apostles.

Q. Why was this day called Whitsunday?—*A.* Because in the ancient Christian church it was the season for baptizing, and those who were baptized used to be clothed in white garments.

Q. Why is Whitsunday called Pentecost?—*A.* From the Greek word pentecostos (fiftieth), because it is observed on the fiftieth day after Easter.

Q. Why is Trinity Sunday so called?—*A.* Because this day is set apart to glorify the doctrine of the Trinity.

Q. Why is Ash Wednesday so called?—*A.* Because on this day, sinners, according to the practice of the ancient church, used to lament their sins by lying in sackcloth and ashes.

Q. What is meant by Lent?—*A.* A fast of forty days before Easter.

Q. Why is Lent observed?—*A.* To commemorate the

temptation of Jesus Christ by the devil, in the wilderness, for forty days.

Q. What is meant by Ember Days?—*A.* Certain days set apart by the church to implore, by prayer and fasting, the blessing of God upon all those who are to be ordained to the office of ministers of the gospel. They are styled Ember Days, because the ancient Christians used on their solemn fasts to sprinkle ashes upon their heads, or to sit upon embers or ashes.

Q. What are the Rogation Days?—*A.* They are the Monday, Tuesday, and Wednesday before the festival of our Lord's Ascension; and are called Rogation Days, or praying days, from the extraordinary prayers and supplications which were offered at this season by devout Christians, to entreat Almighty God to turn away from our nation those judgments which our sins had deserved; that he would be pleased to grant the fruits with which the earth is at this time covered; and not pour upon us those scourges of his wrath—war, pestilence, and famine.

Q. What are vigils?—*A.* The word signifies watchings; it being a religious custom in ancient times to spend great part of the night before certain festivals in watching and prayer, and meditating on the examples of the saints.

Q. Has Sunday always been observed as the Sabbath?—*A.* No; among the Christians its observation as the Sabbath-day did not take place till 321 years after the commencement of the Christian era.

Q. When were the followers of Christianity first called Christians?—*A.* In the fortieth year after the commencement of the Christian era.

Q. What are the names of those who are called the elder fathers of the Christian church?—*A.* St. Chrysostom, St. Clemens of Alexandria, Origen, St. Cyprian, Lactantius, St. Athanasius, St. Bazil, Gregory Nazianzen, St. Jerome, and St. Cyril.

Q. Mention those who are considered as the founders of the Protestant religion.—*A.* Wickliffe in England, styled "the morning star of the reformation," and who was the first man in Europe who called in question the doctrines of the Romish See; Martin Luther in Germany; Zuinglius in Switzerland; Calvin in France; and Knox in Scotland.

Q. Why are the Protestants so called?—*A.* From their protesting against the doctrines of the church of Rome, and its assumption of supremacy. For when, during the contest of Martin Luther with the see of Rome, the diet of Spires proposed articles of accommodation between the Lutherans and the Catholics, fourteen cities of Germany and several of the electors protested formally against those articles; presenting to the assembly at Augsburgh a confession of their faith, which is the standard of the Protestant doctrine.

Q. How is the being of a God, or the existence of a Deity, proved?—*A.* From the light of nature and reason, from the creation and preservation of the world, and the universal belief of mankind.

Q What are the attributes of the Deity?—*A.* Omniscience, omnipresence, omnipotence, eternity, and infinity.

Q. What is meant by the attributes of the Deity?—*A.* His excellencies or perfections; such as his power, wisdom, goodness, and the like.

Q. What is meant by God's omniscience?—*A.* God's perfect knowledge of all things.

Q. What by his omnipresence?—*A.* His presence in all places at the same time.

Q. What by his omnipotence?—*A.* His almighty power.

Q. What is meant by the eternity of the Deity?—*A.* That he is everlasting, that is, without beginning or end.

Q. What is meant by his infinity?—*A.* That he is without bounds or limits.

Q. Why is God called the Father Almighty?—*A.* He is called the *Almighty* from his power to do all things; and he is called the *Father* as being the creator of all mankind and of the world, which he still continues to preserve.

Speak, ye who best can tell, ye sons of light,
Angels! for ye behold him, and with songs
And choral symphonies, day without night
Circle his throne rejoicing; ye in Heaven,
On earth join all ye creatures to extol
Him first, Him last, Him midst, and without end. MILTON.

Q. What is meant by the Catechism?—*A.* A summary of the principles and doctrines of the Christian religion.

Q. What is the design of the Catechism, that is, what are its contents?—*A.* It begins with a recital of our baptismal vow; it then lays down the great Christian principle of faith, as also the rules of practice for the direction of our lives and conduct; and concludes with an explanation of baptism and the Lord's Supper.

Q. What is meant by faith?—*A.* The act of believing on rational evidence. Christian faith therefore signifies a full and firm belief in the principles and doctrines of the Christian religion.

Q. Did the Catechism of the Church of England always consist of the same parts?—*A.* No: at first it consisted only of the Creed, The Ten Commandments, and the Lord's Prayer.

Q. When was it first published in its present form?—*A.* About the middle of the sixteenth century. The person chiefly engaged in its composition was Bishop Overal, dean of St. Paul's.

Q. What is the use of sponsors, or godfathers and godmothers, in the Christian church?—*A.* They are intended as spiritual guardians for the pious education of orphans and deserted children.

Q. What is the use of baptismal names in the Christian church?—*A.* They are intended to point out the heavenly adoption of the person baptized into the church of Christ.

Q. What is the design of the Apostle's Creed?—*A.* In it we declare our belief in the Father, Son, and Holy Ghost; in the Scripture account of the life and sufferings of Christ; in the redemption of the world from sin; in the resurrection of the dead; and in the eternity of a future state.

Q. What are the ten commandments?—*A.* A system of Christian duties towards God and man.

AN EPITOME OF SACRED HISTORY.*

Q. What is meant by the term "Holy Scriptures?"—*A.* A history of the transactions of God with man, and a revelation of his will for the direction of our faith, and the conduct of our lives.

Q. How are the Holy Scriptures divided?—*A.* Into two books, which are commonly called the Old Testament and the New Testament: when spoken of together they are called the Bible, that is, by way of eminence, The Book.

Q. From what period do the Scriptures begin their relation of things?—*A.* The Bible, which is the most ancient history in the world, begins with the creation of the world, of the heavens and the earth, of the celestial luminaries, of man, and of all the inferior animals, the herbs of the field, the sea and its inhabitants.

Q. Mention the subject-matter of the Old Testament.—*A.* First, the creation of the world, the generation of our first parents, Adam and Eve, their primeval happiness and

* It may supply useful evidences in support of the Holy Scriptures, to consider some of the testimonies which are to be found in the traditions of the heathens concerning their authenticity. A few particulars may here be noticed: as that, the formation of the earth out of a chaos, is mentioned by the most ancient Phœnician, Egyptian, Indian, and Greek historians; the very names of Adam and Eve, by Sanchoniathon and others; the longevity of the Antediluvians by Berosus, Manetho, and others; and Maimonides takes notice that the history of Adam and Eve, of the tree, and of the serpent, were extant among the idolatrous Indians in his time. In the Greek and Latin historians we almost every where meet with the savage life of the giants, mentioned by Moses; and it is remarkable, that the memory of almost all nations ends in the history of the deluge. The flood of Noah, with the ark and the dove, were generally taken notice of by heathen historians. Two of every kind of animals entering into the ark are mentioned by Lucian, as a tradition of the ancient Grecians. The account of the flood of Deucalion was plainly transcribed from that of Noah. Under the history of the first and fabulous ship, Argo, appears to be concealed the real history of the ark. The building of Babel is noticed by Abydenus; the burning of Sodom by Diodorus Siculus and others; several particulars of the history of the family of Abraham, and the rest of the patriarchs, by Berosus and others. Many particulars also of the life of Moses appear in several ancient writers; divers actions of David and Solomon in the Phœnician annals; some of Elijah's are preserved by Menander, and confessed by the emperor Julian himself. To which may be added, that the word Jove is a plain depravation of the word Jehovah.

fall;—the universal wickedness and corruption which it produced among their descendants, and the singular and tremendous punishment of that wickedness by the deluge. Secondly, It then relates the peopling again of the world by the family of Noah;—the relapse of mankind into wickedness;—and the choice of one family and people, namely, the Israelites, who were separated from the rest of the world, to preserve the knowledge and worship of the Supreme Being, while all the rest of mankind were devoted to polytheism and idolatry. Thirdly, It then recounts the history of this chosen people;—the laws and regulations respecting their civil government;—their religious duties and ceremonies;—their bondage in the land of Egypt;—their return to the promised land of Canaan; and the rebuilding of the city of Jerusalem, and of the Temple of God.

Q. Into how many books is the Old Testament divided?—*A.* Into thirty-nine.

Q. Mention them.—*A.* Genesis, Exodus, Leviticus, Numbers, Deuteronomy, Joshua, Judges, Ruth, I. Samuel, II. Samuel, I. Kings, II. Kings, I. Chronicles, II. Chronicles, Ezra, Nehemiah, Esther, Job, Psalms, Proverbs, Ecclesiastes, the Song of Solomon, Isaiah, Jeremiah, Lamentations, Ezekiel, Daniel, Hosea, Joel, Amos, Obadiah, Jonah, Micah, Nahum, Habakkuk, Zephaniah, Haggai, Zechariah, Malachi.

Q. What is meant by the books called Apocrypha?—*A.* Books which, though they contain many useful instructions and examples of piety, are not to be regarded as of divine authority, as not being so received in the first ages of the Christian Church. By the reformed churches these books are not admitted into the canon of Scripture, to establish any doctrine, but are read only for example of life, and instruction of manners. Since the decree of the Council of Trent they have (except the prayer of Manasseh, the third and fourth book of Esdras, St. Barnabas's epistle, the book of Hermas, the addition at the end of Job, and the 151st Psalm) been received as canonical by the Roman catholics. They were originally written in Greek.—The word Apocrypha literally signifies *concealed*, kept private.

Q. Into how many books is the Apocrypha divided?—*A.* Into thirteen.

Q. Mention them.—*A.* I. Esdras, II. Esdras, Tobit, Judith, the rest of Esther, Wisdom, Ecclesiasticus, Baruch, the Song of the Three Children, the Story of Susannah, the Idol Bel and the Dragon, the Prayer of Manasses, I. Maccabees, II. Maccabees.

Q. Which book of the Old Testament ceases with the history of the Jews?—*A.* Nehemiah. The thread of the history is carried on in the first book of Maccabees till within 195 years of the Christian era. The second book of Maccabees does not bring the history so forward as the first.

Q. By whom was the Pentateuch, or the Books of Genesis, Exodus, Leviticus, Numbers, and Deuteronomy written?—*A.* By Moses.

Q. Which of the books of the Old Testament are called the prophetical writings?—*A.* Isaiah, Jeremiah, Ezekiel, Daniel, and the twelve following books, the authors of which are called the minor prophets.

Q. Why are the first five books of the Old Testament called the Pentateuch?—*A.* From the two Greek words *pente* and *teukos*, which signify the five books.

Q. Whence is the word Genesis derived?—*A.* Genesis is derived from the Greek word *genesis*, which signifies the production or generation; because this division of Sacred History begins with the production or generation of all things.

Q. What is the derivation of the word Exodus?—*A.* Exodus takes its derivation from the Greek word *exodus*, the going out or departure of the children of Israel from the land of Egypt; the history of which is delivered in this book.

Q. What of Leviticus?—*A.* Leviticus derives its name from its containing the laws and regulations relating to the priests, levites, and sacrifices.

Q. What of Numbers?—*A.* The book of Numbers is so called from its numbering the families of Israel, and enumerating those laws and ordinances, whether civil or ceremonial, which were given by God, but not mentioned before in the preceding books.

Q. What of Deuteronomy?—*A.* Deuteronomy is compounded of the Greek words *deuteros*, second, and *noma*, the law; that is, it contains those laws and ordinances

which the Deity gave to the Israelites, subsequent to those contained in the foregoing books.

Q. What period of time does the book of Genesis occupy in its narration?—*A.* Two thousand three hundred and sixty-nine years.

Q. What is the subject-matter of Genesis?—*A.* The formation of the world, of man, and of all living animals. It then recounts the universal deluge, and the history of the Israelites.

Q. Of what does the book of Exodus treat?—*A.* Of the deliverance of the Israelites from their bondage in Egypt. It also enumerates the ten commandments, and the code of the Jewish moral law.

Q. What do the books of Numbers, Leviticus, and Deuteronomy recount?—*A.* Chiefly the laws and regulations of the Israelites concerning their civil government, their moral conduct, their religious duties, and ceremonial observances.

Q. With what are the historical books of Joshua, Judges, Samuel, Kings, and Chronicles occupied?—*A.* With the history of the Jewish nation under their leaders, judges, and kings, for near one thousand years.

Q. Mention the contents of the books of Ezra, Nehemiah, Ruth, and Esther.—*A.* The two first contain the history of the Israelites for a considerable time after their return from the captivity of seventy years in Babylon; about which time the name of Jews seems first to have been applied to them. The two latter books are a kind of an appendage to the public records.

Q. What are the contents of the books of Job, the Psalms, the Proverbs of Solomon, the book of Ecclesiastes, and those of the prophets?—*A.* The book of Job relates the history and sufferings of the person whose name it bears; the Psalms contain the most exalted strains of piety and devotion; the Proverbs of Solomon and the book of Ecclesiastes consist of a variety of excellent maxims, and invaluable rules of life; and the prophetical writings present us with the justest and purest notions of piety and virtue; and they contain a series of predictions relating to Jesus Christ, in which all the remarkable circumstances of his birth, life, ministry, miracles, doctrines, sufferings, and death, are foretold.

Q. By whom were the books of the Old Testament written?—*A.* Chiefly by the persons whose names they bear.

Q. Of what books in the Old Testament have we no certain account who were the authors?—*A.* Of Joshua, Judges, the books of Chronicles, Samuel, Kings, the book of Job, and of Esther.

Q. What period of time does the Old Testament occupy in its narration?—*A.* About three thousand six hundred years.

Q. Why is the Old Testament called the Septuagint?—*A.* From the seventy-two elders, who were selected from the twelve tribes of Israel, by Ptolemy Philadelphus, king of Egypt, for the purpose of translating the Pentateuch or Law of Moses from the Hebrew into the Greek language; in order that it might be deposited in the library which his father, Ptolemy Soter, had founded in Alexandria.

Q. In what language was the Old Testament originally written?—*A.* In the Hebrew.

Q. Which are the various versions of the Hebrew Scriptures?—*A.* The Samaritan, the Chaldee, the Syriac, the Arabic, and the Vulgate.

Q. At what time was the translation of the Pentateuch made from the Hebrew into the Greek language?—*A.* Two hundred and seventy-seven years before the Christian era.

Q. To whom is ascribed the first collection and publication of the books of the Old Testament?—*A.* To Ezra.

Q. When does the history of the Old Testament end?—*A.* Four hundred and thirty years before the Christian era.

Q. When does the history of the Apocrypha end?—*A.* About two hundred years before the Christian era.

Q. Does the Apocrypha resume the history of the Bible where the Old Testament stops?—*A.* Yes.

Q. What time does the New Testament occupy in its narration?—*A.* The time our Saviour and his disciples were engaged in their ministry.

Q. What is the meaning of the word Testament?—*A* A covenant or agreement.

Q. What is the subject-matter of the New Testament?

—*A.* The miraculous birth, life, and resurrection of Jesus Christ; his ascension into heaven; the wonderful miracles which he wrought in proof of his divinity; and the various prophecies which plainly marked him out as the Messiah. This division of the sacred volume also contains a code of instructions for the regulation of the lives and practice of mankind, which breathes the purest, the most perfect, and the sublimest morality.

Q. Into how many books is the New Testament divided?—*A.* Into twenty-seven, namely, the four Gospels, the Acts of the Apostles, the Epistles, and the Book of Revelation.

Q. Mention them.—*A.* The Gospels of St. Matthew, St. Mark, St. Luke, and St. John; the Acts of the Apostles; the Epistle to the Romans, I. Corinthians, II. Corinthians, Galatians, Ephesians, Philippians, Colossians, I. Thessalonians, II. Thessalonians, I. Timothy, II. Timothy, Titus, Philemon, the Epistle to the Hebrews, the Epistle of James, I. Peter, II. Peter, I. John, II. John, III. John, Jude, and the Revelation.

Q. What is the subject-matter of the four Gospels?—*A.* The birth, divine mission, ministry, doctrines, and death of Christ for the remission of the sins of mankind; and his ascension to heaven as a mediator between God and man.

Q. What is the meaning of the word Gospel?—*A.* Glad tidings, or good news.

Q Of what do the Acts of the Apostles treat?—*A.* They contain the history of the ministry of the apostles after the ascension of Jesus Christ.

Q. Mention the contents of the Epistles.—*A.* The epistles were letters addressed by the apostles to different churches, and to particular individuals, to correct the irregularities and errors into which the churches to which they were directed had fallen. They contain besides many explanations and illustrations of the doctrines of Christianity, and several excellent precepts and admonitions concerning the relative duties of life.

Q. What are the contents of the book of Revelation?—*A.* It presents us with a prophetic history of the Christian religion in future times, and the various changes, vicissitudes, and revolutions it was to undergo in different ages and countries to the end of the world.

Q. Is not the book of Revelation known by some other name?—*A.* Yes; by that of the Apocalypse.

Q. What is meant by the word Apocalypse?—*A.* It signifies in general any revelation or vision; but is peculiarly applied to the Revelation of St. John, which God gave him when he was banished into the isle of Patmos.

Q. Who are the writers of the four Gospels?—*A.* St. Matthew, St. Mark, St. Luke, and St. John.

Q. By whom were the Acts of the Apostles written?—*A.* By St. Luke.

Q. Who wrote the Epistles?—*A.* The respective apostles whose names they bear.

Q. Who was the author of the Apocalypse or the book of Revelation?—*A.* St. John.

Q. Are all the books of the New Testament received as canonical?—*A.* Origen, Athanasius, Hilary, Cyril of Jerusalem, and many orthodox writers are divided in their opinions whether the Epistle to the Hebrews, the Epistle of St. James, the Second Epistle of St. Peter, the Second and Third Epistles of St. John, the Epistle of St. Jude, and the Revelation, are to be acknowledged as canonical or not.

Q. How long is it supposed that the original books of the New Testament were preserved?—*A.* Until the third century after the Christian era; for Tertullian, who died at the close of the second century, seems in his writings to appeal to them, as then existing.

Q. In what language was the New Testament first written?—*A.* In the Greek.

Q. When and by whom were the books of the New Testament first collected into a volume?—*A.* In the second century of the Christian era, by the elder fathers of the church; when they were received as a canon of faith.

Q. When was the Bible first translated into the English language?—*A.* In the year 1534, by Tindal and Coverdale.

Q. When was the Bible first appointed to be read in English in the churches of England?—*A.* In the year 1538.

Q. What were the names of the Apostles?—*A.* St. Peter, St. Paul, St. Andrew, St. James, St. John, St. Bartholomew, St. Philip, St. Thomas, St. Matthew, St. Matthias, St. James, St. Simon, and St. Jude.

Q. What occupations did they follow previous to their being called to the Christian ministry?—*A.* Chiefly mechanical.

Q. What does the word Apostle mean?—*A.* A person sent or commissioned to preach the Gospel. The term is particularly applied in the Testament to the twelve disciples of Christ, by way of eminence.

Q. What are the respective badges or emblematic attributes of the apostles?—*A.* St. Peter is represented with the keys; St. Paul, with a sword; St. Andrew with a saltier; St. James the younger, with a fuller's pole; St. John, with a cup, and winged serpent flying from it; St. Bartholomew, with a knife; St. Philip, with a long staff, the upper end of which is formed into a cross; St. Thomas, with a lance; St. Matthew, with a hatchet; St. Matthias, with a battle-axe; St. James the elder, with a pilgrim's staff and a gourd-bottle; St. Simon, with a saw; and St. Jude, with a club.

Q. Who were the evangelists?—*A.* St. Matthew, St. Mark, St. Luke, and St. John.

Q. What is meant by an evangelist?—*A.* It signifies a publisher of good tidings; which name was first given to all those who preached the Gospel; but afterwards it came to be confined to those four who wrote the history of our Saviour's life and ministry, namely, St. Matthew, St. Mark St. Luke, and St. John.

MISCELLANIES.

1. *Tea, Coffee, Sugar, Sugar Candy, Barley Sugar, Cocoa and Chocolate.*

Q. From what countries is tea brought?—*A.* From China; but it is said that the teas of Japan are much finer and better cured than those of China.

Q. What is tea?—*A.* The leaf of an evergreen plant or shrub, which attains the height of from one to a hundred feet. The flower is like that of the wild rose, but smaller.

Obs. The two grand distinctions of teas are into those of black and green. These again are distinguished into a number of varieties, produced either by difference of soil, of culture, or of gathering. The black

tea consists of three varieties, the bohea, the congo, and the souchong or pekoe; of which the souchong is the finest. The distinguishing varieties of green tea are singlo, hyson, hyson skin, superior hyson skin, imperial, &c.

Q. Can you mention how this pleasant article of consumption is adulterated?—*A.* Among the venders of tea in England, the leaves of the birch, ash, or elder tree, as also sloe and white-thorn leaves, are manufactured to represent and adulterate it; and the author of "*Deadly Adulteration and Slow Poisoning; or, Disease and Death in the Pot and Bottle,*" says, that these fictitious leaves are coloured with Prussian blue, verdigris, Dutch pink, carbonate of copper, &c. by the Chinese, as well as by the English manufacturer: which ingredients are among the most potent poisons. And, as the same author informs us, tea leaves are often purchased from the London coffee-houses to be re-dried and coloured.

Q. What are the principal kinds of tea?—*A.* The green, the imperial, and the bohea. The imperial is so called because it is used by the emperor and the grandees of China.

Q. When was the use of tea first introduced into England?—*A.* In the reign of Charles II.

Q. What is coffee?—*A.* The berry of a tree.

Q. Whence is coffee brought?—*A.* From Arabia, Turkey, the Isles of Bourbon and Java, and the West Indies. The best is the Arabian, which is chiefly imported from Mocha, a town of Arabia Felix, seated near the Straits of Babelmandel.—The native soil of the coffee plant was Abyssinia.

Q. What is sugar?—*A.* The juice of the sugar-cane or reed. This plant, which grows to the height of five or six feet, with a diameter of half an inch, is a native of Asia and Africa. It was introduced first into the Island of Sicily about the middle of the twelfth century; thence it was carried to the Madeira and Canary Isles, and finally made its way to the West Indies.

Q. Whence is sugar imported into England?—*A.* From the East and West Indies. In Assam, a district of the Birman Empire, a species of sugar-cane grows, which excels the East and West Indian varieties in softness and sweetness, and is of three colours, red, black, and white.

Q. Is not sugar made from other vegetable substances? —*A.* Yes; from the sugar maple-tree, the beet-root, grapes, &c. Figs, dates, turnips, wheat, barley, beans, peas, currants, apples, honey, all contain sugar.

Q. From what is white or loaf sugar made?—*A.* From moist sugar, refined by the process of claying with bullock's-blood and lime-water. The bluish-white cast sometimes discernable, is given by indigo.

Q. How are sugar candy and barley sugar made?—*A.* Sugar candy is composed of the particles of saccharine matter, formed into large crystals by slowly evaporating the clarified syrup, which falls on numerous threads intersecting each other, and which are fastened to the sides of the vessels in various directions. Barley sugar, so called because the sugar was formerly boiled with barley, is made by boiling the saccharine matter till it is brittle, when it is cast upon a stone anointed with oil of sweet almonds, and formed into sticks.

Q. What is cocoa?—*A.* The berry of a tree, which grows in the Maldives, and many other Oriental isles, as also in the West Indies and South America.

Q. What is chocolate?—*A.* A paste made from the cocoa-nut, cinnamon, and other aromatic spices.

2. *Spices—as Pepper, Pimento, Ginger, Rice, Cinnamon, Cochineal, Nutmegs, Mace, Cloves, and Sago.*

Q. What is pepper?—*A.* The produce of a shrub. Black and white pepper are the fruit of the same plant; the former being prepared by grinding the whole fruit into powder, the latter by having the outer bark taken off.

Q. How is pepper adulterated?—*A.* Black pepper is adulterated by mixing burnt crust of bread with it; white with beaten rice.

Q. From what country is pepper brought?—*A.* From the islands of Java and Sumatra; and from the coasts of Malacca and Malabar in the East Indies.

Q. What is pimento?—*A.* The fruit of an aromatic tree growing in Jamaica, and other islands in the West Indies. It is a species of pepper.

Q. What is ginger?—*A.* An aromatic root, which grows in the East Indies, and in the Caribbee Islands in the West Indies. While green it is eaten by the Indians for salad.

Q. In what countries is rice produced?—*A.* In Egypt, China, the East Indies, the Carolinas, and in South America.

Q. Where is cinnamon produced?—*A.* In the islands of Borneo and Ceylon.

Q. What is cinnamon?—*A.* The bark of a tree.

Q. What is cochineal?—*A.* An insect, found in Mexico or New Spain, as also in South America and the East Indies.

Q. What are nutmegs?—*A.* The kernel of a large fruit like a peach.

Q. Where do nutmegs grow?—*A.* In the Molucca Isles, particularly Amboyna.

Q. What is mace?—*A.* The shell of the nutmeg.

Q. What are cloves?—*A.* The blossom-buds of the clove-tree, a native of the Molucca Isles, particularly of Amboyna.

Q. In what part of the world do cloves grow?—*A.* In the Molucca Isles.

Q. What is sago?—*A.* The kernel of the fruit of a species of palm, which grows in the Molucca and neighbouring Isles. This farinaceous substance is reduced into granules.

3. *Drugs—as Rhubarb, Opium, Castor Oil, &c. &c.*

Q. From what country is rhubarb brought?—*A.* From Turkey: it was originally a native plant of China and Siberia.

Q. What is opium?—*A.* A juice extracted from white poppy, and afterwards inspissated.

Q. From what countries is opium brought?—*A.* From Natolia in Asiatic Turkey, Egypt, and the East Indies.

Q. What is castor oil?—*A.* An oil extracted from a nut, the produce of a shrub called Palma Christi, and which grows in the island of Jamaica, and in many parts of America.

Q. What is bark?—*A.* The covering of a tree which grows chiefly in Peru; from which it is called Peruvian bark.

Q. What is ipecacuanha?—*A.* The root of a shrub, growing in Peru and the Brazils.

Q. What is camphor?—*A.* A solid concrete juice, extracted by sublimation from the wood of the camphor tree, a species of laurel growing in China, the Indian Isles, and the eastern parts of Asia.

Q. What is manna?—*A.* A gum flowing from the ash

tree, which flourishes chiefly in Calabria, the southern extremity of Italy, and also in the southern parts of the island of Sicily. That of the best quality is rather whitish, or, at most, with only a faint cast of yellow.

Q. What is tartar?—*A.* An acrid concrete salt, which arises from wines, after complete fermentation. That brought from Germany is the most esteemed.

Q. What is cream of tartar?—*A* A new crystallization of tartar, after it has been powdered and dissolved in boiling water.

Q. What is licorice root?—*A.* The root of a plant. In England, it is principally cultivated about Pontefract, in Yorkshire, and Godalming, in Surrey. Its principal use is for brewing and medicine.

Q. What is musk?—*A.* A substance contained in the pouch of an animal, called moschus.

Q. From what countries is musk brought?—*A.* From Tonquin, a kingdom of exterior India; China; and Bantam, in the island of Java; but that in most esteem is the produce of Thibet.

Q. What is myrrh?—*A.* A kind of gum resin, oozing from a tree which grows in Arabia and Egypt.

Q. What are galls?—*A.* Morbid excrescences growing on different plants, especially on the oak. The best are brought from Aleppo, in the Levant.

Q. What is alum?—*A.* A fossil salt and mineral. The astringent qualities of alum are so great, that wood soaked in a solution of it, is fire-proof.

Q. What is saltpetre or nitre?—*A.* A salt extracted principally from earths.

Q. What is sal-ammoniac?—*A.* A salt obtained from the decomposition of wool, horn, bones, flesh, &c.

Q. What is hartshorn?—*A.* Water impregnated with sal-ammoniac.

Q. What is aqua fortis?—*A.* A combination of oxygen and nitrogen, when absorbed by water.

Q. What is vitriol?—*A.* A fossil salt; used chiefly in dyeing linen, cotton, wool, and silk, or in the manufacture of ink, or the preparation of paint.

Q. What is honey?—*A.* A sweet kind of vegetable juice, collected from the honey-dew, which is found upon flowers of various plants, by the bee, and deposited by it

in its intestinal sac, called the honey-bag, until it discharges the contents into cells, which, when filled and surrounded with wax, are called the honey-comb.—The best honey is of a thick consistence, an agreeable odour, and a whitish colour, inclining to yellow.

Q. What is honey-dew?—*A.* It is a saccharine substance, produced by perspiration, during a sultry heat, from the leaves and flowers of particular trees. It is also the excrement of a small insect, called the vine-fretter.

4. *Mahogany, Coal, Sponge, Ivory, &c.*

Q. From what countries is mahogany brought?—*A.* From the Spanish Main, in South America, particularly the Bay of Honduras; from the West India islands of Cuba, Jamaica, and Hispaniola; and from the Bahamas. Mahogany scarcely ever rots, and is never eaten by worms.

Q. Where does ebony grow?—*A.* Chiefly in the islands of Madagascar and the Mauritius, or the Isle of France.

Q. What is ivory?—*A.* The teeth of the elephant. The ivory brought from the island of Ceylon is the best, because it never turns yellow.

Q. What are the properties of Brazil or iron wood?—*A.* Its excessive hardness and weight, being so heavy as to sink in water.

Q. Why is lignum vitæ, or the tree of life, so called?—*A.* From the length of its duration.

Q. Where does cork grow?—*A.* In the southern parts of Europe. Spain and Portugal produce the best.

Q. What is cork?—The bark of the cork tree.

Q. What is coal?—*A.* A mineral found in beds or strata. It chiefly occurs in the northern hemisphere, particularly in countries lying in the same latitude as England. No fewer than seventy different kinds are brought to the London markets; of which the Walls-end, so called from a pit near Newcastle, bear the highest price.

Q. What is charcoal?—*A.* Wood half burned or charred in a crucible.

Q. What is coke?—*A.* Coal deprived of its bituminous and smoky quality by burning.

Q. What is sponge?—*A.* A marine substance, supposed to be the habitation of a species of worm or polype.

Q. Where is sponge found?—*A.* In the Mediterranean

and Indian seas, adhering to the rocks. The coarsest kinds are brought from the coasts of Barbary.

5. *Hemp, Flax, Linen, Cotton, Silk, Muslin, &c.*

Q. What is hemp?—*A.* A plant resembling the common nettle, and similar to flax in culture and use.

Q. What is tow?—*A.* The refuse of hemp.

Q. What is mohair?—*A.* A thread or stuff made from the hair of the Angora goat.

Q. From what is linen made?—*A.* From the fibres of the flax plant.

Q. What is flax?—*A.* A plant formed of slender stalks, and covered with blue blossoms.

Q. From what is cotton made?—*A.* From the wool which encircles the fruit of the cotton tree, a native of the East and West Indies.

Q. In what countries is silk chiefly produced?—*A.* In China, Persia, the Lesser Asia, and the southern states of Europe.

Q. What is silk?—*A.* The produce of a species of moth, called the silkworm, which was originally a native of China, and not known in Europe till the sixth century of the Christian era.

Q. Whence is the best muslin brought?—*A.* From Bengal in the East Indies.

6. *Turpentine, Tar, Pitch, Glue, Paint, &c.*

Q. What is turpentine?—*A.* A gum exuding from tne pine, fir, and larch trees.

Q. What is tar?—*A.* An unctuous substance obtained by burning old pine and fir trees.

Q. How is pitch made?—*A.* It is produced from tar boiled down to dryness.

Q. How is glue made?—*A.* By dissolving the gelatinous parts of cuttings or scraps of coarse leather, or the skins, sinews, or feet of animals.

Q. How many kinds of glue are there?—*A.* Three; common glue, isinglass glue, and parchment glue.

What is size?—*A.* The shreds and parings of leather, parchment, or vellum, boiled in water.

Q. How is rosin made?—*A.* By distilling turpentine to dryness.

Q. Of what is paint made?—*A.* From oxides of metals, and coloured earths, mixed with oil.

Q. What is fuller's earth?—*A.* A kind of marl, found chiefly in Bedfordshire, Worcestershire, and Shropshire.

7. *Glass, Salt, Tobacco, Snuff, &c.*

Q. From what is glass made?—*A.* From sand, stones or flints, and alkaline salt.

Obs. Blue glass is formed by the oxide of cobalt; green by the oxide of iron or copper; violet by the oxide of manganese; red by a mixture of the oxides of copper and iron; purple by the oxide of gold; white by the oxides of arsenic and zinc; yellow by the oxide of silver and combustibles; and black from a mixture of oxides of manganese, cobalt, and iron.

Q. From what is alkaline salt procured?—*A.* It is procured from potash, burnt to ashes, and evaporated in boiling water.

Q. How many kinds of glass are there?—*A.* Five; crown glass, Newcastle glass, bottle or green glass, flint glass, and plate glass.

Q. Of what are bricks and tiles made?—*A.* Of clay, sand, and ashes.

Q. How are slates procured?—*A.* They are dug out of mines.

Q. What is mortar?—*A.* A cement made of lime, hair, and water.

Q. What is salt?—*A.* A native crystallizable substance. It is denominated rock-salt, or lake-salt, according as it is found either in mountains or mines, or on the surface of salt lakes, or when made from sea water.

Q. How is salt procured?—*A.* It is either dug from rocks of salt in the earth, or procured from evaporating the water of salt springs, or of sea-water itself. In Poland, Hungary, Catalonia, and Spain, it is obtained by the first method; in England, France, and Portugal, by the second.

Q. Whence does tobacco come?—*A.* Chiefly from Virginia, in North America.

Q. What is tobacco?—*A.* The leaves of a plant.

Q. Who first introduced tobacco into England?—*A.* Captain Lane, on his return with some persons who had been sent by Sir Walter Raleigh to make a settlement in Virginia.

Q. Of what is snuff made?—*A.* Chiefly of the leaves of the tobacco plant.

8. *Bread, Butter, Cheese, &c.*

Q. Of what is bread made?—*A.* Of the flour of some grain, such as wheat, rye, barley, rice, potatoes, or a mixture of these, together with salt, yeast, and water. The London bakers generally put two ounces of alum into each quartern loaf, for the whitening of the flour and binding the bread; and it is not an unfrequent practice with some of them to use vitriol for the same purpose.

Q. How many kinds of bread are there?—*A.* Three; white, wheaten, and household. French bread, and unleavened bread are also in use.

Q. Of what ingredients is each of these kinds of bread made?—*A.* White bread is made of flour, from which all the bran is separated; wheaten bread is made of flour, from which only the coarser is separated; household bread is made of the whole substance of the grain. French bread is made of fine flour, eggs, fresh butter, and yeast; and unleavened bread is made of flour and water without yeast. Biscuits are made like unleavened bread.

Q. How is butter made?—*A.* By agitating cream in a churn, till the oil separates from the whey, or serous parts. Mungo Park, the celebrated African traveller, informs us, that a vegetable butter is procured in Africa from the fruit of the shea tree, which grows on the banks of the river Niger; and he says, that it is of a richer flavour than butter made from cow's milk, and will keep without salt.

Q. From what is cheese made?—*A.* From milk, by curdling it with rennet. The curd is afterwards pressed and shaped into the form and size of a cheese, and put to dry.

Q. Which are the chief cheese counties in England?—*A.* Wilts, Gloucester, Warwick, and Cheshire. Chedder in Somersetshire and Stilton in Huntingdonshire are famed for an exquisite sort, called the *Parmesan* of England.

Q. What is rennet?—*A.* The stomach or maw of a calf.

Q. How is cheese coloured?—*A.* With Spanish arnotto.

9. *Soap, Starch, Blue, Candles, Potash, Soda, Oils, &c.*

Q. What is starch?—*A.* The sediment of wheat steeped in water.

Q. From what is soft soap made?—*A.* From the lees drawn from potash and lime, and boiled up with tallow and oil; to which is added indigo in order to colour it.

Q. From what is hard soap made?—*A.* From lees produced from ashes and tallow.

Q. How is Castile or Spanish soap made?—*A.* From olive oil, and soda or barilla.

Q. Of what are candles made?—*A.* Of tallow hardened with alum. In China, candles are made of vegetable tallow, which is extracted from the kernels of the fruit of the tallow tree. Tallow candles to be good should be made of equal quantities of the fat of sheep and bullocks. When made of hog's fat they gutter, and give an offensive smell, with a thick black smoke.

Q. What is indigo or blue?—*A.* The sediment obtained from soaking the leaves and small branches of a plant which grows in Asia, Africa, and America.

Q. How is potash obtained?—*A.* From the combustion of certain vegetables; particularly kali or glasswort, a plant brought from the Mediterranean.

Q. How is soda obtained?—*A.* From the combustion of marine plants.

Q. From what is linseed oil made?—*A.* It is extracted from the seed of flax.

Q. How is sweet oil made?—*A.* It is extracted from olives.

Q. What is train or common oil?—*A.* The fat of the whale.

Q. How is spermaceti made?—*A.* It is extracted from the brain, as also the back-bone of that kind of whale which is distinguished by the bunch on its back, and which is termed the cachalot.

10. *Grocery—as Raisins, Tamarinds, Figs, &c.*

Q. What are raisins?—*A.* Grapes dried by the sun, or in the air. They are imported from Spain, chiefly from the neighbourhood of Malaga.

Q. Whence are currants imported?—*A.* From the island of Zante in the Ionian sea, and Cephalonia. They are at first a small dry grape, and do not grow on bushes, but on vines, like other grapes. According to Dr. Johnson, they ought to be written *corinths*, from Corinth, the place where they were first propagated.

Q. What are tamarinds?—*A.* The fruit of the tamarind tree, which grows in the East and West Indies.

Q. What are dates?—*A.* The fruit of the palm tree. The best are brought from Tunis and Persia.

Q. Whence are pomegranates imported?—*A.* From Africa and the south of Europe.

Q. Whence are oranges and lemons brought?—*A.* Lemons are brought from Spain and Portugal, oranges from Nice and Genoa in Italy, Portugal, the American islands, China, the coasts of India, the island of St. Michael, the Isles of St. Hieres and the adjacent parts of France.

Q. From what countries are the best figs brought?—*A.* From Turkey, Italy, Spain, and the southern part of France.

Q. What is isinglass?—*A.* The sounds or air bladders of the cod, ling, and the baluga, a species of sturgeon. The coarser sorts of isinglass are made of the intestines of the fish. The vermicular form which it assumes, is produced by rolling the membranes round each other, and keeping them in that position till they are dry.—The baluga and the sturgeon are natives of the Caspian sea; the first is said to weigh from sixteen to eighteen hundred pounds weight.

11. *Caviare, Anchovy, Ketchup, Vinegar, Capers, &c.*

Q. What is caviare?—*A.* The roes of the sturgeon dried.

Q. Where is the anchovy found?—*A.* Chiefly in the Mediterranean.

Q. What is vermicelli?—*A.* A composition of flour, cheese, yolk of eggs, sugar, and saffron.

Q. From what is ketchup made?—*A.* From mushrooms.

Q. From what is mustard made?—*A.* From the mustard seed.

Q. From what is vinegar made?—*A.* From wine, beer, or cyder, fermented in the sun.

Q. Whence are capers imported?—*A.* From the environs of Toulon and Lyons, and the island of Majorca. The plant which produces them, is a low shrub, which generally grows among rubbish, and out of the joints of old walls and the fissures of rocks.

Q. What is lamp black?—*A.* A pigment formed of the soot arising from burning oil.

Q. What is ivory black or bone black?—*A.* The shavings of ivory burnt in a crucible to a black powder; or, more commonly, bones calcined in close vessels or cylinders.

Obs. The bones of old animals yield more charcoal than those of young ones. The proportion of the former is 40 per cent., of the latter four or five.

12. *Stationary; as Paper, Parchment, Vellum, Wax, Wafers, Ink, &c.*

Q. From what are wafers made?—*A.* From flour mixed with the white of eggs, isinglass, and a little yeast. The colours are produced by tinging the paste with vermilion, indigo, saffron, &c.

Q. From what is paper made?—*A.* From linen or hempen rags, beaten to a pulp in water, by means of an engine with long spikes of iron fixed in it, and then moulded into square sheets of the thickness required.

Obs. In China, paper is made from straw, and even from the bark of trees, and various plants and shrubs. It is said, that in the paper manufactories of that empire, single sheets of paper are made of dimensions sufficient to cover the sides of a moderately sized room.—In the public library of the University of Cambridge is preserved a sheet of paper four yards long, by one and a half wide.

Q. From what is coarse brown paper made?—*A.* Chiefly from old hempen ropes.

Q. What is parchment?—*A.* The skins of sheep or goats.

Q. What is papier maché?—*A.* A substance made out of white or brown paper, boiled in water, and beaten in a mortar until it is reduced into a kind of paste, and then boiled with a solution of gum arabic or size, to give tenacity to the paste, when it is formed into different articles of use and ornament by pressing it into oiled moulds.

Q. From what is vellum made?—*A.* From the skins of abortive or sucking calves.

Q. How is ink made?—*A.* From galls, green vitriol, gum arabic, iron filings, and water.

Q. From what is red ink made?—*A.* From Brazil wood, gum arabic, alum, and white sugar, infused in vinegar.

Q. From what is Indian ink made?—*A.* From lamp-black and animal glue.

Q. How is sealing wax made?—*A.* From gum-lacca and resin. The red wax is coloured with vermilion.

Q. What is Indian rubber?—*A.* It is a resin which exudes from two or three species of trees in the East Indies, as also from the syringa, a tree which grows in Cayenne and other parts of South America. The natives form it into the bottles, which are sold in the shops, by dipping moulds of clay, shaped like a bottle, into the juice; which, though at first of a milky colour, blackens as it dries.

13. *Gunpowder, Rust, Verdigrise, Hones, and Shagreen.*

Q. From what is gunpowder made?—*A.* From saltpetre or nitre, sulphur, and charcoal; in the proportion of twenty-five parts of the first ingredient, three of the second, and five of the third.

Q. Who invented gunpowder?—*A.* Roger Bacon, a learned English friar, in the year 1280. But Swartz, a native of Germany, was the first who applied it to the projection of heavy bodies, about forty years afterwards.

Q. How is rust produced?—*A.* From metals absorbing that part of the air which is called oxygen.

Q. What is verdigrise?—*A.* A compound salt, formed by the union of vinegar and copper.

Q. How are hones made?—*A.* By petrifying hollywood, by continued immersion in water.

Q. What is shagreen?—*A.* The skin of the sword-fish. It is imported from Constantinople, Tripoli, Algiers, and some parts of Poland.

14. *Wines, Spirits, Malt Liquors, Hops, Yeast, &c.*

Q. What is wine?—*A.* The fermented juice of grapes.

Q. Which are the principal wines?—*A.* Port, Hock, Madeira, Burgundy, Champagne, Claret, Sack, Sherry, &c.

Obs. Wines are generally known under the distinctions of *red* and *white*. The colour depends on the circumstance whether the fermentation takes place in contact with the husks or hulls, and the stalks of the fruit, or not. It is white, where those substances have been excluded; but red where the colouring principle has been extracted from the husks, &c. in the course of the fermentation.

Q. Why is Port so called?—*A.* From the districts

adjacent to the town of Oporto, or Porto, (a city of Portugal,) where it is made.

Q. Why is Hock so called?—*A.* From the village of Hockstein, near the city of Mentz, in Germany, where it is made.

Q. Where is Madeira made?—*A.* In the island of Madeira.

Q. Where is Burgundy made?—*A.* In the province of Burgundy, in France.

Q. Where is Champagne made?—*A.* In the province of Champagne, in France.

Q. Where is Claret made?—*A.* Near Bourdeaux, a town of France.

Q. Where is Sack made?—*A.* In the island of Madeira, as also in Palma, one of the Canaries.

Q. Where is Sherry made?—*A.* At Xeres, a town near Seville, in Spain.

Q. Where is Constantia wine made?—*A.* At the Cape of Good Hope.

Q. Where is Hermitage wine made?—*A.* On Monserrat, a mountain near Barcelona, in Spain; and also on the banks of the Rhone, between Valence and St. Valiere.

Q. Why is Frontigniac wine so called?—*A.* From Frontigniac, a town in France, where it is made.

Q. Whence is Malmsey wine brought?—*A.* Chiefly from Madeira, and also from some parts of Spain.

Q. What country produces Tokay wine?—*A.* Hungary.

Q. Where is Mountain wine made?—*A.* Near Malaga, in Spain.

Q. What is Tent wine?—*A.* Mountain tinged red.

Q. From what is brandy made?—*A.* It is extracted from wine by distillation. The best and in the largest quantity is obtained from the heavy wines, which usually afford one fourth, or even one third of spirit; the weak wines yield one twelfth only. It is naturally colourless as water. It derives its colour from the new casks in which it is kept, as also from burnt sugar, saunders-wood, &c.

Q. Which are the best French brandies?—*A.* Those of Bourdeaux, Rochelle, Cognac, Orleans, Nantz, Poictiers, Burgundy, Champagne, Poitou, and the Isle of Rhé. The brandies of Nantz, Cognac, and Poitou are the best.

Q. What is rum?—*A.* A vinous spirit, drawn by distillation from the molasses or dregs of sugar.

Q. What is cyder?—*A.* The fermented juice of the apple.

Q. From what is perry made?—*A.* From the juice of pears.

Q. From what is gin made?—*A.* The inferior kind is made from the oil of turpentine and malt spirits; the better sort from juniper berries, distilled with water and proof spirits. In the manufacture of the Hollands geneva, brandy is used instead of malt spirits.

Q. What is whiskey?—*A.* A malt spirit prepared from a distillation of barley, or barley and oats. The malt in Scotland is dried with peat, the smoke of which gives the peculiar flavour belonging to whiskey.

Q. From what is mead made?—*A.* From honey and water.

Q. What is metheglin?—*A.* A species of mead.

Q. What is mum?—*A.* A liquor brewed chiefly from malt made from wheat instead of barley.

Q. From what is beer made?—*A.* From malt and hops.

Q. What is ale?—*A.* The first decoction of the malt and hops, before the table beer is brewed. Pale ale is made from malt slenderly dried; brown ale from malt more roasted or higher dried.

Q. How is porter made?—*A.* It ought to be made from malt, hops, water, and either burnt sugar or patent malt to colour and flavour it; but, as the author of *Deadly Adulteration and Slow Poisoning; or, Disease and Death in the Pot and Bottle*, says, drugs of a very deleterious and poisonous nature are made use of in its manufacture by both the publican and the brewer.

Q. Can you tell why porter is called entire?—*A.* The author of *The Oracle of Health and Long Life* says, that before the year 1730, the malt liquors in general use in London were ale, beer, and twopenny; and that it was customary to call for a pint or tankard of *half and half*, i. e. half of ale and half of beer, or half of ale and half of twopenny. In course of time, it also became the practice to call for a pint or tankard of *three threads*, meaning a third of ale, beer, and twopenny; and thus the publican had the trouble to go to three casks, and turn three cocks for a

pint of liquor. To avoid this inconvenience and waste, a brewer of the name of Harwood, conceived the idea of making a liquor which should partake of the same united flavours of ale, beer, and twopenny. He did so, calling it *entire*, or *entire butt*, meaning that it was drawn entirely from one butt or cask; and as it was a very hearty and nourishing liquor, and supposed to be very suitable for porters and other working people, it obtained the name of *porter*.

Obs. The poisonous adulterations of wines, spirits, and malt liquors, are ably detailed in the pages of *Deadly Adulteration and Slow Poisoning; or, Death and Disease in the Pot and Bottle*, a work claiming the attentive perusal of every person who has regard for his health and comfort.

Q. How are spirits of wine made?—*A.* From brandy redistilled.

Q. How is malt made?—*A.* From barley steeped in water, and heated to a state of fermentation, and then broken or bruised in a mill.

Q. What are hops?—*A.* The flower of a plant.

Q. From what is spruce beer made?—*A.* From treacle or molasses, essence of spruce, and yeast.

Q. What is spruce?—*A.* It is obtained from an infusion or decoction of the leaves of the black and white spruce fir.

Q. What is yeast?—*A.* A scum arising from beer or ale during fermentation.

15. *The Primary Colours, the Elements of Nature, the Cardinal Virtues, the Primary Senses, the Stages of Manhood, the Points of the Compass, the Wonders of the World, the Three Kingdoms of Nature, &c.*

Q. How many chief or primary colours are there?—*A.* Seven: red, orange, yellow, green, blue, indigo, and violet.

Q. Which are the four elements?—*A.* Earth, air, fire, and water.

Q. Which are the cardinal virtues?—*A.* Prudence, temperance, justice, and fortitude.

Q. How many primary senses are there?—*A.* Five: hearing, seeing, smelling, tasting, and feeling.

Q. What are the different stages of manhood?—*A.* Pueritia, or childhood, extending from the birth to the fifth year; adolescentia, or boyhood, to the 18th year; juven-

tus, or youth, to the 30th year; virilis, ætas, or manhood, to the 50th year; senectus, or old age, to the 60th year; and crepita ætas, or decrepitude, to death.

Q. Which are the four cardinal points of the compass?—*A.* North, south, east, and west.

Q. How many points are in the compass?—*A.* Thirty two.

Q. What are the seven wonders of the world?—

A. 1. The colossal statue, or brazen image of the sun, at Rhodes.

2. The Egyptian pyramids.

Obs. The pyramid built by Cheops, and which stands south of the city of Memphis, and west of the Nile, stands upon eight acres of ground, each square side being 300 paces long. This building the Egyptian king, it is said, wickedly and disgracefully erected from the prostitution of his daughter, exacting a stone (which are of a prodigious size) from every man towards its erection. His daughter built a second, by the like infamous exaction.

3. Diana's temple, at Ephesus.

4. The mausoleum of Mausolus, king of Caria.

5. The walls and hanging gardens of the city of Babylon.

6. The statue of Jupiter Olympus, by Phidias, at Elis, in Peloponessus.

7. The Pharos, or watch-tower of Ptolemy Philadelphus, on the small island of Pharos, in the bay of Alexandria.

Instead of two of these, some reckon the palace of Cyrus, king of Persia, and the labyrinth of Crete.

Q. What is meant by the terms animal, vegetable, and mineral kingdoms?—*A.* By the term animal kingdom is meant every thing that has feeling and life; as, man, beasts, birds, fishes, insects, reptiles, &c.: by the term vegetable kingdom, such things as have life, but without feeling, as trees, shrubs, flowers, herbs, &c.: and by the term mineral kingdom, such things as have neither life nor feeling; as stones, metals, fossils.

Q. How many different species does animated nature consist of?—*A.* According to Linnæus, animated nature consists of about 250 species of quadrupeds, 1000 of birds, 100 of amphibious animals, 500 of fishes, 2000 of insects, and 800 of worms.

16. *The Seven Wise Men, the Remains of Antiquity, the Philosophers' Stone, and the Follies of Science.*

Q. Who were the seven wise men of Greece?—*A.* Thales, Solon, Chilo, Pittacus, Bias, Cleobulus, and Periander.

Q. Why were they so called?—*A.* For their moral sayings, and their maxims and instructions for the government and conduct of life.

Q. Who was the most distinguished of the seven wise men of Greece?—*A.* Solon.

Q. For what saying is Solon celebrated?—*A.* For that to the query of Crœsus king of Lydia, namely, whether he did not think him the happiest of men? To which Solon replied, that "no man could say he was happy till he drew his last breath."

Q. Can you tell the saying for which each of the seven wise men is particularly famous?—*A.* Yes; that of Solon was, "Consider thy end;" that of Chilo, "Know thyself;" that of Pittacus, "Know the times;" that of Bias, "Love your friend, as if you expected him to be your enemy;" and that of Cleobulus, "There is nothing better than moderation."

Q. Which are the most celebrated remains of antiquity?—*A.* The Egyptian pyramids, the great wall in China, and the ruins of Thebes and Persepolis.

Q. Which were the most celebrated cities of antiquity?—*A.* Athens, Rome, Thebes, Memphis, Babylon, Nineveh, and Jerusalem.

Q. What was meant by the expression of the "philosopher's stone?"—*A.* The art of transmuting all metals into gold.

Obs. The impositions and absurd pretensions to this art, have, at different periods, been practised in all countries. Many similar attempts have been made in our country; and in the reign of Henry VI. the delusion was carried to so high a pitch, that letters patent were granted to certain persons who undertook to find out the philosopher's stone, and to change base metals into gold; and a statute (34 Henry VI.) was passed to protect the projectors from the penalty of the statute 5 Henry IV, made against the attempts of deceptive alchymists.

Q. What are the six follies of science?—*A.* The multiplication of the cube; the philosopher's stone; the perpetual motion; the quadrature of the circle; magic; and judicial astrology.

17. *Books, Printing, &c.*

Q. Which is the oldest book in the world?—*A.* The Bible.

Q. Which was the first printed book?—*A.* The vulgate edition of the Bible is supposed to be so; but the accounts are various.

Obs. The first book ever printed, with a date, is a Latin Psalter, in black letter; printed by Faust and Schoeffer, in Mentz, Aug. 14, 1457. The first Latin classic ever printed, was Cicero's Offices, printed in Mentz, 1465. The first Greek book that was printed, is Lascaris's Greek Grammar, printed in Milan, Jan. 30, 1476. The first Greek classic that was printed, was an edition of the Iliad and Odyssey, printed in Florence, 1488, in two volumes, folio. The first book printed in the English language, is the Recueyell of the Historyes of Troye, in 1471; but the first book printed in England, is the Game of Chess, in 1474: both printed in black letter, by Caxton. To the year 1540, the University of Oxford had printed but one classic, which was a book of Tully's Epistles, printed at the expense of Cardinal Wolsey. Cambridge had not printed any classic at this time. The first Greek book printed in England, was the Homilies, printed in 1543, at the expense of Sir John Cheke, who established the Greek lecture at Cambridge.

Q. Who was the first discoverer of printing?—*A.* Faust, a native of Strasburgh.

Q. When was it introduced into England?—*A.* In the year 1471, by Caxton, a mercer of London.

Q. Before the discovery of the art of printing what was the value of books?—*A.* Very dear: according to the authority of Mr. Gibbon, the value of manuscript copies of the Bible for the use of the monks and clergy was, at Paris, from four to five hundred crowns; which, according to the relative value of money at that time and now, cannot be less than as many pounds sterling of the present currency.

Q. What were books formerly written upon, before paper or parchment was invented?—*A.* Upon the bark of trees, tablets of wax, &c.

Q. Who was the founder of the first library in the world?—*A.* Osymandias, one of the early kings of Egypt. On its front he placed the inscription—"The remedies of the mind."

Q. Which was the largest and most splendid library that has ever existed in the world?—*A.* The Alexandrian, founded by Ptolemy Soter, king of Egypt. This library,

which consisted of 700,000 volumes, was burnt by order of Amrou, general of the Saracens

18. *Man and his Structure.*

Q. Which is the noblest creature in the creation?—*A.* Man.

Q. In what does his superiority over the rest of the animated creation consist?—*A.* In his endowment with reason and intelligence.

Q. With how many senses is man endowed?—*A.* With five.

Q. Mention them.—*A.* Hearing, seeing, smelling, tasting, and feeling.

Q. What is the common temperature of the human body?—*A.* Ninety-eight degrees.

Q. What quantity of blood is contained in the human body?—*A.* About thirty pounds.

Obs. The blood is produced by the action of the gastric juice upon the food taken into the stomach. The first action of the gastric juice reduces it to chyme, then by the combination of the bile it becomes chyle, and lastly blood.

Q. How many bones are in the human frame?—*A.* Two hundred and forty-eight.

Q. What is the proportion between the quantity of brain in man and brutes?—*A.* The brain of man twice exceeds that of the largest animal.

Q. What is the use of the hairs of the head?—*A.* To keep open the pores; and for this purpose they are admirably constructed, by being hollow.

Q. What is the use of the pores?—*A.* To evaporate the superfluous moisture of the body. The average amount of perspired fluid during twenty-four hours is about thirty ounces.

19. *Languages, &c.*

Q. What is the number of languages in use in the world?—*A.* According to M. Aldelung, the number of 3064 are in use in different quarters, states, and districts of the earth; in his learned work are arranged and classified the vocabularies, more or less perfect, of 937 Asiatic; 587 European; 276 African; and 1264 American languages and dialects.

Q. Which is the oldest or primitive language?—*A.* The Hebrew.

Q. Which is the most copious language?—*A.* The Latin.

Q. Which is the most expressive language?—*A.* The Greek.

Q. Which is the most difficult language?—*A.* The Chinese.

Q. Why is the Chinese the most difficult language?—*A.* On account of the same character or word being made, by means of aspirations, accentuations, and other precarious devices, to signify many different things or ideas.

Q. What languages are those which are called the ancient?—*A.* The Hebrew, the Greek, and the Latin.

Q. Which are the principal of those which are called the modern languages?—*A.* The Italian, the Spanish, the French, the English, the German, and the Portuguese.

Q. Are not languages further distinguished by the titles of the dead and the living languages?—*A.* Yes: the dead languages are the Hebrew, the Greek, and the Latin; the living are those which are now currently spoken.

Q. What are the several characteristics of these languages?—*A.* The Hebrew is the most emphatical; the Greek, the most sublime; the Latin, the most majestic; the Italian, the softest; the Spanish, the most pompous; the French, the most polite; and the English, the most copious.

Q. What is the characteristic of the English language?—*A.* It unites the emphatical expression of the Hebrew, the sublimity of the Greek, the majesty of the Latin, the softness of the Italian, the pomp of the Spanish, and the politeness of the French.

Q. From what languages does the English derive its origin?—*A.* The Celtic, the Greek, the Latin, the Saxon, the Danish, the French, the Dutch, &c.

Q. Who are considered as having first improved the English language?—*A.* Sir John Gower, Chaucer, Sir Thomas More, the Earl of Dorset, and Sir Philip Sidney. Milton, Dryden, Addison, Swift, Pope, Bolingbroke, Goldsmith, Johnson, and other distinguished writers brought it to its present purity.

Q. How many words constitute the English language? —*A.* About forty thousand five hundred.

Q. Can you state what species of words is derived from each of these languages?—*A.* Our scientific words are from the Greek; our terms of art from the French, Latin, and Italian; while most of our domestic words, that is words expressive of objects, are from the Saxon.

Q. What number of words is derived from each of the languages from which the English takes its derivation?—*A.* Mathematical accuracy cannot be expected in this matter, but etymologists reckon as follows.—

Latin . .	6621	German . .	117
French . .	4361	Welch . .	111
Saxon . .	2060	Spanish . .	83
Greek . .	1288	Danish . .	81
Dutch . .	660	Arabic . .	18
Italian . .	229		

With several from the

Teutonic.	Portuguese.	Persic.
Gothic.	Flemish.	Cimbric.
Hebrew.	Runic.	Chinese.
Swedish.	Egyptian.	

Q. Can you tell the number of words in the Greek and Latin languages?—*A.* The Greek contains about thirty thousand, and the Latin about the same number.

Q. What number of words are contained in the Italian, the French, and the Spanish languages?—*A.* About thirty-five thousand in the Italian, thirty-two thousand in the French, and thirty thousand in the Spanish.

Q. Can you mention the number of constituent letters of which the alphabets of the principal languages in use in the world consist?—*A.* The English alphabet contains 26 letters; the French 23; the Chaldee, Hebrew, Samaritan, and Syriac, 22 each; the Arabic 28; the Persian 31; the Turkish 33; the Georgian 36; the Coptic 32; the Muscovite 43; the Greek 24; the Latin 22; the Sclavonic 27; the Dutch 26; the Spanish 27; the Italian 20; the Ethiopic and Tartarian 222 each; the Indian of Bengal 21; the Brachman 19; and the Sanscrit 28.

Q. Mention the number of words constituting each part of speech in the English language.

A. The articles are . . .	3
The substantives or nouns .	20500
The adjectives . . .	9200
The pronouns . . .	40
The regular verbs 7833 } The irregular verbs 167 } .	8000
The adverbs . . .	2600
The prepositions . . .	69
The conjunctions . . .	19
And the interjections . .	68

Q. Can you mention any persons famous for their skill in various languages?—*A.* Yes: Mithridates, king of Pontus, could speak twenty-two languages. Joseph Scaliger was skilled in thirteen. Amalasunta, queen of the Goths, in Italy, was skilled in the language of all nations that had any commerce with the Roman empire. Frederick II. emperor of Germany, could speak fourteen different languages; and queen Elizabeth could discourse in English, Greek, Latin, French, Dutch, Italian, and Spanish.

Q. How is speech represented?—*A.* By characters or letters.

Q. Who were the inventors of the letters of the alphabet?—*A.* The Phœnicians.

Q. When were the letters of the alphabet introduced into Europe?—*A.* About fifteen hundred years before the Christian era.

Q. Where and by whom were they introduced?—*A.* Into Greece, by Cadmus, king of Thebes.

Q. What was the number which Cadmus introduced?—*A.* Sixteen.

Q. Did the Grecians make any addition to this number?—*A.* Yes: about the time of the Trojan war, Palamedes added four; as was also a like number, some time afterwards, by Simonides

MANNER OF SUPERSCRIBING LETTERS TO, OR OF ADDRESSING IN WRITING, OR CONVERSATION, PERSONS OF ALL RANKS.

THE ROYAL FAMILY.

THE KING.

Superscription. *To the King's most excellent Majesty.*

Address. *May it please your Majesty; Sire* or *Sir*, or *Most Gracious Sovereign:* and at the foot, *Your Majesty's dutiful subject.*

OBS. The title of the king of England is *King of the United Kingdoms of Great Britain and Ireland, Defender of the Faith.* The progressive steps of royal title-making in England is as follows: Henry IV. had the title of "Grace" conferred on him; Henry VI. that of "Excellent Grace;" Edward IV. that of "High and Mighty Prince;" Henry VII. "Highness;" Henry VIII. "Majesty, and Dread Sovereign;" James I. "Sacred Majesty," or "Most Excellent Majesty." The king of France has the title of "Christian Majesty;" the king of Spain, "Catholic Majesty." Respecting the profane appropriation of the term *Majesty* to persons holding the regal office, the following remark of Robert Barclay, in his Apology for the Quakers, claims attention: "We do not find in all the compilations used to princes in the Holy Scriptures, that the title *Majesty*, which the profane usage of modern times has ascribed to crowned heads, was ever given to mortals, but was specially and peculiarly appropriated to the DIVINE BEING."

THE QUEEN.

Superscription. *To the Queen's most Excellent Majesty.*

Address. *May it please your Majesty; Madam;* or *Most Gracious Sovereign.*

THE SONS, DAUGHTERS, BROTHERS, AND SISTERS, OF THE KING AND QUEEN.

Superscription. *To his Royal Highness the Prince of Wales; to her Royal Highness the Duchess of York.* But in cards it is usual to say *your* Royal Highness, not *his* or *her* Royal Highness.

Address. *May it please your Royal Highness;* or *Sir*, or *Madam.*

THE OTHER BRANCHES OF THE ROYAL FAMILY.

Superscription. *To his Highness the Duke of Gloucester; To her Highness the Princess Sophia of Gloucester.*

Address. *May it please your Highness;* or *Sir*, or *Madam.*

THE NOBILITY.

DUKE OR DUCHESS.

Superscription. *To his Grace the Duke* (or *Duchess*) *of Bedford*

Address. *May it please your Grace, Your Grace, My Lord Duke,* or *My Lord; My Lady, Madam, Your Grace, Your Ladyship.*

MARQUIS OR MARCHIONESS.

Superscription. *To the most honourable the Marquis* (or *Marchioness*) *of Lansdown.*

Address. *May it please your Lordship, My Lord Marquis, My Lord, Your Lordship; My Lady, or Madam.*

EARL OR COUNTESS.

Superscription. *To the Right Honourable the Earl* (or *Countess*) *of Harrington.*

Address. *My Lord, Your Lordship; My Lady, Your Ladyship.*

A VISCOUNT OR VISCOUNTESS

Superscription. *To the Right Honourable Lord Viscount Ebrington; To the Right Honourable Viscountess Ebrington.*

Address. *My Lord, Your Lordship; My Lady, Your Ladyship.*

BARON OR BARONESS.

Superscription. *To the Right Honourable Lord* (or *Baron*) *Grenville; To the Right Honourable Lady* (or *Baroness*) *Grenville.*

Address. *My Lord, Your Lordship; My Lady, Your Ladyship.*

The eldest son of a duke is, by courtesy, styled a *Marquis;* the eldest son of a marquis, an *Earl;* and the eldest son of an earl, a *Viscount:* generally assuming the second title of their fathers; and they are addressed by the title of

Lord, and *Right Honourable;* but these titles are merely complimentary, and do not rank them in the peerage.

The title of *Lord* and *Right Honourable* is also given by courtesy to all the other sons of dukes and marquisses; and the title of *Lady* and *Right Honourable* to all the daughters of dukes, marquisses, and earls; and in each case the Christian name immediately follows the title. The younger sons of earls, and the sons and daughters of viscounts and barons, are styled *Honourable.*

The widow of a nobleman is addressed in the style to which she was entitled during her husband's life, with the introduction of the word *dowager* in the superscription of her letters; as *To the Right Honourable the Dowager Countess of Derby.*

OFFICIAL MEMBERS OF THE STATE.

All Members of his Majesty's Privy Council are styled Right Honourable during the time they are in office.

To the Right Honourable John, Lord Lyndhurst, Lord High Chancellor of England.

To the Right Honourable Lord Grenville, First Commissioner of his Majesty's Treasury, &c.

To the Right Honourable Charles James Fox, his Majesty's Principal Secretary of State for Foreign Affairs.

To the Right Honourable William Pitt, Chancellor and Under Treasurer of his Majesty's Exchequer.

To the Right Honourable Richard Brinsley Sheridan, Treasurer of his Majesty's Navy, &c.

To the Right Honourable Robert, Earl of Rochester, Lord President of the Council, or *Lord Privy Seal,* or *Lord Great Chamberlain,* as the case may be.

Officers of his Majesty's Household are addressed according to their station, as *My Lord Chamberlain, Mr. Vice Chamberlain, &c.*

The title of *Honourable* is likewise conferred on such persons as have the king's commission; and on those who enjoy places of trust and honour.

AMBASSADORS, GOVERNORS, &c.

Superscriptions. *To his Excellency Sir A. B. Bart his Britannic Majesty's Envoy Extraordinary and Plenipotentiary to the Ottoman Porte.*

To his Excellency the Right Honourable the Earl of ——, *Ambassador to his most Christian Majesty.*

To his Excellency the Baron de ——, *his Prussian Majesty's Resident at the Court of Great Britain.*

To his Excellency the American (or *Russian*, or other) *Ambassador.*

To his Excellency the Honourable D —— *E*——, *his Majesty's Minister to the United States of America.*

To his Excellency John, Duke of B——, *Lieutenant General and General Governor of that part of the United Kingdom called Ireland.*

Address. *Sir, My Lord,* (as the case may be,) or *May it please your Excellency, Your Excellency.*

THE PARLIAMENT.

HOUSE OF PEERS.

Superscription. *To the Right Honourable the Lords Spiritual and Temporal in the Parliament of the United Kingdom of Great Britain and Ireland assembled.*

Address. *My Lords,* or *May it please your Lordships.*

HOUSE OF COMMONS.

Superscription. *To the Right Honourable the Knights, Citizens, and Burgesses, in the Parliament of the United Kingdom of Great Britain and Ireland assembled;* or *To the Honourable the Commons of Great Britain in Parliament assembled.*

Address. *Gentlemen,* or *Honourable House.*

THE SPEAKER OF DITTO.

Superscription. *To the Right Honourable Charles Abbot, Speaker of the House of Commons.*

Address. *Sir,* or *Mr. Speaker.*

A MEMBER OF THE HOUSE OF COMMONS.

Superscription. *To Henry Brougham, Esq. M.P.*

Address. *Sir.*

THE JUDGES AND LAW OFFICERS.

When on the bench the judges are addressed by the title of *My Lords; Your Lordships;* but when out of court

by their private titles. When written to officially their office is appended to the name; as *The Right Honourable Lord Tenterden, Lord Chief Justice of England.* The judges of the King's Bench are addressed *Mr. Justice Bayley*, and of the Exchequer *Mr. Baron Garrow.*

Sir Vicary Gibbs, his Majesty's Attorney General.

THE CLERGY.

ARCHBISHOPS.

Superscription. *His Grace the Archbishop of Canterbury;* or, *The Right* (or *Most*) *Revd. Father in God, Charles, Lord Archbishop of Canterbury.*

Address. *My Lord; May it please your Grace; Your Lordship*

BISHOPS.

Superscription. *The Right Revd. the Lord Bishop of Peterborough;* or *The Right Reverend Father in God, James, Lord Bishop of Peterborough.*

Address. *My Lord; Your Lordship.*

THE REST OF THE CLERGY.

Superscription. *The Revd. David Burns;* or *Revd. David Burns. The Revd. Dr. Bailey,* or *Revd. Dr. Bailey.*

Address. *Revd. Sir.* If a Dean, Archdeacon, &c. the address may be *Revd. Sir,* or *Mr. Dean; Mr. Archdeacon, &c.*

If the party written to be Dean, Chancellor, Archdeacon, Prebendary, &c. the office should be appended to the name, should the letter relate to their respective employments. Indeed in the superscriptions of all letters relating to the office of the party written to, the style of office should never be omitted.

If a clergyman be ennobled, the superscription ought to be, *The Honble. and Revd. Fitzroy Stanhope.*

The wives of Archbishops and Bishops (unless entitled in their own right) are only styled *Mrs.;* as *Mrs. Secker.*

INCORPORATED BODIES.

Superscription. *To the Honourable the Court of Directors of the United Company of Merchants of England trading to the East Indies.*

To the Honourable the Governor, Deputy-Governor, and Directors of the Bank of England.

To the Honourable the Governor and Company of the Plate-Glass Manufacturers.

Address. *Honourable Sirs*, or *May it please your Honours.*

The Lords Commissioners of the Treasury—of Trade and Plantations—of the Admiralty, &c. are styled in superscriptions, *The Right Honourable.*

The Commissioners of his Majesty's Customs—of the Revenues of the Excise—for the Duty on Salt—for the Stamp Duties—for Victualling the Navy, &c. are styled *The Honourable.*

But should there be a nobleman, having the title of Right Honourable, or even a commoner, who is a privy counsellor, among any set of commissioners, it is proper to style them collectively *Right Honourable.* The usual address then is *My Lords, Your Lordships.*

CORPORATIONS.

The Lord Mayors of London, York, and Dublin, as also the Lord Provost of Edinburgh, are styled *Right Honourable* while they are in office, and are addressed *My Lord, May it please your Lordship, Your Lordship.* Thus the superscription will be, *To the Right Honourable Matthew Wood, Lord Mayor of London; To the Right Honourable Sir James Ferguson, Lord Provost of Edinburgh.*

The Mayors of all Corporations, (except the preceding Lord Mayors,) and the Sheriffs, Aldermen, and Recorder of London, are addressed *Right Worshipful;* and the Aldermen and Recorders of other Corporations, and Justices of the Peace, *Worshipful.*

The Governors of Hospitals, Colleges, &c. which consist of Magistrates, or have any such among them, are styled *Right Worshipful.*

THE ARMY AND NAVY.

A nobleman is addressed according to his particular title, to which is added that which his commission confers upon him.

To the Right Honourable Cuthbert, Lord Collingwood,

Commander-in-Chief of his Majesty's Ships and Vessels in the Mediterranean.

Generals, Admirals, Colonels, Field-officers, and all other officers, have the title of their commission set first in the superscription of letters.

To Major-General Sir John Doyle, Bart. and *K. C. (Knight of the Crescent,) Colonel of his Majesty's 87th Regiment of Foot.*

To Major A. Campbell, of his Majesty's 42d Regiment of Foot; or, *To Captain Hardy, of his Majesty's Ship Victory;* and at the beginning of letters, *Sir;* or, when addressed by a person of very inferior station, *Honoured Sir,* or *May it please your Honour.*

BARONETS AND KNIGHTS.

Superscription. *To Sir Owen Glendour, Bart. To Sir Robert Wilson, K. B.*

Address. *Sir,* or *Sir Robert.*

Superscriptions to the wives of Baronets or Knights are, *To Lady Wilson;* the address, *My Lady; Your Ladyship.*

Gentlemen by Office, Birth, or Station.

All Magistrates, Barristers at Law, and persons executing any office under the crown, which may not be considered unbecoming a gentleman, are styled *Esquires;* and are addressed thus: *To James Reeves, Esq.*

Obs. Esquires, according to law, are the four esquires of the king's body; the younger sons of noblemen, and their male heirs for ever; the eldest sons of baronets, knights of the Bath, and knights bachelors, and their heirs male in the right line; barristers, justices of the peace, and all persons holding the king's commission, provided the employment be becoming the character of a gentleman.

When a letter is superscribed to two or more persons the form is *Messrs. A. and B.* and the address *Gentlemen;* when to two or more women, the superscription is *Mesdames A. and B.* and the address is *Ladies.*

Serjeants at law are addressed *Mr. Serjeant A.;* sheriffs of counties *Mr. Sheriff B.;* professors in the universities *Mr. Professor C.;* members of parliament have *M. P.* subscribed after their names; and officers in the royal navy *R. N.*

TABLE OF PRECEDENCY OF RANK.

PRECEDENCY OF MEN.

The KING.
The PRINCE OF WALES.
The PRINCES, Sons of the King.
Brothers of the King.
Uncles of the King.
Grandsons of the King.
Sons of the Brothers or Sisters of the King.
Archbishop of Canterbury, Lord Primate of all England.
The Lord High Chancellor, or Lord Keeper.
The Archbishop of York, Primate of England.
The Lord High Treasurer.
The Lord President of the Privy Council.
The Lord Privy Seal.
(*Being of the degree of Barons. By Stat.* 31 *Hen. VIII.*)
The Lord High Constable.
Earl Marshal.
The Lord High Admiral.
The Lord Steward of his Majesty's Household.
The Lord Chamberlain of his Majesty's Household.
(*Above all of their degree; viz. if Dukes, above Dukes; if Earls, above Earls, &c. By Stat.* 31 *Hen. VIII.*)
Dukes, according to their Patents.
Marquisses, according to their Patents.
Eldest Sons of Dukes.
Earls, according to their Patents.
Eldest Sons of Marquisses.
Younger Sons of Dukes.
Viscounts, according to their Patents.
Eldest Sons of Earls.
Younger Sons of Marquisses.
The Bishops of London, Durham, Winchester, and all other Bishops, according to their seniority of consecration.
(*If any Bishop be Principal Secretary of State, he shall be placed above all other Bishops, unless they have any of the great offices before-mentioned. By Stat.* 31 *Hen. VIII.*)
Barons, according to their Patents.

(*If any Baron be Principal Secretary of State, he shall be placed above all other Barons not having any of the great offices before-mentioned.*)

The priority of signing any treaty or public instrument, by public ministers, is always taken by rank of place, and not by title.

The Speaker of the House of Commons.
Eldest Sons of Viscounts.
Younger Sons of Earls.
Eldest Sons of Barons.
Knights of the Garter.
Privy Councillors.
The Chancellor of the Exchequer.
The Chancellor of the Duchy of Lancaster.
The Lord Chief Justice of the Court of King's Bench.
The Vice-Chancellor.
The Master of the Rolls.
The Lord Chief Justice of the Court of Common Pleas.
The Lord Chief Baron of the Exchequer.
Judges and Barons of the degree of the *Coife* of the said Court, according to seniority.
Bannerets, made by the King himself in person, under the royal standard, displayed in an army royal, in open war, for the term of their lives, and no longer.
Younger Sons of Viscounts.
Younger Sons of Barons.
Baronets.
Bannerets, not made by the King himself in person.
Knights of the Bath.
Knights Bachelors.
Eldest Sons of younger Sons of Peers.
Eldest Sons of Baronets.
Eldest Sons of Knights of the Garter.
Eldest Sons of Bannerets.
Eldest Sons of Knights of the Bath.
Eldest Sons of Knights.
Younger Sons of Baronets.
Esquires of the King's Body.
Gentlemen of the Privy Chamber.
Esquires of the Knights of the Bath.
Esquires by Creation.
Esquires by Office.

Younger Sons of Knights of the Garter.
Younger Sons of Bannerets of both kinds.
Younger Sons of Knights of the Bath.
Younger Sons of Knights Bachelors.
Gentlemen entitled to bear arms.
Clergymen, Barristers at Law, Physicians, and Officers in the Navy and Army, who are all Gentlemen by profession.
Citizens.
Burgesses.

PRECEDENCY OF WOMEN.

The QUEEN.
The PRINCESS of WALES.
The PRINCESSES, Daughters of the King.
Princesses and Duchesses, Wives of the King's Sons.
Wives of the King's Brothers.
Wives of the King's Uncles.
Wives of the eldest Sons of Dukes of the Blood Royal.
Daughters of Dukes of the Blood Royal.
Wives of the Sons of the King's Brothers or Sisters.
Duchesses.
Marchionesses.
Wives of the eldest Sons of Dukes.
Daughters of Dukes.
Countesses.
Wives of the eldest Sons of Marquisses.
Daughters of Marquisses.
Wives of the younger Sons of Dukes.
Viscountesses.
Wives of the eldest Sons of Earls.
Daughters of Earls.
Wives of the younger Sons of Marquisses.
Baronesses.
Wives of the eldest Sons of Viscounts.
Daughters of Viscounts.
Wives of the younger Sons of Earls.
Wives of the eldest Sons of Barons.
Daughters of Barons.
Maids of Honour.

Wives of the younger Sons of Viscounts.
Wives of the younger Sons of Barons.
Baronetesses.
Wives of the Knights of the Garter.
Wives of Bannerets of each kind.
Wives of the Knights of the Bath.
Wives of Knights Bachelors.
Wives of the eldest Sons of the younger Sons of Peers.
Wives of the eldest Sons of Baronets.
Daughters of Baronets.
Wives of the eldest Sons of Knights of the Garter.
Daughters of Knights of the Garter.
Wives of the eldest Sons of Bannerets.
Daughters of Bannerets.
Wives of the eldest Sons of Knights of the Bath.
Daughters of Knights of the Bath.
Wives of the eldest Sons of Knights Bachelors.
Daughters of Knights Bachelors.
Wives of the Younger Sons of Baronets.
Daughters of Knights.
Wives of the Esquires of the King's Body.
Wives of the Esquires to the Knights of the Bath.
Wives of Esquires by Creation.
Wives of Esquires by Office.
Wives of the younger Sons of Knights of the Garter.
Wives of the younger Sons of Bannerets.
Wives of the younger Sons of Knights of the Bath.
Wives of the younger Sons of Knights Bachelors.
Wives of Gentlemen entitled to bear Arms.
Daughters of Esquires entitled to bear Arms, who are Gentlewomen by Birth.
Daughters of Gentlemen entitled to bear Arms, who are Gentlewomen by Birth.
Wives of Clergymen, Barristers at Law, Physicians, and Officers in the Navy and Army.
Wives of Citizens.
Wives of Burgesses.

EXPLANATIONS OF LATIN WORDS AND PHRASES USED IN CONVERSATION AND WRITING.

Ab initio. *From the beginning.*
Ab arbitrium. *At pleasure.*
Ad absurdum. *An argument showing the absurdity of a contrary opinion.*
Ad captandum. *To attract.*
Ad honores. *For decency's sake.*
Ad infinitum. *To infinity.*
Ad libitum. *At pleasure.*
Ad patres. *Death, or the abode of the just.*
Ad referendum. *For consideration.*
Ad valorem. *According to value.*
Addenda. *Additions.*
A fortiori. *With more or stronger reason.*
Affirmatim. *In the affirmative.*
Alias. *Otherwise.*
Alibi. *Elsewhere, or being in another place.*
Alma mater. *University.*
A mensâ et thoro. *From bed and board.*
Alternis horis. *Every other hour.*
Amor patriæ. *The love of our country.*
Anglice. *In English.*
Ana. *Of each ingredient an equal quantity.*
A posteriori. *From a latter reason; from the effect.*
A priori. *For a former or prior reason; at first sight; from the cause.*
Arcana imperii. *State mysteries, or state secrets.*
Argumentum ad hominem. *An argument which derives its strength from its personal application; or an argument drawn from, or an appeal to, the practices, professed principles, belief, prejudices, or concessions of one's opponent.*
Argumentum ab inconvenienti. *An argument to show that the result of a proposed measure will prove inconvenient or unsuited to circumstances.*
Argumentum ad ignorantiam. *An argument founded on the ignorance of facts or circumstances shown by one's adversary.*
Argumentum ad judicium. *An appeal to the common sense of mankind; or an argument grounded on the foundation of knowledge or probability.*

Argumentum ad populum. *An appeal to the favour of the people.*
Argumentum ad passiones. *An appeal to the passions.*
Argumentum ad verecundiam. *An argument supported by authority we are ashamed to dispute; or an appeal to the decency of your opponent.*
Argumentum ad fidem. *An appeal to the faith of the hearer.*
Argumentum ex concessis. *An argument proved from admissions made by one's adversary, or by means of some proposition already conceded.*
Argumentum à fortiori. *Is when the conclusion is proved by proving a less probable proposition on which the conclusion depends.*
Argumentum à posteriori. *Is when the cause is proved or inferred from the effects.*
Argumentum à priori. *Is when a thing is proved by its necessary cause, or when the effect is proved by referring to the cause.*
Argumentum baculinum. *An argument proved by blows.*
Audi alteram partem. *Hear both sides.*
Aut Cæsar aut nihil. *The first place or none.*
Bellum internecinum. *A war of mutual destruction.*
Bonâ fide. *In reality, or without fraud or deceit.*
Bonus. *A benefit or advantage.*
Cacoëthes scribendi. *A love of scribbling.*
Caput mortuum. *Refuse, sluggish matter.*
Cæteris paribus. *The rest, or other circumstances or things being alike, or equal.*
Commune bonum. *A common good.*
Communibus locis. *A medium or common relation between several places.*
Communibus annis. *One year with another. On the annual average.*
Compos mentis. *In one's senses, of sound mind.*
Contra bonos mores. *Against good manners or morals.*
Copia fandi. *Liberty to speak.*
Copia verborum. *Mere words.*
Credenda. *Things to be believed.*
Cui bono. *To what good will it tend, or what is to be the advantage resulting from the measure you propose.*
Cui malo. *To what evil will it tend.*

Coram non judice. *The matter is not before a proper tribunal.*
Corrigenda. *Things to be corrected.*
Cum grano salis. *With limitation.*
Cum multis aliis. *With many others.*
Cum privilegio. *With privilege.*
Currente calamo. *With a running quill.*
Custos morum. *The guardian of morality.*
Custos rotulorum. *Keeper of the records.*
Data. *Points settled, or things granted.*
De facto. *In fact, in reality.*
Dei gratia. *By the grace of God.*
De jure. *By right.*
Dele. *Erase, or blot out.*
Delenda. *Things to be erased.*
De novo. *Afresh.*
Deliramenta doctrinæ. *The wild speculations or wanderings of learned men, or the fantasies of those whom "too much learning hath made mad."*
Deo favente. *With God's favour.*
Deo juvante. *With God's assistance.*
Deo volente. *God willing. Three phrases intimating a hope of the aid, or a submission to the will of Providence.*
Desideratum. *Much wanted.*
Desunt cætera. *The rest is wanting.*
Dictum. *Assertion.*
Dramatis personæ. *The characters represented.*
Durante placito. *During pleasure.*
Durante vita. *During life.*
Eo intuitu. *With that intent.*
Ergo. *Therefore.*
Ex. *Late.*
Errata. *Errors.*
Esto perpetua. *May it last for ever.*
Et sic de similibus. *And so of the like. What is said of this will apply to every thing similar.*
Et cæteri, et cæteræ, or et cætera. *And the rest; according as it refers to men, women, or things.*
Ex officio. *Officially.*
Excerpta. *Extracts.*
Ex parte. *On the part of, or on one side only.*
Ex tempore. *Out of season.*

Ex curia. *Out of court.*
Ex debito justitiæ. *From what is due to justice.*
Ex concesso. *From what is conceded.*
Ex necessitate. *From the necessity of the case. Arising from the urgency of circumstances.*
Exempli gratiâ. *For example.*
Fac simile. *An exact copy or imitation.*
Felo de se. *Self-murderer.*
Fiat. *Let it be done. A peremptory order from a superior power.*
Finis. *The end.*
Flagrante bello. *While the war is raging. During hostilities.*
Furor loquendi. *An eagerness for speaking.*
Furor scribendi. *An itch for writing.*
Fronti nulla fides. *There is no trusting to the countenance.*
Flagrante delicto. *In the commission of the crime. With full evidence of guilt.*
Functus officio. *Discharge of duty. His official power no longer exists.*
Gratis. *For nothing.*
Haud passibus æquis. *Not with equal steps.*
Hic et ubique. *Here and there and every where. A phrase used to mark a perpetual change of place.*
Ibid, Ibidem. *In the same place.*
Id est. *That is.*
Idem. *The same.*
Ignorantia elenchi. *A mistake of the question, or when one thing is proved instead of another.*
Imperium in imperio. *A government existing within another government. An establishment existing under, but wholly independent of a superior establishment. An arrangement where the clashing interests must inevitably lead to confusion.*
Imprimatur. *Let it be printed.*
Imprimis. *In the first place.*
Impromptu. *In readiness. Unpremeditated.*
In cœlo. *In heaven.*
In cognito. *Unknown, disguised.*
In duplo. *Twice as much.*
In esse. *In being.*

In formâ pauperis. *As a pauper.*
In limine. *At the entrance.*
In commendam. *For a time.*
In loco. *In the place. Upon the spot.*
In petto. (Ital.) *Kept back, held in reserve.*
In propria persona. *In person, or personally.*
In statu quo. *As it was before, or in the former state.*
Inter nos. *Between ourselves.*
In terminis. *At the outset or beginning.*
In terrorem. *As a warning.*
In toto. *Altogether.*
In transitu. *On the passage.*
In foro conscientiæ. *Before the tribunal of justice. In a man's own conviction what is equitable.*
In puris naturalibus. *Stark naked.*
Instar omnium. *One example may suffice for all.*
Inuendo. *By signifying.*
Ipse dixit. *Mere assertion.*
Ipsissima verba. *Literal translation, or identical expressions.*
In vacuo. *Empty space.*
Ipso facto. *In the very fact.*
Ipso jure. *By law or justice.*
Item. *Also, or article.*
Januis clausis. *A debate with doors shut.*
Jacta est alea. *The die is cast. I have put every thing to venture, and I must now stand the hazard.*
Jure humano. *By human law.*
Jure divino. *By divine right.*
Jus gentium. *The law of nations.*
Jus summum. *Law enforced to strictness.*
Lapsus linguæ. *A slip of the tongue.*
Lex talionis. *The law of retaliation.*
Lex terræ. *The law of the land.*
Literati. *Men of letters or learning.*
Literatim. *Literally.*
Locum tenens. *Deputy or substitute.*
Magni nominis umbra. *The shadow of a mighty name.*
Major domo. *One in authority.*
Malum in se. *A thing wicked in itself.*
Mala fide. *Deceitfully.*
Maximum. *The greatest possible.*

Manu forte. *With a strong arm.*
Memento mori. *Remember death.*
Memoranda or memorabilia. *Things to be remembered. Matters deserving of record.*
Memoriter. *By rote.*
More majorum. *After the custom of our ancestors.*
Meum et tuum. *Mine and thine.*
Minimum. *The least possible.*
Multa gemens. *Mourning deeply.*
Mutatis mutandis. *Things being interchanged. After having made the necessary changes.*
Multum in parvo. *Much in a small space. A compendium of knowledge.*
Maximus in minimis. *Very great in very little things. A studious attention to petty objects.*
Minutiæ. *Trifles.*
Mirabile dictu. *Wonderful to tell.*
Ne plus ultra. *No farther, or the utmost extent.*
Nem. con. or Nemine contradicente. *Without a dissenting voice.*
Nemine contradicente. *Without opposition or dissent.*
Non obstante. *Notwithstanding.*
Nudum pactum. *A naked bargain.*
Nolens volens. *Willing or not, or without consent.*
Nominatim. *By name.*
Non compos, or non compos mentis. *Out of one's senses.*
O tempora! O mores! *Oh! the times and the manners.*
Obiter dictum. *An opinion not of binding authority.*
Ore tenus. *Oral testimony.*
Onus probandi. *The burden of proving.*
Opima spolia. *Rich booty.*
Pari passu. *With equal progress, or in equal degree.*
Passim. *Every where. In various places.*
Pendente lite. *While the action is pending, or the matter is in dispute.*
Pacta conventa. *Conditions agreed upon.*
Par nobile fratrum. *A noble pair of brothers. An expression used ironically to denote two associates suited to each other.*
Par pari refero. *I return like for like. That is, I have recourse only to means similar to those which were previously used by my adversary.*

Pax in bello. *Peace in war: That is, a relaxed or incompetent system of hostility.*

Per cent. or per centum. *By the hundred.*

Per saltum. *By a leap. An expression signifying the attainment of honours without passing through the intermediate degrees.*

Per fas et nefas. *By right or wrong. That is, no possible means have been left untried.*

Per se. *Alone, or by itself.*

Petitio principii. *Begging, or taking for granted, the question at issue; or a supposition of what is not granted; or a supposed proof by stating the question in other words; or proving a thing by itself, whether expressed in the same or in different words; or, which amounts to the same thing, assuming in the proof the very opinion or principle proposed to be proved.*

Pinxit. *Painted by.*

Posse comitatus. *The collective force of a county or shire.*

Postulata. *Things required. The admissions demanded from an adversary, before the main argument is entered upon.*

Postulata. *Points assumed.*

Præcognita. *Things previously known.*

Prima facie. *On the first appearance; on the first view or sight.*

Prima facie. *Evidently. On the face or first view of an affair.*

Primum mobile. *First motion,* or *move. The main spring, or impulse, which puts all the other parts into activity.*

Probatum est. *It is proved, or tried.*

Pro et con. *For and against. The reasons on both sides of the question.*

Pro formâ. *For form's sake, or for etiquette sake.*

Pro hac vice. *For this turn.*

Proprio marte. *By one's own strength.*

Pro rata. *In proportion.*

Pro re nata. *For the occasion, or special business. A meeting pro re nata is a special or extraordinary meeting for a particular business.*

Pro aris et focis. *For religious and civil rights.*

Pro bono publico. *For the public good.*

Pro tanto. *For so much.*
Pro tempore. *For the time. A temporary expedient.*
Qui tam. *One who sues for a penalty as well for the king as himself.*
Quantum. *The due proportion.*
Quantum libet. *As much as you please.*
Quantum meruit. *As much as he deserves.*
Quantum sufficit. *Enough, or as much as is necessary.*
Quantum valebat. *Its value, or as much as it was worth.*
Quasi dicas. *As if you should say.*
Quid pro quo. *A mutual consideration.*
Quo animo. *The intention.*
Quo-ad. *As to; as far as.*
Quo jure. *By what right.*
Quondam. *Formerly.*
Quorum. *Of whom.*
Rara avis. *A unique, a prodigy.*
Ratio justifica. *The reason which justifies.*
Ratio suasoria. *The reason which persuades.*
Reductio ad absurdum. *When the truth of a proposition is proved by showing the absurdity of a contrary supposition.*
Re infecta. *The matter being unfinished.*
Res unius ætatis. *A thing only of one age.*
Rus in urbe. *The country in the town.*
Scandalum magnatum. *Scandal against the nobility.*
Semper eadem, *or* semper idem. *Always the same.*
Seriatim. *In regular order.*
Scripsit. *Written by.*
Sculpsit. *Engraved by.*
Sic passim. *So every where.*
Secundum artem. *According to art.*
Sine die. *Without fixing any particular day.*
Sine qua non. *Indispensable requisite or condition, or absolute necessity.*
Sui generis. *Singular, matchless, or unparalleled.*
Simplex munditiis. *Simply elegant, or elegantly neat.*
Summum bonum. *The chief good.*

Obs. Philosophers and men of learning in all ages have disputed what constitutes the summum bonum, or man's greatest happiness or supreme felicity. Marius Varro, a learned Roman, collected no fewer

than two hundred and eighty opinions on this subject. Cicero says, that this point is the cardo totius philosophiæ, the hinge on which all philosophy turns; for this being once established, then all our actions will be directed to attain that end. Plato was of opinion that this chief felicity of man is only to be obtained in the life to come.

Statum in statu. *In political language, an intermediate state, which has no real use, but only increases the component parts of the constitution unnecessarily.*
Suo marte. *By his own exertion.*
Suum cuique. *Let every one have his own*
Sub pœna. *Under a penalty.*
Sub rosa. *Secretly.*
Sub silentio. *In silence.*
Succedaneum. *A substitute.*
Tædium vitæ. *Weariness of life.*
Tempora mutantur. *A change has taken place.*
Toties quoties. *As often as.*
Toto corde. *With the whole heart.*
Uberrima fides. *An implicit faith or reliance.*
Ultimatum. *Final answer.*
Uti possidetis. *In the present condition. As you possess. A diplomatic phrase, used when two "crowned heads," after having sacrificed a number of human lives, and squandered away the treasure of their constituents, choose to make peace, "each retaining the possessions which he has acquired." Its counterpart is the status quo, when both parties re-enter into the condition in which they stood before the war.*
Utile dulci. *The useful with the pleasant.*
Vade-mecum. *Constant companion.*
Vale. *Farewell.*
Verbatim. *Word for word, literally.*
Verbatim et literatim. *Exactly, in word and letter.*
Verbum ardens. *An unqualified expression.*
Versus. *Against.*
Veto. *I forbid.*
Vice. *In the room of.*
Via. *By the way.*
Vice versâ. *The reverse, or on the contrary.*
Vide. *See.*
Vide ut supra. *See as above.*
Vi et armis. *By force of arms. By main force.*

Vis poetica. *Poetic genius.*
Vis inertia. *The inactive property of matter.*
Viva voce. *By word of mouth,* or *oral testimony.*
Vivant Rex et Regina. *Long live the King and Queen.*
Vox et præterea nihil. *A voice and nothing more. An empty, unavailing sound. A mere display of words.*
Vulgo. *Commonly.*

ABBREVIATIONS USED IN WRITING OR PRINTING.

A. B. or B. A. (Artium Baccalaureus) *Bachelor of Arts.*
A. C. (Ante Christum) *Before Christ.*
A. D. or Anno Dni. (Anno Domini) *In the year of our Lord.*
A. Æ. C. (Anno Æræ Christianæ) *In the year of the Christian era.*
A. M. (Artium Magister) *Master of Arts.*
A. M. (Anno Mundi) *In the year of the world.*
A. M. (Ante Meridiem) *Before noon.*
A. R. (Anni Regina) *Queen Anne,* or Ano Rni. (Anno Regni) *In the year of the reign.*
A. S. S. (Societatis Antiquariæ Socius) *Fellow of the Antiquarian Society.*
A. U. C. (Anno urbis conditæ) *In the year of the building of the city (Rome.)*
Bart. *Baronet.*
B. D. (Baccalaureus Divinitatis) *Bachelor of Divinity.*
Cl. (Clericus) *Clergyman.*
Co. *Company.*
Crim. Con. *Adultery.*
C. R. (Carolus Rex) *King Charles.*
D. D. (Divinitatis Doctor) *Doctor of Divinity.*
D. D. D. *Used in dedications for* dat, dicat, dedicat. *He gives, he devotes, he dedicates.*
D. D. D. D. (Dignum Deo donum dedit.) *A gift worthy of the Deity.*

Do. *For ditto, (from detto, Ital. the said).*
D. O. M. (Deo optimo maximo.) *Dedicated to the Almighty, or God is all powerful.*
F. A. S. (Fraternitatis Antiquariorum Socius) *Fellow of the Antiquarian Society.*
E. G. *or* e. g. (exempli gratia) *For example.*
F. L. S. (Fraternitatis Linneaneæ Socius) *Fellow of the Linnean Society.*
F. R. S. *Fellow of the Royal Society.* R. S. S. (Regiæ Societatis Socius) *Fellow of the Royal Society.*
F. R. S. and A. S. (Fraternitatis Regiæ Socius et Associatus) *Fellow of the Royal Society and Associate.*
F. S. A. (Fraternitatis Socius Artium) *Fellow of the Society of Arts.*
i. e. (Id est) *That is.*
G. R. (Georgius Rex) *King George.*
Ibid. (Ibidem) *In the same place.*
Id. (Idem) *The same (author).*
I. H. S. (Jesus Hominum Salvator) *Jesus the Saviour of Mankind.**
Inst. *Instant, or of the month.*
Knt. *Knight.*
K. B. *Knight of the Bath.*
K. G. *Knight of the Garter.*
K. T. *Knight of the Thistle.*
J. U. D. (Juris Utriusque Doctor) *Doctor of Laws.*
C. S. (Custos Sigilli) *Keeper of the Seal.*
C. P. C. (Custos Privati Sigilli) *Keeper of the Privy Seal.*
LL. D. (Legum Doctor) *Doctor of the Canon and Civil Law.*
Lib. (Liber) *The Book.*
M. (Manipulus) *A handful.*
M. A. *Master of Arts.*
M. D. (Medicinæ Doctor) *Doctor of Medicine. Doctor of Physic.*
Mem. (Memento) *Remember.*
M. B. (Medicinæ Baccalaureus) *Bachelor of Medicine.*

* This is the common interpretation of these letters; but it is a horrible blunder made by the Latins of the Greek IHΣ abbreviation for the name of Jesus.

M. S. (Memoriæ Sacrum) *Sacred to memory.*
Messrs. *Messieurs.*
M. P. *Member of Parliament.*
MS. and MSS. *Manuscript and Manuscripts.*
N. B. (Nota bene) *Take notice.*
Nem. con. (Nemine contradicente) *Unanimously, or without opposition.*
Nem. diss. (Nemine dissentiente) *Unanimously, or without opposition.*
N. S. *New Style.*
N. L. (Non liquet) *It does not appear.*
No. (Numero) *Number.*
Olym. *Olympiads.*
O. S. *Old Style.*
P. (Pugil) *pinch; as much as can be contained between the finger and thumb.*
Per ann. (Per annum) *Yearly; by the year.*
Per cent. (Per centum) *By the hundred.*
Pro and con. *On both sides.*
P. P. D. (Propria pecunia dedicavit) *With his own money he dedicated it.*
P. M. (Post meridiem) *Afternoon.*
P. S. *Postscript.*
Q. E. D. (Quod erat demonstrandum) *Which was to be demonstrated.*
Q. E. F. (Quod erat faciendum) *Which was to be done.*
Q. D. (Quasi dictum) *As if it were said.*
Q. L. (Quantum libet) *As much as you please.*
Q. Pl. (Quantum placet) *As much as you please.*
Q. S. (Quantum sufficit) *As much as is necessary.*
R. S. S. (Regiæ Societatis Socius, or Regalis Societatis Sodalis) *Fellow of the Royal Society.*
Scil. (Scilicet) *To wit.*
S. (Solo) *In music.*
S. A. (Secundum artem) *According to the rules of art.*
S. D. (Salutem dicit) *He sends his respects.*
S. P. (Salutem precatur) *He prays for his prosperity.*
S. P. D. (Salutem plurimam dicit) *He wishes much health, or sends his best respects.*
S. P. Q. R. (Senatus Populusque Romanus) *The Roman senate and people.*
S. S. (Semissis) *Half of a pound.*

S. T. P. (Sacræ Theologiæ Professor) *Professor of Theology.*
St. *Saint or Street.*
U. J. D. (Utriusque Juris Doctor) *Doctor of both laws.*
Ult. (Ultimo) *Last, or of last month.*
V. G. or V. B. (Verbi gratia) *As for example.*
Viz. (Videlicet) *Namely.*
&c. (Et cætera) *And such like,* or *and the rest.*
L. *Pound, (being the initial of the Latin word libra).*
s. *Shilling, (being the initial of the Latin word solidus).*
d. *A penny, (being the initial of the Latin word for denarius).*
q. *A farthing, (being the initial of the Latin word for quadrans).*

The common Medical contractions are:

ãã or Ana. *Of each.*
P. (Pugillum) *As much as may be taken between the thumb and two fore fingers.*
M. (Manipulus) *A handful.*
Cong. (Congius) *A gallon.*
Coch. (Cochleare) *A spoonful.*
F. M. (Fiat mixtura) *Let a mixture be made.*
Ss. (Semis) *A half.*

REFUTATION OF VULGAR ERRORS AS TO WHAT IS SUPPOSED TO BE LAW, &c.

It is difficult to account for many of the prevailing vulgar errors with regard to what is supposed to be law. Such as, that the body of a debtor may be taken in execution after his death. Other vulgar errors are, that the old statutes have prohibited the planting of vineyards, or the use of sawing-mills. It is supposed likewise to be penal to open a coal-mine, or to kill a crow, within five miles of London; as also to shoot with a wind-gun, or to carry a dark lantern. That the law has set a price on the head of the hedge-hog may also be classed among erroneous notions; for no such law is now in being, or ever did exist in this country. To these vulgar errors may be added, the supposing that the king signs the

death warrant (as it is called) for the execution of a criminal; as also that a woman marrying a man under the gallows will save him from execution; or that it is forbidden to marry in Lent; or that a negro, being baptized, became immediately free; or that men have one rib less than women. It is also a very prevailing error, that those who are born at sea belong to Stepney parish. Another vulgar error is, that a surgeon or butcher (from the barbarity of their business) may be challenged as jurors. Among the ignorant it is also supposed, that there is a statute which obliges the owners of asses to crop their ears, lest the length of them should frighten the horses which they meet on the road. The notion that in order completely to disinherit the heir at law, his ancestor must bequeath him a shilling, is also founded in error. It is a prevailing vulgar error also, that every bishop, before he accepts a bishopric which is offered him, affects a maiden coyishness, and answers *nolo episcopari*. Another error is, that first cousins may marry, and second cousins may not. This paradox arose from confounding the provisions of the civil and canon law; by the former of which first cousins are permitted to marry, but by the latter, second cousins are prohibited. Two other additional vulgar errors are, that when a man designs to marry a woman who is in debt, if he take her from the hands of the priest clothed only in her shift, it is supposed that he is not liable for her engagements. The second is, that there was no land tax before the reign of William the Third.—*Note to Mr. J. D. Williams's edition of Sir William Blackstone's Commentaries on the Laws of England.*

The errors in natural history are equally ridiculous and unfounded. It is true that a thorough acquaintance with the structure or composition of natural bodies requires much laborious investigation, and must long, perhaps to the end of the world, continue defective; but it might have been presumed that the history of the more sensible qualities of animals, vegetables, and minerals, and of the various circumstances attending them, which require only attentive observation, would have rapidly improved, and readily disentangled itself from any errors which might have been adopted in its infancy. That this has not been the case in a great degree cannot be denied. Some of the many falsities

respecting different subjects of natural history which formerly passed current, have, it is true, appeared too extravagant for modern credulity, such as the ancient accounts of the *dragon*, *phœnix*, *unicorn*, *mermaid*, and other fictitious animals, whose existence, had it been real, must have been long since ascertained: the *lynx* and the *salamander* have also been found wholly devoid of the wonderful qualities ascribed to them, and the story respecting the *pelican*, the *barnacle goose*, the *agnus scythicus*, or *animal plant*, and of that enormous mass of animal materials, the *kraken*, is discarded by every rational inquirer. Nor does the account of the chameleon's living on air, the cuckoo's depositing her egg in another bird's nest in order to get it hatched, or that elephants are in a state of domesticity, longer claim credence. That at the time of the vernal equinox, the day is equal to the night all the world over, is now acknowledged to be a vulgar error; for the fact is, that the sun appears for more than twelve hours above the horizon, and consequently a less time than twelve hours elapses before it shines again in the morning. But this fallacy is more striking at the North Pole than elsewhere, for at this time the sun having been above the horizon for some days, will not set for above six months.

THE DESCENT OF THE CROWN OF ENGLAND.

Egbert was sole monarch of England, 800. From Egbert to 1017, the crown descended regularly, with very little deviation. In the three succeeding reigns it was suspended by force, till the Saxon line was restored in Edward the Confessor, who indeed was not the next heir, because Edmund II. had a son living, Edward, an outlaw, in Hungary. On Edward the Confessor's decease, Harold II. usurped the throne, though the right remained in Edgar Atheling, son of Edward the Outlaw, and grandson of Edmund II.

At this time William I. duke of Normandy, claimed a right, from a grant of Edward the Confessor, and by conquest transferred the crown to a new family. From him it descended to his second and third sons, William II. and Henry I. his eldest son Robert being kept out of

possession by his brothers. Henry I. was succeeded by Stephen, grandson of William I. by his daughter Adela, his elder brother Theobald waving his claim, and Maude the daughter of Henry I. and grandaughter of Edward the Outlaw, to whom the succession belonged, being excluded by force. Her son, however, Henry II. as heir to William I. succeeded Stephen; though the proper heirs in the Saxon line were the sons of Malcolm, king of Scotland, by Margaret the daughter of Edward the Outlaw. But Henry I. having married the daughter of Edgar Atheling, by whom he had Maude, and her son Henry II. coming to the crown, in some measure restored the Saxon line.

From Henry II. the crown descended to his eldest son then living, Richard I. on whose death it was seized by his brother John, Henry II.'s youngest son, in exclusion of his nephew Arthur. On the death of Arthur and his sister Eleanor, without issue, the crown properly descended to Henry III., son of John; and from Henry III. in an hereditary line of six generations to Richard II. and this right of succession was declared in parliament by the 25th of Edward III.

Richard II. resigned the crown, and the right resulted to the issue of his grandfather Edward III. and should have fallen on the posterity of Lionel, duke of Clarence, the first son of Edward III. but Henry, duke of Lancaster, descended from the third son of Edward III. usurped it, under the title of Henry IV. pretending to be the next heir. Parliament (7th Henry IV.) settled it on him and his heirs.

Henry IV. was regularly succeeded by his son and grandson Henry V. and VI. Under Henry VI. the house of York, descended from Lionel, duke of Clarence, by the mother's side, began to claim their dormant right, and established it in Edward IV. by parliament. This king was succeeded by his eldest son Edward V. who was deposed and succeeded by his unnatural uncle Richard III. his father's brother, on a pretence of bastardy. During this reign, Henry VII., earl of Richmond, a descendant of the house of Lancaster, assumed the throne, and his possession was established by parliament, 1485. He marrying Elizabeth of York, Edward the IVth's daughter, the

undoubted heiress of William the Conqueror, the families of York and Lancaster were united in Henry VIII. her eldest son, who transmitted the crown in successive order to his three children, confirmed by parliament, 25 Henry VIII. c. 12. This statute was repealed by 28 Henry VIII. c. 7. by which, after the king's divorce from Ann Boleyn, Mary and Elizabeth were bastardized. They were again legitimated, and the succession was restored by 35 Henry VIII. c. 1. Parliament now asserted its right of directing the succession by 13 Elizabeth, c. 1.

On the death of Elizabeth, succeeded James VI. of Scotland, by the title of James I. (the lineal descendant of Margaret, daughter of Henry VII. and his wife Elizabeth of York,) and in him were united not only the right of the different competitors since the conquest, but likewise the right of the Saxon monarchy; he being the direct lineal heir of Malcolm, who married Margaret the grandaughter of Edmund II.

From James I. the crown descended to his second son Charles I. his eldest son Henry being dead. After him the succession was interrupted by the usurpation of Oliver Cromwell and his son Richard, but restored in 1660, in Charles II. eldest son of Charles I. He dying without legitimate issue, it passed to his brother James II. whom parliament excluded, and called in William of Orange and his wife Mary, the eldest daughter of James II. 1688, to the exclusion of her father and her brother. On the death of William III. Anne, second daughter of James II. reigned, and she leaving no issue, the crown had been settled by parliament, 12 and 13 William III. on the princess Sophia of Hanover, the youngest daughter of Elizabeth, queen of Bohemia, (who was the daughter of James I.) and her heirs, being Protestants. She dying before queen Anne, her son George I. succeeded, in which family the crown has regularly descended to the present king.

The descendants of George I. who are entitled to the crown are those mentioned in the following order.

1. The immediate descendants of George III.

2. Those of William Henry, duke of Gloucester, who was the youngest son of Frederic, prince of Wales.

3. Those of Augusta of England, duchess of Brunswick, and eldest daughter of Frederic, prince of Wales.

4. Those of Matilda of England, queen of Denmark, and youngest daughter of Frederic, prince of Wales.

5. Those of Anne of England, princess of Orange, and eldest daughter of George II.

6. Those of Mary of England, landgravine of Hesse, and next daughter of George II.

7. Those of Louisa of England, queen of Denmark, and next daughter of George II.

8. Those of Sophia of England, queen of Prussia, and only daughter of George I.

PRAYERS FOR SCHOOLS.

MORNING PRAYER.

Let one of the Scholars read or say devoutly the following exhortation, the rest of the School seriously attending.

The Lord hath brought us safe to the beginning of this day; let us therefore give thanks for this, and all his other mercies.

Let us pray that we may live in the fear of God, and continue in love and charity with all men.

That his Holy Spirit may direct and rule our hearts, teaching us what we ought to do, and what to avoid.

That the grace of God may be ever with us, to support us in all dangers, and carry us through all temptations.

That the Lord may bless all our honest endeavours, and make us content with what his providence shall order for us.

And that we may continue his faithful servants unto our lives' end.

For all which blessings, let us kneel down before the Lord our Maker, and devoutly pray.

Then all devoutly kneeling, let the person who repeated the foregoing exhortation, say, in a serious and humble tone of voice, the following prayer, the rest of the school accompanying him in a silent and devout manner.

O Lord, our Heavenly Father, Almighty and Everlasting God, who hast safely brought us to the beginning of this day, defend us in the same by thy mighty power; and grant that this day we fall into no sin, neither run into any kind

of danger; but that all our doings may be ordered by thy governance, to do always that which is righteous in thy sight, through Jesus Christ our Lord.

O God, the fountain of all goodness, give us a serious, an understanding, and a religious heart, that as we grow in years, we may grow in grace, making a conscience of our ways. Create in us so hearty a love unto holiness, and so religious a fear, and just a sense of thy presence everywhere, that we may tremble at the thought of doing any thing that may offend thee, knowing that all our thoughts, words, and actions are open to thy view.

Enable us to resist the temptations of the world, and of our weak and imperfect nature; to follow the motions of thy good Spirit; to be serious and holy in our lives, true and just in our dealings, watchful over our thoughts, words, and actions, diligent in our learning, and temperate in all things. Gracious God, make us truly sensible of thy mercies, and thankful for them. Give us the blessings of this life, and grace not to abuse them; but above all things keep in our minds a lively remembrance of that great and solemn day, when we must be summoned before the judgment-seat of Christ, to give a strict account of our lives, and to receive our everlasting doom, either to bliss or woe, according to what we have done in this world. Oh! let it be our constant care to fit and prepare ourselves for eternal life.

Particularly, we beg thy blessing on all our endeavours after useful knowledge; and with thy most gracious favour help us, we pray thee, daily to increase in learning and wisdom, and all virtue. Enlighten our understanding, O Father of Light! preserve us from error, and lead us into a right apprehension of all things. Further us with thy continual help, that in these and all our works, begun, continued, and ended in thee, we may glorify thy holy name, and finally by thy mercy obtain everlasting life, through Jesus Christ our Lord.

We humbly acknowledge, O Lord, the great imperfections and disorder both of our minds, and of our lives: that we are unable to help ourselves, and unworthy of thy assistance; but we beseech thee, through the merits of our blessed Redeemer, to pardon our offences, to sanctify our hearts, and to guide our lives. Help us, we pray thee, to

learn and to practise those things which are good, that we may become serious Christians, and useful in this world; to the glory of thy great name, the satisfaction of our friends and instructors, and our own present and future well-being.

Let thy blessings, we beseech thee, be bestowed upon all those in authority in church and state; and grant that they may govern with truth and justice. Bless, O gracious God, our parents, friends, and benefactors; particularly those who are concerned in the care of this school; give them wisdom, that they may instruct us in what is best for us to know; and so incline us to submit meekly and willingly to their instructions and reproofs, that we may daily increase in some profitable knowledge of the things of God and man, and learn every thing that is needful in this life, and that may assist us in our way to heaven. And, O gracious God, let us so carefully fulfil our duties this day, that we may come with delight to worship thee when the evening returns.

These prayers, both for them and ourselves, we humbly offer up in the name of thy son Jesus Christ, our Redeemer, concluding in his most perfect form of words, Our Father, &c.

EVENING PRAYER.

Let one of the scholars read, or say devoutly, the following exhortation, the rest of the school seriously attending.

By the favour of God, we are come to the evening of this day; and we are so much nearer our latter end.

Let us seriously consider this, and pray God to prepare us for the hour of death.

Let us with penitent hearts beseech him to pardon our sins; and to deliver us from the evils which we have justly deserved.

Let us resolve to amend what we have done amiss, and pray God that his grace may ever be with us: And that we may be safe under his protection, who alone can defend us from the powers of darkness. For all which blessings let us kneel down before the Lord our Maker, and devoutly pray.

Then all devoutly kneeling, let the person who repeated the foregoing exhortation, say, in a serious and humble tone of voice, the following prayer, the rest of the school accompanying him in a silent and devout manner.

O most glorious and ever blessed Lord God, who dwell-

est in the highest heavens, yet vouchsafest to regard the lowest creatures here on earth; accept, we beseech thee, our evening sacrifice of praise and thanksgiving for all thy goodness and loving kindness unto us; particularly for the blessings of this day, for thy gracious protection and preservation, for the opportunities we have enjoyed for the instruction and improvement of our minds, for all the comforts of this life, and the hope of life everlasting, through Jesus Christ our Redeemer.

Whatever good instructions have been here given us this day, grant, O Lord, that they may be carefully remembered, and duly followed; and whatever good desires thou hast put into our hearts, grant that by the assistance of thy grace they may be brought to good effect, that thy name may have the honour, and we, with those who are assistant to us in this work of our instruction, may have comfort at the day of account, through our Lord and Saviour Jesus Christ.

O merciful God, pardon our offences, and amend what is amiss in us, that as we grow in years we may grow in grace, and the nearer we come to our latter end, the better we may be prepared for it.

In the midst of life we are in death: Lord grant that these thoughts may make us careful how we live, and prepare us for the hour of death.

Enlighten our souls with saving truth; and correct us in mercy when we grow careless of our salvation. Make us ever mindful of our latter end: and help us to testify our thankfulness, for thy blessings, by a due use and improvement of them.

Grant, O gracious God, that all who are in authority in church and state, may govern with truth and justice. Bless our parents, friends, and benefactors, particularly those who are concerned in the care of this school, and all who have been instrumental to our good, by their assistance, advice, example, or writings. Bless this and all other schools for religious and Christian education. And direct and prosper all pious endeavours for the propagation of thy Gospel, and promoting Christian knowledge in the world.

These prayers and praises we humbly offer up to thy divine majesty, through the mediation of thy son Jesus Christ our Lord; in whose holy name and words we sum up all our desires, &c. Our Father, &c.

PRAYERS FOR SCHOOLS ON SUNDAYS.

On Sunday morning, let the following Prayer be added to that which is used in the mornings of the week.

O Lord, who has consecrated this good day to thy service, give us grace so to observe it, that it may be the beginning of a *happy week* to us; and that none of thy judgments may fall upon us for profaning it.

Fix in our hearts this great truth, *that here we have no abiding place,* that we may seriously and timely provide for another life; and grant that this great concern may make us very desirous to learn our duty, and to do what thou requirest of us. And, O God, since thou hast been graciously pleased to grant us the opportunity of serving thee, and that we have ministers to teach us, prosper their labours, and give us grace to profit by them; that they and we may enjoy an everlasting sabbath, with thy saints in heaven, for Jesus Christ's sake. *Amen.*

On Sunday evening let the following Prayer be added to that which is used in the evenings of the week.

O blessed Lord God, we return thee our sincere thanks and praise, for the gracious opportunity thou hast this day given us of attending thee in thy holy church: mercifully incline thine ears to the prayers and praises which have been there offered up unto thee. Grant that we may give diligent heed to whatever has been taught us out of thy word, and that we may strive to remember it, and live according to it; that so we may every time grow better and better by attending on thy service there, and may become such as thou wilt accept and reward at the great day of retribution, for the sake of our Lord Jesus Christ. *Amen.*

GRACE BEFORE MEALS.

Sanctify, O Lord, we beseech thee, these thy productions to our use, and us unto thy service, through Jesus Christ our Lord.

GRACE AFTER MEALS.

For these, and all his other mercies, God's holy name be blessed and praised, through Jesus Christ our Lord.

INSTRUCTIONS TO YOUTH FOR THE PROPER EMPLOYMENT OF SUNDAY.

The Lord, *who hath blessed one day in seven*, blesseth all those that keep it holy; and very terrible have been his judgments upon those who have profaned it.

It is your duty therefore, *on this good day*, to lay aside, as much as possible, all worldly business, all worldly thoughts, all worldly pleasures, that you may honour your Creator to the best of your power: by owning your dependence upon him; by hearing his word and his commands; by asking his blessing, and giving him thanks for his favours.

If, then, it is our interest and our happiness to serve God, it is our duty to be at his house before his service begins: to show that we fear his majesty, and dare not offer him *a lame sacrifice:* to show that we do indeed desire his blessing, and take delight in serving him.

When, therefore, you come into the house of God, first kneel down, and say secretly the following short prayer.

O Lord, now that I am in thy presence, grant that I may behave myself with reverence and godly fear, and worship thee in spirit and in truth. Assist me, I pray thee, in the performance of my service to thee, keep me from all wandering thoughts, and dispose my heart to seriousness and devotion, so that I may improve this opportunity of serving thee to the benefit of my soul.

After this, attend diligently to what is said and prayed for; remembering that they are *your* prayers which are offered up to God; but that you have no share in them, if you do not mind what is asked in your name.

That your heart may go along with your prayers, say softly *Amen*, that is, *so be it*, to every petition. This is what the most unlearned may do, and it may be the most learned cannot do better, to keep their minds intent upon what they are about.

When you confess your sins, do it with great seriousness and concern, remembering that you are for ever undone, if you are not forgiven. And then hear with comfort upon what conditions God will pardon you: if you *repent and believe the gospel*, you are sure to be forgiven, for you have it declared by one, who hath this commission from Christ himself; "Whosesoever sins ye remit, they are remitted unto them; and whosesoever sins ye retain, they are retained" John xx. 23.

And be sure to behave yourself with great reverence and devotion while you are in the house and presence of God: for if, when you should be on your knees asking God's pardon and blessing, or standing to praise the Creator of heaven and earth; if, instead of doing so, you sit and sleep away the time, or carelessly gaze, and think of other matters; then will you return from God's house with a curse, and not with a blessing.

When the word of God is read or preached, be careful to mind it, that you may know your duty, and the reward of doing it: that you may observe the way of God's dealing with mankind, in punishing the wicked, and in protecting and rewarding the righteous: that you may know the manner of our redemption, and the great love of God in bringing it to pass: that you may see the dangers you are liable to, and the blessedness that is set before you; ever remembering, that "faith, without which we cannot please God, cometh by hearing, and hearing by the word of God." Rom. x. 17.

And yet the very best of us, after all our care, have cause to crave pardon even for the faults of our devotions. Therefore before you rise from your knees, say privately the following prayer.

Accept, O Lord, of this imperfect performance of my duty to thee; and grant that what I have heard this day, may be so implanted in my heart, that I may not have been a hearer, but may be a doer of thy word to my eternal salvation.

And now, God forbid that you should spend the remainder of this good day, so well begun, in sin and vanity; rather think how you may do most honour to your Creator and Redeemer.

Then will the Lord be with you, to bless you in the way you go, to preserve and to prosper you. For this is what He hath declared, "Those that honour me, I will honour; and those that despise me, shall be lightly esteemed." 1 Sam. ii. 30.

THE END.

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