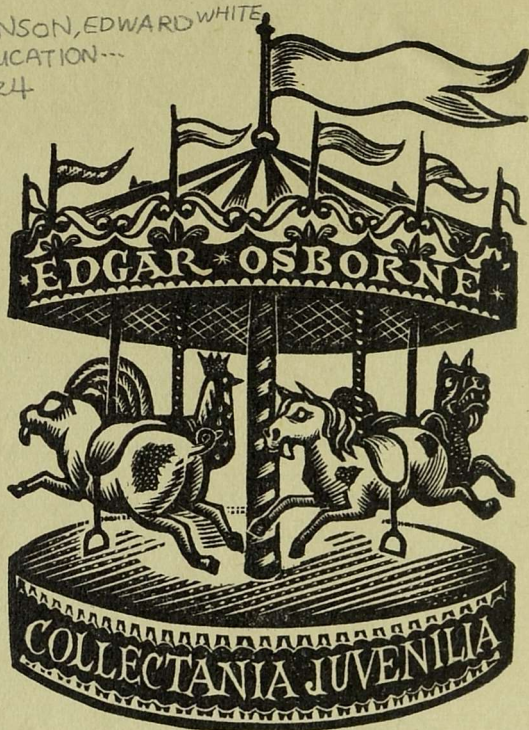




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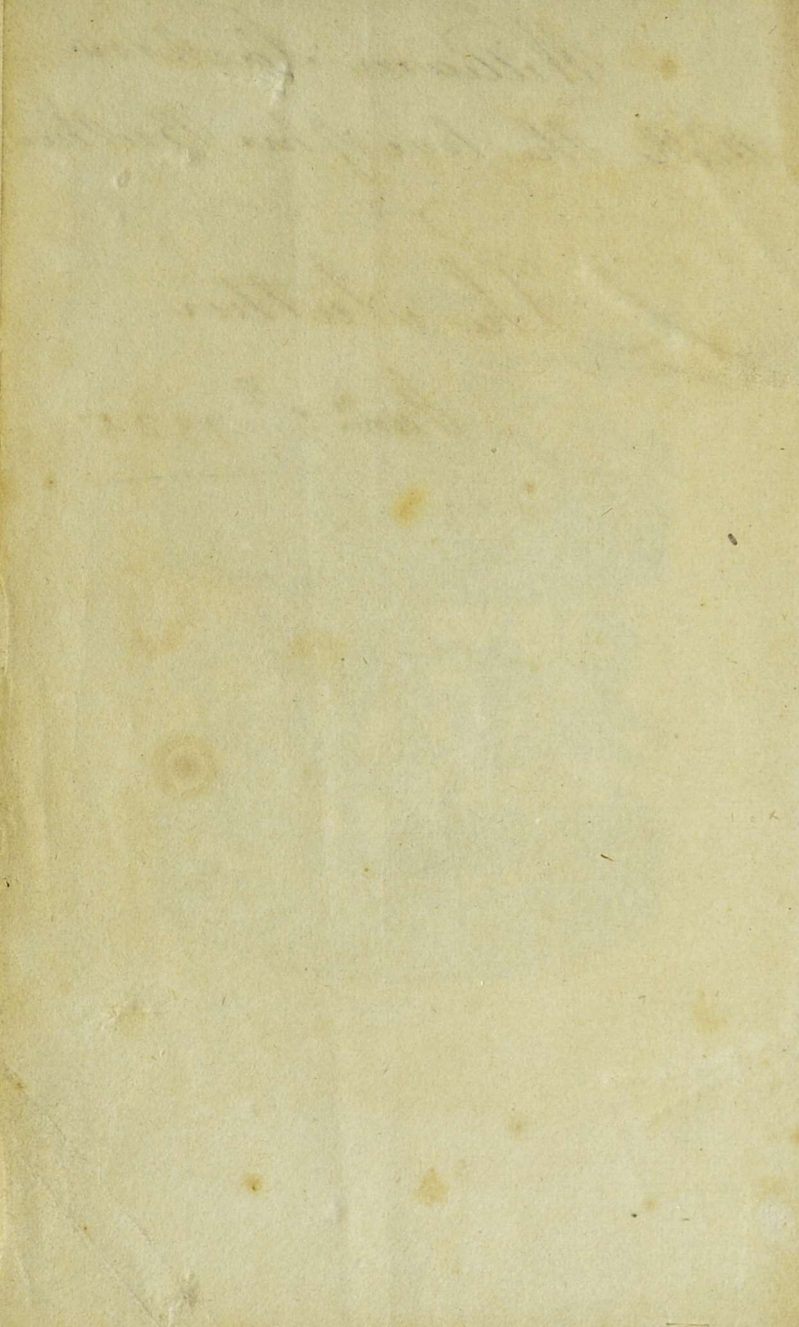
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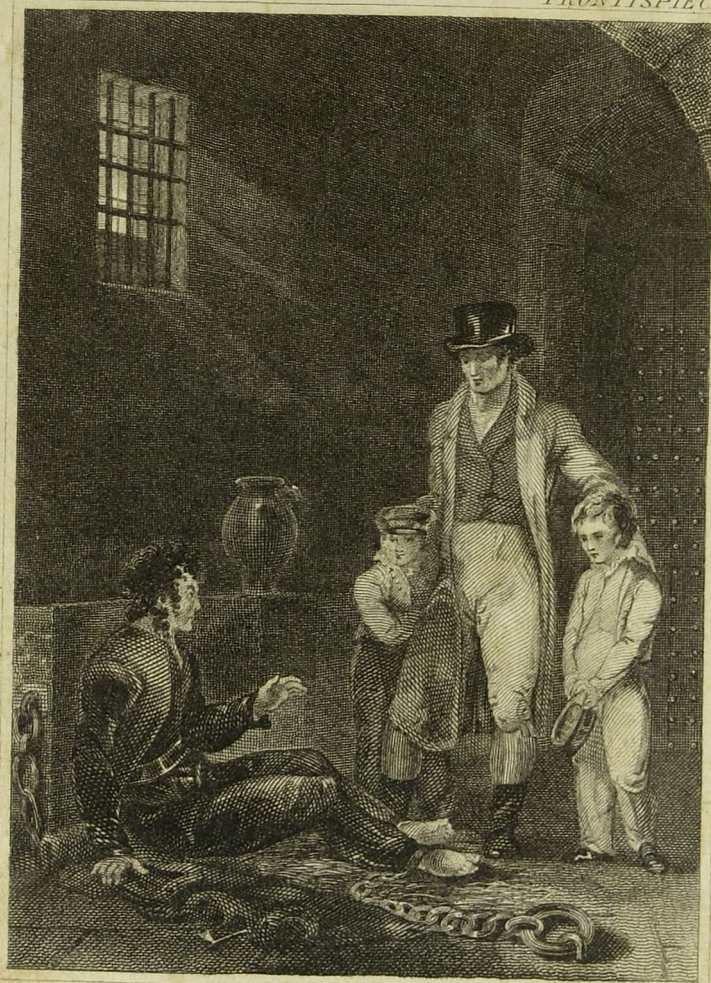
William Jackson
With the love of his Brother

The Author

Jan^{ry} 5th - 1825







W. Harvey, del.

W. Collier, sculp.

IDLENESS IS THE ROOT OF ALL EVIL.

EDUCATION AT HOME;

OR

A Father's Instructions :

CONSISTING OF MISCELLANEOUS PIECES FOR THE
INSTRUCTION AND AMUSEMENT OF YOUNG
PERSONS,

FROM TEN TO TWELVE YEARS OF AGE.

“ Father and Friend, and Tutor, all in one.”

COWPER.



LONDON :

PRINTED FOR BALDWIN, CRADOCK, AND JOY,
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EDUCATION AT THE 19th

CONTENTS

Introduction	1
Benvenuto and Benvenuto	1
On the manufacture of Glass and Paper	1
On the manufacture of Glass and Paper	1
The Pinner	1
Tom of a Bunker	1
Evaporation process	1
On the clothing of animals in hot and cold climates	1
Cyprus a Drama	1
Idleness is the root of all evil	1
Measuring inaccessible heights and distances	1
Remember that thou keep holy the Sabbath day	1
Hygiene—Summer	1
Hygiene—Winter	1

CONTENTS.

	Page
Introduction	v.
Benevolence and Beneficence	1
On the manufacture of Glass and Earth- enware	10
The Funeral	29
Cost of a Breakfast	45
Evaporation produces cold	55
On the clothing of animals in hot and cold climates	67
Cyrus, a Drama	77
Idleness is the root of all evil.....	85
Measuring inaccessible heights and dis- tances	98
Remember that thou keep holy the Sab- bath day	105
Hymn—Summer.....	114
Hymn—Winter	119
Pence make Pounds	124

	Page.
On Prophecy	142
The Poultry-yard	153
Charles the second, a Drama	181
Curiosity	198
Acids and Alkalies	206
The Tortoise-shell Kitten	220

INTRODUCTION.

Mr. Hervey's fortune was a moderate competency, sufficient to procure all the necessaries, and some of the elegancies of life; though he had two sons, he was by no means anxious to increase it, as he believed, that in watching over the education of his children, he was contributing in a greater degree to their future happiness, than by accumulating wealth, and leaving their minds to be trained by dependents. In dedicating much of his time to their instruction, Mr. Hervey felt himself amply repaid by their increased attachment. To their father they always applied in all their sorrows for advice and consolation ;

and in all their pleasures his sympathetic smile was looked for. The hour before retiring to rest was to them the happiest in the day. It was invariably spent along with him ; in summer, in walking ; in winter, in the library. It was passed in reading, in trying amusing experiments, or in conversations which generally arose out of some previous event of the day. For the benefit of my young readers, I have committed to paper such of these conversations as are likely to excite the most general interest. Should these meet with the approbation of the public, it is my intention to add a second volume, containing a more particular account of the pursuits of my young friends, GEORGE and CHARLES HERVEY.

EDUCATION AT HOME.

BENEVOLENCE AND BENEFICENCE.

Propriety of Language is the selection of such words as the best usage has appropriated to those ideas which we intend to express by them.

MURRAY.

MR. HARVEY and his Sons, one day visited a charity school, which had been lately founded by Mr. Leigh, a gentleman of large property in the neighbourhood. George was particularly struck by the neat, clean, and comfortable appearance of the house and school, and by the healthy, cheerful countenances, and regular

behaviour of the children. On their return home, the following conversation ensued :

Geo. I believe, sir, those children are entirely maintained and educated at the expense of Mr. Leigh ?

Mr. H. Yes : and those who conduct themselves with propriety, are afterwards taught some business by which they may support themselves.

Geo. What a very kind, benevolent man Mr. Leigh is !

Mr. H. He is a man of large fortune, and he makes an excellent use of it : he is more than a benevolent man, he is a beneficent one.

Geo. Why, papa, is there any difference between the meanings of the words benevolent, and beneficent ?

Mr. H. A great deal. A bene-

volent man, is only a well-wisher ; but a beneficent man, is a well-doer. I remember a story that, I think, will render the difference evident. Mr. Goodman and Mr. Sylvester, were two intimate friends. As they were, one day, walking through the village together, they were accosted by a thin, sickly-looking woman, having a wailing infant in her arms ; whilst a ragged child, about three years old, clung screaming to her apron. She told them, that her husband had been seized with a fever three months ago, which, though he had quickly recovered from his illness, had thrown him out of work ; and that he had been able to procure none since ; that their parish lay at a considerable distance, and they had not been able to get relief ; that all their savings had been

spent in paying the Doctor, and in purchasing present necessities, and that now they were almost starving: the truth of which, the looks of the woman and of the children confirmed—

“Poor woman,” said Mr. Goodman, “Poor creature! I wish that I could render you any assistance; but alas! I know not how. If I had a hundred pounds, you should be welcome to it all—but, I have not sixpence in my pocket.” “Nor I,” said Mr. Sylvester, and walked on. Mr. Goodman thought it was wrong not to speak one word to comfort the poor woman, and inwardly resolved, that, as soon as he got home, he would desire his servant to carry them some food. They now observed that the people were all

running in one direction ; and the dense smoke, that arose at a distance, sufficiently accounted for it. They quickened their pace, and in a few minutes arrived opposite a cottage which was blazing in a most terrific manner. The chimneys threw up long spires of fire ; white flame and smoke poured in torrents from the windows. The people, that were assembled, in vain endeavoured to check the consuming element, by throwing water upon the building ; for the fire-engine was so much out of order, as is generally the case in small places, that it would not play. Two men were endeavouring to drag away a frantic woman, who tried, with all her strength, to escape from them. Some of the spectators said, that she was the mistress of the house,

and that, in her alarm, she had left an infant asleep in the chamber. "Poor, poor child!" said Mr. Goodman, "what a dreadful thing, to be burned alive! will no one try to save thee? what no one! I wish I could save it, poor little thing!" He had scarcely uttered these words, when he saw, issuing from the volume of smoke that poured out at the doorway, his friend, bearing, wrapped up in his great coat, the infant, unhurt; but his own arm was dreadfully burnt, and his hand scorched in a most shocking manner: yet, notwithstanding this, he superintended, and even assisted, with his lame hand, in pulling down a shed, to prevent the fire communicating to any other building, whilst Mr. Goodman stood, not knowing what to do, or how to act, and

wishing, from the bottom of his heart, that any thing could be done.

On his arrival at home, the fire had made such an impression on his mind, that he quite forgot to send the food for the poor woman and her starving children. Not so Mr. Sylvester; though he suffered much from his burn, yet as soon as it was dressed, he walked back in search of the wretched family. After some difficulty, he found them in a stable which a neighbour allowed them to occupy : their landlord having turned them out of their old habitation because they had not the means of paying their rent. The man sat, in a kind of stupor, on the straw : his wife and children were weeping beside him. They said that they had not tasted food for two days. Mr. Sylvester had brought some

broken victuals in his pocket, which they devoured in a most ravenous way. It was too late to procure fresh lodgings for them, that night, but, with the aid of another bundle of straw, they made themselves a more comfortable bed. On going, he gave them half-a-crown to procure food for the evening ; and told the man, that, if he would come to his house on the following morning, he would endeavour to give him some employment, till he could find work in the business to which he had been brought up.

“Now,” said Mr. Harvey, “Goodman was a benevolent man, Sylvester a beneficent one.” “Why,” said George, “I dare say, if it had not been that the fire made him forget, Mr. Goodman would have relieved the poor family.”

Mr. Harvey. Yes, George, but we ought not to allow any thing to make us forget the necessities of our fellow creatures: but all benevolent men, like Mr. Goodman, intend to be beneficent.

ON THE MANUFACTURE OF GLASS AND
EARTHENWARE.

For this intent, the subtle Chemist feeds
Perpetual flames, whose unresisted force,
O'er sand, and ashes, and the stubborn flint,
Prevailing, turns into a fusil sea. PHILIPS.

MR. HARVEY. As I have no particular engagement to-morrow, it is my intention to fulfil my promise of taking you over a Glass-house, and a Pottery. Before we go, it is my wish, that you should become acquainted with the substances employed in those manufactories, that you may be able to comprehend the different processes used in them.

Geo. Indeed, papa, you are extremely kind, and we will promise to be very attentive.

Mr. H. Well, then, to begin with Glass. Do you remember what I told you it is made of?

Geo. Of sand and alkali.*

Mr. H. It is now necessary to be rather more particular; though sand is used in making some kinds of Glass, yet all sand will not do: it must be of that kind which is termed silicious.

Geo. What is meant by silicious sand?

Mr. H. Sand composed of the same ingredients as flint, and which is by far the most common kind of sand. The sand used for making mortar, and sea sand, generally consisting of it.

Chas. How is the process of making glass conducted?

* See the conversation on acids and alkalies.

Mr. H. The sand and soda being mixed together in proper quantities, are raised to a temperature sufficient to make them combine, slightly, with each other, but not to fuse them : in this state the mixture is called *frit*. It is removed, whilst still hot, into earthenware pots or crucibles made of burnt clay, and clay in its native state, ground together and baked. The heat is, then, increased till the alkali fuses, and combines with the sand. The impurities rise to the surface of the melted mass in the form of a scum, which is called glass-gall, and must be skimmed off. The furnace is then allowed to cool, till the glass becomes sufficiently ductile to admit of its being blown, or cast into the required forms. This is crown glass ; the glass of which the panes

of windows are made. Its clearness and transparency depend upon the purity of the alkali, and the whiteness of the sand.

Geo. I think, sir, you told us, that soda and potash were made from the ashes of vegetables.

Mr. H. I did. Soda is chiefly made from the ashes of sea weeds ; considerable quantities of which are imported from Spain, under the name of Barilla ashes. Potash is manufactured from the ashes of inland plants ; the process is very simple ; in both cases it merely consists in steeping the ashes in water, which dissolves the alkali, and but few of the impurities with which it was before contaminated. This water is afterwards evaporated, or boiled, to dryness, and the residuum, or what is

left, is heated red-hot; this, though it is still mixed with foreign matter, is in a state sufficiently pure to be used in making glass: part of the remaining impurities being driven off by the intense heat to which it is then subjected; and the greater portion of the remaining ones rising with the glass-gall.

Geo. How wonderful it is that such a beautiful, hard, transparent substance as glass, can be made from sand and ashes!

Chas. Is it known how glass was first discovered?

Mr. H. It is related, that a ship having cast anchor at the mouth of the river Belus, the sailors came on shore to dress some provisions, and that, supporting the kettles, in which they cooked, on lumps of soda, with

which the ship was loaded, over fires made upon the sands, the heat fused the soda and sand together, and glass was formed.

Chas. The discovery of glass it seems, then, was purely accidental.

Mr. H. It is rather a mortifying reflection, that most of our greatest discoveries have been made by chance.

Chas. Was glass well known to the ancients?

Mr. H. The Romans were acquainted with it; for a few of the windows in Herculaneum were made of a semi-transparent, coarse glass.

Geo. Where is Herculaneum?

Mr. H. Herculaneum is a Roman town, which was buried by an eruption of mount Vesuvius, in the reign of the emperor Titus, and which the moderns are now excavating.

Chas. Besides, I remember reading, in the Roman History, of Nero's breaking a glass cup which cost fifty thousand pounds.

Mr. H. This proves the very great value of glass in those days. Glass was not brought into general use till some centuries after the christian æra.

Chas. Why, glass is so useful I can scarcely tell how it could be done without.

Mr. H. Now, that we have been so long accustomed to use it, it certainly has become, almost, one of the necessities of life. Formerly windows were made of Isinglass, of the skins of animals, or of a mineral called Talc, which is almost as transparent as glass, and is still sometimes used to cover mariners compasses with, as being much less brittle than glass.

Geo. It is the substance, I believe, between two plates, of which the objects in the sliders of microscopes are placed.

Mr. H. You are right; and it is used for that purpose, because it admits of being readily cut with a knife, and of being split into layers indefinitely thin.

Geo. And they might use horn too for windows: I have seen lanthorns made of horn, possessing a considerable degree of transparency.

Mr. H. I do not know whether they did or did not. It has been asserted, that king Alfred discovered the method of forming horn into thin plates, capable of transmitting light; as for bottles, they were obliged to make them of skin or leather.

Chas. Then, this explains a pas-

sage of Scripture that I have frequently been puzzled with, which says, that men do not put new wine into old bottles, lest the bottles should burst. Now, I did not see that old bottles would be more liable to burst than new ones; but since they were made of leather they certainly would.

Mr. H. In place of looking-glasses, polished mirrors, made of a mixture of copper and tin, similar to those now used in reflecting telescopes, were substituted.

Geo. There are other kinds of glass besides crown glass, there are flint and bottle glass: what are those made of?

Mr. H. Flint glass is the most beautiful of any. It is made of quartz, a very fine kind of flint; and sometimes of rock crystal, fused along with soda and a small quantity of red lead.

Chas. I have frequently seen red lead, what is it made from?

Mr. H. It is made by exposing lead to a considerable heat, continued till the lead is converted, by the action of the atmosphere, into a red powder.

Chas. One would think that it would colour the glass red.

Mr. H. It has not this effect. A little lime is sometimes added, which makes the glass less brittle. Bottle glass is made from coarse sand, and the alkali is supplied by the addition of soap-boilers' refuse, or vegetable ashes. Its green colour is owing to the presence of iron, which all vegetable ashes contain in a state similar to rust.

Chas. I have seen coloured glasses of different kinds: for instance the

sugar-basin, which is made of purple glass.

Mr. H. The substances that I have mentioned to you, form the basis of glass. Different colours are given to it, sometimes accidentally, sometimes intentionally, by the presence, or addition, of metallic substances: Green and red, by copper and iron; violet, by manganese, &c. After the glass is made, it is blown, moulded, and cut into various forms, which operations you will see performed to-morrow. There is still one thing respecting it, that you should be acquainted with, and that I have not mentioned to you; the operation of annealing.

Geo. What is that?

Mr. H. If glass were allowed, after being blown, to cool suddenly,

it would become so exceedingly brittle as to be useless. It is therefore placed in large ovens, which are cooled by degrees.

Geo. I think, glass is one of the hardest substances with which we are acquainted?

Mr. H. It is one of the hardest substances formed by *art*; but the diamond is so much harder as readily to cut glass, for which purpose it is used by glaziers.

Chas. Are cut-glass decanters, &c. cut with diamonds?

Mr. H. No, my dear, properly speaking, they are ground into the required form, but not with diamonds, and are afterwards polished.

Geo. Would it be possible to divide glass, as is done with a diamond, without one?

Mr. H. It would ; but not so readily. If a scratch be made on the edge of a piece of glass with a flint, or a file, and a bit of red-hot tobacco pipe, or strong wire, applied to the surface of the glass, at the distance of about the tenth of an inch from the scratch, a crack will form from the edge to the wire ; and, if the hot wire be then drawn slowly along, the crack will follow it in any direction. Now let us proceed to earthenware.

Geo. That is a subject about which I am very curious, for I read, the other day, in Robinson Crusoe, all the bungling attempts he made, before he could succeed in forming a dish : and I wish very much to know, how they, really, are made.

Mr. H. The basis of all earthenware is clay.

Geo. What! clay, such as bricks are made of?

Mr. H. Yes, but in a purer state, in the state of pipe, or porcelain clay: you have seen pipe clay?

Chas. O yes, very often; it is quite white, and does not look at all like the blue or red clay that bricks are made of.

Mr. H. Well, this white clay is ground very fine, and mixed with water, after which it is passed through sieves of different degrees of fineness but, as vessels made of clay alone would crack in drying, it is mixed with a proportion of fine sand for delf ware; or burnt flints, ground to powder, for stone ware: the coarser kinds of pot, are made of common clay and sand, these mixtures are afterwards dried in kilns, and worked

to a proper consistency ; then, coarsely moulded on a potter's wheel, allowed to dry, and the required form given to the vessels, after which they are baked, and termed biscuit.

Geo. Are they now finished ?

Mr. H. No, they must be glazed and painted : the common white and brown wares are glazed by throwing salt into the ovens, before the biscuit is withdrawn ; the fumes of which cause the surface of the ware to melt into a kind of glass. The principal potteries are in Staffordshire, and the common glazing day is Saturday ; when the fumes arising from them involve an extent of several miles in a cloud, of which a stranger can form little idea. Other coarse vessels are glazed, by covering their surfaces with a preparation of lead called litharge,

whilst hot; this runs into a kind of opaque glass of a yellow or red colour.

Geo. Then, how are the finer kinds of ware glazed?

Mr. H. A mixture is made of the oxides of tin and lead, white sand, and the mineral called Talc. This, after being melted, is ground to powder, and diffused over the surface of the biscuit, which is again heated; and this composition melting, covers it with a fine enamel. Besides these, there are some other ways of glazing.

Geo. I do not know what is meant by oxide.

Mr. H. It is out of my power, at present, to make you understand the exact meaning of the word: red lead is an oxide of lead, and the oxide of tin and lead, used in glazing, is made

in a similar manner. The lead used in this manufacture is very pernicious to the health, and produces the most lamentable effects upon those workmen who are much exposed to its action.

Chas. The composition of different kinds of ware must vary, though the basis of them all is clay.

Mr. H. It does; besides those I have mentioned, there are various other sorts. Crucibles used for melting metals and glass in, are formed of burnt clay, or sand, and common clay, or of clay and plumbago (black lead, the mineral of which pencils are made), and which though its name would lead you to suppose that it contained lead, consists chiefly of iron and charcoal. Porcelain and china are composed of substances, some

of which are infusible, and some of which melt readily, and, of course, the composition is semi-vitrified, half transparent.

Geo. The Chinese excel all the world in this manufacture, and in the beauty of their colours.

Mr. H. They do ; but some of the English specimens are scarcely inferior, in any respect, to theirs, and are infinitely superior in the taste displayed in the designs and painting. Our paintings are, indeed, often admirable, both as to their correctness and elegance. The colours used are metallic : the rich purple is a preparation of gold. When they are applied, they are mixed with powdered glass and borax, and, either melted on to the surface of the glaze or enamel, or actually incorporated with it.

Chas. Porcelain is exceedingly durable.

Mr. H. Yes: the porcelain tower in China is three hundred feet in height, and covered entirely with porcelain, which still retains its original beauty, though it has been exposed to the action of the weather for more than four hundred years. The manufacture of earthenware has been, of late years, brought to an unrivalled degree of perfection in England, by the taste and science of Mr. Wedgwood, who has entitled the art of pottery, by his improvements, to be ranked among the fine arts.

THE FUNERAL.

——— It was eve

When homewardly we went, and in the air
Was that cool freshness, that discolouring shade
That makes the eye turn inward. Then we
heard,

Over the vale, the heavy toll of death
Sound slow; and question'd of the dead.

SOUTHEY.

IT was one of those delightful evenings that so frequently occur in the month of August, at the conclusion of a sultry day; a thunder shower, which had fallen during the afternoon, had cooled the air; the blades of grass raised their pointed leaves toward Heaven; the wild-flowers, no longer drooping, diffused their fragrance through the air, and

the trees seemed decked with new verdure: the cattle, as they slowly returned homewards, grazed on the banks of the neighbouring river as they went, the swallow tribe fluttered along the unruffled surface of the water, or skimmed, with the rapidity of thought, over the adjacent meadows: all nature seemed to rejoice.

As Mr. Harvey and his sons walked through the woods, that led from the village to the valleys beneath, the shades of evening began to fall around; the bat was seen flitting, at intervals, along the glades; the beetles occasionally dashed against the unwary passenger; the little birds nestling in the branches, and the rooks returning homeward, in every direction, indicated the ap-

proach of night. The clouds that skirted the horizon were tinged by the setting sun, and the pale streak of red that extended itself above the distant hills, gave promise of a fine day. In the valley at their feet was situated the church, a small, but venerable edifice, nearly obscured by the Ivy which covered the tower, and which no unhallowed hand had dared to displace; a huge oak, the growth of centuries, extended its arms above the humble chancel; a few cottages were scattered around. A little further, the river, which was visible among the trees for many miles, flowed calmly along: beyond it were some low hills, cultivated to their summits; still further, hill and vale were seen alternately, till the blue summits of a range of very distant mountains bounded the prospect.

As they stood a moment to admire this extensive view, the slow tolling of the bell announced the approach of a funeral. As the boys had never witnessed this impressive ceremony, their father, after some hesitation, complied with their request of permitting them to attend the service. As they arrived at the church, the melancholy procession was entering the wicket that separated the churchyard from the green; the coffin was supported by six of the village girls in white, and followed by a train of the afflicted relatives; the father and mother, two aged infirm people, who themselves seemed fast verging to the grave, preceded the weeping brothers and sisters of her, upon whom the tomb was about to close, but not for ever. The scene and

service produced, as Mr. Harvey expected, a very strong effect upon the boys.

The clergyman met the coffin at the gate, and walking before it to the church, repeated the following sentences with a solemnity and impressiveness, that particularly struck them. They had often read them before, but, till now, they had never felt their weight. The first sentence indeed they did not fully comprehend, but they understood the last perfectly: "I am the resurrection and the life, saith the Lord: he that believeth in me, though he were dead, yet shall he live; and whosoever liveth, and believeth in me, shall never die."

"I know that my Redeemer liveth, and that he shall stand at the latter day upon the earth; and though

after my skin, worms destroy this body, yet in my flesh shall I see God: whom I shall see for myself, and my eyes shall behold, and not another." They felt the full force of the Psalm, and were much affected by the lesson, particularly by this passage: "The trumpet shall sound, and the dead shall be raised incorruptible, and *we* shall be changed; for this corruptible must put on incorruption, and this mortal must put on immortality; so when this corruptible shall have put on incorruption, and this mortal shall have put on immortality, then shall be brought to pass the saying that is written, Death is swallowed up in Victory: O Death, where is thy sting? O grave, where is thy Victory?" After they had left the Church, and had come to the grave-

side, the lowering of the coffin was attended to with much interest. When the Sexton scattered a little earth upon the lid, while the clergyman repeated, "We therefore commit her body to the ground; earth to earth, dust to dust, ashes to ashes, in sure and certain hope of the resurrection to eternal life," the relatives wept bitterly, and the boys could not restrain their tears. After the conclusion of the service, as the old man dropped a tear into the grave of his daughter, he clasped his hands and said: "she is gone, the staff of my old age, my stay and my comfort, I had thought to have gone down to the grave before her; but I shall go to her, she shall not return to me. The Lord giveth, and the Lord taketh away, blessed be the name of the Lord."

Each took a farewell look into the grave, and after a word of comfort from the minister, returned home. As Mr. Harvey and the boys entered the wood, the hymn (which it is still the custom to sing, in many country places, at a funeral) rose full upon their ear; and softened as it was by distance, they thought it the most solemn, and the sweetest music they had ever heard: but as they proceeded, the sounds gradually died away. It was now dark; the glow-worm had lit her little lamp, faint emblem of her who had just departed, whose unobtrusive merit, though bright, was seen by few. The nightingale filled the woods with her melody, the twinkling stars appeared one by one, the fallen leaves that rustled beneath their feet, reminded them: how “one

generation passeth away, and another generation cometh."

As for man, so he flourisheth, "for the wind passeth over them, and they are gone, and the place thereof shall know them no more." They had just witnessed the funeral of a very young woman, she was well known to them, and was but a few years older than themselves. She had run her course; but like the sun, which had just sunk below the horizon, she had set to rise again with tenfold lustre. "From dust she came, and to dust she had returned." "The sun also ariseth, and the sun goeth down, and hasteth to the place whence he arose." "Vanity of vanities, saith the preacher, vanity of vanities, all is vanity and vexation of spirit." A few years hence, said Mr. Hervey,

we shall all have joined her in the grave.

“That,” said George, “is certainly true; but every thing is so beautiful, and all so happy, that it is a very melancholy reflection.” “You have lived but few years,” said Mr. H., “and have had but few things to disgust you: but still you should beware how you set your affections on the things of this world, the sun which has set this evening, has set to rise no more upon thousands who are as young and younger than yourselves. As to its being a melancholy thought, it can only be so to those, who think of death as the extinction of existence, the loss of all happiness and “to those, who perish without hope,” in neither of which lights, my children, I pray God you may ever

view it. If we consider death, as merely a change of the state of our being, it will disarm it of many of its terrors. The Caterpillar, which, a few months ago, crawled an insignificant worm upon the ground, now disengaged from its first form, flutters from flower to flower, and traverses the fields of air. Such, but more glorious, is the change that death effects in us. You remember the words of our Saviour to the dying, but repentant and believing thief."

Geo. "This day shalt thou be with me in Paradise." Is not death frequently called sleep, in Scripture?

Mr. H. Yes: as man resteth from his labour, and lyeth down to sleep; so does he rest from his labour and his troubles, and sleepeth in the grave. Our bodies shall sleep in the dust,

till the last trumpet shall awaken them ; “ then the grave shall deliver up the dead, and we shall all stand before the judgment-seat of Christ.” This world is, indeed, a happy one ; and we may freely partake of all its lawful enjoyments, but life is short in this world ; for every minute we live here, we must live thousands of years hereafter. As a drop is to the wave, as a grain of sand on the sea shore ; so are our days, to the years of eternity. We are here placed, for a short time, in a state of trial. On our conduct here depends our happiness for ever : if we approve ourselves “ heirs of salvation,” we shall inherit the kingdom of heaven : but otherwise we must perish ; every man shall be rewarded, according to the deeds he hath done on the earth.

That such were the thoughts of the shortness of life, entertained by the inspired writers, is evident. "The days," said the venerable Patriarch, "of the years of my pilgrimage are a hundred and thirty years: few and evil have the days of the years of my life been, and have not attained unto the days of the years of the life of my fathers in the days of their pilgrimage." "Behold," says the Psalmist, "thou hast made my days as an hand breadth, and mine age is nothing before thee: verily, every man at his best estate is altogether vanity."

Geo. Life is, I think, frequently compared to a journey, in Scripture.

Mr. H. Yes. We are all travellers journeying to the grave: some

arrive speedily at the appointed place, and some travel on for a longer period. Like fellow travellers we ought to assist each other in our journey, and, like them, frequently employ our minds and conversation with each other, on our prospects and the hopes of our final destination. As Christians, we are all journeying to the same heavenly City, and, like anxious travellers, we ought not to set our minds and affections on the objects we meet with by the road : we may step aside and enjoy them, we may stop an instant and admire them, but we must not linger ; we must not load ourselves with riches, or with any of the cares of this life, so as to hinder us in our pilgrimage. If we meet with any impediments to our progress, we must use our utmost

endeavours to remove them. "These all," as the Apostle of the Gentiles, hath said, "confessed they were strangers and Pilgrims in the earth. For they that say such things declare plainly that they seek a country. And truly if they had been mindful of that country from whence they came out, they might have had opportunity to have returned. But now they desire a better country, that is, an heavenly: wherefore God is not ashamed to be called their God: for he hath prepared for them a City"

We must beware how we enter into temptation. The way is narrow: if we are led astray it is only by the grace of God that we can ever find it again. But, above all, prayer to God for his guidance and support,

is the only sure means of conquering the terror of death. "In the hour of death, and in the day of judgment, good Lord deliver us."

COST OF A BREAKFAST.

“Let us consider how many arts and professions are necessary for this purpose.”

Mr. Hervey. Well boys. I suppose your morning walk has given you an appetite for your breakfast.

Chas. Yes, indeed ; we have been round by the wind-mill and heath, and have seen the poultry fed, and have been at home this half hour.

Geo. And since we returned, we have been endeavouring to count the number of men who have been employed in making the rolls, which are growing cold while we are talking about them, papa.

Mr. H. I believe, that you are scarcely aware of the number. Cast

your eyes upon the table, and let us try to ascertain how many people have been required to procure our very simple breakfast. But, first, by how many different countries do you think the articles are supplied?

Geo. Let me think—Coffee, where does that come from?

Chas. Arabia, I believe: does it not, sir?

Mr. H. Yes. And the sugar—

Geo. From the West-Indian Islands.

Mr. H. And you know it is there cultivated by slaves, the poor injured sons of Africa; and the cream being the produce of our own farm, you find that the natives of all the four quarters of the earth, Asiatics, Americans, Africans, and Europeans, unite their labours before we can

enjoy, even the luxury of a dish of Coffee.

Geo. The cups I think are made in China.

Chas. Yes :—and the tea-spoons are silver, and silver comes from America.

Mr. H. Silver is found, not in America alone, but in various other countries ; and, then, the cloth being of British manufactory, we have here assembled the productions of five different countries, some of which are distant several thousand miles. I will endeavour now, to give you some notion of the labour necessary for procuring these articles of common use. First, the Coffee tree is to be planted, the ground cultivated ; then it requires to be supplied with water ; the berries, when ripe, must

be gathered and freed from their external covering, dried, and packed for exportation : so we have got employment here for an Arab and all his family.

Geo. But all Coffee does not come from Arabia.

Mr. H. Certainly not, it is only that of the best quality ; but wherever produced, it must undergo the same operations.

Chas. And afterwards, it has to be roasted and ground, which, I believe, is done in England.

Mr. H. Certainly, and that cannot be done without fire and iron ; and thus we call in the collier, the blacksmith, the iron-founder, the miner, and I know not how many trades besides, that would require more time to enumerate than I can at present spare.

Geo. Well, papa, the sugar is the next ingredient ; that comes from the West and East Indies.

Mr. H. Yes ; and to procure this luxury, thousands of our fellow creatures are doomed to spend their lives in the most rigorous servitude, deprived of all hope of the termination of their misfortunes, but that which death affords. You have lately read an account of the dreadful sufferings of the West-Indian slaves, and, I doubt not, it has made an impression on your minds that will not soon be effaced—but to return to the subject of labour. The canes must be first planted, which, in some countries, is a work of no little toil ; the ground previously requiring to be reduced into the state of mud, by artificial watering. The canes are afterwards

to be secured to stakes, and, when the harvest comes, they must be cut, and the juice pressed out by heavy rollers, which is then to be boiled down, and packed in hogsheads. Thus, besides those things that are immediately employed, we must consider, that the work cannot be carried on without tools to cut the canes, mills to press them, boilers to evaporate the juice in, alum and lime to make it crystalize, and, when exported, hogsheads to put the sugar in.

Geo. Now we come to the cream.

Mr. H. The labour requisite for procuring which you are acquainted with, and cream churned affords the butter for our rolls.

Chas. I suppose the manufacture of cups employs a great many people.

Mr. H. Yes, indeed. I intend taking you soon to see a porcelain manufactory, and you will then form a more correct estimate of the numbers that are employed, than I can give you by mere words. Some, you will see, busied in digging the clay; some in forming the cups; others, in grinding flints, baking the cups into what is called biscuit, or glazing them, and others in painting them. Before the last mentioned operation alone can be executed, an amazing number of people must unite their efforts. As the colours are chiefly mineral, gold, silver, and copper miners, and those who get manganese and many other metals, must be employed. Gold affords the very rich purple, that is used in the finest and most costly pieces; to procure which

we must set the chemists to work, who will necessarily call in the aid of other businesses; and we must once more travel all over the world, to collect the colours for our plates. The Chinese have this advantage over us, that they procure them nearly all in their own country.

Chas. Then for the bread, we must employ the farmer, the miller, the brewer, the salt maker, and the baker, who, in their turn, will employ many others.

Mr. H. You are right, and now for the cloth, and, by that time, we shall have done breakfast.

Geo. Why there is the farmer who grew the flax, the man who dressed it, those who spun the thread, and those who wove the cloth.

Chas. But yet, we have to get

our sugar from India, our coffee from Arabia, and the cups from China.

Geo. That will afford plenty for the sailors and the ship builders to do, and, after the ship is built, we shall want ropes and sails to rigg it, ordnance to defend it, and food to victual it, and a great deal more.

Mr. H. A great deal more indeed !—for I believe that, if you and your brother will reflect, you will find, before a ship can be fitted out completely, for a voyage to China, every trade in the world must be employed, either directly or indirectly.

Geo. What must every trade in the world be employed before I can have a cup of coffee ! I had not, indeed, any idea of that.

Mr. H. I dare say not—we sel-

dom reflect upon the number of men, who must unite their efforts to procure for us those things which we are daily in the habit of using, or even of destroying without a thought.

EVAPORATION PRODUCES COLD.

All Evaporation produces cold. A person might be frozen to death in Summer, by being sprinkled with Ether.

PARKS.

Geo. When my brother and I were bathing this morning, we observed, that, on coming out of the water, we felt colder than whilst we were swimming, though the air was, at that time, much warmer than the water. We could not agree as to the cause of this sensation, and determined to ask you. I thought that our feeling warmer in the water was owing to the exercise of swimming, but this Charles would not admit.

Chas. And we also observed that on the wind rising we felt still colder.

Father. In the tea urn, which is now standing on the table, you are aware there is a red-hot heater; now, that heater will, in a short time, be of nearly the same temperature as the water: what do you think will have become of its heat?

Chas. I believe, sir, that the iron keeps the water boiling, and that the principal part of the heat flies off, along with part of the water, in the form of steam.

Father. Desire the servant to bring the tin tea-kettle with some boiling water in it. I will set the kettle on the fire—you observe the water boils, and a quantity of steam issues from the spout, now, if I make the fire burn as briskly as I can, I cannot make the water red-hot; I cannot, indeed, make it hotter than boiling:

what do you think becomes of the heat, that is every instant communicated to it?

Geo. I suppose it flies off with the steam; and you cannot make the water hotter by increasing the fire, because, the more heat you communicate to the water, the greater the quantity of steam that will be generated to carry it off.

Father. Now, whilst the kettle is boiling violently, I will take it off the fire, and place it with the bottom on my hand. You observe it does not burn me—but if I was to allow it to remain on, after it had ceased boiling, it would burn me. How do you account for this?

Chas. I really do not know—it is very singular; but did it not feel very hot?

Father. No, not at all. Whenever water, or any other fluid, flies off in vapour, it is said to evaporate, and the process is called evaporation. When any liquid evaporates, part of its heat combines with the vapour or steam, and, of course, leaves the remaining liquid with less heat than it had before : that is to say, colder. Thus, by the evaporation of part of the water in the kettle, the remainder was prevented from rising higher in temperature than what is commonly called the boiling point ; and it was the rapid evaporation of the water from the bottom of the kettle, that kept it cool enough, to prevent its burning me ; and when the boiling, and of course the rapid evaporation of the water, ceased, the bottom of the kettle instantly became too hot for me to sustain it longer.

Geo. But liquids sometimes evaporate without boiling : for instance, if I spill a little water on the tray, it will soon have evaporated entirely. Does this kind of evaporation produce cold ?

Father. I will show you. The temperature of this basin of water, is nearly the same as that of the air in the room ; for it has stood here some hours. I will plunge into it this thermometer.—You observe, the mercury in it has sunk three divisions or degrees ; therefore, the temperature of the water is three degrees lower than that of the atmosphere. I will wrap the bulb with a single fold of cloth, and again plunge it into the water : you see, it sinks to the same point as before. I will now take it out of the water. You know, the

temperature of the room is greater than that of the water, the mercury, therefore, ought to rise, but, you observe, the evaporation of the water in the rag has caused it to sink still lower. I will repeat the experiment, whilst your brother blows with the bellows upon the wet rag: the mercury descends still lower than before.

Geo. I now understand the reason why we felt colder when we came out of the water, than during the time we were in it. When the thermometer was taken out of the cold water into the warm air, the evaporation of the moisture adhering to it caused it to be colder than when it was in the water; and this was exactly the same with us. The evaporation of the water, adhering to our

skins, caused the sensation of a greater degree of cold, than even the cold water did. But how did blowing upon the thermometer produce a greater degree of cold?

Father. I will render these two pieces of paper equally moist, now, blow upon one with the bellows, and leave the other to dry by itself.

Chas. The one I blow upon is nearly dry, the other is still quite wet.

Father. That is to say, the evaporation of the moisture from the one has been more rapid, than from the other. When you blew upon the thermometer, the evaporation from it was more rapid than when left to itself; and the heat dissipated is always in proportion to the evaporation, other things remaining the same, and this was

also the case when you were exposed to the wind. But this is not the only reason why you felt colder in the wind, than under shelter from it; for, if you had not been wet, the same thing would have happened in a smaller degree. Thus, a hot iron, from which there is no evaporation, will cool sooner when exposed to a current of air, than when placed where it is calm.

Geo. Suppose, I were to blow upon the thermometer when it is dry, what would happen?

Father. Try.

Geo. The mercury does not sink, which is a proof, in this instance, that the diminution of heat is caused by increased evaporation.

Father. The principle of evaporation is, in hot countries, applied to cool-

ing wines, and procuring ice. The wine to be cooled is placed in an earthen jar full of water, this jar is so porous, that the water slowly percolates through the sides, and evaporates, the evaporation cooling its contents. When this jar is placed in a cool situation during the night, the cold produced is so great, as to cause a small quantity of the water it contains to freeze. I told you before, that the heat dissipated is in proportion to the evaporation. Now, some fluids evaporate much more readily than others. I will repeat the former experiment with different liquids. I will dip the bulb, first, into olive oil, which does not evaporate at all.

Chas. And it does not affect the thermometer.

Father. This is brandy, which evaporates more readily than water.

Geo. The thermometer has sunk, very low indeed. I suppose that brandy is used to bathe bruises, in preference to water, from its producing a greater degree of cold.

Father. Certainly. This is ether, which evaporates almost instantly. It is the middle of July. Into this ether I will dip the bulb, previously wrapped with a fold of cloth, three times, leaving about half a minute between each dip.

Chas. Well, this is amazing, the mercury has sunk 17 degrees below freezing!

Father. In this small glass tube is half a tea-spoonful of water. I will turn it slowly round with one hand, dropping out of this vial ether, so as

to keep the tube moist, for you see, it evaporates with great rapidity, diffusing a strong unpleasant odour. There is my watch, tell me when four minutes have elapsed.

Geo. Now, sir !

Father. I will now break the tube.

Chas. The water is frozen into a solid lump of ice, how wonderful !

Geo. But could you not have avoided breaking the tube ?

Father. I might, by having frozen into the water a bit of fine crooked wire, have drawn the ice out without breaking the tube. The most economical method of trying this curious experiment is, to bore a hole through a cork, and to thrust a piece of tobacco pipe through the hole. The cork of the bottle being then removed, is to be replaced by the perforated one.

When the phial is inverted, the ether, if good, may be made to drop with the requisite speed by grasping the phial with a warm hand. I will pour a little upon your hand.

Chas. It feels very cold, colder than ice.

Father. It is owing to the rapid evaporation.

ON THE CLOTHING OF ANIMALS IN HOT
AND IN COLD CLIMATES.

“The provident care of the Creator is evidently seen in this appointment and discovers the same undeviating attention to the comfort of all his creatures: hence, the clothing of animals in the torrid zone is hair; in the temperate zones, wool; in the frigid, thick fur.”

Chas. Look, father, at the old horse under the hedge. How very rough his coat is.

Father. Yes, he is casting his heavy winter covering of hair, and, in a short time, will appear as smooth and sleek as he used to do last summer.

Chas. But, papa, the horses that have been kept in the stable, during the winter, are not so rough.

Father. No; exposure to the cold

has the effect of thickening the hair of animals. This horse has been exposed to the rigours of the winter, with no other shelter, from the inclemencies of that season, than what an old wall, or leafless hedge could afford. While those in the stable have been protected from the cold, and sheltered from the snows and rain with the greatest care. Yet still, though they have not acquired such a warm coat of hair, it thickened, a little, at the approach of winter; and they are now casting it, though you do not perceive the change, because the loose hair is regularly combed off.

Geo. Do all animals change their hair in this manner?

Father. In countries where the difference of temperature between the hot and cold seasons of the year is

great, the hair of all animals grows longer and more abundantly at the approach of winter; and, in the spring, as they would be too warmly clothed, the hair falls off, and a lighter coat springs up. “HE, who tempers the wind to the shorn lamb,” rather tempers the warmth of the cloathing to the rigours of the season.

Chas. Does the hair of animals, the natives of hot climates, differ much from that of the animals of the north?

Father. It does. In hot countries animals are lightly clothed with hair: in cold ones with wool and fur. The coat of a little Finland poney, or a Greenland dog, bears a stronger resemblance to wool, than that of a Numidian sheep. Some animals, as the sheep and dog, inhabit countries

of very different temperatures; because, as I have just mentioned, the hair of the one, in cold climates, becomes converted into a warm fur, and the wool of the other, in hot ones, degenerates into hair. Animals, such as the white bear, that never loses its fur, or the elephant whose hair does not much increase by cold, commonly inhabit places of certain temperatures. Man is the only being who can vary the warmth of his clothing at will, and, of course, the only one that can live in all countries, with nearly equal ease.

Geo. Yet, I have seen both the elephant and the white bear, in England.

Father. Yes, but exposure to a Greenland frost, by which the white bear is not inconvenienced, for a single

hour, would prove fatal to the elephant; and the bear is with difficulty kept cool, by plentiful supplies of water, even in our northern clime.

Chas. What is the reason that man in hot climates is black like the negroes, or copper-coloured, and in cold ones white?

Geo. It is what has often puzzled me, because last winter, father, you showed us, that black absorbs heat much faster than white: for, when you laid a piece of black, and one of white cloth, on the snow, when the sun shone, the black cloth soon became warm enough to melt the snow beneath it, whilst the white piece lay upon the surface, without producing any effect.

Chas. Yes, and when my father blackened the bulb of one thermome-

ter, and whitened that of another, and hung them together in the sunshine, how much more rapidly the mercury ascended in the one, than in the other.

Geo. I should have thought from this, that the people in hot countries should have been white, that, like the white thermometer they might have kept cool where the sun is so powerful: and, that those of the north, should have been black, that they might have received the full benefit of the little sunshine that is there.

Father. Thus far your reasoning is correct, but, let us go into the house and I will shew you an experiment, that will at once satisfy your minds upon the subject. These two canisters are equal in size, are of the same shape, are both made of tin and are coated with an equal thickness

of paint. I believe there is no difference between them, excepting that one is white and the other black. Into each of them I will pour an equal quantity of hot water, and ascertain the temperature by means of this thermometer. You observe, the mercury stands at the same degree in each. I will now put the lids on, and wait a few minutes, during which time do not speak to me as I am going to write a letter.

Geo. I have met with an accident, sir, I am afraid you will be very angry: I have broken the thermometer.

Father. secured as that instrument was, you must have been extremely careless. How did you do it?

Geo. I saw you plunge the thermometer into the boiling water in

that pan, the other day, to show us that the mercury would ascend no higher than 212, and I wanted to repeat the experiment; but the moment the thermometer reached the water, it broke.

Father. I am glad to find that it was broken through ignorance, and not carelessness. I ought to have told you that no instrument, made of glass, will bear a sudden change, either from cold to heat, or from heat to cold. Before I plunged the thermometer into the boiling fluid I warmed it gradually in the steam, and immersed it with caution. We will now examine the canisters with this thermometer, which is filled with mercury. Thermometers in which the fluid is spirit are improper for experiments in which heat is employed

Geo. The water in the black canister has sunk in temperature 15 degrees, that in the white one but 6, what can be the reason?

Father. It is entirely owing to the difference in colour, the black one parts with its heat much more readily than the white one. I dare say you perceive the application.

Chas. The inhabitants of hot countries are black, that they may part with their superfluous heat more readily than if they were white.

Father. Yes; and for the same reason it is, that in cold climates, at the approach of winter animals become lighter coloured: far north, hares and foxes become quite white. The bellies of animals require to be kept warmer than the rest of their bodies, and are in general, lighter coloured,

frequently quite white, as in the hare, the rabbit, and the cat.

Note.—The thermometer is an instrument that ought to be put into the hands of all children, as soon as they are capable of using it, as it may be made the source of much instruction and great amusement. It should be a large, mercurial thermometer, attached to a graduated scale, and as plainly fitted up as possible, that it may not be injured by moisture. When the divisions become indistinct, they may be restored to their original blackness by rubbing the scale with the snuff of a candle.

An excellent and most entertaining account of the barometer and thermometer, is given by Miss Edgeworth, in the "Continuation of Early Lessons."

CYRUS, A DRAMA.

O the fierce wretchedness that glory brings us !
 Who would not wish to be from wealth exempt ?
 Since riches point to misery and contempt.
 Who'd be so mocked with glory, as to live
 But in a dream of friendship ?

TIMON OF ATHENS

PERSONS OF THE DRAMA.

CYRUS, *King of Persia.*CRÆSUS, *lately king of Lybia ; now prisoner to the
 King of Persia.**Guards, Soldiers, &c.*

SCENE 1st.

*The Tent of Cyrus.—Enter Cræsus
 loaded with chains.*

Cræsus. Cyrus, I have come to
 learn my doom. What mean these
 bonds ? Is the name of Cræsus still
 terrible ? Or dost thou think to add
 to mine afflictions, and to feast thy

pride with the ignominy of a vanquished foe? Then know, oh tyrant! that I despise thy wrath.

Cyrus. Away with him and all his followers to the flames.

Cræsus. For myself, I did expect no better doom; but what are these, that they should share my fate? I was a king, as thou art: We fought, and fortune gave thee victory. These, my comrades and my soldiers, obeyed but my commands; and, faithful to their lord, have followed me through victory, and in my fall. But here they stay:—Not to the pile oh Cyrus! Have the Gods put power into thy hands? and wilt thou use it like a savage?

Cyrus. Away with him—Away with them—to the flames.

Cræsus. For myself, oh Cyrus,

I can bear what thou choosest to inflict. I have lost my crown, my friends, my all—all that could tie me to this world. The chain is broken; death hath nought horrible to me; but for these, act nobly. Pardon them their crime, the guilt of having followed their king too far; at the hour of death, the thought of mercy shewn is sweet. Pardon these, oh Cyrus!

Cyrus. Away with them.

1st. Soldier. Most noble Cræsus! we have followed thee through all thy fortunes, and will die with thee.

Cræsus. My comrades and my friends, for myself I have no hopes or fears; but for you my bosom bleeds—you've followed me, indeed, too faithfully, too far. But he who reigns omnipotent hath seen, and will re-

ward, this bloody deed. Though now it sleep, his thunder yet shall strike the tyrant. Thou wretch, I scorn thee, and defy thy power; thou mayst consume my flesh, but my soul thou canst not slay.

Cyrus. Away with the fellow to the flames, and let the pile be seven-fold large; we'll try if that can move him. What sayst thou now?

Cræsus. That thou mayst redden the heavens with thy flames but that I fear thee not.—Thou wilt have no power upon me when we meet again among the dead. Cyrus, till then farewell! and you, my friends, till then adieu! [*Exit Guards leading him away.*]

SCENE 2nd.

A Funeral Pile. Cræsus in chains upon it. Cyrus and attendants looking on. Soldiers with torches around the Pile.

Cræsus. Oh Solon !

Cyrus. Whose name dost thou invoke ? dost thou yet defy my power ?

Cræsus. His whose words ought ever to speak to the hearts of kings.

Cyrus. Whom meanest thou ?

Cræsus. Cyrus, I hate thee not, I bear thee no revenge, and I had rather that thy heart were changed than thou upon this pile and I upon thy throne ; draw near, and I will teach thee what, when thou art hum-

bled to the dust as I, thou mayest remember.

Cyrus. Say on.

Cræsus. When I, O king, was in my power upon the throne, Solon the Athenian visited my court. To him, I showed my power, the riches of my court, the glory of my reign ; and, in my pride, I asked, what man he thought the happiest. To which he said "Tellus, the Athenian." "And why?" I said, "Oh Solon!" "Tellus," replied the sage, "was virtuous, happy in his life, his parents, his children, and in his death." "And whom," I vainly asked, "esteemest thou next to Tellus," to which he answered, "Cleobis and Biton : These deserved their parents' love, their country's gratitude, of Greece the admiration, and in their death

they earned eternal fame.” “And is the happiness of a king,” said I, “so little regarded, O Grecian Stranger, that you prefer the mean condition of an Athenian or an Argive citizen?” To which, he replied, “The life of man is seventy years, but yet so changeful and so varied, that he who rules to-day may wish that he had been a slave to-morrow. He, whom the tide bears prosperously amidst this sea of trouble, is fortunate, but, till his death, we cannot say, ‘this man was happy.’” Cyrus, thou art fortunate, but not yet happy.

Cyrus. Most noble Cræsus, descend, be thou our friend, and share our throne. [*Descends.*]

All. May the king live for ever!

Cyrus. To these I cannot grant their freedom, they are in thy hand.

Cræsus. Freedom, my friends,
your love I will requite.

*[Interrupted by shouts of Long
live the king! may Cræsus live for
ever.]*

IDLENESS IS THE ROOT OF ALL EVIL.

But ill he lived, much evil saw,
 With men to whom no better law,
 Nor better life, was known.

WORDSWORTH.

Mr. Hervey took his two Sons along with him, one day, to visit a prison. As *Mr. Hervey* was well known to the keeper, he was admitted without hesitation, to whatever part of the building he desired. The boys were much shocked by the dejected and sickly appearance of many of the prisoners; and by the damp and dusky apartments in which they were confined. The gloomy aspect which the massy stone walls, and the windows strongly grated with iron

bars, gave the building, made them shudder. They pressed closer to their father, as they gazed upon the malignant countenances of some ferocious-looking men, who were walking in the court; who just raised their eyes as the visitors passed, and then drew their slouched hats lower over their brows, as if ashamed or unwilling to be seen.

At every step, the clanking of their chains resounded through the walls. The first cell they looked into, was the debtors'. It was a low, arched apartment; the window secured by massy iron bars let deeply into a heavy stone frame, and intersected by others. Around a few embers burning on the hearth, were seated, in profound silence, several melancholy, emaciated-looking men. In

one corner, laid upon a little straw, was a man apparently dying of the ague. Between the bars of the window, was squeezed the crown of an old hat, beside it was fastened a slip of wood, with "Remember the poor debtors," carved in rude characters upon it. "Here may be," said Mr. Hervey, "among these wretched men, some unfortunates, who have been ruined by unavoidable misfortunes : but the greatest part are men, who found it easier to live by taking goods which they had it not in their power to pay for ; and by borrowing money which they could not return, than by working to procure an honest livelihood. 'Idleness is the root of all evil.'"

They next looked into a cell, similar in most respects to the former, in

which were confined those who had committed petty thefts. In it were a mixed multitude of all ages : boys of nine and ten years old : apprentices and young men, along with the aged and infirm, who seemed just tottering on the brink of the grave.

“ These,” said Mr. Hervey, “ are people, who thought it pleasanter to take what did not belong to them, than, by labour, to procure it honestly. ‘ Idleness is the root of all evil.’ ”

In a strong vaulted apartment, sunk so far beneath the ground as to receive the light from a grating above, without fire, and from the smallness of the aperture, almost without light, were confined those who had committed felonies. On looking through the grate, they could only discern some figures moving about ; and they heard

mingled with the clanking of chains, singing and laughter, oaths and imprecations. "This," said Mr. Hervey, "is the last receptacle of human misery and depravity. These men preferred breaking into their neighbour's house to extort from him, by fear or pain, his hard-earned savings, before a more laborious life. Some of them will be banished from their country, their homes, and their friends; and some few of the worst will be put to death. Yet you see many of these wretches are so hardened as, in a great measure, to appear insensible of their fate. 'Idleness is the root of all evil.'"

The next cell, into which Mr. Hervey desired to be admitted, was the condemned cell: that is, the apartment in which persons are confined,

between the time that sentence of death is passed upon them, and of its being carried into execution. It was a small room, in which there was no fire place, the dim light that entered, were a few straggling rays that, having passed the heavy atmosphere of the court, found their way through a narrow loop-hole obscured by a double set of bars.

The cell was so dusky, that they did not at first perceive that there was any one in it besides themselves. The boys felt a kind of shuddering, as the massy oak door, studded with iron nails, grated on its rusty hinges. As they heard the turnkey lock the door behind them, and replace bolt after bolt, with a noise which echoed along the vaulted passages like thunder, they grasped their father's hand;

and though conscious, that there was not the slightest cause for alarm, they did not remove their eyes from the door, till they could hear the last footsteps of the retreating turnkey, no longer.

After remaining in the cell a few minutes, they found they could see more distinctly; and, in a short time every object became visible. In one corner, was seated a man, the sole occupant of the apartment. His heavy fetters were secured to an iron cramp, let into the stone work of the wall. His elbows rested on his knees, and his face was buried in his hands. He did not seem to pay any attention to them, or even to be conscious that any one was present. On Mr. Hervey's addressing him by name, the man looked up. He was rather a

good-looking man, about six-and-thirty, and appeared as if he had been in the sea service. There was nothing of ferocity in his countenance. He had, evidently, been in tears; but he wiped them away hastily, as if ashamed of them.

On seeing Mr. Hervey, he grasped his hand. A faint smile passed over his face for an instant, and he said: "this is kind, sir, very kind, may heaven shew such kindness to you as you have shewn to me!" The man then added: "Is there any hope, sir?" "Some," replied Mr. Hervey, "but do not flatter yourself. Perhaps," said Mr. Hervey, "if the state of your mind will permit, you will favour us with some little of your history." "My mind, thank God, is somewhat calmer than when I saw your honour

last," replied the man, "and though it may be painful to me, to think over my past life of sin and wickedness, if it will amuse you, sir, and be of any use to these young gentlemen, in warning them of the danger of acquiring evil habits of Idleness, it is at your service. Idleness was my ruin. 'Idleness is the root of all evil.' "

"I was born of respectable parents, who earned a good living from a small farm of their own. But being of a weakly constitution, my mother would never let me do any work, nor let me go to school; lest sitting all day at my book should injure my health. From having nothing to do, I used to wander about with all the idle vagabonds of the town; and for want of employment, we used to amuse ourselves by bird-nesting, setting traps

for sparrows, and pilfering gardens. Thus I acquired such inveterate habits of idleness, as nothing could subdue. When I grew older, my father found it impossible to make me work, and therefore bound me apprentice to a joiner: and a good situation I might have had, but I was so idle he could make nothing of me: and having run away twice, he gave me up my indentures at the end of six months. I had wisdom enough to be sorry, and determined to be no longer idle. My father said to me: ‘idleness has lost you this place. ‘Idleness is the root of all evil.’”

“I was then very steady and diligent for about a month, at the end of which period I relapsed into my old habits; and time hanging heavy on my hands, I got into a way

of frequenting public houses and gaming. My father now refused to support me, and to keep myself from starving, for my character was so bad that no one would employ me, I took to snaring game; but being discovered, I narrowly escaped transportation. My father visited me in prison. "Jack," said he, "'Idleness is the root of all evil.'" On being liberated, I connected myself with a set of men who obtained a livelihood by passing counterfeit money. I was again discovered, and should have been hung; but, his majesty being in want of sailors to go on a dangerous expedition, I was allowed to commence my career, once more, on board a man of war.

"This was a kind of life I liked pretty well; and conducted myself so much to the satisfaction of our

captain that, on our return, I was appointed to head a press-gang: but, getting acquainted with some smugglers, I thought this an easier life, and therefore joined them. Before I had been a twelvemonth with them, we had a hard fought engagement with a revenue cutter, and were boarded by them. Our captain was hung, and I, with some others, was sentenced to twelvemonths' imprisonment, short allowance, and hard labour. But, even from this, I did not learn, that 'Idleness is the root of all evil.' "

"At the expiration of this term, I once more found myself at liberty. Destitute of friends and character, and wanting inclination to honest industry, I united myself to a gang of thieves, who having broken into a

house, were taken, and as your honor knows, for this crime I am condemned to be hanged. My father often used to tell me, that idleness brought men to the gallows, since Idleness is the root of all evil.”” Some conversation then passed between Mr. Hervey and the man. On leaving the prison, the boys eagerly inquired: “and will he really be executed?” “It is very probable he may; but, as I trust he is really penitent, I hope that he will not. The king has been pleased to reprieve him for a week; and, in consequence of some important discoveries he has made to government, it is thought that the sentence of death will be changed to that of transportation for life. But ever bear in mind, that ‘Idleness is the root of all evil.’”

MEASURING INACCESSIBLE HEIGHTS AND
DISTANCES.

Without inquiring what parts of knowledge are most useful, you may be assured of this; that there are few things, that give one man greater superiority over another, than the extent and accuracy of his knowledge.

Dr. AIKIN.

Mr. Hervey. Well, boys, have you ascertained the height of the kitchen chimney, yet?

Geo. Yes, sir, it is 64 feet high.

Mr. H. It is. How did you measure it?

Geo. We placed a pole 10 feet long exactly upright, and waited till its shadow was 10 feet long also: that is, just as long as the pole. We then, as quickly as we could, measured the length of the shadow of the

kitchen chimney, and found it to be 64 feet, and, therefore, the height of the chimney is 64 feet.

Mr. H. Very ingenious indeed! But you would have the shadow of the pole to measure many times, and to wait a long time, before you found it to be equal to the height of the pole.

Chas. O yes! I dare say we measured it twenty times, and watched it above an hour.

Mr. H. But you might have saved yourselves that trouble: one measurement would have been sufficient.

Chas. Indeed, sir! will you show us how?

Mr. H. With pleasure. Go, now, and measure the length of the shadow of your pole, and the length of that of the chimney.

Geo. The length of the shadow of the pole is now 15 feet, and that of the chimney, as nearly as we could measure it, is 96; for we could not distinctly find its termination.

Mr. H. Then say, by the single rule of three direct, as the length of the shadow of the pole is to the length of the pole; so is the length of the shadow of the chimney to the height of the chimney.

Chas. That is, As 15 : 10 :: 96 : 64 which is, exactly, what we made it before.

Mr. H. But suppose that the sun had not shone, how would you have managed?

Chas. Why then, I suppose, we must have waited for a cloudless sky.

Mr. H. By no means! I would lay down on my back, at any convenient

distance from the chimney, with my feet towards it. You should carry the pole, holding it exactly upright, and with the lower end touching the ground, from me, towards the building, till I could just discern the summit of the chimney, over the top of the pole. You should then measure the distance of my eye from the pole, and also from the chimney; and I would then say, by the rule of three direct: as the distance of my eye from the bottom of the pole, is to the height of the pole; so is the distance of my eye from the chimney, to the height of the chimney.

Chas. I think, Father, by the same method I could measure distances; as, for instance, the breadth of the river.

Mr. H. Well, let me hear how you would proceed?

Chas. I would first, by the method you have just told us, ascertain the height of some tree or building that is near the water. I would then go to the other side of the water, and, at a little distance from the edge lay down, and let some one carry the pole from me, till I saw the top of the tree or building over it. I would then say: as the height of the pole is to its distance from my eye: so is the height of the tree or building, to its distance. I would then subtract my distance from the water, added to the distance of the tree or building from the water, from the distance of the tree from me, and the answer would be the breadth of the water.

Mr. H. It would indeed.

Geo. I do not clearly comprehend it.

Mr. H. Give me an example.

Chas. Suppose the height of the building was 50 feet, and that it was 10 feet from the water ; again, suppose the height of the pole was 10 feet, and that it was 50 feet from my eye, when I saw the top of the building over it, and that I was laid 60 feet from the edge of the water : then, I must say : As 10 : 50 :: 50 : 250, from which I subtract 70 feet, my distance from the water added to that of the building, and there remains 180 feet for the breadth of the river.

Geo. But if you chose a tree or building close to the edge of the water, you would not then have to ascertain the distance of the object from it.

Mr. H. Very correct. I am glad to find you understood me so well ;

but in thus measuring heights and distances, the ground must be perfectly level, the pole exactly perpendicular, and its top correspond, precisely, with that of the building, or you will obtain incorrect answers.

Geo. We will go to-morrow and measure the breadth of the river, and the height of the great oak in the park: are there any more ways of doing it?

Mr. H. Many. When you have learned Trigonometry, you will be able to do these questions, more accurately and with less trouble.

*"REMEMBER THAT THOU KEEP HOLY THE
SABBATH DAY."*

Be careful to preserve upon your minds, a serious regard and reverence to things SACRED; that is, to every thing that bears a relation to God and his religion. BISHOP GIBSON.

Mr. Hervey. I was not a little surprised, my dear children, by seeing you come into church, this morning, so late. What could be the reason that you were not there before the commencement of the service.

Geo. Robert Turton called this morning, about an hour before church time, and asked us to accompany him to skate upon the pool. This, of course, we refused to do. He then pressed us to walk home with him, through the west plantation, and he

had so many things to show us, that, unless we had acted very rudely, and positively refused to look at them, we could not have come away earlier. This, father, was what made us too late for church. But, as we have often heard you say; that it is proper to be civil to every one, and that rudeness is very culpable, I hope you do not think that we were wrong.

Mr. H. I think, my dear, you were wrong; to enter church, after the service has begun, shows a disrespect of the sacred ordinance, and disturbs those who are already assembled: but you would have been still more to blame, had you neglected to come at all. A compliance with the customs of the world, so far as they do not interfere with the duties of religion, is right; but, whenever they do,

it is our part not to yield a sinful compliance to them. You call Master Turton your friend : a person whose friendship it is desirable to have, never wishes you to do wrong ; he would not have asked you to skate, or have pressed you to stay from church. I do not desire you to break off your acquaintance with Robert : I should wish you to shew to him, and to every one, a proper degree of civility ; but I would have you select your friends with the greatest care and circumspection. On the friendships we form depends, in a great measure, not only our happiness in this world ; but what is of infinitely more importance, our welfare in the next. Improper connexions often lead us into error ; as has been the case with you to-day. I have heard Master Turton

attempt to justify his practice of skating on Sundays, you have probably heard him do the same?

Chas. Yes father: he said, that you allowed us to walk on Sundays, and he did not see much difference between walking and skating for exercise and health's sake; as they were only different ways of taking exercise. I was conscious that he was wrong; but I did not know how to answer him.

Mr. H. I perceive that you do not at all understand the nature of the sabbath, nor the manner in which it is to be kept holy. Suppose we have a little conversation on the subject.

The sabbath was appointed among the Jews, as a commemoration of the creation of the world. Among Christians, it was changed from the seventh

to the first day of the week, that it might also commemorate the resurrection of our Saviour from the dead. It was appointed as a day of rest: on it we are to rest from all our labours. So solemn is the rest to be observed, that no work is to be done on it, except in preparing what we shall eat and what we shall drink, and that must be done in the simplest manner, giving as little trouble as possible. It is a day to be much observed unto the Lord, in which, not only ourselves and servants, and the stranger that is within our gates, are to rest; but our very cattle also. The man, among the Jews, that broke the sabbath was stoned to death. The strict observance of this cessation, is enjoined in one of the commandments, written by the finger of God himself,

The only works that we may do, are works of charity and of necessity ; we are always, and at all times, commanded to do good, and to work righteousness. All secular employments are to cease ; we are to give this day entirely to God ; and, surely, it is not too much to give one day in seven to him, who gave us all that we possess, especially, when by so doing, all the benefit is on our side ; for what can we do for God, or what can we render to him, that we have not received.

This day is set apart, in an especial manner, for the purpose of praying to God for his forgiveness, his guidance, and his blessing ; of thanking him for all the benefits he has conferred upon us, which are far more than the wisest among us can tell ; of comme-

morating the resurrection of our Lord and Saviour; of affording an opportunity of meditating upon whatever relates to our eternal welfare, and of admitting the assembling of ourselves together for these purposes; which, were not a day particularly appointed, it would be impossible for a great part of the community to do. Whatever interferes with these duties, excepting works of necessity and charity, which are permitted to be done; all amusements, which tend to disturb the tranquillity of the day, to unsettle the mind, and to remove our attention from better things, are very blameworthy indeed.

Geo. I now see why skating on Sundays is wrong; and why our being too late for church was wrong; also, why walking for health's sake,

is not wrong because the latter does not interfere with any of the injunctions you have given us, which the others do.

Mr. H. No: for a person may think or read when walking, as well as sitting, which they cannot do when skating; perhaps better, for if you remember, "Isaac walked out at eventide to meditate," but, when not engaged in proper conversation when walking, to prevent the attention being diverted, and the thoughts dissipated, by the objects around, I would always recommend you to read.

Chas. It is improper to read books imply of amusement, and all the games I know are to be condemned.

Mr. H. Certainly.

Geo. And it is not wrong in Mr. — the surgeon, sometimes neglect-

ing church, and riding to visit his patients on Sunday :—Because attending the sick, is a work of necessity, as well as charity, and it would be impossible for him to visit half his patients unless he rode, therefore, making the horse to labour on Sunday, is with him a work of necessity.

Mr. H. Yes : *Mr.*——is a very good man, and, I am sure, would not ride on Sunday, or neglect church, unless it were absolutely necessary. If you keep in mind what I have now said to you, you will never be at a loss to know, what ought, and what ought not, to be done on the Sabbath ; and you will not again be liable to be guilty of an error similar to that which you this morning committed.

HYMN.

For thee, the fragrant zephyrs blow,
 For thee descends the sunny shower,
 The rills in softer murmurs flow,
 And brighter blossoms, gem the bower.

DARWIN.

SUMMER.

Morning—Noon—Evening.

THE sun hath arisen in glory and in beauty. His throne is in the heavens; he is crowned with beams of light, and who can gaze upon the brightness of his coming. At his coming, the stars hide themselves, and the pale moon fades in the midst of her course; he arrays himself in crimson clouds, he veils himself in the dark clouds; the purple hills rejoice in his light, and the waves of

ocean sparkle in his beams. Very glorious art thou, O Sun !

Ye waves of ocean that sparkle in his light, ye eternal hills, ye clouds of Heaven, praise the Lord ! And thou, O man ! rise from the bed of sloth, and praise His name who made the glorious sun, the stars, and the pale moon, to give light upon the earth. Yea, let all the earth praise the Lord !

The sun is in his course, he is in the midst of heaven. His crown of glory is laid aside : the dark clouds roll around him, he darts his fierce beams from the midst of the thunder cloud ; the wild beast retires to the shade ; man faints in the midst of his labour ; the earth, dry, and parched, gapes with his heat ; the grass dryeth up, and is withered ;

the herb perisheth, and the flower of the earth droopeth, and fadeth away ; the rivers shrink beneath his rays, and the little streams vanish, as the dew from the mountain disappeareth ; the dark clouds gather around him : the thick clouds hide him from our sight ; the heavens themselves, and the sultry air are darkened ; the leaf of the Aspen is still ; the murmur of the water-brooks hath ceased, and the birds are silent in the trees.

The heavens open, the bright lightning gleams, the fire runs upon the ground, the arrows of the Almighty are scattered abroad. The thunder rolls ; the earth is shaken with the sound. The billows break upon the rocks ; the rain descends ; the whirlwinds sweep along ; the waves

are mingled with the clouds ; the trees, the forests, are levelled before the storm. Very dreadful art thou, O Lord. When thou arisest to shake terribly the earth, where shall the guilty retire from thy wrath, where shall he hide himself from the indignation of the Lord !

The storm hath ceased ; the billows are at rest ; the sun hath re-assumed his glory, and looks in beauty from the Western wave ; the flowers diffuse their sweetest fragrance ; the birds rejoice in the green trees, and the brooks murmur softly in the shade.

Doth the Lord ride in the tempest ? and doth he not fly upon the evening breeze ? Is the voice of the Lord in the thunder ? and is not heard in the murmur of the brook ? Is the

terror of the Lord in the whirlwind ?
and doth not his mercy fill the earth ?
Praise the Lord ye children of men !
Yea, the whirlwind and the storm,
the bright sun, the firmament of heaven,
the seas, the everlasting hills, the
whole earth declare the glory and the
goodness of our God ! Let all the
earth praise the Lord, and all the
children of men rejoice before God.

HYMN.

How dead the vegetable kingdom lies !

How dumb the tuneful !

THOMSON.

Winter.

WINTER hath blown upon the earth :
he hath breathed on the streams, and
they are frozen. The rivers them-
selves, and the mighty lakes, are
turned into stone. From his hand,
he hath scattered the hoar frost, and
hath spread the snow upon the ground.
The murmur of the brooks, the me-
lody of the birds, are heard no more.
The verdure of the spring, the glory
of the summer, and the golden fruits
of autumn, where are they ? And
thou, O man ! does not the time ap-

proach, when the voice of harmony, and the daughters of music, thou shalt hear no more? When the beauty of thy youth, the strength of thy manhood, and the wisdom of thy hoary head shall be, as though they were not? For the icy hand of death shall arrest thee in thy course, and thou shalt lie cold and silent, neglected and forgotten, in the tomb.

Turn again, O man! and look upon the goodness of the Lord. He it is, that hath scattered the soft snow, to preserve the tender herb: he hath clothed the sheep with wool, and hath given the scarlet berry to the birds. His hand hath provided thee a shelter from the cold, fuel for thy hearth, and food to make thee of a cheerful heart. The mercy of the Lord is great! the goodness of the

Lord is over all ! The tender mercy of the Lord is wonderful ! Let all the earth praise the goodness of our God.

Is the brook for ever frozen ? Is the earth for ever desolate ? What ! and shall the trees resume their verdure ; shall the flowers of the forest and the plain again revive, and shall I, O man ! sleep for ever, neglected in the dust.

He, who clothes the trees with verdure, and biddeth the blossoms of the spring to bud ; His voice shall reach me in the tomb ; His hand shall raise me from the dead.

The dark cloud ariseth from the north, the beauty of the moon is no more seen, and the brightness of the stars are hidden, the north wind sweeps along the plain, and the path of the traveller is no longer discerned.

The cottager bars fast his door against the sleet, the faggot crackles on the hearth; his children hang the traveller's coat before the flame, the lamp trembles in the socket, the tempest beats upon the thatch, the wind howls in the chimney, the hail rattles against the casement; but the praise of the Lord is on his tongue; the goodness of the Lord is in his heart; the word of the Lord is in his hand.

“The Lord taketh pleasure in them that fear him, in those that hope in his mercy. For he hath strengthened the bars of thy gates; he hath blessed thy children within thee: He maketh peace in thy borders, and filleth thee with the finest of the wheat. He sendeth forth his commandment upon the earth: his word

runneth very swiftly. He giveth snow like wool : he scattereth the hoar frost like ashes. He casteth forth his ice like morsels : who can stand before his cold ? he sendeth out his word, and melteth them : he causeth the wind to blow, and the waters flow. Praise ye the Lord : praise the name of the Lord, for his name alone is excellent. His glory is above the earth, and the Heavens."

"PENCE MAKE POUNDS."

"Sluggards are nature's rebels, slight her laws,
Nor live up to the terms on which they hold
Their vital lease.

Riches and fame, are Industry's reward."

IN a beautiful vale, on the river Wye, are situated the extensive domains of Mr. Sheldon. The house, which is a large and elegant mansion, is erected on the summit of a gentle acivity, which, falling down in an easy slope to the edge of the water, commands an extensive view of the windings of that romantic river; whose rocks and wood-crowned hills, have long been celebrated by the poet and the traveller. The park, surmounted by a considerable wood, extends around the house, and comprises every thing

that nature, assisted by the wealth and taste of its opulent owner, can do to render it a happy retreat from the bustle of the busy world.

In a very secluded corner of the park, on the side of the river, is erected a small cottage, the residence of a man, who there spends alone the remainder of a sufficiently unhappy life ; of whose existence few are aware, and for whom still fewer have any regard. To this cottage Mr. Hervey and his sons were one day driven, to seek for shelter from a sudden and violent shower, that had overtaken them in an unusually long ramble. Mr. Hervey on opening the door, was instantly saluted with a kind greeting, by the sole inhabitant, an old man ; who, notwithstanding his tattered, thread-bare, black coat,

that seemed as if it had known much service, and few repairs, had the appearance of having seen better days. The cottage was very wretched : the walls were unplastered, and the panes of the window were broken, and stopped up with wisps of straw ; the grate had long since been burnt away, and an iron bar or two, laid across two stones, supported the fuel ; the crazy door had much ado to support its station, and the wind blew in through a thousand crevices, which a little wood and labour would have stopped. Yet, the old man seemed, not only contented, but cheerful ; and his easy good nature, surrounded by such poverty, surprised and pleased the boys. “ Here is a chair for you, Sir,” said he, reaching Mr. H. the only one his cottage possessed ; “ but

it is only old and crazy, like its master. Here, master; can you sit upon that tub? it's the firmer seat of the two, though, in a general way, it serves me for a table. My other old arm chair broke down last night," added he, as he threw, with a laugh, one arm and a leg on the fire to make a blaze. "If it won't serve one turn it will do for another. Would you like a draught of milk young gentlemen? I have nothing better to offer; my diet's simple but good: milk and brown bread content me, as well as roast beef and strong ale do some others. Its a cracked jug, but it will hold it as well as the best: it served my grandmother and will serve me." He then accosted Mr. H., and was soon lost in recounting the exploits of former days, "when they were all,

rattling, roaring lads at school together." He told what tricks they used to play; what fun they used to have, and concluded, to the infinite delight of the boys, with singing the Dulce Domum, that they used at school. When the shower was over, Mr. H. resumed his hat and stick, much against the old man's inclination, who accompanied them some distance on their road homewards, and bidding them a hearty farewell desired that they would never pass his cottage without looking in.

At first, the boys could think and talk of nothing but the good-natured old man. At length the conversation took the following turn respecting him, and the owner of the neighbouring splendid mansion. The one, said Mr. H, acquired his splendid fortune, by ob-

serving two of Dr. Franklin's maxims :
“ That a penny saved is a penny got,”
though “ it is not mean savings that
make a man rich ” ; and the other, lost
one, by “ despising the day of small
things, so that he fell by little and
little.” And yet, answered George,
one may be as happy as the other : he
seems perfectly contented with his
lot.

“ If those, who sit at shepherds board,
Sooth not their taste by wanton art,
They take what nature's gifts afford,
And take it with a cheerful heart.”

That cheerfulness, replied Mr. H.
which arises out of proper motives,
is highly to be valued ; but, I hardly
imagine you would be inclined to
envy that of old Kirby : it arises from
a careless, thoughtless indifference
about every thing. But, asked George,
how did he contrive to lose all his

money ? and Mr. Sheldon to acquire so much ? Mr. Sheldon, this old gentleman, and myself, were all at the same school. Old Kirby was then about twelve or thirteen years old, and Mr. Sheldon about the same age. The father of the former, was a man of considerable fortune, and made his son the largest allowance of any boy in the school : Mr. Sheldon's, was a tradesman in the town, who, having a large family, could not afford to be [so liberal to his son. But what turned the balance in favour of the latter, was, that he had been taught habits of frugality of which the other was ignorant.

I remember, that one fine October day, having holiday, I begged leave of our master, for us three to go a nutting in the neighbouring woods.

Henry, which is the name of Mr. Sheldon, and Gilbert had neither of them learned their tasks. We were delayed a few minutes at setting out, by a shower. Henry immediately took his grammar and sat down to work. "What does it signify," said Gilbert, "getting to work now? the shower will be over in five minutes." "Yes," answered Henry, "and minutes make hours" the shower lasted just ten minutes, and in that time he had learned half his lesson. "Take care of the minutes" he added as he came away, "the hours will take care of themselves." We spent a very pleasant day, rambling about the woods, and searching for nuts; but we had not a bag to put them in, and, when we had filled our hats and our pockets, we were compelled to give

up for want of means to carry them away. As we returned through the town, Gilbert saw, hanging at a door, a bag, which he thought would exactly do for this purpose; he inquired the price, and bought it. "What," he asked "Henry, will not you buy one? it is but sixpence." "No," answered Henry, "I am not sure that we shall want one again this year, and though it is but sixpence, yet, pence make pounds." "Well, and if they do," said Gilbert, "sixpence will not ruin you, it is but sixpence; and look, would not this be an admirable nutting hook? it is but sixpence more, so I will certainly have it; won't you have one Henry?" "No," Henry would not have it for the same reason, he was not sure that it would be of any use to him. We

walked on, and presently passed a shop, where fruit, of every description, was displayed in a most tempting way. "I must," said Gilbert "taste these apples; I am so very thirsty and hot. Wont you have any, Henry? it is but two-pence for three." Henry said, he would wait till they got home. After Gilbert had eaten his apples, a few pears he thought, would be nice to eat on the road, and it would be but two-pence more. We had not proceeded much further, before we passed a cutler's; Gilbert stopped, and, as it would be but eight pence, he purchased a knife, though he had already three, because his others were not buck hafted. "Will not you" said he "buy a knife, Henry? I know you want one, for you had to wait half an hour for

mine the other day." Henry said, he did, and having chosen one, to Gilbert's astonishment, who began to think him a complete miser, he paid the large sum of eighteen pence for it. "Really! that is twice, and more than twice, as much as I gave for mine," observed Gilbert. We walked on, and came to another shop, where toys were sold. Gilbert wanted two penny-worth of marbles, and two-penny worth of alleys. Henry contented himself with marbles. "What," exclaimed Gilbert "and will you not have some of these beautiful marble alleys? it is but two-pence. "No," said Henry, "a penny saved is a penny got; and I can play just as well without the alleys?" Gilbert, then bought a whipping top; it would be but one penny

more, and a peg top but another. As we walked home, on the road we met a very poor woman ; she had two children with her ; they had neither shoes or stockings, and she said they were crying for hunger, that they had been obliged to sleep under a stack, and had no money to purchase food with. Gilbert put his hand into his pocket, but he had not one halfpenny left. Henry slipped four-pence into the woman's hand, and said he was sorry it was all he had with him.

As we walked on, Gilbert said, "Henry how is this ? I had half-a-crown when we left home, and you had but two shillings, eighteen-pence of which, you gave for your knife, and I, but eight-pence for mine, which, after all, I did not much want." "I believe," said Henry, "that all

your '*tis buts*,' come to two shillings and four-pence, and two-pence the marbles, make half-a-crown." "Well," replied Gilbert, "I will try to remember that, 'pence make pounds;' but a day or two after, when his cheap knife, which, as the price was low, was probably bad, broke, he said, "*it is but* eight pence lost after all." Henry shook his head, and said, "pence make pounds."

It was almost tea time when we returned. Henry took his book, and began to learn his lesson. "I would never trouble myself with my lessons now; it only wants five minutes to tea time," said the careless Gilbert, "what a miser of time and money you are!—and, without waiting for an answer, bounded into the play room. After tea, we all joined in

the play of the evening. There was an interval, between prayers and dispersing, of five minutes : in this five minutes, Henry completed his task.” “What signify a few minutes?” exclaimed Gilbert. “I can learn my task in the morning :” but in the morning we all slept too long, owing to the exercise of the preceding day. Poor Gilbert went up to the master, and was turned back in disgrace. Henry said every word perfectly. “I wonder how this comes to pass?” asked Gilbert, “you were at work only a few minutes last night, Henry.” “Only twenty !—” replied careful Henry—“minutes make hours.” A few days after, there was a show of wild beasts came to the town : an Elephant, a Lion, and a Tiger. We were all very desirous of seeing them,

as none of us had ever seen, an Elephant, a Lion, or a Tiger. "Oh!" said Gilbert, "Henry, can you lend me sixpence? or I cannot go, for I have spent all my money." Henry went himself, and lent Gilbert sixpence, and had nine shillings and sixpence left. "I cannot tell how this is," said Gilbert, "I have just as much money again for allowance as you." Gilbert had promised to pay Henry again, the next money he received, the payment was put off from one day to another; and, I believe, Henry was never repaid, though Gilbert always intended to do it. Gilbert remained poor all the time he was at school, without any great extravagance; and Henry, without any mean saving, had always the power of being generous.

As I left school soon after, I do not know any thing further respecting them, 'till they were established in business: Gilbert succeeded his father as a merchant; and Henry was a clerk, in another merchant's house. Gilbert was seldom seen in his counting house till a late hour. "An hour or two in a morning, signifies nothing," he would say. He kept very irregular accounts, "What does it signify setting down every shilling?" His business was amply sufficient to have supported him, but not very extensive. At this time he kept a horse; but, as he was, of an indolent disposition, he thought a gig would be easier, and the expense would be little more. A gig was bought; but, after a time, he found it unpleasant riding, in wet weather

in his open gig. A close carriage would be only, after the original cost the keep of an additional horse. The gig was sold and the carriage purchased. I only mention these particular instances : but every other part of his domestic affairs, were conducted on the same principle, that “ a few shillings signified nothing.” His expences, by a little at a time, encreased beyond his income, and he was ruined ; though he frequently declared that, “ he did not know how it happened.”

Henry, on the other hand, followed his favourite maxims that, “ minutes make hours, and pence make pounds.” He was so regular in his attendance at the office ; so accurate in his accounts, and seemed to live so economically, that his employer, at length

gave him a share in his business, out of which he saved sufficient to purchase the whole, when his partner retired. Since then, he has been gradually rising in the world; and has lately retired from business with a large fortune. I never knew him, notwithstanding his maxims, ever guilty of any mean action. He is one of the most beneficent men in the county: he never turns a deaf ear to those who ask his aid. Gilbert is at present, entirely supported by him, the cottage he lives in belongs to him, and he has now an ample allowance from him: but all Gilbert's experience, has not sufficed to teach him habits of economy; he spends all his money as soon as he gets it, and lives in poverty and want.

ON PROPHECY.

“If they hear not Moses and the Prophets, neither will they be persuaded, though one rose from the dead.” LUKE XVI. 31.

Geo. I do not attach a clear idea to the word prophet; would you, father, explain it to me?

Mr. H. A prophet, my dear, is a man, whom the Spirit of God enables to foretell future events: that is to say, a man who is divinely inspired; one to whom the purposes of God in future ages are revealed. There were men, also, among the Heathens, and even among the children of Israel, who fancied themselves inspired; others, who prophecied falsely, to make a gain of the people, not hav-

ing the fear of God, before their eyes, and some, who were actually inspired by evil spirits: these, in Scripture, are called false prophets, and soothsayers; while those, to whom the Lord made manifest the things that should hereafter come to pass, are called prophets, and sometimes seers, from the will of God being frequently revealed to them in visions.

Geo. What is meant by the word miracle?

Mr. H. A miracle is something wonderful, different from the ordinary dealings of God, and which could not have happened, but by the immediate interference of the Almighty: thus, when the dead were raised, the blind made to see, the deaf to hear, the dumb to sing, and the lame to

walk ; when, at the voice of one divinely inspired, the water gushed from the rock ; when the earth, at his command, opened, and swallowed up rebellious Korah and his company ; when the walls of Jerico fell down ; when Elijah called down fire from heaven,* there was evidently a divine interposition. These are events which do not ordinarily happen. These were miracles. And, as all the instances that I have mentioned, were also foretold, some of them hundreds of years before they happened, Miracle and Prophecy were mingled. Miracles were strong attestations of the truth to those that saw them ; prophecies are equally so to us.

Geo. I thought, that the gift of prophecy had long ceased.

* 1. Kings, xviii.

Mr. H. It has, my dear: It is no longer necessary. But, with respect to ancient prophecy, we are certain that the events foretold frequently did not happen for ages after the prophecy was delivered: there are, also, prophecies fulfilling at this present time, and many remain yet to be accomplished.

Geo. What are those that are now accomplishing?

Mr. H. The prophecy concerning the Arabs. They, you are aware, are the descendants of Ishmael, of whom it was prophesied, "He shall be a wild man; his hand shall be against every man, and every man's hand against him; and he shall dwell in the presence of all his brethren.* Prophecies addressed to individuals

* Genesis, chap. xvi. v. 12.

were, frequently, meant to attach to their descendants. Thus, through a period of thousands of years, has this one been fulfilling. How improbable was it, that if every man's hand should be against them, they should be able to exist! and yet we find it accomplishing at this very time; and all the efforts of man to subdue them, and the attempt has been made more than once, have proved vain. What is wilder than an Arab? Is not, "his hand against every man, and every man's hand against him?"

The prophecies, respecting the destruction of Egypt, Babylon, and Tyre, you will find, by comparing what was foretold respecting them, with the accounts given of their present state, are fulfilling with the most accurate minuteness.

Those concerning the calling of the Gentiles, that is, all who are not the descendants of Jacob, to the true religion; and those foretelling the dispersion of the Jews over every nation of the world, without their assuming the customs or religions of the people amongst whom they should dwell, which is indeed a standing miracle. Those concerning their despised state: that they should become a by-word, and a proverb, and yet be rich; with many others, which if you attentively peruse the prophecies dispersed through every part of the bible, comparing them with history, you will find are fulfilling, and have yet to be accomplished. If you feel as anxious respecting this subject as I hope you do, you will be highly pleased with a book which I

will lend you, collecting the prophecies and their fulfilments into one view : it is intituled, “ Bishop Newton on the prophecies.” Suppose, that, as a proper employment for Sunday, we compare one of the prophecies in the old Testament, with its fulfilment in the new.

Geo. Yes, I should like it very much ; which shall we take ?

The circumstances of our Saviour’s life were distinctly foretold ; some, relating to his crucifixion, are mentioned by David in the twenty-second Psalm. This psalm, we are certain, was written more than one thousand and twenty years before the accomplishment of the prophecy contained in it. I will read you a few verses from it, and do you refer to the history of the crucifixion

in the gospels. "All they that see me laugh me to scorn: they shoot out the lip, they shake the head, saying, He trusted in the Lord that he would deliver him; let him deliver him; seeing he delighted in him."

Geo. In the 27th chapter of Matthew, in the 39th, and 43rd verses, I find it exactly fulfilled—"And they that passed by reviled him, wagging their heads," and the chief priest, with the scribes, and elders, used the very words which it was predicted that they would use—"He trusted in God; let him deliver him now if he will have him: for he said, I am the son of God."

Mr. H. "They pierced my hands and feet" (ver. 16.), this you perceive evidently refers to the manner

in which our Lord should suffer; namely, by having his hands and feet nailed to a cross.

Chas. What dreadful suffering our Saviour endured!

Mr. H. Yes: it shews God's great abhorrence of sin, and his wonderful love and mercy for us wretched sinners, in giving his only Son to suffer for us. How careful ought we to be, not to offend! how ought we to pray to God to support us in temptation! How ought we to love and serve him! who came down from heaven to bear our iniquities upon the cross, for he hath tasted death for every man. "They part my garments among them, and cast lots upon my vesture." Refer to the nineteenth chapter of St. John; I wish you to bear in mind, that the prophecy was

written above a thousand years before the event foretold came to pass.

Geo. At the 23rd verse, “then the soldiers, when they had crucified Jesus, took his garment, *and made four parts*, to every soldier a part; and also his coat: now the coat was without seam, woven from the top throughout. They said therefore amongst themselves, let us not rend it, but cast lots whose it shall be.”

Geo. This is accomplished, indeed, with wonderful minuteness!

Mr. H. Not more so than most of the other prophecies. It would be a very proper employment for your brother and you, on Sunday evenings, to go through other prophecies relating to our Saviour, in the same way. You will find many in Isaiah, and in the book of Psalms: for there

were no circumstances of our Saviour's life and death, but what had been previously foretold. It is very remarkable, that some of the prophecies contain *apparent* contradictions; and yet, when the events foretold came to pass, were shewn to be perfectly correct. Such is that of Isaiah respecting our Lord, that "he should make his grave with the wicked, and with the rich in his death:" Our Saviour was, as you remember, crucified with malefactors, and buried in the tomb of Joseph of Arimathea, a rich man.

THE POULTRY YARD.

In no part of the animal creation, are the wisdom, the goodness, and the bounty of Providence, displayed in a more lively manner, than in the structure, formation, and various endowments of the feathered tribe.

BEWICK.

Geo. May we go to the Poultry yard, along with Roger, to see the chickens fed.

Mr. H. Yes ; and as I am not at present engaged I will walk with you.

Geo. See, here comes the old gander, followed by all the geese, stretching out their long necks, and hissing, to frighten us away. How silly they look ! The ducks swim about on the pool, and do not take any no-

tice of us. Quack, quack, quack ! what a noise ! There are a great many birds, I believe, of the duck tribe, but none of them very musical I think ?

Chas. Yes, brother, the swan : you remember, we read the other day, of the swan singing as it dies.

Geo. I cannot say I do : can you repeat the passage ?

Chas. No : but, I dare say papa can.

Mr. H. The singing of the expiring swan, has been a poetical image from the earliest times. I cannot repeat the lines to which you allude ; but, with the following, you are probably unacquainted.

“ As pours the Swan his melancholy strains,
While death-pangs shudder thro’ his freezing
veins :

He mourns for life, in lapses sad, but strong,
And his last accents faulter into song."

Geo. But, papa, is it really true, that the swan sings when dying? I should think it very improbable, that a bird that never sung before, should sing when expiring.

Mr. H. So should I, my dear.

Chas. Is not my brother mistaken, in saying that the swan is of the duck tribe?

Mr. H. No: the swan possesses the characteristic marks of that family of birds, which is distinguished by the name of *Anas*; you Latinists can tell me the English of *Anas*?

Geo. *Anas*, sir, is a duck.

Mr. H. Yes: each family, or *genus*, as it is properly termed, of animals, is distinguished by a name generally derived from that of one of its members: thus the mouse tribe.

Geo. Must be named *Mus*.

Mr. H. Which family name includes the rat, &c. The cat tribe, in which is comprehended the Lion, Tiger, Panther, &c, is called—what?

Geo. *Felis*.

Mr. H. Yes: and the Pheasant, to which family belongs the common fowl, *Phasianus*.

Geo. These names are called, I believe, the generic names, and you once told me, that the individuals comprehended in each genus, are distinguished by a second name.

Mr. H. Yes: the species have distinct names. If I were to call an animal *Felis*, though in strict Latin it would mean a Cat; yet, as it also comprehends the Lion, &c, I must add a second term, and say, *Felis Catus*; or for a Rat, *Mus Rattus*.

Geo. I suppose, we must not say, *Anas Duckus*, and *Anas Gooseus*.

Mr. H. No : if you did, I should be very apt to mistake you for a goose : but you may say, *Anas Anser*, and *Anas domestica*.

Geo. That is, a Duck Goose, and a domestic goose : but of what use are these names ? If I were to say, a duck or a goose, you would know just as well what I meant.

Mr. H. I do not think, that I could make you fully comprehend all the advantages arising from this method of naming, without entering more deeply into the subject than we have now time for. According to the common method of naming, you only tell me the name of the animal, but if you use the other, you also tell me the family to which it

belongs. Several of these families are united by some external mark, common to all, into great divisions or classes. Now, suppose I were to find an animal, or plant, with which I was unacquainted; if the author of the books which I consulted to discover its name, habits, and properties, had made no use of any arrangement, I might spend months in looking them over, before I found a description answering to this animal or plant. But as the classes are not very numerous I soon read them over, and find the one that is distinguished by some mark, which the specimen I have found is possessed of. This class will probably contain a few *Genera*, or families, and by the same means, I find the one, to which my animal or plant belongs. This

genus or family, will be subdivided into species, amongst which I readily discover the individual I want, by its distinguishing marks agreeing with the description. And, although I had never seen, heard, or read of it before, I can, in this way, find its name, and all the particulars that are recorded of it, with nearly as much ease, as referring to a word in a Dictionary.

Geo. Water birds are readily distinguished from land birds, by the former being web-footed.

Mr. H. If by water birds you mean, those that principally depend upon the productions of the water for their subsistence, you are mistaken : there is a numerous tribe of birds called waders, that are not web-footed : these are distinguished by legs

unusually long, and generally, by a proportionably long neck. These, as their name indicates, find their food by wading into shallow waters, and fishing for muscles, &c. for which their long legs and neck admirably fit them. Those birds which are web-footed, are all swimmers and divers; inhabitants of three of the elements, they swim in the water, they walk on the land, and many of them are celebrated for the swiftness of their flight through the air.

Chas. The goose, the duck, and the swan, have certainly no great strength of wing.

Mr. H. In their tame state, the duck, and goose, are lumpish birds, and heavy flyers; but, on the contrary, in their wild state they can support long and tedious flights. You have

seen the wild geese soaring at immense heights, almost out of the reach of vision ; marshalling their battalions in the form of a lengthened wedge, or changing this form into that of a long line. These wild geese, and the greatest part of the wild ducks, breed in the frozen regions of the north, and have to travel many hundred miles in their annual migrations ; and, as to the swan, it is in a state of nature, capable of a well-sustained flight.

Chas. I have often listened to the whistling sound the wings of the swan make when flying : it is rather musical.

Mr. H. It is ; to produce this sound, the wing must strike the air with great force indeed. I knew an instance of a man's arm being

broken by a swan which he had enraged by discharging a fowling piece at it.

Geo. Is it known for what purpose birds migrate?

Chas. By the migration of birds is meant, their changing their country at certain periods; is it not?

Mr. H. Yes: It is not in every instance known, why birds migrate, but, from their passing, in general, south-ward in autumn, it is probable, they are seeking a warmer climate, where food is in greater abundance.

Chas. But how do the birds find their way over the countries, and across the seas which they travel? and how do they know that it is warmer in the south?

Mr. H. My dear, this is a question which I cannot answer.

Geo. The goose is much altered

from its original colour ; but the swan still preserves its whiteness.

Mr. H. The grey goose much resembles the wild one ; swans in this part of the world, are always white, but in New Holland there are black swans.

Geo. Then, as white as a swan is not a correct phrase. Look at those ducks how they dive under the water, and yet they do not seem wet.

Mr. H. Birds are, by nature, furnished with a little bag, filled with oil, which they press out with their beaks, and with it prune their feathers : now, as oily substances repel moisture, it completely defends their feathers from the action of the water. Water birds are further secured from cold by a thick coat of down beneath their feathers.

Geo. I remember to have seen tip-pets, and other parts of ladies' dress, made of swan's-down; and very warm and soft it is. Beds, I believe, are also made of it some times?

Mr. H. Yes: but feathers are, as you know, generally employed for that purpose: few substances are warmer than feathers, and it is the frequent custom, to pull them from living birds, which are then released, and as soon as a second coat is produced, they are again plucked.

Geo. How cruel and barbarous! I should suppose, that so wicked a practice, is not pursued in this country.

Mr. H. In this immediate neighbourhood it is not, but, I am sorry to add, that where large quantities of geese are kept, as in the fens of Lin-

colnshire, they are subjected to this cruel operation four or five times in the year.

Chas. What can induce men to be so cruel?

Mr. H. The love of money, that abundant source of most evils. It is pleaded in defence of this custom, that without it, they could not keep such numerous flocks, and that the animals enjoy life: but, "the mercies of the wicked are cruel!"

Geo. The goose seems to be a very useful animal, the flesh, the giblets, even the blood, is used as food; its feathers form our couches, and without its quills I know not how we should manage to write.

Mr. H. There is one of its uses you have forgotten, if not two.

Chas. What are they?

Mr. H. As sentinels—

Chas. As sentinels !

Mr. H. Yes : these birds being very watchful, begin to cackle at night, on the least disturbance : you remember, that when both the biped sentinels, and the still more faithful canine ones, were buried in slumber, the geese gave a timely notice, and saved the Roman Capitol from destruction. The other use I dare say you will recollect, if you think of your favourite chevy chace.

Chas. Oh ! I know what you mean ;

‘ Against Sir Hugh Montgomery,

So right the shaft he set,

The *grey-geese* wing that was thereon,

In his heart’s blood was wet.’

Mr. H. And, that the same use was made of them in still more ancient times, is evident ; for Virgil, speaking of Eneas says,

“ Thus while he spake, unmindful of defence,
A winged arrow struck the pious prince.”

Geo. I do not comprehend what is meant by saying, the grey-goose wing was wet in his blood.

Mr. H. On the part of the arrow nearest the string of the bow, is fastened three strips of that part of the quill which is called the vane or beard, for the purpose of giving it steadiness in its flight ; hence, ‘ the winged arrow.’ It has been well said, that the goose and the calf rules the world ; the goose furnishing quills, and the calf parchment.

Chas. Swans are not used as food ?

Mr. H. Cygnets, or young Swans, are considered as very good ; and Swans were formerly ranked as dainties, and were then much more common than they are now.

Chas. See, there is our old grey cock : how he stands on the top of the hen-roost, crowing, and flapping his wings ! I should think that a bird might be denominated, a flying animal.

Mr. H. That definition would hardly be sufficient ; for you know, there are flying fish, and the Ostrich cannot fly, however swiftly it may run.

Chas. Then we must call them winged animals : for the flying fish can hardly be said to have wings : it raises itself into the air by means of its fins.

Mr. H. By this definition, you will rank the bat amongst birds, a place which, I am afraid, it is scarcely entitled to hold.

Chas. A bat is certainly a bird.

Mr. H. A bird with four legs and two external ears; without feathers or bill!

Geo. Now, I have found a definition, we must distinguish birds by their bill.

Mr. H. This will not do, there is an animal that has a bill like a duck, and yet has four feet, and no wings.

Geo. If we denominate birds bipeds, we shall include mankind; therefore birds are feathered bipeds.

Mr. H. Ha! ha! you remind me of a story I have read, respecting Plato, who defined a man to be, "a biped without feathers." On hearing this, old surly Diogenes divested a live chicken of its feathers, and turning it into Plato's school, exclaimed, "behold Plato's man!"

Geo. That was comical, but it was

exceedingly cruel to pull the feathers from a living bird. I am afraid, we shall find no definition for a bird, unless that of a winged biped will do?

Mr. H. I do not object to it. Here comes Ralph with barley for the hens; how they flock round him! The old cock himself, has condescended to come down from his lofty station.

How anxiously the hen calls her chickens! cluck, cluck, and tries to shew them how to peck, and finds their food for them. She is a very tender mother; when they are hungry she feeds not herself till they are satisfied; when danger threatens them, however timid at all other times, she is bold in their defence, and will assail any animal that attacks them.

She watches over them with the greatest anxiety and solicitude ; from the storm she shelters them, and at night she gathers them under her wings : a circumstance that has been used as a striking and beautiful simile by our Saviour ; speaking of the rejection and dispersion of the Jews, which was about to take place for their obstinacy, he said “ O Jerusalem ! Jerusalem ! that killest the Prophets, and stonest them that are sent unto thee, how often would I have gathered thy children together, even as a hen gathereth her chickens under her wings, and you would not.”

Chas. The Duck genus comprehends the Swan, the Goose, the Duck, the Widgeon, the Teal, and I know not how many besides. Is the family to which the hen belongs as numerous ?

Mr. H. No : it is by no means extensive : the domestic cock belongs to the Pheasant family, and the generic name is *Phasianus* (Pheasant).

Chas. He has got grand relations, but he is a very handsome looking fellow.

Mr. H. He is indeed, and very valiant too : where the barbarous custom of cock-fighting prevails, he will frequently die before he yields. Pity it is, that such a handsome bird should be mutilated, and so much courage be employed by barbarians, for the detestable purpose of gambling.

Geo. I hope that there are few in this country, who practise this cruel sport, if sport they can think it?

Mr. H. This practise is on the decline in England ; but in some foreign countries it is carried to such excess,

that a man has been known to stake his property, his wife, children, and himself, on the event of a cock-fight: a father on his death-bed, has even commanded his son, to stake his fortune on a favourite cock.—The breakfast bell rings; we must return.

Chas. May we come again to-morrow? for you have not told us any thing respecting the guinea fowls, the turkeys, and the pigeons.

Mr. H. If I am not engaged.

Chas. I have often been surprised by a bird sitting so patiently on her nest, day after day, during the time the eggs are hatching.

Mr. H. It is indeed surprising, that a bird, the liveliest of all animals, whose motions are so free, and which is at other times not at rest for a single moment, should continue willingly

for so long a period, almost as still as if she had lost the use of her limbs : but this is probably a state of enjoyment. In Egypt, and in some parts of France, eggs are hatched in large ovens, which are kept at a proper temperature, either by fire or by fermenting substances, in the manner of a hot-bed ; in this way, several thousand chickens are hatched at once. It is worth observing, that birds are, in proportion to their bulk, much lighter than other animals.

Geo. Is this owing to their feathers ?

Mr. H. Not entirely : their bones are hollow, and, of course, strong and light.

Geo. I see that being hollow they will be light, but why strong ?

Mr. H. I think it is scarcely neces-

sary to answer that question. I will only refer you to a stalk of wheat.

Chas. They will certainly be stronger than a solid bone containing only the same quantity of matter ; for, if a straw, which is possessed of great strength for its size and weight, be flattened, it will almost break with its own weight. On the same principle it is I suppose, that the quills of birds are made hollow that they may possess strength and lightness.

Mr. H. Did you ever take particular notice of the vane or beard of the quill?

Geo. I have observed, that when the rays of which it is composed are separated, and afterwards pressed together again, they immediately reunite ; and yet they do not seem to possess any stickiness.

Mr. H. On the inner part of each ray, are a great number of hooks, which clasp into each other; these, if separated, will instantly re-clasp on being pressed together. After breakfast, I will shew you them in the microscope.

Geo. Some birds, as the hawk and eagle, live entirely upon animal food, and others upon insects and seeds.

Mr. H. This forms a grand mark of distinction, dividing birds into carnivorous, and granivorous; the flesh-eaters, and the seed-eaters. The carnivorous birds are distinguished by their hooked bill and strong talons, with which they seize and tear their prey, their strength of wing is, for the most part, very great; a large eagle will, with ease, fly away with a lamb in its talons;

and they soar far beyond the reach of human vision, and their sense of smell is great, almost beyond belief.

Chas. When sufficient food cannot be procured, I have read, that carnivorous birds will prey upon shell fish, the shells of which they break by soaring with them to a great height, and then letting them fall upon the rocks.

Geo. From this circumstance perished Eschylus, who was killed by an eagle's dropping an oyster upon the bald pate of the philosopher, which it seems to have mistaken for a stone.

Mr. H. In other kinds of birds the bill is formed sometimes long and tapering, for boring in search of insects; flattened and serrated, for filtering and examining the mud;

strong and large, for breaking nuts ; crooked, as in the nut-hatch, for splitting the fir-cones ; tapering and pointed, for picking up the insects and seeds, which are dispersed over the trees, herbs, and ground. Their legs and feet are formed for swimming, for wading, for running, hopping, climbing and perching, according to the habits of life of the particular species. But, granivorous birds differ in their internal structure from all other animals, in being possessed of a gizzard. Grain, and most seeds, will not digest in their stomachs unless broken ; and, as they have no teeth, they are furnished with this organ to perform their office, in it they are ground and prepared for digestion, which operation is much assisted by the small stones that the birds

swallow. Those seeds which escape unaltered are deposited by the birds in the crevices of rocks, and in situations inaccessible to other animals, and which, otherwise, must remain for ever barren.

Geo. Birds are the only animals which sing?

Mr. H. Many animals and insects amuse themselves by making different noises, as some species of monkey, the cricket and the grass-hopper; but birds alone possess the power of producing really musical sounds; though this talent is not extended to the whole race: of carnivorous songsters there are few. Birds in the tropical region of the earth, are many of them decorated with the most splendid colours; but few of these are songsters. It may

perhaps surprise you to be informed, that the song of birds is acquired by imitation ; a lark educated under a linnet, will sing like a linnet, and not like a lark ; even a sparrow has been taught to sing, by being brought up in the nest of a linnet.

Geo. I have heard a canary whistle a tune, and I have read of a bird called a mock bird, that imitates the notes of all other birds, though it has a song peculiar to its species.

Mr. H. The canary, in a state of nature, has no song. The canaries that are reared in this country, sing the notes of the nightingale or the tit-lark, and the song of many of them partakes of both.

CHARLES THE SECOND. A DRAMA.

I could not die any where so contented as
 in the King's company, his cause being just,
 and his quarrel honourable.

KING HENRY 5th.

SCENE 1ST.

*A Cottage in a wood in Staffordshire ; a
 countryman seated at his breakfast.*

[Enter a farmer.]

Farmer. Good morrow to you,
 neighbour.

Countryman. Good morrow, Gaffer.
 It's foul weather ; will you step to the
 fire and dry yourself ? there is sad
 news i'the country side. *[Enter
 another farmer.]*

1st. Farmer. A friend of mine—
 bid him welcome ; a true lover of his

king and country; none o' your parliament men.

Countryman. Welcome to you, sir, with all my heart. Be seated, sir, are ye fasting? will ye breakfast?

1st. Farmer. We have breakfasted, neighbour, but what is the news, the bad news, you may speak out, this is a friend, a true king's man.

Countryman. Why the news, the king's fled for his life, the parliament men have offered a reward of a thousand pounds for his head. And so all the king's men are likely to be put down.

1st. Farmer. More's the pity: but, neighbour, if aught could yet be done, you've a hand and heart; and there's talk of a rising.

Countryman. Well, I've fought for him before, and would bleed again

for my noble master ; but it's all over now.

1st. Farmer. Not so bad, I hope, as you think of ; all may yet be well. I hear you've had great losses, that the parliament have fined you.

Countryman. Fined me ! aye that have they. After the battle of Worcester, you know we all got home as fast as we could ; but the parliament finding I had fought against them for my king, as is right to be done, and as I'll do again when I've the opportunity, fined me. My three cows went, and two horses had I to sell out of the shafts, to pay with.

1st Farmer. There was bloody work that day : there was such killing and murdering, the streets were bloodier than a butcher's stall. The guns firing, the people flying, scream-

ing, falling in heaps on every side : it was a dreadful day. Were you at the battle of Worcester, friend ?

2nd. Farmer. I was. It was a dreadful day, indeed, a dreadful day for me.

Countryman. A dreadful day for you. then you suffered greatly by it too.

2nd. Farmer. Did I say a dreadful day for me ? Well, so it was—I lost every thing—my all.

Countryman. There were many that did ; and many lost their lives as well. The king staid bravely with his troops till all was lost. We have not heard of him since. Perhaps, sir, if you have travelled far you may.

1st. Farmer. He is apt to be absent, he does not hear you.

Countryman. Have you heard any thing in your travels of the king ?

2nd. Farmer. I was with him at Worcester, and I have heard, since then, various reports respecting him; but none that were true.

Countryman. If it would not be making too bold, may I ask, how you know they were not true? Perhaps you know the truth respecting him: but these are dangerous times to speak freely in, but we are all King's men here, sir.

2nd. Farmer. I was not thinking of what I said, I meant, that were likely to prove true.

1st. Farmer. Time wears away, I must be going. This gentleman is one who has suffered greatly for the king, as he has told you. There is, I understand from the friend he came with, a reward offered for his apprehension, and he is endeavour-

ing to escape from England. I brought him here, thinking that you, Roger, being a loyal man, would give him shelter for a night; and help him on his journey, for my sake.

Countryman. Aye that I will, if he loves his king as well as I do, for his own sake. Would you fight for your king, friend, if there should be a rising?

2nd. Farmer. I love him better, I think, than you can do, and have fought for him.

1st. Farmer. Well, then, farewell! Be kind to this stranger, Roger. Fare ye well, sir!

2nd. Farmer. Farewell! If fortune favour me you will hear from me again.

1st. Farmer. And you, sir, if ever you should want a home, re-

member your friend at the old House. So heaven bless you ! [*Exit ; and enter a labourer.*]

Serv. O master, master ! here's a great parliament man, and more than a score of the parliament soldiers, and the folks say they are coming here to search the premises. It's suspected that king Charles is hidden somewhere here.

Countryman. Well, they may search till they are tired for their pains. How can the fools think the king should be here ?

Farmer. A word with you, my host.

Countryman. Step out, Joe, the gentleman wants to speak to me. [*Exit Servant.*]

Farmer. The same men that are seeking the king, have a warrant

against me ; therefore my kind host I must beg you will place me out of danger.

Countryman. [*Drawing back a pannel in the wainscoat*]. Please to enter here, sir. This place was made for a different purpose. It was made long ago, by my old grandfather, to hide his money ; and, I fancy they will not find you here. [*Closes the pannel, and hangs up a coat and hat on a peg placed over it ; strews some sacks upon the ground beside it, and draws a table close ; seats himself in a chair beside the table, and talks to himself.*] There,—they may seek him now, I think. But I wonder who he is ? Some great man, I'll be bound for him ; his talk and his manner speak him such, let his coat be what it will : but still he did not

seem to have much money in his purse.—If it should be the king after all ! but no, that can't be. I forgot to give him a light, I must get one.

SCENE 2ND.

A dark Closet. Farmer seated with his face covered with his hands. A lamp burning on the ground. Countryman's voice, and other voices heard without.

1st Voice. I tell you I am,—and its no use disputing with me, you have got the king in the dark closet.

Countryman. If I have, wife, its unknown to me.

1st Voice. Jem ! Jem ! I tell thee, neighbour Hicks saw two men come in here this morning, and there was but one went out, and as he passed

him, the wind blew his coat on one side, and he saw a grand sword belt under it; and they say the king changed clothes with him in the wood. And the king is here.

Countryman. They lie, wife, that say so.

1st Voice. Well then, why will you not let me look into the closet? But, Jem, the parliament men will be here soon, and then I'll see.—hush! here they come!—There's a great reward offered for him, and I'll have it in spite o' thee, Jem.

[*Farmer rises from his seat, and clasps his hands.*]

Ah me! Oh, that the thunders of Heaven would strike me dead! or that the earth would swallow me!—My Crown,—my kingdom,—my friends, all gone? . My men, my no-

ble army, all perished ! my country rent with intestine strife ! why, with my greatness, fell I not ? Of late a king.—what am I now ? a fugitive ! an outcast of the people ! and for this poor man, who, already has borne so much for me, if he persist, and I am found, he too must perish with me, or if this woman's tongue betray me—If I had fallen with my men at Worcester, then should I have been at peace : but to endure the scorn, the mockery, the triumph of my enemies ; my very death, a public spectacle, how terrible !—It is now too late to attempt an escape : already do I hear the voices of my pursuers.

SCENE 3RD.

The Interior of the Cottage. Countryman and his wife.

Countryman. I tell you, if you drop one word, with this pistol, I will that instant kill you.

Wife. Why, Jem, only consider, so many thousands, if you tell them it would make you a gentleman for life: our squire would not be so rich by half. And if you should keep him hidden, and he should be found, these men will hang us both up at our own door—Oh dear! oh dear! what will become of us!

Countryman. Well, Bess, I should only die to save my king, and I've run the risk of it before, and therefore if you say one word, remember!

[*Enter an officer. Men without.*]

Officer. It is suspected that the king is here concealed, and we are come to search, by warrant of the parliament. If you deliver him to us, there's the reward, read this—

[*Puts a paper into his hand.—The men enter, search the house, and failing to discover the king, break into the larder, and carry off the provisions. After they are gone, the pannel slides back, and the king, in his disguise, enters. Countryman's wife retires.*]

Countryman [*kneels*]. My master, and my king ! If I have spoken aught amiss, it was because I knew you not, your majesty will pardon me?

King. Rise, friend, and ask not from me pardon. You have afforded

me shelter, and have saved my life : to reward your faithfulness I am not able, the time perhaps is not far distant, when it may be in my power : trust me, such service will not be forgotten, at present you must be my guide.

[*Exit.*]

SCENE 4TH.

A handsome Room. Countryman and his wife well-dressed and seated. Enter 1st. Farmer in an officer's uniform.

Countryman. Good morrow, captain, to you : I think, I need not ask where you got your king's livery.

Officer. Good morrow to you : and

I wish you joy in your new house. I hear the king, our noble Charles, has been bountiful to you in his gifts. But your wife, there, had nearly brought you into trouble. She's forgiven, I suppose?

Wife. Aye, the king forgave me all, like a good and noble master, as he is.

Countryman. And would you believe it, he had not forgotten the loss of my three cows and my two horses, for he sent me down a famous team, and a purse full of gold, with a promise of a yearly pension. 'Twas a lucky day when you and he crossed this threshold. My heart misgave me then he was no common gentleman. But did you know he was the king?

Officer. Believe me, no. He came

recommended by a friend, with the story I told you, and stayed with me a whole week too ; and when he left my house, he took his sword belt off, (but for which he was dressed just like a farmer, in those times of war, when every ploughman held the whip with one hand, and his sword with the other,) but that was too grand for a farmer, and he gave it me, and told me to keep it as a pledge till I should hear from him again, when he would redeem it. And what think you? a month ago a grand letter came, tied with silk, and it contained a commission, and desired the belt might be restored. This was it which farmer Hicks saw, and that raised the report about the king being with you.

Countryman. But after all, he got

no good by it, he was killed soon after in a skirmish, poor man!

This Drama is founded on fact: the descendants of the countryman reside in Staffordshire, and still enjoy the pension.

CURIOSITY.

Still be the man with caution tried
 In whose discretion you confide :
 Who loves to ask, will love to prate.
 Ears that unfold to every tale,
 Intrusted secrets ill conceal.

HORACE.

Geo. How shall we employ our time till the candles are brought? I wonder whether papa will tell us a tale?

Mr. H. Well, I have thought of one that perhaps may improve a certain young person, if he will attend to it—but I mention no names.

Geo. Do you mean me, papa?

Mr. H. I did not say so.

Geo. No, papa, but though you did not say so, perhaps you did mean me.

Mr. H. In a certain town, there lived a gentleman of the name of Broadhurst. Mr. Broadhurst was a married man, but as he had no family of his own, he used to invite a niece to live with him occasionally, and she frequently spent many weeks together at her uncle's. This young lady had acquired a very troublesome habit of asking questions, and of prying into things that did not at all concern her, in short, she was what is generally called very curious; though I do not think she was well aware of it herself. One evening her aunt left the room, and was absent for some time on domestic affairs. Her uncle sat reading the paper. When he had finished it, he laid it upon the table, and pushed up his spectacles to his forehead, which was a certain sign that he was going to say something very grave.

Chas. That is just as you do, papa.

Mr. H. Is it? well—I believe it is, said Mr. H. smiling. He then called his niece to him and said, my dear, I am going from home early to-morrow morning. I have something I should wish to leave in your care; may I depend upon you?

Certainly, sir, you may: replied his niece, but what is it? That, said Mr. Broadhurst, I wish to remain unknown.

Well, said his niece, that is very odd: how can you commit any thing to my care without my knowing what? It is, replied her uncle, inclosed in a small paper box. I have so much dependence upon you, that I dare intrust you with the box unfastened; but with the knowledge of what it contains, I may not. Here is the key

of my desk, open it, and you will find the box wrapped in a brown paper. When she had found it, she carried it to her uncle. Now, my dear, said he, as he unfolded the paper with care, this small box I give into your hands. You must neither tell Mrs. Broadhurst, nor any one else, what has passed between us this evening, and you will lock the box up in your trunk: it is of importance to yourself to remain ignorant of its contents. Good night, love. It may probably be three weeks before I return.

Geo. I wonder what was in it: do you know, papa?

Mr. H. You cannot wonder more than Mary did. She carried the box up stairs into her room: she examined the outside over, and over again, it was a small box made of

purple paper; and after poring over it for a full half hour, she was just as wise as at first. It had no smell. It felt extremely light, and sounded hollow, for thus far did Mary's curiosity lead her. At length, she placed it in her trunk, and locked it up, as she had promised to do. She could scarcely sleep for thinking of it. What could it be, that was of importance to her not to know, and yet that her uncle had put into her hands? What could it be, that he would not even trust her aunt with? for it was the first time she had ever known her uncle conceal any thing from her. When she at length fell asleep, the box—the box still troubled her; she dreamt about it, waking or sleeping, the box still run in her head. Day after day passed; the

desire to know what was in this box grew stronger. A thousand times did she wish that her uncle had never placed it in her care. It was daily examined, and many a time was her hand on the point of raising the lid. She had tried, and found that it was really not secured in any way. The evening at length came preceding the day on which her uncle was expected to return. To morrow, she thought, would put it out of her power to ascertain the contents for ever. She tried the lid—it dropped into her hand.—There was a paper in the box. Well, said she, I will not read this paper, I will only just look at it. She raised it; the paper was blank, but beneath on the bottom of the box, was written in large characters —“*Peep says Curiosity.*”—

Poor Mary burst into tears ! The box dropped from her hand upon the floor. To deny that she had opened the box, she could not : a lie was what Mary never told. It was now apparent what her uncle meant when he said, that it was of importance to herself that she did not open it. She had forfeited his good opinion, and in all probability, a reward ; though, to give Mary due credit, her mind was so completely occupied by the thought of having lost her uncle's esteem, that the latter idea never entered her mind. To increase her perplexity, at this instant there was a knock at the hall door. It was her uncle's well-known rap. When he was informed of the truth by Mary's frank confession of the whole, he told her, that he intended no punishment ;

that he meant to give her a lesson which he trusted she would never forget. "That I shall not indeed," replied the sobbing girl, and I am happy to say, that before long, she recovered the good opinion of her uncle.

ACIDS AND ALKALIES.

It is desirable, as soon as possible, to give correct ideas of the properties of acids and alkalis. To this end, let the pupil be early instructed in the use of chemical tests.

PARKES' CHEM. CAT.

Geo. I saw my mother using some concrete acid of lemons this morning. I thought acids were always liquid.

Father. No, my dear; some acids, as you see, are solid.

Chas. I suppose by an acid is meant something sour.

Father. No. Some acids are not at all sour.

Chas. Why, I thought that acid and sour were synonymous. I have often heard you say, how acid the fruit is!

Father. In common conversation, acid and sour are used for each other:

sourness always implies the presence of an acid, though all acids are not sour; you have tasted bitter almonds?

Chas. Often.

Father. And peach stones, and laurel leaves?

Geo. Yes: the cook sometimes bitters the custards with them.

Father. Well, it is an acid that gives them their bitterness.

Geo. Are acids generally considered wholesome?

Father. No: the one I have just mentioned is poisonous.

Chas. I never found any bad effects from eating custard bittered with laurel leaves.

Father. Because there is not a sufficient quantity of them used in making it to injure you.—Do you know oil of vitriol, and aqua fortis?

Geo. Yes, sir, I broke a bottle of one of them last year, and where the drops fell upon my cloaths, it completely destroyed the cloth.

Father. It was very fortunate for you that the liquid did not fall upon your hands or face. But these are acids also; their proper names are, sulphuric and nitrous acid.

Geo. Acids then are either sour or not; liquid or solid.

Father. You are not quite right yet; some acids are in the form of air or gaseous. What is called fixed air, that is found in fermenting liquids, and which gives to beer, porter, cyder, and champagne, their briskness, and sparkling appearance, is an acid.—Carbonic acid.

Geo. Then, if it is an air, can it be breathed like common air?

Sulphuric & Nitric acids

Father. No : it soon suffocates any one that is compelled to inhale it.— It occurs in wells, and is then called the heavy damp ; in brewers' vats it is always found ; and where charcoal fires are burnt, the air becomes strongly impregnated with it.

Geo. I have often heard of persons having died, in consequence of sleeping in close rooms where charcoal was burning, they were suffocated, I suppose, by the carbonic acid, produced by the combustion of the charcoal.

Father. Yes.

Chas. I was reading yesterday an account of a cave in Italy, into which if a dog and a man enter, the dog soon dies, and the man receives no injury. The book states, that this singular circumstance arises from the

heavy damp, which, being heavier than the atmosphere, occupies the bottom of the grotto, so that the dog is immersed in it, whilst the man's head is in the purer air.

Geo. Is the fire damp the same thing?

Father. No: the fire damp is nearly similar to the gas with which the streets are lighted. Carbonic acid is contained in many substances; if you pour a little strong vinegar upon powdered whiting, it will be disengaged in bubbles.

Geo. Are there any more gaseous acids?

Father. Yes, several. Did you never observe the white smoke that arises from burning brimstone?

Geo. Yes, sir, often.

Father. That is an acid, and one

of which we have the earliest account; it was used, at a very early period, in bleaching wool. I will shew you an experiment with it. I will hold this red rose over the fumes arising from these burning matches.

Geo. How curious! the rose has become white, it is no longer a red rose, it is a white one.

Chas. Then, as the form, and taste, and smell of acids are uncertain: for aqua fortis has a very different smell from burning brimstone, and the acid of lemons has no smell at all; how am I to distinguish them from other bodies?

Father. I am afraid that I cannot give you a definition of an acid, that you can at present understand. But I can readily shew you how to ascertain the presence of an acid in an uncombined form.

Geo. Then pray do, papa.

Father. These little slips of paper are stained blue with the purple flowers of a violet; any other blue flower will do. Into this wine glass of water I will drop a little vinegar, and then immerse the slip of paper.

Geo. The purple colour has disappeared, and the paper has become red.

Father. This paper so stained is called a test paper, from its power of indicating the presence of an acid.

Geo. Is there any thing besides acids which changes the colour of a test paper?

Father. Into this glass of water I will put a small quantity of pearl ashes, and dip the paper into it.

Geo. It has turned green?

Father. Potash is what is called

an alkali, and alkalies always turn this test paper green.

Geo. How many alkalies are there?

Father. Three only of much importance.

Geo. Are they all like potash, solid?

Father. No, one of them is gaseous; this, when combined with water, is called spirit of hartshorn.

Geo. Are alkalies as various in their tastes as acids?

Father. No, taste this potash.

Geo. It is exceedingly nauseous.

Father. The taste is what is called an alkaline taste. The other important alkalies are, soda and ammonia.

Geo. What are alkalies made from?

Father. Soda is made from the ashes of sea weeds; Potash from those of land plants; and impure

ammonia, or hartshorn, as the name indicates, was formerly made by distilling the horns of deer, but now, on the great sale, other animal substances, as bones, hoofs, &c., are employed.

Geo. Are alkalies of much use?

Father. Yes, they have the property of making oils unite with water. Into this vial I will pour some water, and a little oil. You observe the oil swims on the surface of the water, and if I shake them, as soon as I let them remain at rest they separate. I will now add a small portion of potass, and shake the bottle.

Geo. The water, and the oil, and the potass, are all blended and look like cream.

Father. Oils combined with potash, form soft soap; combined with soda,

hard. The colour of the soap arises from that of the oils, that are used in the manufactory. Before the alkali is used for this purpose, it must be deprived of the carbonic acid which is united with it. There is another substance of still greater value, of which soda is the basis.

Geo. What is that ?

Father. Glass.

Geo. Glass ! Why glass is quite transparant, and it will not dissolve in water, and has no taste !

Father. And, yet it is made by fusing soda and sand together.

Geo. Indeed ! and would not potash do as well ?

Father. It is seldom used for this purpose. When alkali is added in excess, the glass is soluble in water of which, one of the old windows

in the cathedral at York is an instance.

Geo. Well, this is still stranger. I never heard of glass melting in water before.

Chas. As acids turn the blue paper red, and alkalies green; I have been wondering, what colour both mixed together would produce.

Father. Let us try. In this glass is some liquor, made by pouring boiling water on red cabbage leaves sliced; you see it is purple, I will pour a few drops of acid into it: It has turned red. I will now add, drop by drop, some water in which a little pot-ass is dissolved.

Geo. The redness has changed to purple, and the liquid is now restored to its original blue colour.

Father. I will continue to add more alkali.

Geo. The liquid has become green.

Father. I will now shew you another experiment. Into this green liquid, I will drop a small lump of citric acid, that is, the concrete acid of lemons, and allow it to remain a short time undisturbed.

Geo. How beautiful ! it is red at the bottom, green at the top, and a narrow streak of blue passes across the centre.

Father. Acids, you find by this experiment, combine with alkalies. When united, they are called neutral salts, of which, common salt, salt-petre, and sal ammoniac, are familiar instances : the first being composed of muriatic acid and soda ; the second, of nitric acid and potass,* and the last, of muriatic acid and ammonia.

* Potash is impure potass.

Geo. Then acids lose all their properties when combined with an alkali ; for salt-petre does not bear much resemblance to aqua-fortis, which, I think you said, is nearly allied to nitric acid.

Father. Yes ; and alkalies lose their peculiar properties when combined with acids. Into the bottom of this glass I pour a little hartshorn. In this bottle is some muriatic acid, commonly called, spirit of salt ; smell it, but not too nearly.

Chas. It is exceedingly pungent, more so, I think, than the hartshorn.

Father. I will gradually add a sufficient quantity of the acid. Smell the mixture.

Geo. It is perfectly scentless !

Father. If I had a piece of quicklime, and were to add a bit to this,

the acid would leave the ammonia, unite with the lime, and the smell of the hartshorn be restored.

Geo. Are not these experiments chemical ones?

Father. Yes.

Chas. I thought that chemistry had been a trade ?

Father. Chemistry, my dear, is a regular science ; one of the branches of natural philosophy. Chemistry has been defined to be, “ a science, by which we become acquainted with the intimate and reciprocal action of all the bodies in nature upon each other.” Thus, in these experiments we have been trying the action of acids and alkalies upon each other, and upon blue vegetable colours : therefore, these experiments are chemical.

THE TORTOISE-SHELL KITTEN.

The cat, half-famished, lean, and weak,
Demands the privilege to speak.

GAY.

ONE dark winter's evening, George and Charles, and two of their cousins, were seated round a cheerful fire, amusing themselves by playing at forfeits. On one side of the fire was seated their father, in his great arm-chair, and before him were placed a table and his desk. He was busy, I believe, writing some letters.

In the midst of their game, the boys were suddenly startled by something rattling against the casement; and, in the next instant, they were surprised by the mewing of a cat, which was heard faintly above the

howling of the wind, and the beating of the sleet which drove violently against the panes. George instantly ran, drew back the curtains, and opened the window, when, driven in by the tempest, a poor cat, half drowned by the rain, and benumbed by the cold, fell to the floor.

“It is,” exclaimed George, “it is our poor tortoise-shell kitten, that we lost three months since, and which we thought the dogs had worried. My poor, poor kitten, where have you been?”

The game was no more thought of. The dairy maid was put in requisition for some warm milk, and the cook for a bit of meat, and puss rolling herself on the warm carpet before the fire, soon made herself dry, comfortable, and happy. She purred,

she mewed, she walked up and down before the fire, and rubbed herself against the legs of her old masters, looking up sometimes in the face of one, and then of another, as if overjoyed to see them. Puss at length stretched herself at ease upon the rug, and the boys, though they could see no possibility of ascertaining the truth, began to wonder where she had been, how she had supported herself, and had at last found her way home.

“She has, perhaps,” said Charles, “been wandering about the fields, and preying upon such small animals as she could catch.” “I think not,” replied George, “for you know it is winter, and she could not have survived the cold nights, exposed to the inclemency of such weather as this,

do you think she could, father?" "I think she might," answered Mr. H. "because many other cats do, sleeping in barns, or stables, or where they can get shelter; but there is one thing that induces me to think that this has not been the case with puss." "Oh!" said George, "I know why, I remember you once told us, that the hair of animals, that are much exposed in winter, becomes close and rough, but puss is quite sleek now that she is dry, and, I think, if she had had to provide for herself she would scarcely have been so fat. O pussy, I wish you could tell me where you have been, and all your adventures."

A few evenings after, when George had prepared his paper, pen, and ink, with the intention of writing his exercise, he was called out of the room

and did not return for a considerable time. On again seating himself to proceed with his task, he found his paper already filled, and inscribed on the first sheet, in large letters, was "The Adventures of myself, the Tortoise-shell Kitten." When he left the room no one was in it, and puss was sat rubbing her face with her velvet paw ; when he returned, the room was still vacant, his pen was left in the ink, a thing which George never did, and puss was seated in the chair that he had vacated. Whether any one had been in the room during his absence, or whether puss was really the author, are points that George could not ascertain by inquiry, and that we must leave undetermined ; but all my readers will certainly admit with him, that if puss

did write this history, she was much cleverer than cats in general are supposed to be.

In the evening, when the family circle had re-assembled, George, producing the roll of paper from his pocket, and relating the manner in which he had discovered it, notwithstanding the smiles that were visible on every face, declared for the latter opinion; "for", said he, "I inquired of every one in the house, and I could not find that any person had been in the room."

He then said, that he would, if they pleased, read it aloud. To this every one instantly assented, and the fire being stirred, the curtains drawn, the candles snuffed, and silence established, each person listened with anxious attention, while George,

after having hemmed three times to clear his throat, proceeded as follows :—

The Adventures of myself, the Tortoise-shell Kitten.

My dear young master,
 With my parentage and education till within the last three months you are well acquainted; since I was bred in this house, and was reared under your own inspection: but as I heard you the evening I returned express a wish that you were acquainted with the places that I visited, and the adventures that I passed through, during my absence, and not knowing how to make you any other return for all the kindness you have ever shown me, than by endeavouring to gratify your curiosity, though as a

cat albeit unused to employ my pen, I hope to accomplish this (for one of my class) unheard-of, arduous undertaking. Here George stopped, and looked at puss. Puss was laid quietly before the fire without much appearance of attention. He then read on.

One fine October morning I wandered to some distance from home, prowling about the hedges in search of mice and birds, when, beneath a stack of corn, where I had promised myself a plentiful share of plunder, I saw the hoop of a barrel laid. It was crossed, in various places with strings curiously looped and twisted. These I did not then observe, my attention being arrested by several birds which I thought were busy pecking the corn that lay scattered around. Instantly

determining to make one of them my prey, I crept behind a little bush, made a spring upon a luckless sparrow, and, in the same instant, found myself entangled in the strings, which I now discovered to be snares for birds. In the same predicament with myself were two tom-tits, and three sparrows; but I was much too frightened to molest them, and after struggling, in vain, to escape, I was compelled to resign myself to my fate.

After a few hours had elapsed a troop of school-boys came running up. The moment that they saw me they set up a shout of laughter and exultation. The biggest of them instantly seized me, and claimed me as his share of the spoil: the others submitting with much murmuring and many discontented looks, divided the

birds among themselves, though my new master would have a share of these also, and when one of the boys attempted to dispute the fairness of this proceeding, he silenced him with a blow, yet I afterwards found that his cowardice was equal to his cruelty and oppression, that overbearing as he was where he was master, he was meanly submissive to those who were stronger than himself, and that he sought to over-reach by cunning where he could not succeed by force. He now proposed, as he termed it, to make some sport. This was to consist in fastening one of the poor birds to a stick, and then in letting me fly at it, but I was too intent on making my escape to attend to any thing besides ; therefore, the moment he let me go, I ran away as fast as I

could, pursued by all these cruel boys who pelted me with stones till an unlucky hit upon the side stunned me so much that I could run no longer, and I was once more seized and conveyed away in triumph.

As I was recovered by another boy who claimed me as his property, a quarrel ensued, which terminated in blows, and I was relinquished into the hands of my former possessor who, considering me as the cause of the dispute, declared that as soon as he should get me home he would have his revenge.

After a short walk, we arrived at a large house into which my master entered, but the others dispersed in different directions. On entering the yard, Master Dick, for this I now found was his name, inquired for

Bob the stable boy, and walked along with him to the stable, where they held a long consultation to determine how they could make the most sport of me. To recount the various wicked schemes that were proposed of getting fun, as Bob called it, out of me would only serve to disgust you, who have been brought up in a just abhorrence of all cruelty ; suffice it to say, that many of them were such as must have proved fatal to me, and the thoughts of which made every hair upon me bristle with terror. At length it was determined to set the great yard dog upon me, that they might see us fight. The dog was loosed ; it was an immense mastiff that was chained in the court. It was led into the yard by master Dick, who held it by the collar. On seeing me, it

snarled, it growled, and shewed its immense teeth, which in imagination I already felt mangling me, and crushing my bones. I then thought how often I had seized a poor unfortunate mouse, and, in mere wantonness, played with my captive for an hour together; and I inwardly resolved, that in future, should it be my fortune to escape, I would never keep any animal a single instant in suspense; and, as it is my duty to destroy vermin, that I would put them out of pain as quickly as possible. Master Dick now set the horrible animal upon me, whilst Bob held me in his hands. I instantly turned and bit him with all my strength in the finger, on which he let me go with a dreadful oath. I sprung upon the manger, and from thence into

the rack, where I set both dog and Bob at defiance, by striking with my claws between the bars. These two abandoned boys swore at me in the most horrible manner, and Bob went for a fork to displace me with. During this interval of dreadful suspense as to the fate which awaited me, master Dick's sister passed, and by her tears and entreaties endeavoured to persuade him to liberate me, but in vain.

Wicked people, however clever they think themselves, often meet with those who are a match for them in cunning. Thus, what Dick's sister could not obtain by persuasion, she at length effected by the threat of telling his father of his cruelty. This was an argument which there was no resisting, so he held the dog

while Bob, who had now returned, pulled me down, and I scampered across the yard as fast as possible. Master Dick, as I passed him, let go his hold of the dog, pretending that he could not restrain it. It instantly sprang upon me with a tremendous growl, seized me by the back, and shook me violently ; but I know not how, it let me turn myself in its mouth sufficiently, to allow me to reach its eyes with my claws. It instantly set up a most dreadful howl, and I took the opportunity of escaping to the roof of the barn.

At this moment, Master Dick's father entered the yard, and, with the most impudent effrontery his son advanced to meet him, and told him a story, every word of which was false, to account for the dog's being loose,

and for the battle between the dog and me ; the conclusion of which, it was evident that his father must have seen.

Wickedness may go unpunished for some time, and a person may flatter himself that he contrives matters too cunningly ever to be detected. A liar may devise his falsehoods so artfully, that he may feel certain that they cannot be discovered : but such practices will not always escape, and he, who has been successful for many times, will at length meet with the reward he merits. Thus it now proved, Bob confirmed what Master Dick had said, and his sister would not betray her brother. Little did they imagine, that their father had been a silent auditor of all that had passed, and that, unseen himself, he

had eben a spectator of the whole affair.

I shall never forget the stern look of anger with which he regarded the culprits. Dick, conscience-struck, with a look of terror, fell upon his knees ; his sister, pale, and trembling, stood beside him : while Bob, who read in his master's countenance that he had nothing to expect, with matchless impudence wished him good morning, and walked out of the yard. " Lethim go," said his master, as he cast a look of contempt after him, " but for you, sir, I have long had suspicions of your conduct ; kneel not to me, it is too late to kneel. Did I not blame myself for allowing you to go with such associates, your punishment would be severer ; but, in future, I will endeavour to

rectify my error. As I can place no dependence in you after the falsehoods you have just uttered, I will send you where you shall have no opportunity of doing ill, and no wicked associates. To-morrow you leave home for school, as a boarder, and I will take care to give such directions as will prevent your having the power to run into error. Rise, sir, and follow me."

"I wonder," said George, "whether puss has the marks of the dog's teeth remaining in her back. Puss was instantly searched, and the incredulity of the party, as to the authenticity of the history, was almost shaken, when, on turning back her hair, the marks of teeth were plainly visible.

The injuries that I had received prevented me from travelling far, and

with difficulty I crawled to a neighbouring rick, where I resigned myself to that fate which seemed inevitably approaching. Here, worn out with the fatigues of that terrible day, notwithstanding the pain I suffered from my bruises, I fell asleep. How long I laid in this state I do not know : when I awoke, the sun was shining bright and warm, and the birds were singing sweetly in the hedge-rows. I tried to rise, but found myself unable, and I had no prospect but that of being starved to death. In the evening, however, the son of a neighbouring farmer found me. I had now, to my inexpressible joy, fallen into the hands of a very different person to my late possessor. He took me very gently up, and, when the agony I suffered on being

moved made me cry out, he put some soft hay in his hat, and laid me in it. He then placed me at the foot of the stack till he had milked the cows—when he poured a little milk into his hand, and gave it me to drink. Thirsty and famished as I was, I thought it the most delightful that I had ever tasted. I thanked him as well as I was able, and I think he understood me, for he stroked my head, and said, poor puss !” “As he carried me home, to my horror and surprise, I heard the well-remembered voice of my late persecutor. “Hey Jem ! what have you got there, man, so carefully in your hat ?—a nest of young birds, I suppose.”—“No, Master Dick,” replied Jem, “I *be* not such a *natural* as to look for nests in Autumn, or so wicked as to rob the poor birds of

their nests at any time. ; so let me pass on, Master Dick, and dont hold me all day by the shoulder." "What," answered Dick, "you can never stop a moment to talk with one. I dare say, now, you have got some apples and pears, or something good in your hat?" "Not I," replied Jem, "and if I had, there would be none of 'em for you." "I want none of your apples, but I want to know why you keep your hat so closely covered up?" "Why," said honest Jem, "do you go so round about? could you not ask one plump at once? Its that poor cat, that I saw you and your comrades chasing the other morning, and pelting with stones, and shamed you might be, if any shame you have. Look here at the poor beast—here she lies, unable to stir a limb."—"I

thought as much," answered Dick, "and I tell you, that cat is mine, and I desire you to give her to me; she cost me a flogging, and almost got me sent to school, and I'll be revenged on her."—"Your own ill ways got you a flogging," replied Jem, "and I think it would not much mend them to hurt the poor beast." "It does not signify preaching," answered this wicked boy, "the cat is mine, and the cat I'll have." "Say you so" said Jem, "then I say, the cat never was yours, and I'll see no animal abused." "Is that the way you talk to a gentleman," said Dick, and relying on his superior size and strength, seized the hat with one hand, and struck my protector with the other so furious a blow upon the face, as to make him reel from its violence.

Jem instantly set the hat carefully down, and returned the blow. What followed I do not know, for I was so terrified by the apprehension of falling into the hands of my old foe, that I did not dare to look up. The matter was at length decided, and to my great relief, I found myself carried off by Jem, who had received some very severe blows in my defence. "What!" said his father, when he entered the door of his cottage, "what, Jem! thou surely hast not been fighting. How came you by that black eye?" "Oh," said Jem, "but I have! and with the squire's son, Master Dick," and related the occasion of the battle. "Thou art a brave little fellow," said his father, "and next Fair-day thou shalt have a sixpence to spend." Jem proceeded to make a

warm bed of hay by the fire-side for me, and delivered me to the care of his sister, who, by good nursing, restored me to health. I could not help remarking the difference between my late tyrant, and the kind person to whom I owe my life. One lived in a fine house, wore fine clothes, had servants to wait on him, and play-fellows to quarrel with, at command. He spent his days in idleness, and feasting, in playing and rioting—But, with all this, he was not happy. He was of a weak constitution, from the manner in which he had been brought up; tyrannical and impatient, from never having been contradicted; proud and overbearing, from having no one to play with that had so much money, and wore clothes so fine as himself; he was indolent, because he

had nothing to do but to play, and was continually sick with stuffing. Jem lived in a cottage ; but he was active and industrious, because his father could not afford to bring his children up in idleness ; his clothes were coarse, but they were warm and clean, which was all Jem wanted ; his food was plain, but Jem eat his brown bread and milk with more pleasure than Dick feasted on his dainties, because he had got a good appetite, with rising early and working hard. He had no servants to attend upon him, but Jem did not want them, for he could do everything for himself, and just as he liked. In play, he was active and merry, because he had so little of it that he enjoyed it. Master Dick was disliked, and Jem loved, by all in the parish—but

to proceed : the day I returned home to you, I had resumed my old habits, and had prowled along the hedges in pursuit of birds, till I had wandered out of my knowledge. After several hours spent in fruitless efforts to regain home, on turning the corner of a wood, I unexpectedly found myself in sight of my old habitation, to which I instantly proceeded, and arrived, as you know, at night-fall. Poor Jem, I am afraid, will weep for the loss of me.—He knows not what good fortune has befallen me, and will suppose that I have fallen a prey to the dogs, or that I have perished by the hands of cruel boys. This reflection is the only one that embitters my present felicity, and could I give him an occasional visit, nothing would be wanting to complete my happiness.

Thus ends "The Three Months' Adventures of the Tortoise-shell Kitten."

I shall only add to the above, that puss lived to a great age in the family of Mr. Hervey, that Master Dick, in hunting after birds' nests, fell from a stack of hay, and was severely injured, that as soon as he had recovered, he was sent to school, and that, during his holidays, having ridden a horse till it would run no further, he alighted and flogged the poor animal, till an unlucky kick cut short his career of cruelty. Honest Jem still lives, happy and respected, and had the pleasure of discovering that puss was not worried, but had found a happy home.

That ends "The Three Months' Adventure of the Tortoise-shell Kitten." I shall only add to the above, that I was living at a great age in the family of Mr. Harvey, that Master Dick, in hunting after birds' nests, fell from a stack of hay, and was severely injured, that a soon as he had recovered, he was sent to school, and that during his holidays, having ridden a horse till it would run no further, he frightened and bogged the poor animal, till an unlucky kick cut short his career of cruelty. Honest Jam still lives, happy and respected, and had the pleasure of discovering that puss was not worried, but had found a happy home.

