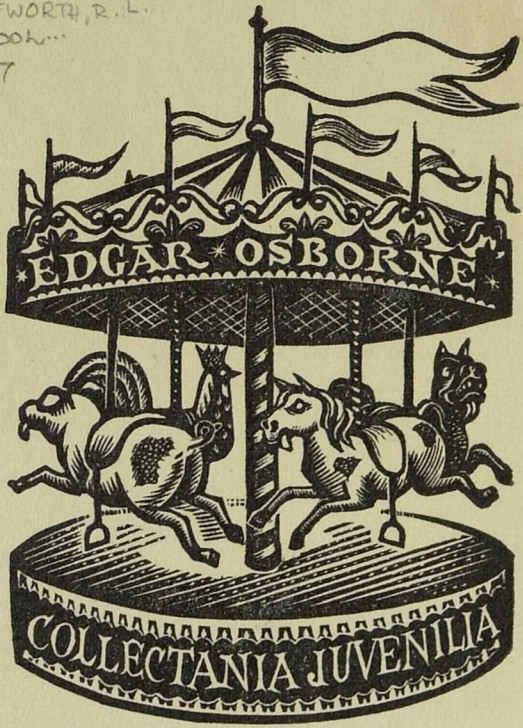

DEDICATION.

To Lovell Edgeworth, Esq.

My Dear Son,

At your return from a twelve years captivity in France; I find you untainted by French vices, or by French frivolity.—Your immediate application to the estab-

lishment of a School for the education of the poor, amongst whom you are hereafter to live, was not only benevolent but wise.

The uncommon assiduity with which you have pursued your plan, and above all, its success, have secured my warmest approbation.

Where the ages of the boys permit, you have combined voluntary and profitable labour, with a confinement of only three hours to the school.

The order, cleanliness, and chearfulness of the scholars,—the amount of the money, which, besides paying for their schooling, they have actually earned,—the eagerness with which admission into your School is sought after, give reasonable hopes, that your establishment will not be one of those sudden bursts of enthusiasm, which is so apt to begin benevolent institutions in Ireland, and which so often dies away with their novelty: but that it will be permanently useful to your neighbourhood.

Wishing, notwithstanding the declining state of my health, to contribute something that might be useful to your establishment, I have compiled the following pages, which are printed, not for publication, but entirely for your use, and at your disposal.

If you think proper at any time to publish them, you are at liberty to do so. My object has been, to comprise common and general instruction in a few words,—to avoid detail, and to excite curiosity.

I have in the first pages inserted common words, and names of things that are likely to occur in the different occupations which your scholars may hereafter follow. That they may learn to pronounce these words with propriety, and to write and to spell them correctly.

These humble pages do not pretend to communicate much knowledge. But even a small quantity of knowledge, when disseminated amongst numbers, and when

it is compared with the gross ignorance of the parents of these children, may perhaps hereafter be advantageous to your scholars.

Your affectionate Father,

RICHARD L. EDGEWORTH.

Edgeworthstown, 16th April, 1817.

LESSONS FOR SCHOOLS,

&c. &c.

LESSON I.

THE FOOD OF MAN.

MEN, Women, and Children, are called mankind. They feed upon different kinds of food in different countries.

In a savage state, as in some parts of Africa, men live upon the flesh of animals

which they kill in hunting, in great forests where there there are few men, and a great many wild beasts.

As the number of men increase, they join together, and form a kind of society, into which, by degrees, necessity introduces the breeding and feeding of animals for food and clothing.

Sheep and Cows have probably been the first animals that were tamed for this purpose; and thus the occupation of keeping Sheep, Goats, and Cows, was added to that of hunting. In time men discovered the use of fruits, roots, and grain of various sorts, for food.

In China, in India, and in a considerable part of America, rice is the principal food of the inhabitants. It flourishes best in warm climates, and in a rich and watery soil.

In great parts of America, maize, or Indian corn is used for bread.

In Italy, wheat flour is the chief nourishment of the people. It is chiefly used after it has been formed into a substance called maccaroni, which is then boiled, and prepared in various manners.

In Spain, bread and onions, are the commonest articles of food.

In France, bread, made of wheat or rye, is their principal food,—and weak wine, the principal liquor. In all these countries fruit of all sorts form a considerable part of their diet.

In Scotland the poor live much upon oaten bread, or *cakes*, as they are called. Their drink is milk, beer, and whiskey.

In England, the food of the poor, is more varied, than in any other country; for though in France, Scotland and Ireland, meat is part of the diet of the people, yet it is so but occasionally; whereas, in England, most of the poor can procure some fresh meat, or bacon. They

live also on vegetables and pulse of different sorts, upon wheaten, and rye, and barley bread, butter, and in some places partly on potatoes. In others their food is principally cheese. Their drink is beer, ale and porter, brewed from barley malt; and in the Western counties, cider.

In Ireland, the poor live chiefly on potatoes, oaten meal made into stirabout, and bread, a little butter, and sometimes bacon. Their drink is chiefly milk and butter-milk. Their luxury and destruction is whiskey. Fortunately beer and porter are now more common than formerly.

In all these countries, fish makes a considerable article of food. Food is every where seasoned with salt, which tends to keep it from decaying.

The best bread in all countries is made of wheaten flour, but various other sorts of grain are made into bread in different countries of Europe ; as rye, barley, oats, beans, and other grains and roots.

Corn is ground into flour, by mills, which are moved by men, or horses, but chiefly by water, or wind, or by steam.

It is then sifted, or bolted in sieves, either by hand, or by bolting mills. After which it is kneaded into dough with

water. The flour of wheat, rye, or barley is made into loaves, with barm yeast, or leven and salt, and then it is baked in an oven. The bread made of oat-meal is most commonly baked in flat cakes, on a griddle; which is a thin plate of cast iron, laid over the fire.

besides food, beer and ale, and porter, are made from grain. Barley is the grain chiefly used for this purpose.

Barley is made into malt by steeping it in water, for a certain time, and then putting it in heaps, in a house, so as to heat it, and make it grow, or sprout again. When it has begun to sprout,

the growth is suddenly stopped, by drying the malt on a kiln. When it is to be brewed, it is first ground in a mill, and then mixed with boiling water, which is called mashing it.

The clear liquor is then strained off, it is boiled again, and mixed with hops, which gives it a slightly bitter taste, and preserves the beer from growing sour.

Beer is sometimes made of oats, prepared in the same manner as barley.—A spirituous liquor called whiskey is distilled, both from barley and oats. Gin is distilled from Juniper berries. Rum is distilled from coarse sugar, in the West Indies; and brandy is distilled from

wine. Brandy comes chiefly from France. Wine comes from France, Portugal, Spain, Madeira, Italy, and from some other countries. It is made of grapes.—Cider is made from apples. Perry from pears. Mead is made of honey and water.

Beer, ale, porter, mead, cider, and perry are more wholesome than gin, rum, brandy or whiskey, or any spirituous liquors, which are slow poisons.

The Instruments made uss of in Husbandry are chiefly the following:

A spade, is a tool for digging. It is made of wood, and iron and Steel.

That part which cuts the ground is made of steel, which is a harder kind of iron.

That part of the spade with which the earth is lifted up, is made of thin or sheet iron.

The handles of spades are made of wood.

The wood of which the handles of spades in Ireland, is commonly made, is ash.

For ash is not only a strong wood, but is also very tough, and is not easily broken.

A loy is a kind of half spade.

In using a spade, or a loy, a man presses the spade or the loy, down, into the earth, with one of his feet, leaning his weight upon it, by jerks.

A shovel is not used for digging, but for lifting earth, and for throwing it from one place to another.

A rake is a tool used for breaking small clods of earth, and for levelling the ground.

The teeth of rakes used for this purpose are made of Iron—other rakes have teeth made of wood, these are used for collecting grass and hay.

Hay rakes are much wider than garden or iron rakes, because hay rakes are

used to collect together, what is light.—Iron rakes are smaller, because they are used to collect, and break what is heavy and tough.

A plough is a tool for breaking and turning up ground. It is made of wood and iron, and is drawn by horses or bullocks.

The horses draw traces made of ropes or leather, which are fastened to swingle-trees, that are hooked to the plough.—Formerly, in Ireland, ploughs were drawn by ropes fastened to the tails of horses. This cruel custom is not now practised.

One part of the plough, which cuts the ground, like a knife, and opens it before the share, is made of iron, and is called the coulter.

Another part which cuts and throws up the ground is called the share, from the word to shear or cut, and is also of iron.

The rest of the plough is made of wood. It consists of the sole, to which is fastened the share,—of the beam, in which the coulter is fixed, and to the end of which the swingle-tree is fastened.—of the handles by which the ploughman guides the plough; and lastly of the earth-board or mould-board, which throws up the earth on one side of the plough.

This mould-board is generally made of wood, but it is sometimes made of iron, yet it is still called a *mould-board*. In the same manner that which holds ink is usually called an ink-horn though it is frequently made of glass or earthenware, or lead.

Ploughs are now in many places made entirely of iron. They are heavier than good ploughs made of wood, but they are much stronger and more durable.

A harrow is a square frame of wood, with two or more cross-bars, into which iron-teeth or harrow-pins are placed, at equal distances from each other, in holes in the frame, and in the cross-bars, so as

to form a kind of rake, with many teeth behind and beside each other.

The harrow is drawn from a staple placed on the frame in such a manner, as to prevent the hindmost teeth of the harrow from following in the very same line as the foremost teeth. By which means the lumps of earth are broken into smaller pieces than if the teeth of the harrow followed each other exactly.

Rollers of wood, or of iron, or of stone, are sometimes used to break down hard clods of earth, after it has been harrowed, or to level ground after it has been sown.

Frost breaks and powders, or *pulverises* clay, because when the water in the

clay is frozen into ice, it swells with great force, bursts the clay, and breaks it into small pieces.

Manures of different sorts are mixed with different soils, to improve them.

Dung, the ashes of vegetables, the ashes of coals, woollen rags, pounded bone, oil cake, lime, marl, shells, sea sand, sea-weed, and many other substances are used as manures, upon different soils, and for different purposes.

LESSON II.

THE CLOTHING OF MAN.

NEXT to food, clothing is what is most necessary to man.

Savages in many parts of the world go naked. In others, where they employ themselves in hunting, they cover themselves with the skins of the beasts which they have killed.

By degrees, mankind learned to make different kinds of clothing, from grass, straw, and other vegetables.

In these countries, clothes are made of cloth, woven of woollen or cotton, or linen yarn, and of silk.

Cloth made of wool is called woollen cloth. Cloth made of linen yarn is usually called linen cloth.

To make woollen cloth, the wool is first to be shorn from the sheep with shears. It is then washed, picked, sorted, scribbled and carded.

It is spun into worsted yarn, and the yarn is woven into cloth, in a loom.

It is dyed of different colours, and either pressed under very heavy presses, to make it smooth, or it is cleansed, or

fulled, in a fulling mill to make it thick, or to give it a nap.

It is afterwards made into different garments by a taylor.

The cheaper or inferior sorts of cloth, are not so wide as the fine, or superfine, which are called broad cloths.

Other kinds of cloth are called Kerseymere, frize, drugget, rug, linsey woolsey, &c. Besides these, wool is woven into various different kinds of stuff, into serge, shalloon, baize, flannel, blankets, carpets, and other woollen goods.

Stockings, and Stocking-web, are also made of woollen yarn, by knitting, or in the stocking frame.

Linen is made of flax, which is prepared by soaking it in water, till the outside skin is loosened from the inside fibres. Flax is then dried, and beetled and skutched, till all the outside, hard parts are broken off.

It is then hackled and carded, and bleached, and spun into thread of various fineness, and woven into cloth of different sorts, such as sheeting, diaper, damask, lawn, cambrick, tapes, &c.

Lace is also made with bobbins, or woven of fine linen thread.

Cotton grows on trees and shrubs, in different parts of the world, from which it

is gathered, picked, sorted, and brought over to Europe, where it is manufactured into thread, from which many kinds of cloth are made, such as cotton, calico, dimity, fustian, corderoy, gingham, and various kinds of goods, and of which gloves, night-caps and stockings are knitted, or woven.

The spinning of cotton has of late years been chiefly performed by machines, which are worked either by water-mills or steam-engines.

Various articles of dress are made of silk.

Silk is produced by the silk-worm. In its original state, its threads are extreme-

ly fine, and are wound round the body of the animal, in a shape which is called a cockoon, from this they are wound off with great care, and twisted together, so as to make a thread sufficiently strong, to be woven into materials of different kinds. Such as satins, sarcenet, persian, damask, ribbons, gauzes, velvet, tabby, &c.

Stockings are also knitted or woven of silk.

Silk, Cotton, and Worsted, are frequently mixed together in different proportions, and form various materials, such as Poplins, Tabbinets, Velveteens, Plush, &c.—Besides these articles of dress, Hats,

Boots, Shoes, and Gloves, are made of the skins of animals.

Hats are made of the hair or fur of different animals. Some fine hats are made of the hair of an animal called a Beaver; some are made of Rabbit's hair, and some very coarse hats are made of wool.

This hair, or fur, or wool, of which Hats are made, is not woven in the same manner as cloth of different kinds, but is joined together by a particular process, which is called felting.

The hair is beaten with the string of a bow, like a fiddle-stick. The flirting motion of the string, makes the hair rise

upwards, and as each hair has other small hairs on every side of it, sloping all one way, like the beards of a head of barley, as the long hairs fall down again, they cross one another in the air, the little hairs tangle in each other, and are matted together, so as to form one solid substance called felt. It is then pressed together, and shaped upon a mould, and dyed in a black liquor, made of logwood, copperas, verdigrise, and the bark of the alder tree, boiled together.

Shoes and Boots are made of leather, which is produced from the skins of cows, calves, goats, and different kinds of animals, that have been tanned. The tan-

ner, (the name of the person who manufactures leather,) throws the skin into a pit filled with lime water, and lets it lie there for a few days, and then takes it out again and lets it dry.

He then stretches it upon a thick plank of wood, called a horse, and scrapes off the hair with a kind of knife. He afterwards puts it into another pit, with stronger lime water, and in this manner alternately soaks it with lime water, and dries it, till it is sufficiently prepared, to put it into a tan-pit, which is a hole containing water and the bark of oak trees. It is there let to lie for several months.

When the shoemaker buys leather from the tanner it is brown, and he blackens it with copperas.

The shoemaker makes this leather into shoes and boots, not by sowing it together with a needle and thread, but he forms shoes and boots on a species of mould called a last, made of wood. He makes holes in the leather by means of an awl, and fastens the ends of the thread to an hog's bristle, which is just stiff enough to direct the thread, which is strengthened with shoemakers' wax, through the holes.

Breeches, gloves, and other articles of dress are made of the skins of different

animals. Such as, the skins of sheep, dogs, and deer, and goats of a particular kind, the leather made from which, is called Shamois leather.

LESSON III.

THE HABITATION OF MAN.

IN some parts of the world, particularly in America, there are large woods or forests, and in these a few scattered inhabitants are found, who have no fixed habitations or houses, who live by hunting, and who shelter themselves under rocks, or in caves in the ground.

These people are called savages, which means wild men.

In time these people learn to make hovels or huts of poles of wood stuck into

the ground, and made to meet in a point at the top, like a bee-hive. These are covered with the branches of trees, so as to keep out the rain; such huts they call wig-wams.

In many parts of America, the houses of substanstial farmers, are made of logs of wood, piled one upon the other, with moss stuffed between the joints, and roofed, with bits of board called shingles. These are called Log-houses.

The houses of the poor in England, and particularly in Scotland and Ireland, are frequently built of clay, which is mixed with bits of straw to hold the clay to-

gether—and such houses, when they are well-built, and kept perfectly well-covered, though they are not so handsome, are much warmer in winter, and cooler in summer than stone houses.

The common fault of these houses, is in the construction of the roof, which is so made, as to tend to push out the walls of the house.

This could always be prevented by having a collar-beam go across the house, and pinned fast to the feet of the opposite rafters, to prevent the roof from spreading. At present a kind of collar-beam is put near the top of the couples, which

does not prevent them from spreading out at bottom.

A roof so made, will last three times as long as a roof made without such a collar-beam, and will cost very little more expense or trouble in the making.

The roof of a cabin is usually made with couples, which in larger buildings are called principal rafters, with purloins, which reach from couple to couple, with ribberies and wattles. Upon these they lay turf and sods cut from the ground, which they call scraws. Upon these scraws is fastened down the thatch, with scallops, (which are twigs of sally,) and with briers.

A newly thatched cottage looks neat and comfortable, and is warmer than one covered with either tiles or slates in winter, and is cooler in summer. But it requires constant attention to keep it in repair, and its repairs are most frequently neglected.

The houses of Farmers and Gentlemen are usually built, either of stone or brick; and they have generally two or more stories, one above another, with floors between them.

The Mason builds the stone walls, and the Bricklayer builds the walls of brick.

Bricks are made of yellow clay, which should be dug and turned frequently

with a spade, the winter before the bricks are made.

In dry weather the clay is put into wooden shapes or moulds, of the size of a brick, they are then laid upon level ground to dry, and when they are become so hard that they may be moved without breaking, they are built up in a kiln.

Spaces are left between the bricks, and they are burned by wood or coals, or turf, which are put into flues at the bottom of the kiln. The heat and smoke rise up, and spread themselves all through the bricks.

When bricks are sufficiently burnt, they become hard like a stone, and if

they are good bricks, when they are struck with a trowel they make a kind of ringing noise.

Such bricks are therefore called *clinkers*. Bricks and stone are cemented or made to stick together by means of mortar, which is made of lime and sand.

Lime is made by burning lime-stone in a kiln, with turf or coals.

One part of lime, and two parts of clean sand make good mortar.

The more free the sand is from clay, or dirt, the better will be the mortar.

For laying bricks the sand should be finer than for the laying of stones.

The sharper the grains of sand are the better. And for stone mortar it is advantageous to have a mixture of sand of different sizes.

Whilst the walls are building flues for the smoke of chimnies should be constructed. These flues should be proportioned to the size of the fire for which they are intended; they should be narrower at the lower part next the fire, than at the upper part.

When the walls are built, joists are laid to support the floors. Over these are laid boards. The principal stories of floors are connected by stairs. Window frames are fixed as the walls are built.

Doors to the rooms are hung with hinges, and locks put to them. Sashes are hung in the window frames, so as to slide up and down with weights and pullies. These sashes are glazed. The invention of glass, has except the discovery of fire, added more to the warmth, comfort and cheerfulness of man, than any other discovery we can mention.

This beautiful transparent material, which admits light, and excludes cold, is made from common flint stone, which when pounded finely, and mixed with the ashes of vegetables, which contain a substance called alkali, may be melted into glass, and made into thin plates such as

are used in windows, or formed into drinking glasses, bottles, and vessels of various shapes.

Fire-places with hearths and chimney-pieces are put up.

Architraves and other ornaments are put round the doors and windows. A base, and sometimes surbase are put around the room.

The walls are plaistered by a plaisterer. The ceilings are made white. Cornices of different forms and prices are carried round the tops of the rooms.

The wood-work is painted, and sometimes the walls are painted, and some-

times they are covered with papers of different patterns and colours by the paper-hanger.

Before the inside of the work is done, the house should be entirely roofed, and slated or tiled, or covered with lead or copper.

But sound slates of a moderate size, properly put on, so as each of them to rest upon three laths, and nailed upon the middle lath, with nails dipped in melted lead, or tin, or in thick paint, is the best covering which has been yet discovered for houses.

The roof of a house should be framed together in such a manmner, that the feet

of all the principal rafters should be tied together across the roof. Without this no roof can be depended upon. Where it is necessary, lead or copper gutters should be placed to carry off the water.

The principal tools made use of in building, are,

The Rule, which is usually two or three feet long, and is divided into inches, and the inches into halves, quarters, half-quarters, or eighths.

The Trowel—the Stone-hammer—Punches, Chisels and Mallets; a Square-line and Bevil, for the mason.

The Axe, or Hatchet; the Adze; Saws of different sorts; Chisels, Gouges and

Mallets; Planes, Augurs, Centre-bits, Common Bits, Gimblets, Prickers or Nail Piercers, Pincers and Hammers, are the common tools of the carpenter.

But of all tools that have ever been invented, the Plumb-line is of most universal use. By means of it, walls, doors, windows, &c. may be placed upright, in every part of the world.

To make the habitations of man comfortable in winter, it is necessary that they should be heated by fire. No country is better provided with fire than England. There are coal mines in many parts of that country, that supply the people with cheap and convenient firing.

In France, and in most other parts of the world, wood is the principal fuel. In parts of Scotland, and in Ireland peat or turf is used for firing.

Turf, when well-dried is a cleanly and agreeable species of fuel.

The poor burn their turf upon the ground without any grates. It is surprising with what skill they manage these fires. But in one respect they are totally mistaken in their economy.

To preserve the heat from being dissipated they prevent the smoke from escaping. The consequence is that their houses, their furniture, their food, their

children, and themselves, are covered with dirt. It is in vain to have decent clothes, if those clothes are to be spoiled by the smoke of the cabin.

To this cause is owing much of that squalid appearance, which gives to the Irish peasantry an air of wretchedness much beyond what they really feel.

Besides, the manner in which the women and children sit huddled over the fire, to keep themselves below the cloud of smoke, which hangs within a few feet of the ground; actually smoke dries the women so that in four or five years' time a blooming bride becomes a withered

hag, and it has been found, that the young men, who are used to sit with their naked legs over the coals, when they were children, have limbs that suffer from the smallest injury. So that an Irish soldier, who would easily recover from a gash in the head, suffers a long confinement from a slight wound in the shin.

LESSON IV.

THE HEALTH OF MAN.

AFTER men have provided themselves with food, clothing and habitation, their next care should be to preserve their health. In the enjoyment of this, the greatest of all human blessings, the agricultural poor are in general superior to the rich.

They live in the open air, and they use constant exercise, under the name of labour. Whilst the rich are obliged to

labor, if they would enjoy any portion of health, calling this labor, exercise.

The poor also live temperately. The rich luxuriously. The poor follow the calls of nature. They eat when they are hungry, drink when they are dry, and sleep during the night.

The rich eat, not only to satisfy their appetites, but to indulge their taste. They drink in the same manner; and instead of retiring to rest at a proper season, they turn night into day.

A few simple rules or cautions, with respect to their health, are necessary to the poor.

They should never drink very cold liquors, when they are over-heated with labor. If in such situations they taste cold water, or cold milk, it should be taken sparingly, and by degrees.

When they rest from labor, in the fields, they should be careful not to lie on wet ground; and they should particularly avoid lying upon new mown hay, which has begun to heat.

They should in summer evenings avoid marshy ground, from which mist or steam rises about sun-set. Something rises from such ground, which causes low fever and ague, as Irishmen learn to their cost when

they go to England, to the fens of Lincolnshire or Essex for labor.

Happily for Ireland, bogs, and the wet ground near them, have not this infectious quality.

When a working man throws off his coat, he should hang it upon some dry place, and not leave it upon the damp ground. In the hottest day in summer, moisture arises from the ground.

But one of the chief sources of sudden disease among the poor, is sitting in the house in wet clothes, and letting their clothes dry upon their bodies at the fire, instead of taking them off.

The wives of the labouring poor should attend to this circumstance, and they should persuade them to take off their wet clothes, and even to go to bed rather than to expose themselves to the danger of letting them dry on their bodies.

When it is said that the sudden diseases of the poor generally arise from their unnecessary damps and cold, it was meant to distinguish them from slow diseases.

The chief source of slow diseases, and of the miseries of the poor, is the use of strong and spirituous liquors. These increase the present strength, enliven the spirits, and drive away the thoughts of care. But the use of them is followed by weakness,

that comes on by such slow degrees, as not for some time to be perceived ; and when it is perceived, recourse is had to the aid of spirits, which gives temporary relief ; till by degrees, rheumatism, which is the gout of the poor, consumption, jaundice, and dropsy, generally succeed, depriving the wretched victim not only of his health but of the means of gaining his subsistence.

There are certainly exceptions to the usual effects of intemperance ; but ninety-nine times out of a hundred, drunkenness, contempt, and wretchedness go together.

Can a reasonable creature compare the short-lived pleasure of intoxication, to the

long-lived torment of disease, without resolving to live a life of sobriety?

To preserve health, care must be taken to avoid eating what is hurtful and poisonous. Many plants, and particulary berries, are incautiously swallowed by children, who are ignorant of their qualities. Amongst these are the berries of the Deadly Night-shade, of the Mezereon and the Yew Tree. Unripe blackberries, haws and sloes are very unwholsome.

Amongst plants, Hemlock, Fool's Parsley, and the apples of Potatoes, and plants which are often mistaken for Mushrooms, are poisonous. Also, vegetables eaten

raw, particularly cabbage-stalks, are very hurtful.

Children should not put any thing into their mouths without enquiring what it is.

Three of the most deadly poisons that are known, Sugar of Lead, Corrosive Sublimate, and Arsenic, are like white sugar.

Copper vessels are, in Ireland, not very common amongst the poor.

The Verdigrise, or rust of Copper, is a most fatal poison.

In England, many diseases, and even deaths are occasioned by the folly of notable house-keepers. The writer of this little book, actually saw the mistress of a

public-house, on the Shrewsbury road, steeping half-pence in boiled vinegar to give her pickled cucumbers a green color. She was persuaded to take the half-pence out before the liquor cooled; though she hinted that the right green color could not be given, unless the half-pence lay in the vinegar all night!

It should be observed, that oily and acid substances, when cold, in a few hours turn copper into verdigrise. But when the liquor is boiling, the steam, or some other cause, prevents the copper from being corroded.

When it is suspected that a person has swallowed poison of any sort, the first

thing to be attended to, should be to empty the stomach; and for this purpose nothing is better or more easily attained, than melted butter, or the white of a raw egg.

Besides being subject to diseases, men are subject to accidents.

When any joint of the body is dislocated, attempts should be made to restore the joints to its proper place immediately, before the limb swells. If bones are broken, the parts that are separated should be replaced, as much as the want of skill will permit.—Thin slips of wood should be placed in such a manner, as, with the

help of bandages, may keep the parts of the bone in their proper places, till surgical assistance can be procured. In cases of fresh wounds, made with sharp instruments, the lips of the wound should be drawn together, so as to fit into each other exactly, and they should be held together by bandages, or slips of any kind of sticking-plaister. If this be done carefully, if the wound be clean, it will frequently heal in a short time, in a healthy body :— this is called healing by the first intention. But if any thing remain in the wound, as a thorn, a bit of dirt, or a part of the clothes of the patient, the wound will not

heal with the first intention: the inside of the wound will decay, and melt into *pus* or matter; new grains of flesh will grow from the bottom of the wound, and will push out what prevents the wound from healing. For this purpose it is necessary that the mouth of the wound should be kept open, so that it may heal regularly from the bottom.

If a hard substance, called proud flesh should grow in the wound, it must be carefully removed by what is called a caustic, or by the surgeon's knife.

The best application to such wounds as are here described, is dry lint, which

should be kept on by bandages, or by slices of plaister.

The healing of the wound does not depend upon the kind of plaister which is applied. The healing of the wound arises from nature, and not from the plaister ; and the pretence of old women, and of ignorant quacks, who prescribe plaisters, and applications of various sorts, should be carefully avoided, as they frequently turn a temporary evil into a lasting torment.

When a wound is made, with an instrument that bruises, or that both bruises and cuts ; to keep down the inflam-

mation which is occasioned by such wounds, no remedy is better than the frequent application of poultices, made of oat-meal and water.

It is scarcely necessary to say, that whenever inflammation has taken place, the patient should avoid strong food and spirituous liquors of every sort, and should abstain from motion; and should follow a cool regimin, with the admission of cool air, but not of cold wind, and crowds of visitors to the sick should be peremptorily excluded.

Means have providentially been discovered in these countries, of preventing

one of the most dangerous diseases to which human nature is subject. A disease, which in some parts of the world has nearly exterminated a whole race. This disease is the Small Pox. Its fatal effects were several years ago counteracted and diminished by inoculation.—But the late discovery of vaccination has rendered this disease no longer an object of terror, to persons of common sense and prudence. Some few victims of superstition still doubt whether they ought to give a disease on purpose to their children.—Leaving them to the hazard of a fatal disease, after they have grown up to man's estate—this folly will soon cure itself.

In cases where an artery has been wounded, and where there is danger of the patient bleeding to death, if the wound is not too large, the pressure of a thumb upon the wound has saved many a life. To stop bleeding, the application of any fine powder is useful. The powder of the peaff-ball, (Licopurdon,) has been very successful in stopping a flow of blood.

Boys and young men often attempt to carry loads which are too heavy for them. This practice frequently occasions ruptures.—Ruptures are also frequently occasioned by jumping from great heights

upon hard ground. This disease is so common in Ireland, that a large proportion of recruits for the army, are rejected upon this account.

LESSON V.

THE DUTIES OF MAN.

WHEN a Child is born, he is the most helpless of all annimals.

The lamb, the calf, and the foal, run immediately after their dams; but a child would die in a few hours after its birth, if it were not fed and nursed by its mother.

The first duty therefore of a child, is gratitude to its mother.

As the child grows older, among the poor, it depends upon the labor of the father for subsistence. It therefore owes gratitude towards its father; and this feeling, fortunately for the happiness of the poor, is stronger among them, than among the rich; and the mutual affection which is thus created between the parent and the child, frequently makes the cottage happier than the palace. If the child owes gratitude to the parent, the parent owes affection and protection to the child; and it is surprising in society to see with what constant labor a well disposed peasant endeavours to maintain his wife and children.

Beside being a parent or a child, a man may either be a master or a servant, a landlord or a tenant; he may owe obedience to a magistrate, or respect to the ministers of his religion, or he may himself be a magistrate or clergyman.

In these and in various other situations, there are some duties to which he is equally bound, let his station in society be what it may.

Strict truth and perfect honesty in all ranks of life, are the foundation of virtue and of good character. The rich have but little temptation to dishonesty. The poor are subject to daily and to hourly tempta-

tion; and it may be said of a poor man who is perfectly honest, "that an honest man is the noblest work of God."

There is one virtue that is common both to the rich and to the poor; this virtue is œconomy, which is the only sure means of becoming richer.

There is nothing more certain, than that a boy of fifteen years of age, may, by laying by one penny a day, be possessed when he is about thirty years of age, of five and thirty pounds; and if he continue to save a penny a day, for fifteen years longer, he would be worth one hundred.

Saving of time is as advantageous as the saving of money. The time wasted

in Ireland, by almost every poor man, would, if properly employed, bring him in the value of a cow.

There is a method of spending time, that is worse even than losing it. Playing at pitch and toss, head and harp, and gaming at lotteries and fairs. In great cities, lotteries lead numbers, particularly servants, to ruin and disgrace.

There is no country in the world where the people are more disposed than in Ireland, to believe in good or bad luck. The best luck generally follows the best conduct.

Boys are frequently disposed to torment animals, not so much from cruelty

as from the love of play. Do not harden your hearts by cruelty to animals.

The servant owes obedience to his master, that is to say, to his master's lawful commands, and for such services as are usually performed by servants, or workmen in any particular situation.

The master owes payment, kindness, and protection to the servant; and his commands should be given with as little harshness as possible.

If this be true of a master and servant, in general, it is still more applicable to the master and apprentice.

If apprentices are frequently idle, it should be considered that they are young

and ignorant. But it as frequently happens that masters are unreasonable and cruel, as that the apprentice is negligent of his duty.

In many cases the master makes the boy work at any thing, except at his trade, and it is much to be regretted that magistrates do not exert that interference, by which the laws have empowered them to do justice, both to the master and apprentice.

The connection between landlord and tenant is still of a higher sort.

A good landlord will generally have good tenants. It would be well for Ire-

land, if it could be always said, with equal truth, that good tenants will have good landlords.

To see his tenants thrive, must give pride and satisfaction to a generous mind.

To squeeze from the hard hands of peasants their vile trash, is unworthy of a gentleman.

To indulge the idle, to permit the drunkard, to live upon his land, and to waste his substance; is unworthy of a man of sense, and of a true friend of his country.

To dismiss the worthless, and assist the worthy, is the interest and the duty of a landed proprietor.

On the other hand, the farmer and the labourer, should be taught from their earliest years to know that some men must be richer, and some men poorer than others, and that by care and industry, the poor may better their condition, and in time their children may be advanced to situations in life better than those, in which they are themselves placed.

In every ladder, some of the steps must be at the bottom, and some at the top.

Were the poor and the rich to change places, it would only be turning the ladder upside down. The forefathers of the richest persons in the nation must at some

time or other have been poor; and we see every day before our eyes the richest and the proudest families, becoming extinct or falling into decay. But wise Providence has so ordered it, that even in this world, the happiness of men does not depend upon their situation. But upon the feelings of a man's own mind. He, who is conscious that he is honest and industrious, and who feels that he is kind-hearted and generous, possesses sources of enjoyment, that cannot be conferred by wealth or power.

A man owes obedience to the laws, and to the magistrates, who dispense those laws.

There is neither meanness nor servility in the respect which a good man of the lower rank, shews to a magistrate.

If respect is due to the magistrate, still higher respect is due to the Clergy, particularly to the Clergy of that persuasion to which a man belongs.

In the same proportion, the magistrate owes justice and protection to the poor, and the Clergyman owes comfort, advice, and religious instruction to his flock.

LESSON VI.

EMPLOYMENT AND OCCUPATIONS FOR MAN.

BOYS at the age of twelve or fourteen begin to think of the trade or business they are to follow, and their parents generally look forward either to putting them apprentices to some trade, or of teaching them the trade or business by which they maintain themselves.

Parents in chusing occupations of life for their children should attend, not only to the opportunity which they may have

of placing them in an advantageous situation, but they should consider the health and strength of their children, and their different degrees of capacity.

A boy whose health is not robust might be bred up to be a clerk or a shop-boy; and a boy of a stout constitution and active habits, without any particular quickness of intellect might make a good mason, common gardiner, or a labourer.

Where strong powers of body and mind have been given by nature, boys may be taught to look forward to rising in the world, by their own talents and industry.

Occupations of a master-builder, of a master-carpenter, coach-maker, wheel-

right, mill-right, or master-gardener, requires skill, knowledge, and ingenuity, and one of the great advantages of good and early schooling arises from its unfolding the real capacities, propensities, and inclinations of children.

If a boy is intended for a mason, he should frequent any buildings that are carried on in the neighbourhood—he should examine the materials which are employed—he will learn how to distinguish different kinds of stone from each other, he will attend the burning of a Lime-kiln, and he will see the kind of stone that is employed, and into what sizes it is broken.

He will observe what quantity of fuel is employed in burning the lime, and the cost of the whole process—he will observe the different shapes of stones, and by attending to the work of a good mason, he will learn by degrees how to chuse from a heap a stone that will fit a given place, an art which is to be acquired by habit, and upon which the expedition of a workman depends. If bricks are made in his neighbourhood he will observe the whole process, he will know how to select those that are fit to endure the weather.

A boy who is intended for a carpenter, will in like manner attend to workmen who are employed in that branch of busi-

ness—he will learn how to distinguish one kind of timber from another, and the names of the parts of the building and of the tools that are employed by the workman.

In the same manner boys intended for different trades and occupations, will attend while they are young, to the manner in which those trades are carried on.

Habit will make their future employments easy and agreeable to them, or their parents will learn that they have not made a proper choice for their children and they will be able to find out what business is best suited to them.

It is necessary to warn parents and their children, that the great demand for persons who read and write, and spell correctly, has ceased with the war.

Sergeants and clerks, and assistants in various departments, were found in Scotland and Ireland, and made their way advantageously by their talents, but there are now thousands out of employment, who would gladly exchange their pen for the tools of any useful manufacture.

To be able to write tolerably well, to spell the words that are in common use, without making gross mistakes, to be able to draw up a bill or an account

neatly and clearly, to be able to calculate the weight and bulk and measure, and prices and value of the different materials and goods which they are to use or to purchase, is one of the most necessary parts of school education; and besides the advantages arising from being able to count readily, a rational knowledge of arithmetic gives the mind a just habit of reasoning upon the subjects, so that it may be said with truth that he who has learned arithmetic so as to understand the steps by which he advances from what is laid before him, to a just conclusion, has at the same time learned the best principles of logic or reasoning.

Among the various occupations, that of a servant is one of the most common, and for a lad of an obliging disposition, with a good temper, who is fond of cleanliness, and who is, what is usually called well-looking, may in a good service, live not only in comfort, but in luxury, and he may, in the early part of his life lay up a certain provision for old age—a provision not only of money but of respect and consideration.

Before we quit the subject of employments of men, something should be said of the amusements of boys. Upon this subject very little need be added—boys in Ireland amuse themselves in a manly

manner, and there are no young men in the world who can run or walk with more activity and perseverance than the Irish.

We should however recommend it to boys whenever they have an opportunity to learn to swim, it is a cleanly and wholesome custom for land-men, for a seafaring life, it is scarcely necessary to point out its advantages.

It may perhaps be proper to mention here, that where there can be any hopes of recovering a person from drowning, who has fallen into the water, the body should be put into warm blankets, and for a long time be rubbed with salt, and burnt feathers should be held under the

nostrils. But the body should not be held by the heels, to let the water run out of the mouth, for that generally suffocates the patient.

Having mentioned the danger of death from water, we must caution our young readers from accidents by fire. Where a person's clothes have caught fire—they should be thrown down upon the ground, and the fire should be smothered by throwing upon them a blanket, a sack, a winnowing cloth, or even a large great coat.

Young people should cautiously avoid meddling with fire arms, lest they should hurt themselves, or injure others.

In thunder storms many persons lose their lives by running under trees to shelter themselves from the rain. A stream of water falling from the leaves of the trees, towards the ground, conducts the lightening from the clouds to the earth. A person near such a stream of water is exposed to much danger. It is better to be wet to the skin than be burnt to death.

The safest place in a thunder storm is that which is farthest from other bodies. When the thunder is heard the danger from the last flash of lightening is over. For the thunder is caused by the lightening, and not the lightening by the thunder.

LESSON VII.

ON GENERAL KNOWLEDGE.

THERE are many persons who live and die in the belief, that the sun rises in the east, and goes over our heads, till it goes down at night in the west, but this is not the case.

The sun stands still, it is the earth that moves, and we that are upon the earth move along with it.

The earth is not a flat plane, it is round like a ball, and it goes round once in

twenty-four hours. During part of that time it is day, and during another part of that time it is night. In summer the days are longer than the nights, and in winter the nights are longer than the days. In the longest day in this country, there are about sixteen hours and three-quarters. If the sun shines during these number of hours, it has time to heat the earth very much. This is the cause of summer. When the nights are long, the coldness of the night produces winter.

There are 365 days and some few hours more, in a year. The year is divided into months. There are twelve

calendar months in a year—and about four weeks in each month, exactly seven days in each week. There are two kinds of months, the month by which time is usually reckoned is called a calendar month. A lunar month consists of exactly four weeks, and it is reckoned from one new moon to another new moon.

There are thirteen lunar months in a year.

The calendar months in a year are not equally divided, seven of them have thirty-one days, four of them have thirty days, and one month, February, has only twenty-eight.

A Continent is a number of countries joined together without any sea between them. An island is a single small country surrounded by sea.

France, Portugal, Spain, Germany, Italy, Poland, Hungary, Russia, part of Turkey, Denmark, Norway, Sweden, Lapland, &c. form the Continent of Europe,—Africa is another Continent.

Asia, which contains Tartary, Persia, Arabia and China, besides Bengal and the great Peninsula we call the East Indies is larger than any of the former.

America is another Continent, which has been known to the inhabitants of this

part of the world only a little more than three hundred years.

England and Scotland form one island. Ireland is another island.

Islands have the advantage of being open on every side towards the sea, so that they can export or import whatever they wish in ships.

The knowledge of the divisions of different countries, of the names of the principal cities in these countries, and of the rivers which run through them, of their mountains and forests, and of the different soils of which they consist is called Geography.

A knowledge of the events that have happened in different countries, which are told in books is called History. The most ancient history is that of the Old Testament.

The first people of whom we have any account, were the Assyrians, then the Medes and Persians, then the Grecian republics, and lastly the Roman empire, which about eighteen hundred years ago, extended over the greatest part of the world that was then known.

By degrees the Roman empire declined. Uncivilized and warlike people from the North of Europe conquered and overran the Roman empire, and it was divided

into various smaller states and kingdoms, the names of which have been already mentioned.

Chronology is a knowledge of the times when each of these events happened.—The world was supposed to be about four thousand years old, at the time of the birth of Christ, which is now above eighteen hundred years ago.

It has been said, that as an island is surrounded by the sea, it can easily send in ships what it produces, in exchange for the produce of other countries. This is called Commerce.

This may be carried on, either by an exchange of the commodities themselves,

or by exchanging the commodities that we part with for money, and buying the things which we want with that money in other countries.

Bank notes, promissary notes, and bills of exchange, are given and received instead of money.

This method of carrying on business, is called paper credit.

This exchange of commodities, and the employments of the different people who carry it on, gives motion and life to society.

A poor woman cannot sit down to breakfast upon tea until a number of sailors have gone twenty-four thousand miles to China, in the East, and come

back again, to import tea to Europe, nor till other ships have passed over eight thousand miles of sea towards the West, to bring sugar from Jamaica, or from some of the West India islands.

Tea is the leaf of a plant which grows chiefly in China.

Sugar is the juice of a kind of hollow cane, from which it is squeezed out by mills. The juice thus squeezed out is then boiled and cleaned, and made into soft and hard sugar.

Navigation, or the art of sailing on the sea, was but imperfectly known till within these last four hundred years; because sea-men had before that time no method of directing their course at night,

but by the stars. And when the stars were not visible, the mariner could not know which way he was going.

A person of the name of Sebastian Cabot, discovered the use of the magnetic needle. Any Surveyor will shew you this needle, which is part of his surveying instrument. Turn the instrument round as you will, one end of the needle will always point to the North.

By means of such a needle as this in a ship, a sea-man can tell at night which way a ship is going.

FINIS.