







AN EASY

INTRODUCTION

TO THE

KNOWLEDGE OF NATURE,

AND READING THE

HOLY SCRIPTURES,

ADAPTED TO THE

CAPACITIES OF CHILDREN.

By Mrs. TRIMMER.

THE THITEENTH EDITION.

WITH CONSIDERABLE ADDITIONS AND IMPROVEMENTS

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TO THE

RIGHT HONOURABLE LADY CHARLOTTE FINCH.

MADAM,

THE purpose for which this little treatife was composed can alone entitle it to your Ladyship's notice; for in its execucution I fear it is very imperfect: but as it is intended to lead to the most ferious concerns of human life, The Knowledge of the GREAT CREATOR, and the study of bis works, I hope it will not be thought totally unimportant.

Permit me to fay, MADAM, that before I ventured to produce it to the world, I had the happiness to obtain the fanction of your Ladyship's approbation, which encouraged me to hope for a fa-

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vourable reception from the public; as the great fuccefs with which you have educated the ROYAL FAMILY fo evidently proves that your LADYSHIP is perfectly acquainted with the most happy arts of winning the attention of children, and the most proper method of conveying religious and moral instruction to their tender minds.

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With the most ardent wish that your LADYSHIP may long continue to enjoy every comfort both of public and domestic life, I have the honour to be,

> Madam, Your Ladyship's, moft obliged, and obedient Servant, SARAH TRIMMER.

BRENTFORD, Dec. 12, 1780.

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TO THE

NINTH EDITION.

THE idea of the following little work was originally taken from Dr. Watts's Treatife on Education, Section II. on the exercise of the natutural powers in children; his words are these:

"Almost every thing is new to children, and novelty will entice them onwards to new acquirements: shew them the birds, the beafts, the fishes, the infects, trees, fruit, herbs, and all the feveral parts and properties of the vegetable and animal world. Teach them to observe the various occurrences of Nature and Providence, the fun, moon, and stars; the day and night; fummer and winter; the clouds and the fky; the hail, fnow, and ice; winds, fire, water, earth, air, fields, woods, mountains, rivers, &c.

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Teach them that the GREAT GOD made all thefe, and that his providence governs them."

But delightful as thefe things are to children, if communicated in a way that is accommodated to their capacities, they can never be brought in their early years to attend to fcientific accounts of caufes and effects, or to enter far into each particular branch of knowledge.

I therefore thought that a book containing a kind of general furvey of the works of Nature would be very useful, as a means to open the mind by gradual fleps to the knowledge of the SUPREME BEING, preparatory to their reading the holy Scriptures.

In the former editions of this work, I gave, at the end of it, a fummary account of the Revelation of God's will to mankind, and of the hiftory of the Ifraelites; this part has undergone a confiderable alteration, and I hope it will prove a better *introduction to the reading of* the Scriptures, than the pages which have given place to it.—If I might be allowed to recommend a publication of my own, I could wifh that the next book to be put into the hands of my young readers, fhould be ⁴⁶ An Abridg-

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ment of Scripture History, confisting of Lessons felected from the Old and New Testament," by means of which they may be made acquainted with the principal events recorded in facred hiftory, without the labour of reading the whole of the Bible, or without engroffing too large a portion of time : thefe leffons are contained in two fmall volumes, one from the Old Testament, the other from the New : which may be had feparate. * They were originally defigned for charity (chools; but as they are in the very words of Scripture, and religion is the great concern of all, whether rich or poor, 1 should hope no objection would be made to them on account of their being used in schools for the lowest classes of children. When the fcholars have read thefe books through, I would recommend that they should not only read them again, but hear a portion of them read and explained in the fchool every day, and be questioned in claffes to fee whether they really understand them or not. +

* Published by Messis. Longman and Co. Paternosterrow; and Rivingtons, St. Paul's Church Yard.

† A specimen of this mode of teaching may be seen in a work entitled A Sequel to the Teacher's Assignment, which con-

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The good effects of this mode of inftruction I have witneffed among the children of the poor, and happy should I be to fee it universally adopted in fchools for the higher orders of children; for I am not only convinced, by my own experience, but have been affured, by perfons of fuperior judgment who have made trial of it, that it is calculated, above all others, to engage the attention of children, and to make lafting impreffions. With a view to facilitate this bufinefs in fchools and families, I fome time ago published a series of books upon the plan of familiar conversation, viz. An Attempt to familiarize the Catechism of the Church of England; An Explanation of the Office of Baptism, and the Order of Confirmation; and A Companion to the Book of Common Prayer, with Questions for the Use of Teachers. Subjects which furely ought to make a part of the early education of those who have been recei-

fifts of a comment upon the Scripture Leffons, from the Old Teftament in the catechetical form. It is my intention to compose a *fborter* catechifm upon the Scripture Leffons, for children who are too young to underfland the above comment; and fo to lead them, ftep by ftep, to my Sacred Hiftory, and from thence to the Bible itfelf. ved as members of the church of England. But my expectations have been greatly difappointed-these books, it is true, have been adopted by many whofe approbation does honour to my labours, but they are not fo generally ufed in fchools as, from the uncommonly favourable reception of my Sacred History and other works, I flattered myfelf they would be. Confcious that in every work I have prefented to the public, utility has been my first and principal object, I hope I shall be acquitted of felfish motives when I request those who approve of my other writings, to make trial of , thefe-at least till some better or easier means are provided for accomplishing the fame important ends. When the enemies of Chriftianity are fo industrioufly at work, and, it is to be feared, with fatal fuccefs, in poifoning the minds of youth by means of infidel books, in which the BIBLE itfelf is openly attacked; it is highly incumbent on all who engage in the important business of education, to fortify the yet uncorrupted minds of their young pupils against the dangers to which they in their turn will be exposed when they mix in fociety;

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and what can fo effectually answer this purpofe as giving them an early acquaintance with the Scriptures, and instructing them in the principles of religion ?-On the mafters and governesses of schools it certainly depends, in a great measure, whether the generation which is growing up to maturity shall be Christians or infidels. Since then the eternal happiness of thousands may be promoted or injured by their affiduity or neglect, it is devoutly to be wished that all may unite in doing what is already fuccessfully done by many; and that they may fee the happy effects of their pious labours in the exemplary conduct of their pupils in this world, and their everlafting happiness in that which is to come.

If any difficulties fhould occur in using the books above mentioned, I shall be thankful to those who will take the trouble of pointing them out to me, that they may be removed if new editions should be wanted.

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AN

EASY INTRODUCTION, &c.

PART I.

I HAVE been thinking, my dear Charlotte, that you and I might take fome very profitable walks together; and, at the fame time that we are benefiting our health, by air and exercife, might improve our minds; for every object in nature, when carefully examined, will fill us with admiration, and afford us both inftruction and amufement; and, I am perfuaded, we fhall find that nothing has been in vain.

Though Henry is fo young, he is a fenfible little boy, and will be able, I dare fay, to understand many things which we shall have occasion to talk of; therefore I think to take him with us: I long to fee him, as I fuppofe he is greatly pleafed with his change of drefs ! Oh ! here he comes. Your fervant, Sir ! you are very fmart indeed; I could not imagine what little beau it was ftrutting along; I fuppofe, now you are dreffed like a man, you begin to fancy that you are one; but, though you can read and fpell, fpin a top, and catch a ball, I do affure you there are a great many things for you to learn yet, and I shall be happy to teach you what I know. Your fifter and I are going to take a walk; we shall have many pretty things to look at and talk about, therefore I dare fay you will be happy to be of our party, will you not?

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You know, my dears, in the walks we have already taken in the fields together,

shewed you a great variety of plants.

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and flowers; you have feen the cattle and fheep grazing, the little birds hopping and flying about; and though I told you the name of every thing you faw, which I hope you will remember, you muft learn to know a great deal more about them. Charlotte is going to get herfelf ready, fo fetch your hat, Henry, and let us go into the meadows, where I am fure we fhall foon find fomething worth examining.

Well, Henry, what do you think ? is not this a charming place? You know that it is called a meadow. See how green the grais looks, and what a number of pretty flowers ! Run about, and try how many different forts of grafs you can find, for it is now in bloffom. One, two, three: you have got eight forts, I declare ! Charlotte has gathered quite a nofegay; daifies, cowflips, butter-cups: as for the reft, I do not know their names fo we must fearch the herbal, where we shall find them, and learn what they are called.

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I need not tell you what is the use of grafs, becaufe you have fo frequently feen the cows, horfes, and fheep eating it; but they do not eat it all in that flate; no, a great quantity of the grass that grows is cut down with a fcythe, like what our gardener uses, which is called mowing; then come the haymakers, who turn it over and over again, spreading it upon the ground; and when the fun and air have fufficiently dried it to keep it from becoming mouldy, it is carried home to the farmer's yard, and put together in great heaps called hay-ricks and hay flacks.

There are thousands and thousands of loads made every year, which ferve to feed the cattle in the winter; for there is but little green grass for them then. [15]

All of it grows from little feeds no bigger than pins' heads: look at the bloffoms in your hand, Henry; they would foon have turned to feeds.

In a meadow, where there has been hay made, a great many of the dry feeds drop and are fcattered about, and grafs fprings from them the next year; but if people want to make a new meadow, they must keep fome feeds and fow them.

The beautiful flowers which you have in your hand, Charlotte, grew likewife from feeds which were mixed among the hay feeds; for the plants which fprung from those feeds are good for the cattle, and ferve to give a pleasant taste to the grass. Besides, numbers of them are medicinal, that is, good to make medicines for the cure of many diforders to which we are subject.

Don't you think that grafs is a very useful thing? I am fure the poor horses

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cows, and fheep, would fay fo could they reafon and fpeak; for they have no cooks to drefs victuals for them, nor money to buy bread, nor can they afk for any thing they want; fo you fee their food grows under their feet, and they have nothing to do but to eat it.

Now we will take leave of the meadow, and go into the corn field. Look, Henry, pray take notice, Charlotte, this is wheat. I hope we shall have a plentiful harvest; but it will not be ripe till August, which is called the harvest month: however, I put this ear in my pocket, which was plucked last year, on purpose to show you what all this which grows here would come to: rub it with your hands, Henry, blow the chaff from it, give me one of the feeds. This is called a grain of corn. You fee there are a great many grains in an ear; and look, hère are a great many ears from one root,

and yet the whole root grew from one fingle grain which was fowed last year.

The earth was turned up with a plough, then the grains of corn were thinly fprinkled in the furrows, and the earth drawn over them with a harrow; after they had fwelled fome time, and become foft, by the moisture of the ground, little roots ftruck downwards, and stalks grew upwards, broke through the ground, and branched out, in the manner you fee here; and produced ears, each of which, perhaps, contains twenty grains; and fo if you reckon all that are grown from the feeds which came up, there may be a hundred times as many as were put into the earth.

This which grows now will be ripened by the fun, and look like that which you rubbed to pieces; then it will be cut down with a fickle, and tied up in bundles called fheaves, and carried to the barn, where it will be threfhed, cleaned from the chaff, and fent to the miller: he will grind it into flour, which will be fold to the bakers, who will make it into bread; but they muft leave fome for puddings and pies.

Only think, Henry, what quantities of corn must be fown every year, to furnish bread for thousands and ten thousands of people! And what should we do without it? For bread is the cheapest and wholesomest food we have; many poor people can get but little else to eat.

But corn will not grow without fowing, as the hay feed does, becaufe the feed is larger, and muft be buried deeper in the earth, therefore hard work muft be done to prepare the ground for it. But, my dear Charlotte, I think you have tired yourfelf; and Henry feems to have done fo too; therefore let us fit down or this graffy bank, and reft.

What a fine fpreading oak is this, which ferves us for a canopy, and shades us fo comfortably from the fun! See what a number of acorns hang upon it; they are excellent food for hogs. But do not think that the stately oak is good for nothing but to fupply them with provision; it is of the greatest use to us. How large it is ! it is bigger round than any man ever was; it has hundreds of branches, thousands of acorns, and still more leaves. It has great roots, which frike a long way into the ground, and fpread all round at the bottom; they keep it from being blown down by the violentgufts of wind, which it frequently has to encounter, and through the roots it is that the moilture of the earth nourifhes it, and keeps it alive.

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Now, Henry, is it not a very furprifing thing that this great tree grew at first from a little acorn? Look, here is a young one, called a fapling; it is fo little, Charlotte, that you will be able to pull it up yourfelf. There you fee is the acorn ftill flicking upon the root. The oak we fit under probably is an hundred years old; when it is cut down it will be called timber; the fawyers will faw it in pieces proper to be ufed in building fhips and houfes.

There are many forts of timber trees befides, as afh, elm, chefnut, walnut, and others.

When there are a number of trees growing near together, the place is called a wood, you have each of you been in one; you recollect that, I fuppofe, and what kind of a place it was. I wifh we were in one now, for it is hot walking.

But I was going to observe, that all forts of trees grow either from seeds or kernels that are withinfide their fruit, or elfe from little plants taken from the old roots, or flips taken off from their branches. All timber trees grow without any trouble, for the rain waters them ; but I forgot to mention the bark, Charlotte, which is this outfide part. It is of great ufe to tanners and dyers ; and the dry branches, which are good for nothing elfe, make cheerful comfortable fires ; fo that you fee trees are very valuable ; nay, poor Henry would mifs them, for traps, tops, and bats, are cut out of them.

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See how the pretty birds fit finging on the branches; how glad they muft be, when it rains, to fhelter themfelves amongft the leaves: befides if a heavy fhower was to come now, we fhould be happy to ftand under a tree ourfelves, provided there was no appearance of a thunder-ftorm; for in thunder-ftorms trees often attract the lightning, which might make it very dangerous to be near them.

Do not you fmell fomething very fweet ? Look about in the hedges, Henry, and try if you can difcover what it is. See, Charlotte, what a fine parcel of woodbines he has got; they are quite delightful : take notice the woodbine is very different from the oak; it has long flender stalks, and would fall upon the ground but that it borrows affiftance of its neighbours. Obferve how it twifts about, and lays hold first of one thing, then of another. Last month there were briarrofes and hawthorns, that were very beautiful, but now they are out of bloffom, and fee, the fruit is growing. The briars produce hips; the hawthorns haws; they are for the birds to eat in the winter. There are many pretty things that grow

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in the hedges, as you may fee, and all are of fome ufe. Thefe are brambles; they will foon produce blackberries. Don't you love blackberries? you fhall come and gather fome when they are ripe; but you muft be fure never to eat any thing that grows wild in the fields, without knowing what it is, becaufe fome berries that appear very beautiful to the eye are poifon, and would kill you.

There was a little boy who gathered fomething that looked almoft like currants, and as foon as he had fwallowed them, his throat and ftomach felt as if he had eaten fire; and he fwelled and fwelled, till in a fhort time he died; and yet those berries might be very good and even valuable for fome uses.

The farmers plant hedges to divide and fecure their fields; for if the cattle should get amongst the corn they might do a great deal of mischief; besides, peo-

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ple would not know exactly where their own ground ended, and their neighbour's began; and the cattle would be very cold in the nights, but that the hedges fhelter them.

Don't you think this has been a very pleafant walk, Henry? Shall I cut you a flick? Here, take this, it is a hazeltwig; nuts grow on hazel trees: filberts are another kind of nut, much more delicious: walnuts you have feen growing in our orchard. There are a variety of fruits which are contained in hard fhells, in the fame manner: as almonds, chefnuts, &c. The cocoa-nut is the largest that I know of; you faw and tafted one the other day. 1 never faw a cocoa-tree, fo I cannot give you a perfect description of it, but have read that it grows ftraight without any branches, and is generally very

high: at the top it bears twelve exceeding large leaves, ufed by the Indians in covering houfes, making mats, and other things: between the leaves and the top arife feveral fhoots, as thick as a man's arm, which being tapped, yield a very agreeable liquor, called in the Eaft-Indies, toddy, from which arrack is made; but frequent tapping deftroys the tree: thefe fhoots of branches put forth a large clufter or bunch of cocoa-nuts, to the number of ten or twelve.

Three times a year the tree yields fruit, which is as big as a man's head: but there is another fort no larger than your fift, of which they make punch ladles in the Weft-Indies.

It is aftonishing to think what a quantity of provision and useful materials these trees supply; they grow in the East and West-Indies, and in Africa.

There is another fort of nut called the

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cacoa; this grows in the Weft-Indies and South America. The tree which produces it is fomething like our cherrytree, and the nut about the fize of an almond: there are feeds withinfide, which are made into chocolate, with the addition of fome other ingredients. The beft fort of this nut is imported from Carraca.

I begin to fear you will be tired; we must therefore think of returning home, but we will go through the barley field.

Obferve; this is very different from Wheat; the ears have long, hairy fpikes, which are called beards. Do not put them in your mouth, for if you do, they will ftick in yout throat and choak you. Barley is fown in the fame manner as wheat is, but does not make fuch good bread: it is however very uleful to us; for after it has been threfhed, it is fold [27]

by the farmers in great quantities to the maltflers, who pour water upon it, which makes it fprout; then they dry it with hot cinders, and it becomes malt; with the addition of water, and fome hops, to give it a pleafant bitterifh tafte, and keep it from becoming four, it is brewed into beer, which is one of the comforts of life, and helps to give the poor men who drink it ftrength to their laborious work. Barley is alfo good to feed chickens, turkeys, and other poultry.

Hops grow in gardens and fields, which are from thence called hop-grounds, and run up long poles: when they are ripe they are gathered, dried, and fold mostly to people called hop-merchants.

Now we are come to a field of Oats; pray look at it, that you may know it again from wheat and barley. The poor horfes make their meal of oats and hay all the winter; and when they are kept in ftables they eat them in fummer too: fo that you find oats are very useful.

We have in England another kind of corn, called Rye, of which bread is fometimes made; but this is inferior to Wheat.

Some countries do not produce.corn like that which grows here, but are in general fupplied with fomething that partly anfwers the fame purpofe.

The grain which is called Turkey Wheat is very different from ours. Its ftalk is like a reed with many joints, and grows to the height of five or fix feet; out of the joints fhoot the ears, which confift of a great number of grains, each about the fize of a pea, enclosed in coats or hufks, which burft open with the heat of the fun, and then it becomes quite ripe.

Millet, I believe, comes from Turkey. Rice grows in the East and West-Indies.

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I need not tell you, for you already know by experience, that they make delightful puddings; and I dare fay you think rice-milk is excellent food, and that it is right to let those people who furnish us with fuch good things have a little of our Corn in return.

In countries where there is no grain to be had, the inhabitants are under the neceffity of eating roots or fruits; and even in some parts of our king's dominions, the poorer fort of people are obliged, from the barrenness of their soil, and extreme poverty, which prevent their either cultivating or purchasing wheat, to eat cakes, puddings, and porridge made of oatmeal; and, inftead of a good dinner of meat and bread, are glad to fatisfy their hunger with potatoes alone. How happy therefore, my dears ought we to think ourfelves, who have never known the want of bread. I hope you will

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remember this and let it be a rule never to wafte what fuch numbers would be glad to have. Even the crumbs which you accidentally let fall, might if collected, afford a hearty meal for a little bird, and make him merry for the whole day; or would ferve to divide amongst its nestlings, which might otherwife open their mouths and chirp for food many a time, while the parent bird was feeking it with weary wings. I was very angry with you, Henry, the other day, for flinging bread at your fifter; but I hope you will never do fo any more, now I have informed you what a bleffing it is; for I have feen perfons who wantonly wasted bread, live to feel great distress for want of it.

Can you tell me, Henry, what grows in this field? They are turnips. I will pull one up. This root, when it is boiled, is very wholefome and excellent

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fauce for mutton, lamb, and other meat: there are quantities of turnips fown every year for our tables, and likewife to give to the cows, turnips being cheaper than hay.

Some fields are planted with potatoes; numbers fown with carrots, a great many with peas and beans, others with hemp and flax, which are very valuable commodities: when I have an opportunity I will thew you fome. The ftalks of hemp and flax, after they have been beaten and properly prepared, are fpun into thread, of which all linen cloths are made; they likewife furnish the materials for all kinds of ropes and cords. That fine cloth, which your frock is made of, Charlotte, once grew in a field, and fo did that of Henry's fhirt. It was made in Ireland and Scotland, but a great deal of the fame fort is made in Flanders and Germany.

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Flax is also fpun into exceeding fine thread, for weaving of lace and working upon muslin.

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Instead of these plants, they have in fome countries, particularly in the East and West Indies, cotton. Of this they make mullins, dimities, and calicoes. Cotton is a kind of down that is round the feed of a tree called the cotton-tree. It grows in pods about the fize of a walnut; as they ripen, their outfides become black, and the heat of the fun makes them fplit open; they are then gathered; and with a proper machine the cotton is feparated from the feeds, and afterwards fpun for the purpose of weaving. So you fee, my dears, there are a variety of materials for clothing; and the ingenuity of mankind has invented many ways of applying them to ufeful purpofes. Even the very bark of trees is, with incredible labour and industry, fometimes converted

into curious cloth by favages, who to us appear extremely ignorant; and there are others who weave themfelves ornaments and garments of net-work, covered with feathers.

Befides what grow in the fields which belong to the farmers, the gardens afford many excellent things. There are cabbages and cauliflowers, brocoli, lettuce, endive, cucumbers, French beans, in fhort a hundred things very pleafant to the tafte and extremely wholefome.

Befides, you know there are fruit trees, the names of which, I fancy, you are intimatelyacquainted with; currants, goofeberries, apples, pears, peaches, nectarines, plums, grapes, apricots. Don't you wifh they were all ripe Henry? Then, what excellent tarts we could make! and what feafts we fhould have! Well, have a little patience, my dear, they will foon be ripe, and then you fhall have plenty;

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but you must not eat them before they are ripe; for they will make you very ill.

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I knew a little boy, Henry, who used to look as fresh and rosy as you do, and. run about, and be merry all day long. His mamma had a great garden, and fhe told him not to gather the green fruit; but the little greedy fellow would not pay attention to what fhe faid; like a filly child as he was, he thought he knew better than his mamma, fo he stole in unperceived, and ate the green goofeberries, and currants, by which means his ftomach being filled with trash, he entirely loft his appetite, and his rofy cheeks became as pale as death; at laft worms, live worms, came in his bowels. They were in the green fruit, but fo fmall that he could not fee them, and he was taken very ill, and had like to have died : fo when all the good children were eating ripe fruit every day, he was laying

fick a-bed, and did not get well before it was gone.—Was he not rightly punished for being fo undutiful and greedy?

You remember, my dear children, how very beautiful the fruit-trees looked a little while ago, when they were in full bloom; the bloffoms are now gone, and the fruits grow in their ftead; they will get bigger and bigger every day, till the heat of the fun ripens them, and then they will be fit to gather.

Apples and pears will keep all the winter; but the other fruits will become rotten unlefs they are preferved by boiling them up with fyrup made of fugar and water; or elfe dried; fo we muft fpeak in time to the houfekeeper, that fhe may preferve us fome damafcenes and goofeberries for tarts, make marmalade of quinces, preferve apricots, and make currant jelly and rafpberry jam.

Currants, grapes, and goofeberries,

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will make wine; but that is not at all good for little boys and girls; they can be merry enough without it; and fweetmeats must be eat verv sparingly, or they will make you sick and spoil all your teeth, I assure you.

When you can get no ripe fruit a little currant jelly, and other things of that kind are very agreeable; but as for fugarplums, and the reft of those foolish things they answer no purpose in the world but to make people difrelish what is wholefome; and when they have loft all their teeth by indulging themfelves with them, it will be too late to refolve against eating any more; therefore it is better to prevent the mifchief, by not eating them at all. I am fure I would not part with one tooth for all the fweetmeats in the world.

Charlotte, if you are not tired, my dear, we will go into the flower garden; as

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for Henry, he is too much of a man to complain; nay, I am ready to believe he could keep upon his feet from morning to night. Come, Sir, take the key and open the gate. This I think is the most delightful place we have feen yet!

What shall we look at first? There is fuch a variety of beauties that one knows not which to prefer; you admire those in the fields, but these excel them.

Look at those tulips! examine those carnations! observe that bed of ranunculas! and then admire that stage of auriculas! The whiteness of this lily exceeds that of the finest cambrick. This blue flower is a convolvulus; it is very like the binds that grow in the hedges, only they are of a white colour. Pray, Charlotte, gather one of those very little flowers; I have forgot its name; but when one set it near, it is beautiful and curious as the large ones. Now turn your

eyes to that noble funflower! that elegant holyoak! that glorious piony !--- I beg of you to gather me one of those charming rofes: how fweetly they fmell! get me alfo a little fprig of jeffamine, and one honeyfuckle, for I cannot tell how to leave all these beauties behind me; but I will not permit you to gather many, becaufe it is pity to spoil them. The gardener brought us fome to drefs our rooms with this morning, and I know if you fhould pluck any they would foon be dead in your warm hands, for nothing but water will keep them alive.

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Have you taken notice that every flower has different leaves from the reft? That fome of them are variegated with all the colours you can name, and polifhed in the higheft manner? In fhort, their beauties are too many to be numbered; and when you come to be able to read books of natural hiftory, you will be aftonished to find how much can be faid about them; but you are too young to understand them at prefent: however, I must not forget to tell you, that all flowers grow either from seeds, or little roots taken from great ones.

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Few of those which grow here would grow wild in the fields, because the earth there is not rich enough for them. There is a great deal of trouble required to make some of them grow at all, the gardener is obliged to do many things, or they would wither away: and particularly he must water them properly; for earth and water are the same to the trees, plants, and flowers, as victuals and drink are to us; but as they are fixed to one place, and can neither fetch nor ask for it, it either comes to them in rain and dew, or the gardener pours it on them with a watering pot.

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Some tender, delicate plants will grow only in very light earth, for they could not get through hard ground, any more than you could break through a ftone wall. Other plants are strong and stiff, therefore light earth would crumble away, and leave the roots bare, fo they grow beft on clay: Some require a great deal of water, nay, grow even in ponds and ditches; others will thrive only in fandy ground. Many curious plants are kept in green-houses; they would not grow in the open air in this country, becaufe they are brought from foreign parts, where it is hotter than here: If you were to go to a place much colder than this, you would not be able to bear it like those who always live there.

From what I told you just now, my

MARTINE SANTARDED PE

dears, you must understand that there is not only great variety in what grows out of the ground, but even in the earth itfelf. Look at the walks; fome of them are of a yellowish red colour. That is gravel: does it not make pretty walks? it is exceedingly good for the roads likewife, Henry, which would foon be very bad where there are a great many carriages continually going, if they did not fpread gravel upon them to keep them in repair. Of another kind of earth bricks are made, which are afterwards used in building houfes, walls, &c. Chalk comes out of the earth. That is very useful to lay upon fome forts of land, in order to make what the farmer purpofes to fow there grow the better : It is likewife burnt to make lime of, which, mixed with fand, makes mortar for the bricklayers to fasten their bricks; for they would fall down if they were not cemented together. Stone

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and marble are dug out of the ground. When they find a vaft quantity together, they call the place a quarry. Some fine churches and caftles are built of ftone. Marble is ufed for chimney-pieces, flabs, and ornaments, in elegant houfes.

Coals are likewife dug out of the earth, with which we make fires to warm us, and drefs our victuals. Oh! how we fhould go fhivering and fhaking about if we had no fires in the winter! And what would meat and puddings be good for, if we could neither roaft, boil, nor bake? and we could not get wood enough for thefe purpofes.

I have not yet told you half the riches that are in the bowels of the earth. Out of them are dug gold, filver, copper, lead, iron, tin; these are called metals. Look at my watch; this is gold: guineas and half-guineas are likewise made of it, and it may be beaten into leaves thinner than paper. Did I not give you fome, Henry, to gild your oak-apple?

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With leaf gold they gild wood; the picture frames in the drawing-room appear very fine, but are only wood covered with those thin leaves.

Gold is the most valuable of all metals. This shilling is made of filver, which, though inferior to gold, is yet much efteemed. It is used for coffee-pots, candlefticks, waiters, spoons, and an hundred other things, which people who can purchafe them make use of. Lead is very heavy: there is great plenty of it to be had, and it is of the utmost fervice to us; for it is made into cifterns to hold water; pipes to convey it from the fprings; gutters to carry the wet from off our houfes; weights, and a variety of other conveniencies. Our faucepans and kettles are made of copper, which would be very unwholefome if they were not lined with tin;

which is a whitish metal, softer than filver, yet harder than lead. We have many mines of it in England, and fend quantities of it to foreign countries. Halfpence are made of copper. Iron is one of the most ferviceable things we have; most kinds of tools that are used in the fields and gardens are partly made of it; likewife most of those which are employed in different trades have generally fome iron about them; in fhort, it would take up a great deal of time to tell you the whole of its value. Steel is iron refined and purified by fire, with other ingredients; it is much prized too. Our knives, fciffars, razors, needles, and many articles befides, are made of it.

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All kinds of precious ftones likewife are found in the earth; diamonds, rubies, emeralds, topazes, &c. They do not look fo fine when they are first dug up, for there is much patience and labour required in cutting and polifhing them. Look at the diamonds in this ring; you fee they are cut with a great many fides, and the light falling on them makes the appearance of fuch a variety of beautiful colours.

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Now you fee, my dears, that every thing, when we examine it, is curious and amufing. None need go fauntering about, complaining that they have nothing to divert them, when they may find entertainment in every object in nature; but I am fure, if you are not tired you muft be hungry, and I fear the dinner will be fpoiled, fo let us make hafte into the houfe. You have been told enough to employ your thoughts till to-morrow, when we will take another walk, if nothing prevent us.

Good morning to you, Charlotte, have you feen Henry yet? I did not expect you quite fo early; but hope it is a proof that my inftructions were agreeable to you yefterday: pray fee whether he is up.

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Are you not afhamed of yourfelf, you little lazy boy, for lying in bed fo late? I was obliged to fend Charlotte to call you. Your fifter and I longed to be walking; let us therefore lofe no more time, but be gone.

There is the dairy-maid milking the cows. How comfortable the cattle look grazing in the verdant meadow! I dare fay the herbage is as pleafant to them as apple-pie is to you. See what charming thick coats they have got. As beafts cannot make themfelves clothes, they have what anfwers the fame purpofe growing on their backs. All cattle have four legs; they do not walk upright, for that pofture would be both painful and inconvenient to them, whofe food is on the ground, as they would be always ftooping, which would

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tire them fadly; and had they only two legs, they could not move their long heavy bodies with them. Obferve what hard hoofs they have got. If they had not, their poor feet would be torn in pieces without fhoes. Their great horns ferve them for a defence, in cafe any thing threatens to hurt them, for they cannot get guns, fwords, or flicks, you know.

Can you tell me what becomes of the cows and oxen; I am fure you cannot, therefore fhall inform you. Do not run away, Henry, fee how attentive Charlotte is.

Cows, as you fee, give milk; a valt deal indeed, which fupplies the dairies with cream; for it is put into great difhes, and in about twelve hours the cream rifes thick on the top, which is fkimmed off; when they have got enough of it they put it into a churn, and work it about very faft, by which means part of it becomes butter; the remainder is butter milk, which is very wholefome for little boys and girls.

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Cheefe is made from milk, and fo are puddings too, with the addition of eggs and flour, bread or rice.

The calves are the cows little ones, and many of them are fold to the butchers, who kill them; their flefh is called veal.

See that drove of oxen ! do not be terrified, Charlotte; obferve how quietly they fuffer themfelves to be driven along, fo many of them by one drover! He will drive them to market, where the butchers will buy them : when they are killed, their flesh will be beef, and their skins will be fold to tanners, who will make leather of them, and fell it to the leather-dreffers; then it will be bought by the fhoe-makers, for fhoes and boots; by the faddlers, for faddles, bridles, and other things. The horns of these beasts are made into combs, lanterns, &c.

Look at the pretty harmless sheep, with their innocent lambkins by their fides. Sweet creatures! you also have got fine thick coats; they are very comfortable to you in the winter, when you are obliged to lie in the open fields in the frost and fnow, but must make you very hot in the fummer. Well, a way is contrived to eafe you of them; as foon as the fultry heat comes on, the farmer will get you all together, and begin his fheep-fhearing; then all your load of wool will be cut off, and you will fpring away from him, and run frisking and skipping about, like little boys who pull off their coats to play.

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The poor fheep would not be fo merry if they knew that they fhould be fold to the butchers too; but that must be the cafe. Their flesh will be mutton, and their skins will either be parchment, such as Mr. Green, the lawyer, brought to your papa the other day, and like what your drum is

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covered with, Henry, or elfe leather, like the outfide of your spelling-book.

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The fheep's wool is very valuable indeed, for it is fold to the wool-combers, who clean it, and poor old women, who live in cottages, fpin it with their fpinning wheels. Have you not feen Goody Newman fitting at her work, finging, and happy to think that fhe fhould be paid enough for it to keep her from begging?

When the wool is fpun it is called worfted, and the weavers make it into cloth for men's clothes, flannels, blankets, ftockings, and other things: fo that fheep fupply us both with food and raiment. But I dare fay you think it very cruel to kill the poor creatures: Indeed, my dears, it is a pity; but if fome were not killed there would be fuch numbers that there would not be a fufficient quantity of herbage for them to eat, and many would die of hunger; and now whilft they live, they are as happy as they can be, have fine green paftures to feed and play in, and when they die, have no relations to be forry for them, or who will fuffer by their deaths; becaufe, though ewes are very fond of their lambkins while they are little, the fondness continues no longer than while they are helplefs; for when they have done fuckling them, and shewn them what to eat, they drive them away, and take no more notice of them. When the butchers take the sheep to the slaughter-house, they know not what is going to be done; and when their throats are cut, they are but a little while dying, therefore they do not fuffer much. When they are dead, they can feel no more you know. We must kill them to preferve our own lives, but should never be cruel to them while they live.

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Horses are sent to market, Henry, but not to be killed. Horsesses not good E 2

to eat; it is carrion, and only fit for dogs and crows. Horfes are noble creatures. That is a riding horfe. See how he leaps and bounds now he is at liberty. But though he is fo ftrong, can kick hard, and raife himfelf upon his hind legs, he is fo gentle that he will fuffer himfelf to be mounted and guided any way. His legs are flenderer, and his body not fo heavy as the ox, fo that he can move nimbly; neither is his back fo broad but that a man can eafily fit across it. He has hoofs alfo; but as he travels fo much, they would be worn out, therefore all perfons who keep horfes should be careful to let them have iron shoes, to keep their feet from being bruifed. The fmith makes them, and nails them on, which, if done cleverly, does not hurt the horfes at all.

Don't you wifh, Henry, that you could ride on horfeback? When you are old enough you shall be taught to ride, and

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learn to manage a horfe: but if you get on one by yourfelf, without knowing what to do, he may run away with you, and kill you.

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There was a little boy who wanted to ride, and had not patience to ftay till his papa had bought a pretty little gentle nag for him; but got upon the fervant's horfe, which was hung at the gate. He laid hold of the bridle, and could not reach the ftirrups; gave the horfe a cut with a flick, and away he gallopped with him fo faft, that the little boy was thrown off with his head against a stone, which fractured his fkull, and he was taken up dead: and yet that was not a vicious horfe, when he had a skilful rider on his back: the accident was entirely owing to the child's not knowing how to manage the bridle.

There was another little boy, who was always running into the stables amongst the horses, and one day he was kicked, E 3 [54]

and had his ribs broken, for the horfe did not know that it was a little boy at his heels.

Thofe fine large bay horfes, with black manes and tails, are coach horfes; they are ftronger, but not fo nimble as the others; thofe with great clumfy legs, and rough coats, are cart horfes. There is another fort of horfes, which are very beautiful and fwift; they run races, and carry their mafters when they hunt; but it is very expensive to keep them.

We can walk but a little way in a day, as we foon tire on foot; but when we are upon a horfe's back we can travel a great many miles, and fee our friends, who live at a diftance; and it is very pleafant to go in coaches; do you not love it, Charlotte? Now thefe pleafures we could not have without horfes; don't you think that we ought therefore to ufe them well? Befides, we could not tell how to manage many things without them, for it would be exceeding hard work for frong men to do what horfes can perform with eafe. It is extremely fatiguing to a poor boy, with his heavy nailed fhoes, to walk by the fide of a plough all day; but do not you think it would be a great deal harder to him were he forced to draw it along through the tough ground: and how would Men be able to move heavy waggons and carts, and other great loads, without the help of horfes? So I think that the least we can do is to give them plenty of oats and hay, and a warm stable at night. Don't you think those people are very barbarous who ride them too hard, who whip and fpur them till they are ready to die? and yet fuch cruelties are exercifed every day; but remember, Henry, that it is both foolifh and wicked to act in that manner.

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There is a poor afs; he makes but a mean appearance after we have been viewing fuch beautiful fine animated creatures, as horfes; but do not defpife him on that account; he has great merit, I affure you, for he will do hard work, and it cofts but very little to keep him, as he will be contented with what the hedges afford, or even a few dry leaves, or a little bran: and requires no stable to shelter him, nor groom to attend him, fo that poor people who cannot afford to keep horfes may have an afs, and he will draw a cart, carry panniers, nay, will not difdain to lend his back to a chimney - fweeper. Have you not seen the little grinning rogues, with their black faces and white teeth, riding on a jack-afs with a fack of foot?

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I must not forget to tell you likewife that affes' milk is one of the finest medicines in the world, particularly for any one who inclines to a confumption: many perfons who drink it get well, after they have been fo ill that they were thought ready to die. Is it not very barbarous to treat fuch valuable creatures with inhumanity? and yet it is very common to do fo. I am fure it would grieve you to hear how people beat and ftarve them frequently.

Let me look at my watch; it is paft eight; we muft return home to breakfaft. Who is that? O! it is John coming to call us, and poor Tray with him. You are very glad to fee us, Mr. Tray, and we are glad to fee you too, for you are an honeft faithful fellow. Don't you love Tray, Henry? How he wags his tail, and jumps about. I declare he looks fo pleafantly, 1 could almost fancy he had a fmile on his countenance. When we are in bed and fast assessed. all night, and will not let a thief come near the houfe. When papa goes fhooting and courfing, Tray runs about, round the fields, and acrofs the fields, and finds out all the game for papa to fhoot; for he can fmell it a great way off; then he is fo good-natured that he will let the little baby play with him, and will never be perfuaded to leave his mafter.

Poor Tray defires no other reward for his fervices than a little food, and the pleafure of walking out fometimes with his mafter or any body in the family. I have got the key of the paddock, fo we will go through it, and take a peep at the deer.

There is a noble ftag, with his fine branching horns! Do not you admire him? and fee the little frifking fawns! Active as you are, Henry, I think you cannot bound like them.

This kind of animals are only kept by

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those who have parks and paddocks properly pailed in, for they would not stay in the fields as cows and sheep do. Their sless fine flavoured meat, called venifon.

Gentlemen often take great diversion in hunting ftags. They turn one out of the park, and then let loofe a great number of dogs, of which he is fo fearful, that he runs from them as fast as his legs will carry him; a number of gentlemen on fine fwift horfes follow him, and are fo eager for the fport that they leap over hedges and ditches to overtake him., Sometimes he will lead them a great many miles; but at laft his weary legs will carry him no farther, he pants with fatigue and apprehension, stops, and makes an effort to repel them with his horns; but the dogs feize on him, and tear him till he dies. I suppose there is pleasure in hunting, but I think the poor crea-

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ture should be allowed to return to his park again, in order to make him amends for the terrors he must have fuffered, and for the diversion he has afforded to his pursuers.

Sometimes people hunt hares alfo. They go into the fields with their dogs, who can fmell them out if they hide themfelves ever fo cunningly; and when the hares find they are in danger of being caught, they fpring up and run with all the fpeed they can, and practife many tricks to fave themfelves; but all in vain, for they are generally overtaken, and fuffer the fame fate as I told you the ftags do.

I don't know how it is with the gentlemen, Henry, but I should feel fo much for the poor little frightened creature, as would destroy all enjoyment of the front. I am fure it would delight me more to fave one from its diftrefs.

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Well, now for breakfaft.—Run into the parlour, Henry; fee, Charlotte! there is a good bafon of milk for each of you; I dure fay your walk has given you an appetite. There is nothing like air and exercife for improving health and cheerfulnefs.

Whilft you eat your breakfaft I will tell you a piece of news; your favourite Tibb has got kittens, Charlotte; there they are in a bafket. Call her out to lap a little milk, and then we can look at them. How they mew and tumble about! They cannot now fee, but in nine days their eyes will be open, and they will foon begin to play a hundred diverting tricks. When old pufs has taught them to catch mice, fhe will make them provide for themfelves, and fo far from giving herfelf any trouble about them,

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will grumble, and give them a good box on the ear, if they take any freedoms with her; but fhe will be a good mother to them for all that; for fhe will be extremely tender of them as long as they ftand in need of her care; and they have no reafon to expect her to catch mice for them all their lives, when they will be as clever at it as herfelf.

Mice are pretty creatures to look at, but they do a great deal of mifchief; and fo do rats. If we had not cats we fhould be overrun with them.

I should never have done were I to enumerate every kind of animal; but must not forget to mention that there are great numbers of *wild* beasts; lions, tygers, leopards, panthers, wolves, and others.

They have great ftrong claws, monftrous teeth, and are fo fierce that they can tear a man to pieces in an inftant. Now had they been amongft us like the flocks and herds, what havock would they have made in the world! We fhould not have dared to go out of doors. The cows, fheep, and horfes, would have been a conftant prey to them: but there are none here; they avoid the habitations of men, and range the forefts and deferts far from our abodes.

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As their fkins make very comfortable clothing for people who live in cold countries, the hunters frequently purfue them; for there are feldom many wild beafts together, and there are ufually a number of hunters who provide themfelves with proper weapons; they frequently get the better of them.

Sometimes they are caught alive when they are young, and fhewn about as curiofities; and those who look after them have a way of managing fo as to cure them in a great measure of their F_2 fiercenefs: there is no beaft whatever fo fierce but it may be tamed or fubdued by men. I have feen feveral forts, particularly at the Tower of London, and read a very entertaining account of that collection in one of Mr. Newberry's little books: I think you have got it Charlotte; I defire you will fhew it to Henry.

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The elephant is a most aftonishing creature, I believe the largest of all beafts. Remind me, when we are in the library, to shew you the picture of one; and as foon as I have an opportunity I will take you to Mr. Parkinfon's Mufeum, where you will fee an elephant and many other curious things; their teeth are very valuable. They are ivory, and you know there are abundance of things made of that. You have feveral pretty ivory toys, and there are combs and knifehandles; in fhort one might foon name twenty things made of ivory.

The fkin of elephants is extremely hard, and their ftrength wonderful, fo that when they are provoked, nothing can stand before them; yet they are of a very gentle, harmlefs nature, and will fubmit to be guided by a man. We read in hiftory, that it was formerly the cuftom to employ elephants in armies; and that they had little wooden caftles built on their backs which were filled with men, who fhot from them with bows and arrows. When these beafts had been fome time in the battle they grew angry, and then they trampled to death all who came in their way, and could even beat down trees and demolifh houfes. How would you like to ride on an elephant, Henry? Why, you would look on his back like a little marmofet on a horfe.

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The camel is another noble beaft; we have none of them here, only now and

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then one which is fhewn about as a fight. You can form no idea of him from a defcription, but I will look for a picture of him likewife.

In the countries where the camels are, there are many fandy deferts; places where there are no houfes for many miles, nor a tree to shelter travellers from the fcorching rays of the fun; and yet people are under the necessity of taking journeys through them, in order to carry the goods they want to fell from one country to another: it would be impoffible for them to bear fuch heavy loads themfelves, and horfes would perifh with thirst, as there is no water to be met with; but a camel will carry very great burdens, and requires no refreshment on the road; and when he gets to his journey's end will kneel down, that his mafter may be able to reach his back to unload him; for he is

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fo tall, that it could not be conveniently done otherwife. I could tell you wonderful things of an hundred other creatures, but that I hope you will have curiofity enough to read about them.

If you have breakfasted, and are not fatigued, we will go into the poultry yard. You, Charlotte, shall carry fome barley, and Henry fome tares, and I am fure we shall be welcome visitors.

See what a fine brood of chickens that hen has got; and fhe takes as much care of them as a fond mother does of her children. Do not attempt to catch her chickens, Henry, for fhe will fly upon you. Yefterday they were in the eggfhell; fhe laid them in a neft in the henhoufe, fat upon them three weeks, and would fearcely come off to eat, for fear they fhould perifh for want of being

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kept warm. As foon as they were ftrong enough, they broke the shell and came out, and the gathered them under her wings; now she is teaching them to peck and fcratch; and when fhe fears that any thing is going to hurt them, fhe flies at it with the fury of a lion. Poor hen! what will you do now there is a hawk? oh, how the poor creature is terrified ! the little chickens throw themfelves on their backs, expecting to be caught up by his talons, and the hen runs about in agonies; for he is too powerful to contest with. Go, Henry, call Thomas, and defire him to bring his gun immediately. Poor hen; the hawk shall not have your chickens. Now, we have driven him away, come and eat your barley.

We want fome eggs for cuftards, Charlotte, fee if there are any in the hen's neft. Oh, you have found fome; thefe

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are new laid; there are no live chickens in them yet, but were we to let them remain for the hen to fit on, fome would grow withinfide, and fhe would hatch them. But we want eggs for many ufes, and were they all to be hatched, there would be too many fowls. All kinds of poultry and birds come out of eggs.

It is poffible to hatch chickens in ovens. And I have read that in Egypt this is a common practice, and that as foon as the young chickens come out of the shell they are put under the care of a fowl, which, having been trained to the business, leads them about, scratching for them with the fame anxiety that a hen would do. This is certainly a wonderful thing; but, for my part, I do not approve of fuch unnatural proceedings. I am fure we may have a sufficient number of eggs and chickens in the ufual way if we manage them properly. It appears

to me a robbery to take the chickens from their parent, and put them under a fowl which provides for, and protects them only becaufe it is his bufinefs to feed and attend little chickens. It is like taking a child from its mother, and putting it to nurfe, without her confent, in a place unknown to her. But I have the pleafure of hearing that hatching chickens in ovens has been tried in England and rejected.

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There is another foolifh cuftom, which is indeed very common here; I mean that of putting ducks' eggs to be hatched by a hen. You can fcarcely conceive the diftrefs it occafions. The hen, not confcious of the exchange that has been made, fuppofes fhe has hatched her own chickens; for fhe has not fenfe to reflect on thefe matters, therefore, when fhe fees them go into the water, as it is their nature to do, fhe is feized with the moft alarming apprehensions left they should be drowned, and yet dares not attempt to follow them, as she is not able to swim. I am fure you would pity the poor creature; therefore never make such experiments, as they only ferve to gratify curiosity, by proving that it is warmth that hatches eggs.

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It grieves one to be obliged to kill any of the poor chickens; but, as I told you in refpect to the fheep and oxen, were we to fuffer them all to live they would die of hunger, and caufe us to do fo too, for they would eat up all the wheat and barley, and we fhould have neither bread nor meat for our ufe. But we will take care to feed them well, not hunt them about; and put them to as fhort pain as poffible. I am fure I could not kill a chicken, but fomebody muft.

The feathers of geefe and chickens are what our beds are filled with. Don't be afraid of the turkeycock, Henry; he is a faucy fellow, but has very little real courage. Turn towards him, and he will run away from you as you did from the man who held up his flick at you for flinging flones at him.

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Chickens and other fowls have very fharp claws, that they may foratch about in dunghills, and at barn-doors, where they ufually find plenty of food; befides, their feet have feveral joints to them, fo that when they fleep at night they ftill hold faft round the roofts, and preferve themfelves from falling. Water - fowls ufually fit on the ground to fleep. They endeavour to find a fnug corner; but a little damp does not injure them.

Cocks are noble birds, and very fierce; fometimes they will fight till they kill one another; and there are people in the world who are cruel enough to make them do it for their own diversion.

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They get two of these fine creatures, and fatten to their legs fharp fpurs made of polifhed fteel; then they put them in the middle of a round place, covered with turf, called a cockpit, where they ftand about them hallooing, fwearing, and faying fhocking wicked words, whilft the cock's fight till one of them dies. Oh, Henry ! I hope you will never take pleafure in fuch barbarous sports. I can fee that your tender heart is moved with the bare relation of it. I could tell you, many ftories of the bad confequences of cock-fighting, which has frequently been the ruin of those who were fond of it; but hope before you are a man, you will entertain such sentiments as will effectually preferve you from the danger of practifing it.

I will tell you of another kind of barbarity which is fometimes practifed by cruel, wicked boys on cocks. On a particu-

lar day in the year, called Shrove Tuefday, they affemble in parties, and fing cudgels at these poor harmless creatures, till they kill them. First one little tyrant throws at a cock and perhaps breaks a leg; this is mended as they call it with a piece of flick tied to support it; and then the next boy flings, who, it is likely, may knock out an eye; another blow perhaps breaks a wing; and fcarce a ftroke fails of crushing fome of its tender bones; as long as ftrength remains, the tortured bird attempts to escape from his tormentors; but continued agony foon obliges him to drop. If he difcover the leaft remains of life he has still more to endure; for they run his head into the ground to recover him, as they fay; this makes the creature ftruggle: and he is fet up once more: a few blows now complete the cruel fport, and he drops down dead, whilft his murderers exult over him, and call them-

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felves very clever fellows! What do you think of fuch boys, Henry? Is there not much more pleafure in feeing the happy creature peeking at the barn-door, ftrutting on his dunghill, clapping his wings, and crowing with joy, than to fee his noble courage fubdued in this manner; his bright eyes hid with a deadly film, and his beautiful plumage covered with dirt and blood.

See that flately fwan, how magnificently he fails along, with his filver wings expanded to catch the fresh breeze. And pray observe his mate, with what pride she leads forth from the nest her newhatched cygnets! Of all the water fowls I ever faw the fwan appears to me the most beautiful.

That fimple goofe looks mean in comparison of a swan. Observe how she hisses

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and waddles along! However, we must not defpife any thing merely for its looks: geefe are very ufeful creatures, and we are in fome measure obliged to them for all the learned and entertaining books we have, fince they were originally written with pens made of quills taken from goofe-wings; befides geefe afford us many excellent meals; for when roafted they are very good eating. This goofe, you see, has got a numerous brood of goflings; and here is miftrefs duck too, with a fine train of ducklings; now they go into the pond; now they fwim away: they are amphibious; that is, they can live either on land or in water. Obferve the feet of the geefe and ducks. It is the fame with every other water fowl; they are webbed, and fo ferve like oars you have feen the watermen use to row with.

There is another kind of birds, called birds of paffage, fuch as quails, wild

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duck's, plovers, woodcocks, fwallows, &c. thefe do not conftantly refide in one place, but go from country to country at particular feafons of the year. They all affemble together on a certain day, and take their flight at the fame time. Some crofs the feas and fly many hundred, miles, which is very wonderful.

Pray look at the peacock. Did you ever fee a more beautiful fight? He fpreads his refplendent tail which the fun fhines on, and fhews it to perfection. There is one of his feathers on the ground. I defire you both to examine it particularly. The nearer you look at it the more admirable it feems.—And pray pick up fome of those which the pigeons and other poultry have dropped; you will find them worth examining. I would have you accustom yourfelves to look at [78]

every thing; that is the way to gain knowledge.

Did you ever fee any gold or penciled pheafants? They are charming creatures. All birds, I think, are pretty; even the owl and the crow are not to be defpifed when you fee them near. But if you are not fatisfied with the little information I have given you, we will read fome books of natural hiftory, and go to the Mufeum over Black Friars Bridge, where you will fee a most beautiful collection.

There are many forts of birds in this country, and numbers different in other parts of the world; but I fhall not at prefent give you a defcription of them all, becaufe you must take the pains to read about them yourfelf. I fhall only mention the humming bird and the oftrich.

One fpecies of the humming bird is a little creature, fcarcely bigger than an

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humble-bee, and fo beautiful, that ladies, in the country where they are, wear them in their ears for ornaments. The offrich is remarkably large, and fomething refembling a goofe, but taller than a man: their eggs are fo big that I have feen drinking cups and fugar diffes made of their shells, and their feathers are very fine. Those beautiful ones which have lately been fo much in fashion, are offrich plumes: and fo are those fine black ones which are put upon a hearfe. Thefe birds are too heavy to fly, but they have fhore wings, which are of great use in helping them along; and they run with furprifing fwiftnefs.

They do not fit upon their eggs, but leave them to be hatched by the fun.

I must go into the house now, so pray take leave of these favourites of yours for the present. There is little Dick Williams coming in at the gate; I fancy he has fomething that he thinks will pleafe us. What have you got there, child? a bird's neft! oh, fie upon you, to rob the poor things of what coft them fo much pains to make. The young ones, you fay are flown; well, Henry, take it in your hand, and I will tell you how the birds built it.

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Two of them agree to live together; for though they cannot talk as we do, they can make one another underftand; fo they fet about building them a houfe. Firft they got fome fmall flicks and hay, then, in a fnug place, which was not likely to be found out, they began the outfide, then they picked up fome mofs and horfehair; after all, they lined it with feathers, the hen-bird laid her eggs, and her mate fang to her whilft fhe fat over them; at laft came out the little birds, and away flew the old ones to get food

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for them. As foon as they had found any they came hurrying with it to the neft. When the young ones heard the found of their parents' wings, they chirped, and opened their mouths, as much as to fay, " feed me, feed me." The old birds fed them one after the other. Sometimes the hen fat upon them a little while to warm them, then abroad fhe went for more food, and fo the old birds kept on till the young ones were ftrong enough to fly, when they went along with them to fhew them where to get food, and how they must shift for themfelves, and all their care about them was over. As foon as the little birds are big enough they will build nefts too, and do as their parents have done.

I am always angry with those who take birds' nests, when I think how many miles the poor creatures may have flown to procure the materials, and how hard they must have worked with no other tools but their beaks and claws to build with.

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We should not like to be turned out of a comfortable warm house ourselves, though few of us have the ingenuity to build one. The farmers indeed find themfeives under a neceffity of deftroying fome kinds of birds for eating the corn; and hundreds are killed on that account; besides, there are great birds, such as hawks and kites, which devour a great many, fo they have enemies enough without little boys. For my part, I would willingly (pare them fome of my fruit to pay them for their mulic, and would not have my fweet blackbird killed, which fings fo charmingly in the orchard, were he even to eat up all the cherries.

You have got a canary-bird in a cage Charlotte; I hope you take care to feed

him well and keep him clean. He never knew what liberty was, and therefore does not want it; nay, if you should turn him loofe, he would starve and die; befides he could not bear the cold air out of doors in the winter, because canarybirds were first brought here from a hotter country and only build in houfes. But should you catch a poor bird which had been used to fly about, hop from twig to twig, and fing amongst the branches, he would at first flutter, and almost beat himself to pieces against the wires of the cage; and when he found he could not get out, would fit moping in a corner, and refuse to eat or drink, till extreme hunger and thirft obliged him; and long would it be ere he would be reconciled to confinement.

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I knew a little boy who was otherwife good, but fo exceedingly fond of birds, that he would try every means in his

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power to catch them. One day he had fixed fome traps made of flicks and bricks, and being called away to go to fchool, forgot to mention his traps. He did not come home till a week afterwards, when the first news he heard was that a poor robin had been caught in one, where he remained till he was ftarved to death; a sparrow was crushed to pieces, and another had his leg broke: Now, would not any good little boy have been very forry to have tormented the poor things in this manner? And fo was he, and I hope has never caught any fince. But I must leave you now, for I have many things to do; and fo good bye to you.

The weather continues fo remarkably fine, Charlotte, that I long to be in the air. Do you vote for a walk? Henry I am fure, will attend us; fo let us equip ourfelves and be gone.

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What is Henry running after ? Oh ! it is a butterfly, I fee; well, you have caught it, poor little tender creature ! take care how you handle it; would you believe it ? all that powder, which comes off on your fingers, is feathers. I have feen fome like it in a microfcope, and will fhow fome to you by and by.

Try if you can find a caterpillar. Why, you have got feveral forts! well I have a long hiftory to tell you about them when we go home. See what a neft of little ones are in that web in the hedge: As foon as they were big enough to go to work, they fpun it to keep the wet off; the dew, you fee, hangs withoutfide, and does not penetrate through. There are more! Sure, there are thousands! We have had fuch dry weather lately that I fear the gardens and fields will be over-

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run; they will deftroy all the cabbages; and the birds may feaft away, for they eat caterpillers, as the larger birds deftroy them.

Behold what a fwarm of very minute infects are there, like a cloud before us! You would fcarcely fuppofe that thefe little creatures when feen with a magnifying glass, are very beautiful, and adorned with magnificent fringes as fine as gold and filver, with elegant tufts of feathers, and fome parts appear like velvet embroidered with pearls. Every one of them is furnished with weapons of defence, and all have enemies to defend themfelves against; each has fome particular plant or herb to feed on, and knows where to feek it. There are fome fo exceedingly fmall that they cannot be feen at all with the naked eye, but when feen, are as wonderful as the reft.

Look how bufy that fpider is at her

work. Your filly maid has taught you to be afraid of spiders, but I hope vou have both of you fense enough to get the better of fuch ridiculous fears. Pray confider how much ftronger you are than they, and how much larger. It is true they will fometimes drop down fuddenly, but that is from fear of your hurting them: how often are their nefts and webs cleared away? but I never heard that a spider took a broom and swept a little boy away, or trod one to death. I defire you both to take notice, that when a spider drops down, it always runs away as fast as it possibly can, therefore certainly has no defign against you. But, as they dirty our houfes, and cobwebs have a very untidy appearance, I must defire that the house-maid will keep them away; yet I am fure little boys and girls may take a good leffon from spiders, and learn both industry and exactness; for

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their webs are woven with the most perfect regularity. You will be exceedingly pleafed to read an account of their method of working, and I shall shew you parts of them in the microscope.

Take care, take care, Charlotte, mind where you tread! why you might have deftroyed a city for aught I know. Look at those little bufy ants; they are at work as had as possible. Do you know that they get all the corn they can, and lay it up against the winter comes? They bury their dead, carry their young ones about, and do many laborious things. If all men and women were as provident as they are there would not be fo many beggars.

Let us go and fee the bees at work in their glafs hives. See they are in a great buftle: furely there is fome curious

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work going on. Curious indeed, my dear ! all the honey and wax we have is the work of these little creatures. They fly about and with a kind of trunk they have they fuck fomething fweet out of the flowers; others get materials for the wax and form the honey-comb, in which the honey is deposited. Are they not very furprifing? the cells join exactly together; there is no room loft. This whole fwarm of bees are subject to one bee, which we call the queen; they follow her wherever fhe goes, and will fuffer themfelves to be killed fooner than forfake her. But I must not tell you every particular about them, becaufe I want you to read the account yourfelves in the books I mentioned to you. Most people keep bees in ftraw hives, and burn them as foon as they have finished their combs, in order to get their honey; but I bought these glass ones on pur-H3

pose to have the pleasure of seeing them work, without being obliged to kill them. When the honey is taken you shall fee how it is managed, and I will treat you with fome for your fupper. Should you at any time have a cough or fore throat, I will make a medicine with honey in it, which will help to cure you: fo pray remember how useful bees are, and never hurt them. Keep in mind alfo, that not even the leaft of these creatures, which I have shewed to you, is idle; all are employed. They do not faunter away their time, but take care of their families, and build houfes. The young ones learn readily what the old ones shew them how to do; and little boys and girls fhould likewife be defirous of improving from the inftructions that are given them. It is very fatiguing to teach children all that is neceffary for them to learn, and very expensive alfo. If they do not ac-

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cept of knowledge when it is offered, people will grow tired of inftructing them; and they will be laughted at and defpifed for their ignorance. The days pafs heavily along, when fpent in idlenefs and folly. You may now go and divert yourfelves as you pleafe, and in the afternoon come to me again.

See, I am prepared for you; here is the microfcope; in it is a magnifying glafs, that is, a glafs which makes every thing appear larger than it does to the naked eye; fome magnify much more; but this will anfwer our purpofe. Now fome of the wonders I told you of will be prefented to your fight. In this box are a fet of objects ready prepared for us. Now the glafs is fixed. Pray, fir, let the lady look firft; if you are a philofopher, do not forget you are a gentleman. Can you guess what this is, Charlotte? Do you look, Henry. It is only part of a feather of a goofe, but appears like an entire one. This is a bit of a peacock's, examine it before I put it in; now view it, and you will perceive it to be perfectly beautiful. I am going to shew you the feet, wings, and head of a common fly; this is its leg, fee the claws; the head appears to have an hundred eyes. 1 must shew you the parts of a bee. See what a dreadful weapon the fling appears. Ah! Henry, I hope you will be cautious how you catch bees again: and I am fure you will not take a pleasure in tormenting flies now you have feen what limbs they have. You may affure yourfelt that they fuffer great agony when their wings and legs are torn off. I never could endure, without great uneafiness, to see a cock-chaffer fpinning as they call it, on a pin. The

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noife and humming it makes, is its way of crying and groaning. Let me beg of you, therefore Henry, if you with to be thought a boy of a generous fpirit, never to take pleafure in hurting any thing that is lefs and weaker than yourfelf. Think how you should like to have a man tie a string about you and pull you along, and whirl you about in the air, till you lost your fenses, break your limbs, and perhaps throw you down at last and tread upon you.

I must shew you this bean; you know I told you that all plants grow from feeds; this is the feed of a bean. I have split it open, and at bottom you may see the little plant. It is at present too tender to bear the earth next to it, so you fee it is provided with a covering. The white part of the bean will nouriss the plant till it is stronger, when it will spring out, and the white will drop off, and

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leave it to the earth, where it will increafe every day till it grows up and comes to perfection. It is just the fame with all vegetables, from the humble grafs to the flately oak; only in very little plants, we cannot different them without exceeding good glaffes.

I had like to have forgot this butterfly's wing? there you fee the holes where the quills came out, and here fome of the bits of duft which you may convince yourfelf are actually feathers. I must fhew you this little infect, which came off a rofe leaf; and here is a drop of vinegar full of little things like eels.

You must not pore too long, for it will hurt your eyes. I have only shewn you these, to convince you that a curious search may discover new wonders; and were you to keep on to the end of a long life, you would not see them all.

What does your brother fay, Char-

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lotte? That he wishes his eyes were microscopes. Alas, my dear boy! you know not what you with for. If that was the cafe we should fee very furprifing things to be fure; but then, what we now look at with pleafure, would become monstrous to us. Men and women would appear fo large that we could only fee a bit of them at once. We fould not know a house from a wall, an ox from a mountain, and should be involved in a thousand difficulties. It we came to a kennel, we might millake it for a river; take a cat for a tiger, a mouse for a bear: in short, absurdities out of number would follow. So reft contented that your eyes can fee with eafe every thing that is useful or hurtful to you; and if you want to be curious there are glasses to affift you.

I promifed you the hiftory of caterpillars, and make it a rule never to break my word, fo pray attend to me.

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I believe I must fix upon filk worms, because they are the most useful to us. First of all they are in little greyish eggs, which may be layed by in a drawer till warm weather comes the next year, when they must be put where the fun shines, hot; in a little time they break, and out come finall grey maggots; those who keep them pick them up, and lay them upon mulberry leaves: they grow very fast, for they eat all day long; in a few days the fkins come off, and they look a little handsome when they have got new ones: Soon after they change them again, and then are pretty white worms, larger than before, as big as one of your fingers. They foon begin to look yellowifh, leave off eating and go to work : first they spin a fort of wool, then they

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form a ball the fize and fhape of a pigeon's egg, and are quite hidden from our fight; but their bufinefs is not yet complete they make a lining withinfide, much clofer woven than the cloth of a man's coat.

Their filk is extremely valuable, and all the fine dreffes which ladies wear are the works of thefe little crawling infects. Who would be proud of being dreffed in filks and fatins when they know this to be the cafe ?

A great many of the balls are put into warm water, and those who are used to the business readily find the ends. They are obliged to put several together to make the filk of a proper size, and they wind it off in seins upon a little reel; then they come to the linings I told you of, which they cut open with a pair of fciffors, and use them for making artificial flowers. But what do you think they

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find withinfide, filk worms! no, nothing the least like them, but cryfalids, as they are called. A cryfalis is a brown thing the fize of a fmall bean, fomewhat of the shape of a barrel, no head no legs, no body to be seen; but if you touch it, one end will move a little, which shews that it is not quite dead. In this state it lies fome days, and then breaks forth a large white moth with two black eyes, four wings, long legs, and a body covered with feathers; view it through a microfcope, and you might take it for a chicken. Is it not very aftonishing? It truly is, but not more fo than many other things. Almost all things in nature, whether they have life or not, undergo as furprifing changes.

You want to keep filk worms Charlotte; I am always glad to indulge you when I can, and will let you have a few next fummer, becaufe I could wifh you

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to see these curiofities yourself; but you will never be a filk merchant, nor will it answer to ladies to keep a great quantity of the worms. Belides they are reckoned unwholfome when there are many of them together; and it is dirty troublefome work to change the leaves they feed on twice a day. The cafe is different in those warm countries where they are on mulberry-trees in the open air, help themfelves, and fpin amongst the leaves. It must be a pretty fight to fee the shining balls, like golden plumbs, amongst the green branches.

All butterflies and moths undergo the fame changes, though they do not all fpin filk; fome creep into holes in the walls, others into houfes, and fome into the earth, and there become cryfalids, and remain in that flate from the end of one fummer to the beginning of the next, when the buterflies come out in all their

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variegated beauties, and, inftead of crawling about, foar in the air, and amufe themfelves with flying from flower to flower.

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PART II.

COME here, Henry and Charlotte, look at this globe. Do you know what it was made for? Why, fmall as it is, it reprefents the whole earth.

When you were very little children, I dare fay you thought the world was no bigger than the town you live in, and that you had feen all the men and women in it; but now you know better, for I think I have told you that there are thoufands and ten thousands of people; you have feen a great many at church, but they are only a fmall number of what the earth contains. When you go to London you will be quite aftonished at the multitudes, for they crowd along the

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ftreets in the city like bees in a hive, and are as bufy too.

The world is an exceeding large globe, and this before us is a kind of miniature picture of it. You fee here vast numbers of lines drawn; one part is painted blue, another red, another yellow, another green; they ftand for different kingdoms.

It is not poffible to draw every part of the great world on a globe, any more than it was for the painter to mark every hair of the eyebrows on this finall picture in my bracelet. Here is a pea; now you fee this is of the fame form as the globe, but we fhould not be able to defcribe fo much upon it, and yet we might reprefent the large green and yellow places, &c. by dots of different colours, and call them England, France, and fo on, juft to fhew what fituations those kingdoms have.

In the fame manner then as the pea

refembles the globe, the globe refembles the world.

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The earth is not fmooth and even, as this globe is, becaufe there are many mountains and hills on it; but though we call them large, and fo they are to fuch little creatures as us, they are no bigger in proportion to the earth, than grains of fand would appear here; therefore we fay it is round.

Neither is the world all land; for there are vaft hollow places between the different kingdoms, and they are filled up with water. The largeft waters, fuch as this on the globe, are called oceans, leffer ones feas, and there are others yet fmaller, which run in among the land, that are called rivers; there are, befides, fmaller pieces, called ponds, ditches, brooks, and others, which are ufed for fupplying us with what is neceffary to boil our meat, brew beer, clean our boufes, water our gardens when there is a want of rain, and likewife for the cattle, and other living creatures to drink. Thefe generally fpring out of the earth, and are at first only little streams, but run along till they join with others, and are increased by the rains that fall, and fo in time become great rivers like the Thames.

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As the land is full of living creatures, fo are the waters, for they abound with fifh, many of which are caught for us to eat. Some people are very fond of angling with a line and a hook, but I cannot help thinking it a very cruel fport, and always was of opinion that it is an idle one alfo, and never had patience to follow it. To fit hour after hour watching a floating quill! what an employment!

l was told of a gentleman, who, after fitting a whole day in a mizzling rain,

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was afked by a friend that faw him in the evening what fuccefs he had had? Fine fport! fine fport! faid he, three bites and a nibble. I fhould have caught one fifh, only my line broke, and it fwam away with the hook. This perfon might truly fay, indeed, that he had done no harm, but, in fo many hours, how many good actions might he have performed! If none fhould reft contented without endeavouring to improve their time, what do they deferve who trifle it away!

Now let us have another peep at the globe. See what a great part of it is water. Now fuppofe we were to take a number of thofe mites which I fhewed you to-day in the cheefe, and fet them to crawl about the globe, they might ferve to reprefent the men and women that inhabit the earth. As there is no real water on the globe, only a picture of it, the mites might go which way

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they pleafed; but fuppofe the places which ftand for water were really dug hollow, and made into little feas and rivers, how would they contrive to get acrofs them to any other part which the water came in betwixt? It is the fame with us, for we fhould never be able to reach parts beyond fea unlefs there was a contrivance to crofs it.

This place is Great Britain, the kingdom we live in; you fee it is quite furrounded with water. Now fuppofe we fhould want to go to any other country, we must cross the fea to get to it. This place is France, which is a very fine country, and in times of peace is famous for its fine manufactures of china, lace, and cambrick in particular; and alfo for its fine vines, from whence claret, and burgundy, and champaign, and other wines are made: there are alfo filkworms kept in France, and filk manufactured.

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We could eafily get to France by going in a coach, a chaife, or on horfeback, to Dover, and from thence in a fmall veffel to Calais, from thence we might travel to any part of France; but if we wanted to go from France to Italy, we must crofs the Alps, those high mountains, the tops of which are all the year round covered with fnow.

You have feen in the winter both ice and fnow, but did you know that they were only water ? the fnow would have been rain, only the air being exceffive cold, made it freeze in falling; but as foon as the weather became warmer, it diffolved, and the ice thawed, as we call it, and then both were water again.

After this fatiguing and frightfnl paffage over the Alps, where you would be in danger every minute of falling down

dreadful precipices, and of being dashed to pieces, but that the men who carry you are used to the ground, and can run as fast on it as you have feen little boys do on a wall. After this, I fay, you would arrive in Italy, and there the beautiful appearance of the country would quite transport you; for it is defervedly called the Garden of the World. There are myrtles and orange-trees growing wild in the hedges, as the hawthorn does here. Don't you wifh we could make fuch hedges in England? Should we attempt it, Charlotte, I fear the first winter would entirely deftroy them, becaufe the air is fo much colder here than it is there. You know the gardener always carries the myrtles and orange-trees into the green-houfe in the winter.

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The fruits in Italy ripen much better than ours do, and therefore have a richer flavour: and they have in great plenty

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feveral forts which do not grow here, particularly olives, which when pickled, many people are very fond of; befides, there is a great deal of oil made from them, part of which they fell to us, and is what we drefs our fallads with. There are filkworms in Italy alfo, on the mulberry-trees. The fky in that country is moftly of a fine blue colour, and the fun fhines brighter than it does here.

The houses are very magnificent, and most of them large; fome are built of marble, for they have many quarries of it, and their churches are most magnificently adorned with fine pictures, large filver croffes, candlesticks, and a thousand other. curiofities, particularly the noble buildings which were erected a great many years ago, and are now falling to decay, which occasion many people to travel thither in order to fee them.

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But, amongst the curiofities of Italy, I must not forget to me tion mount Vefuvius, a large mountain, which fometimes burfts out with an aftonishing noife much louder than thunder, and cafts forth flames, with hot alhes and cinders, many miles distant; numbers of houses are sometimes destroyed, and people are killed by these eruptions. A fiery matter, called lava, iffues from the mountain, and runs with a most rapid stream for feveral miles together, carrying away every thing before it till it reaches the fea, which boils and hiffes in an affonishing manner when the lava reaches it.

Suppofe we were there, Henry, do you think you fhould like to go up the mountain? What fay you, Charlotte? Had you not rather live in England, and be contented with what it produces, than go to live near a burning mountain, to enjoy all the fine things I told you of?

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There are numbers of these volcanos (as they are called) in the world; the largest we know is mount Etna, in Sicily. —When you are older you shall read a description of it in Brydone's Travels, which will astonish and delight you.

I am entirely of your mind, Charlotte; were I to go into that country, I should endeavour to get courage to view it near, but should approach it with trembling steps. But you must not think that these mountains were only made to frighten and destroy people. Like all things elfe, they have their use. There is fire within the earth, which, if it had not places to vent itself at, might do greater mischief, nay destroy the earth entirely.

The perfons who live on thefe mountains enjoy life as well as others; and, as there are generally fome years between the eruptions, they plant vines and other things, which prove very fruitful; and

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the mountain ufually fmokes, or they hear noifes from it, which fhew that it is near burfting, fo they fometimes fave themfelves from the danger by removing for a time.

When you are older, Charlotte, you shall read books of travels, which defcribe what is worth observation in every country. Perhaps Henry may be a traveller himfelf, for you know gentlemen often make the tour, as they call it, and it is very right they should fee the world, if they take care to get fufficient knowledge before they go, to enable them to make proper observations; but for an ignorant person to visit foreign countries is only to expose his own shame wherever he goes; because every one who sees a gentleman that has left his own country to vifit theirs, naturally inquires what he

is; and fhould they find him deficient in knowledge, he would deferve to be laughed at and ridiculed; but, fhould he prove fenfible and well-informed, his company would be fought for, becaufe he could give an account of places and things which they have never feen; and would be refpected and honoured.

The language which people in Italy fpeak is Italian, and it is very fashionable to learn it; besides, if travellers reside there long, they muft be at a great lofs without it. The French indeed, is a language which almost all nations learn: therefore, if a perfon knows it he may find fomebody or other in most places with whom he can converfe; and if they understand Italian (or the language of the perfons in that country where they are), they may explain to the Englishman what the Italian lays, and to the Italian what the Englishman fays; this is called

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interpreting. But who would wish to be fo troublesome to others, when by a little pains and application he may learn all the languages himself, and be an accomplished gentleman?

I think we have ftaid long enough in Italy, Henry, and am afraid you are tired; fo take leave of the world for tonight, eat your fupper, and go to bed; to-morrow I will tell you more. Good night, Charlotte.

TACING STREET

Well Henry, how did you fleep? Did you dream of the myrtle hedges and burning mountains? I fuppofe you would like to have a full defcription of every country in the world; but I hope you will one day be fond of reading, then I fhall furnish you with books, which will make you acquainted with a great deal; from them you will learn that fome people in

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the world are black, others have coppercolour complexions: that every country produces fomething that does not grow any where elfe; that fome parts of the world are hot, others exceffively cold; but every climate agrees with the natives, that is, those who are born there, better than any other would do; and the people in one land make themfelves as happy as others who have greater advantages, ufually thinking their own country the best in the world, and would not change it for any other.

You are an Englishman, Henry, fo you must love England the best; and, if you travel all the world over, you will never find a better country. Here we have neither such piercing cold, nor such fcorching heat, as some countries are subject to; we have plenty of corn to make bread; barley to brew beer; wool to spin for clothing; flax for linen; the

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best roast beef in the world, and many other comforts. And we have artifts and manufacturers to make every thing we actually stand in need of; in short, Old England is a very defirable place, and here your friends live, fo that I make no doubt, my dear boy, you will return from your travels with great pleafure, tell us, who ftay at home, what wonderful things you have feen, and love your native land better and better. But you must not despise the people of other countries because they do not speak, act, and drefs, as we do, for to them we appear as ftrange as they do to us.

I must now tell you a little about the fea. You know I faid that between the different kingdoms on the earth there are vast hollow places. Pray observe this large space on the globe; it is called the

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great southern ocean. You have seen a fish pond, which is fo deep, that if a man flood at the bottom, the water would cover his head; but that is no more than a cup-full, in comparison of this great ocean. Only look what a fpace it covers on the globe; then caft your eyes to those parts of the land which ftand for the greatest kingdoms. Obferve, the fea is by far the broadeft; it is fo deep in many places, that you cannot get a line long enough, with a piece of lead tied to it, to reach the bottom. When the wind blows very high it drives the waves up like great mountains of water, which roar, and make a frightful noife by their motion. Sometimes thips are driven about to by the winds and waves, that they are thrown upon rocks, which are a fort of ragged hills in the fea, as hard as stones, some of them of an enormous fize, even above the furface

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of the water, others concealed under it. All fea water has falt in it, which may be feparated from it by boiling; falt is fo ferviceable to us, that, after having been accuftomed to it, we fhould not know what to do without it, particularly for meat, which, by being well rubbed with it, may be kept many months.

The reafon that the fresh water in rivers does not spoil and grow good for nothing, is, that it keeps running continually from the fountain-head, that is, the place in the earth it first springs from, towards the sea; and where there is a tide, as you know is the case in the Thames, it is owing to the ebbing and slowing of the sea, which seads the water of such large rivers back again every day.

The fea is in conftant motion; and you would think it very affonithing to ftand on the fhore, and behold how ma-

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jeffically its mighty waves follow one another, rolling with a folemn and pleafing noife; gradually advancing till they gain confiderably on the fhore, and when they have reached the bounds allotted them, and it is high-tide, they retreat in the fame manner to vifit the oppofite fhore.

Philofophers tell us that it is the moon which influences the water, and occafions the ebbing and flowing of the fea; and I fancy you will be of their opinion when you are old enough to underftand Mr. Nicholfon's Introduction to Natural Philofophy.

Henry wifnes to know where all the water that fills the fea comes from. Indeed, I cannot tell; perhaps it may fpring out from the middle of the earth: I rather think it does, and that there is a great collection of water there; but it is of no confequence to us to know that; we are

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certain that it of the greatest use to us, and we can see enough to admire in it, without searching for its source.

If the hollow places had been left empty, inflead of being filled up with water, how frightful they would have appeared! It would have been impoffible to have got across to any part whatever. You think we might have had wings to fly over, Charlotte? Why, I must own, that when I have feen the little feathered race foaring over our heads, and fporting about in the air, I have been tempted to wish for a pair of wings myself; but when I confidered how large they muft have been to have carried fuch heavy bodies as ours, I am apt to think we should have found them very troublefome incumbrances, and am fure we are better without them. But had there been those immenfe abyffes I was talking of, and we could have contrived to make a clever

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pair of wings, we could not at any rate have flown far without refting, and therefore muft have tumbled headlong, and been dashed in pieces.

Befides, had there been any fifthes they must all have died, because they can no more live out of the water, for any confiderable time, than we can live in it; and now there are various kinds, as many, perhaps, as equal the number of the different forts of living creatures on the land. Some fo aftonifhingly large that I know not what to compare them with; others as minutely finall; many extremely beautiful, others frightful to behold; fome of them are most delicious food, and are caught in great quantities with nets. The turbot we are to have for dinner to-day came out of the fea, and fo do foals, whitings, cod-fifh, falmon, lobsters, and many others.

Should all fishes keep in the wide

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ocean, there would be but few caught, and none but failors would eat them; but they come in fhoals to the narrow parts of the fea near land; and filhermen, whofe business it is, go out in boats, throw nets into the fea, and catch them: then fome are fent to all great towns, and from thence fold to every place to which they can be carried before they are tainted or spoiled; some again, such as the cod, on the Banks of Newfoundland, are caught with a hook and very long line; a bit of fith, or red rag, is fastened to the hook, and lerves as a bait to entice the fifh to it. They are then falted, and fent in thips to different parts of Europe, which furnishes employment for a great number of failors, and is an extensive and profitable branch of commerce.

If we did not eat filhes, the larger kinds would, for they prey upon one

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another as birds and other animals do. In books of natural hiftory there are many entertaining things concerning fifthes. Only think what pleafure you will have, Henry, when you can fit ftill long enough to read them, and are fufficiently improved to be able to underftand them! In many of those books there are pictures of what they defcribe.

I forgot to tell you that fifthes have no legs. You know it. Oh! I beg your pardon, fir, I did not recollect what a man I was talking to; give me leave to inform you, however, why they have not; becaufe they have no ufe for them, and would find them very troublefome; their fins anfwer the purpofe of fwimming much better.

Many fiftes have very fharp teeth, others thorns at their fides, and various

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weapons of defence; and, instead of elothes, are covered with scales which the water cannot penetrate.

There are many things growing at the bottom of the fea, called fea-weeds, I have a picture in my dreffing-room made of them; you have often admired them, Charlotte. Indeed, they are extremely curious: the files, I fuppofe, eat them.

Befides those I have been speaking of, that swim about, there are numbers of shell-fish. That cabinet which stands there is filled with shells: it contains a great variety, but there are many other kinds. Some are much larger than any here; others you see fo small that you could not perceive them unless they were laid on white paper; and yet in the microscope they would appear to as much advantage as the infects did. Observe what curious shapes and variety of colours! I know, my dears, you admire

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this beautiful collection, and well you may! every one of thefe fhells formerly had a fifh in it; it ufed to come part of the way out, as you have feen a fnail do, and draw back again at pleafure: they generally remain at the bottom of the fea, but fometimes ftorms throw them on fhore, where they are picked up and kept by curious people.

There is likewife coral, both white and red. Here is a bit of each: that beautiful yellow fubftance by it is amber; it makes elegant cabinets and other things; and the ladies in former days were fond of wearing necklaces of it.

All pearls come out of the fea too; there are quantities to be met with in a particular kind of oyfters; and people, called divers, have the fkill to fink themfelves to the bottom of the water, and, L 3

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by means of fome ingenious contrivances to fupply them with air, are able to ftay long enough to get a great many pearls, which they tell for a great deal of money; and those who can purchate them think themselves very fine when they are adorned with them.

People of fortune should have handfome clothes, jewels, and other ornaments, becaufe it is very right for them to drefs better than their inferiors, who could not afford fuch things, as they find it hard to get money enough for the bare neceffaries of life; therefore, perfons who have plentiful fortunes ought to encourage labour and ingenuity, by laying out fome part in buying what others fell and make, to procure themfelves and families a livelihood; but it is very wrong in any to value themfelves on riches and fine clothes, for they fhould confider that gold, filver, and jewels, come out of the

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bowels of the earth, and that they could not make, nor probably find, any of them; that their finest filks are from the entrails of a little crawling worm, and that after it is fpun they could not use it till it had gone through the hands of many poor workmen. What would the rich do without the poor? Could they make their own shoes, build their houses, plough their fields, fell their timber trees, shear their sheep, and a hundred other things abfolutely neceffary to be done by fomebody? They should therefore learn to behave with kindnels and condefcenfion to the industrious, and remember that the meanest artificer, if he discharge the duties of his station, is preferable to themfelves, unlefs they are diffinguished as much by their benevolence and greatnefs of mind as by their rank and riches.

Neither should the poor ever forger

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how much they are obliged to their fuperiors, and how much they depend upon them, but treat them with all poffible respect, and never envy them; for as they have no money nor land of their own, they must perish for want of neceffaries unless they could obtain some by their labour. If they are fo fortunate as to be paid for what they do, they can purchase what they want with the money; you know, and may, in their humble condition, enjoy an equal fhare of happinefs with the rich, and avoid many anxious cares and dangers, to which an elevated station is frequently exposed.

I dare fay you did not think there were fo many curiofities at the bottom of the fea, nor fhould we ever have known it, but by the invention of fhips, which was a very curious and uleful con-

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trivance. Fine china, muslins, calicoes, fpices, and other articles, are brought from the East Indies in ships, which carry back in exchange what our own country produces; they also convey to England vast quantities of tea, which is a plant that grows in the East Indies in great abundance; the leaves of it are dried upon plates of metal heated; this makes them curl; then they are packed in boxes and canisters, and sent to different parts of the world: But a good bafon of milk, or tea made from herbs, which our own gardens fupply, are, in my opinion, greatly preferable, and much more wholefome.

From the Weft Indies we get fugar, which is produced by boiling the juice of a particular fort of plant called a fugarcane; the inhabitants have large plantations of it, which bring them in a great deal of money; but the poor negroes, who are employed to work in the plantations, undergo fevere hardfhips.

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Negroes are black people; many perfons in England, you know, have them for fervants. Abroad they toil like horfes, and are frequently much worfe ufed, which is a very barbarous thing, for they are men as well as their mafters, though they be of that black colour; but how much does it pain me to tell you that this inhuman commerce, which puts thefe poor creatures into fuch a dreadful fituation is carried on by Englifhmen, and even authorifed by our own laws.

From Spain we get oranges, lemons, nuts, almonds, figs, and raifins, (which laft are dried grapes;) from Lifbon the fame, and, befides those articles, a great deal of wine. If there were lefs of that it would be better; for many people drink fo much of it as to hurt their conflitutions. Would they make it a rule to drink only when they were thirfly or weary, and leave off drinking as foon as

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they were refreshed, they would preferve their healths, and might perhaps live many years longer.

I could mention the productions of other countries, but do not intend to travel round the globe with you. I shall only tell you that there are many things valuable and worth observation in every part of the world; and those which you have no opportunity of seeing, you may read of in books, which will give you much better accounts of them than I am able to do.

You find, my dears, what great use fhips are of, but how fhall I make you understand the nature of a voyage; I will take you both to Mr. Wilfon's where you will fee a model of a ship; that is a little thing made exactly like one, only considerably less, as you will judge by the

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figures which reprefent the failors. Mr. Wilfon will explain the mafts, fails, ropes, and other parts, which I am totally unacquainted with.

When a voyage is to be taken, the ship is first perfectly repaired, if it be not a new one, fo that it may effectually keep out the water, and not fink. The fails and masts must be in exact order, strong, tight, and whole, that they may be able to fland the force of the winds; then they lay in a great quantity of bifcuits, as bread would foon get mouldy; feveral casks of fresh water, for that in the sea is very nauseous; some barrels of falt beef and pork, because they cannot get fresh meat when they launch out into the wide ocean, and leave the fields and meadows behind them. They carry as much garden stuff too as they conveniently can; when it is gone, they are obliged to make shift without, till they land somewhere to get a fresh supply.

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A ship which goes on a trading voyage, besides a stock of provisions, takes in her cargo, that is, the goods which the owner proposes to fell in foreign countries; fuch as wool, watches, hardware, I mean knives, sciffars, various kinds of tools, and numerous articles, which other nations are glad to purchase from England, becaufe they are made better here. Every ship requires a certain number of men, fome more fome lefs, according to the fize of the veffel; for there is always a great deal of work for them to do, especially in ftormy weather. One time all the fails must be spread in order to receive the wind, at other times all must be furled, or taken in, to prevent the veffel's being overset by violent squalls of winds. They have large iron things on board called anchors, with very great ropes, or cables, which are tied to them, and fastened to the vessel, and when they

want to keep the ship in a particular place, they cast them into the sea, where they can reach the bottom, and they flick into the ground and fasten, so as often to preferve the ship from being loft. Somebody on board is obliged frequently to keep letting down a line with a large leaden plummet that they may know the depth of the water. A man stands at the helm, with a compass before him: the helm turns the rudder, by which means he can steer the ship to any point of the compass he pleases, according to the directions he receives from the officer who commands the watch.

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When the veffel is perfectly fitted, and ready for her voyage, the captain is impatient to be gone, and keeps himfelf and all his jolly tars in readinefs to fail with the first fair wind; but I believe I must inform you what I mean by a Fair Wind. Let us just step out of doors.

Now look forward ! that is east, behind you the west, on the right hand the fouth on the left the north. Now, you know, that when the wind blows behind you, it forces you along; when you face it, if very high, you can fcarcely stand against it; but it does not always blow the fame way: let us go in and look at the globe. Here is the eaft, west, north, and fouth: now if they want to fail to a country which is north, they must have a fouth wind to blow them along; for if the wind were in the north, it would be impoffible for them to get forward; fo that fometimes a voyage is made much longer than it would-have been, from the wind's changing about from one corner to another, which often obliges them to go to other places if it blow very high; but they are not obliged to return for every change of wind, because the art of navigation teaches the failors a method M 2

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of managing the ship, so that they can get on by crossing backwards and forwards, though if it blows right it faves them a great deal of trouble.

It is a very furprifing thing to think of, but it is really true, that in fome parts of the fea the wind will blow conftantly for months together, every year, the fame way, which enables ships to reach the places they are wanted to go to; and then the wind turns and blows the direct contrary way, which brings them back again: therefore people contrive these voyages fo as to endeavour to get to those parts time enough to have the benefit of them: They are called trade winds, or monfoons, and thefe arrows on the globe fhew the particular parts of the ocean they blow in.

When people are upon the wide ocean, they are frequently whole months together

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without feeing any thing befides sky and water, excepting what their own ship contains. Look here, for instance, in the middle of the great fouthern ocean: it is very diftant from the land, and the are no paths marked out on the furface of the water, to shew the nearest way to any place; but those who have been there formerly have kept exact accounts of the rocks they escaped, the little islands they met with, and other particulars, which ferve those who come after them, as fome rule to go by; for there are maps or pictures called charts, made of those parts of the fea, which people who fail that way carry with them; by which means they know how to escape rocks, quickfands, whirlpools, and other dangerous things which are defcribed to be in particular latitudes. You must at present be contented without an explanation of the word latitude; you M 3

will know all about it when you learn geography.

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But, after all their clever contrivances, they would be utterly at a lots without a compais on board, which is an inftrument that looks like the dial of a clock, only, instead of the hours, they put east, weft, north, fouth; in the middle comes up a little spike, upon which is a needle that has a fmall hole in the middle of it, to receive the little spike, upon which it hangs very lightly. This needle must be rubbed on the loadstone, which gives it the remarkable property of pointing always to the north. One of these compasses is fixed on board every ship, and when they look at it, they can tell where the north is, and order the ship accordingly; because they can either fail towards the north or from it as fuits their purpose. But I shall soon get beyond my knowledge here, Henry, and muft

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own myfelf a very indifferent failor; fo I have done with navigation; but muft fay a little more about the loadfione or magnet, as it is certainly a moft wonderful, as well as ufeful thing.

The loadstone is hard, very much refembling iron, and ufually found in mines with that metal. It attracts or draws iron or fteel, fo as to make them flick to it. If you rub those metals upon it they will attract alfo, though in a lefs degree. Here is a magnet, with two pieces of fteel fixed in it; they are called its poles; one the north, the other the fourh. Now let us fee what effect they will have on these needles which we work with; I will lay them on the table. Hold the magnet over them; fee how they jump up; you would think they were alive; but it is only that the load-

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flone draws them; they would lie flill enough if there were no loadftone near them. Now, take notice, I will touch two others, one at each pole. If I attempt to bring that which has been touched by the north to the fouth pole, it will drive it away, and fo of the other, which is called repelling it.

I will give you this pretty little magnet, Henry, which I have got in a cafe. It is only a piece of fteel, that has been rubbed in the manner I faid, but will divert you very much. How the loadftone performs all this I cannot tell, any more than I could inform you where all the water in the world comes from; but there are many things we fee that we have not wifdom to underftand perfectly; happy is it that we can learn fo much as we do !

Don't you think, Henry, that it is very entertaining to hear of all these

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wonderful things which I have been telling you of? and will you promife me to endeavour to remember them? You will be enabled to inftruct William by the time he is as big as you are now; and will not that give you pleafure? Now you may go and amufe yourfelves; I have a hundred things more to tell you, but would not tire you with too many at once; fo adieu for the prefent.

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Well, Charlotte, I fee, by the preparations you have made, that you intend to folicit me for a walk. It will be equally agreeable to me after the heat of the day, and our little beau will, I make no doubt, attend us. Come hither, my charming little fellow ! you are fo goodnatured, Henry, and fo attentive to my inftructions, that I am happy to have you by my fide. Charlotte and I are going to walk in the fields, and could not bear to go without you, though I fear we fhall be obliged to make you fit up beyond your ufual hour.

We will first walk up this shady lane, where we may gather batchelor's buttons, and numbers of other flowers, which were blown the other day; there will be fresh ones continually till the summer is over.

Who will get over the fiyle firft? The gentleman to be fure, and then he can hand the ladies. Take care ! take care ! Henry, do not be in too great a hurry, left you tumble, and that would be a fad difafter to fee our beau rolling in the duft. Now we are all fafe.

What a delightful prospect is here! How rich the earth looks with the beautiful mixture of pastures, where the flocks and herds are feeding, and cornfields almost ripe for harvest, which promise bread for thousands! How cool

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and refreshing does that river look, winding along amongst them. Then that majestic wood ! where grow oaks, which perhaps, will one day be made into ships, and plough the ocean to bring us treasures from distant lands. But above all observe the glorious sun ! he appears to be now finking in the weft, but to-morrow will thew himfelf in the eaft. I think I have never told you any thing about him, and indeed I fcarcely know whit to fay, because many particulars which are known concerning him you could not at present be able to understand. However, you may depend upon it, that I will never tell you any thing but truth, and if you do not comprehend me now, you undoubtedly will, when it shall be repeated to you fome time hence, when your understanding will be improved. You must endeavour to gain a little

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knowledge every day, and in time you will have a confiderable share.

Well, the fun then is fupposed to be a very large globe of fire but different from any that we know. It is thousands and thousands of times larger than the world you live in. It keeps every thing that grows alive by its heat; for in all plants and trees there is a juice called fap, which if the fun did not melt it, would be fo thick that they would not fhoot out. You know, that in the winter all the leaves drop off the trees, and there are no plants or corn growing; that is because the fun shines but little at that time of the year, rifes late, and fets early, fo that the earth has but little of its heat, to what it has in the fummer, when it appears by four o'clock in the morning,

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and we do not lofe fight of it till eight at night. The fap has not time to get thick in those short nights; besides, the air, though cooler in the night than in the day, retains a great degree of heat, and is not like the chilling cold of winter, even at noonday. I faw you very curious the other day, Henry, examining the carpenter's glue-pot when he was at work in the house. Did you not obferve that the glue was very thick before it was put on the fire, but when it had been on fome time, it melted and became quite thin? Now we may compare the fap in the trees to glue, becaufe like, that, it requires heat to melt it. If the glue-pot should be put on a fire, and taken off foon, it would not be much melted, and if it flood off a long while would be quite hard; but if you fet it on long enough to diffolve it entirely, and keep it from the fire but a little

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while at a time, it would never get cold and thick. In the fame manner the fap is affected by the fummer and winter. The continued heat of the fun in the long warm days diffolves it fo entirely, that it cannot get thick in the fhort nights, and, on the contrary, in the fhort cold days it does not receive warmth enough to melt it.

Winter is a dreary unpleafant feafon, though of very great ufe, as it prepares the earth for the growth of the various fruits which the other feafons produce, and in its turn is exceedingly beneficial to our healths, though, were it to continue always, we fhould be in a terrible fituation; but as it is only for a little while, we do very well, becaufe there is plenty of provision, both for man and beafts, laid up in barns and ricks. There [147]

are coals and wood to make us cheerful fires, and there has been wool enough taken from the sheeps' backs to furnish us with flannels and other warm clothing. When we have felt the pinching cold of this uncomfortable feason, we are the better prepared to enjoy the lively one that follows. How agreeable it is to fee the trees which have been ftripped of their leaves renewing their verdure; to behold the little crocufes and fnow-drops peeping out of the ground; to hear the little warblers chanting forth their notes as if they were finging fongs of joy; and to observe the poor people come out of their cottages with cheerful looks to purfue their daily labours, now no longer hindered by winter's froft and fnow, which must have been dreadful to those who could not afford themselves good fires and warm clothing.

I am going to tell you a very fur-N 2

prifing thing, Charlotte. I dare fay you think the fun goes round the earth. It does not, I affure you; it is fixed, and the world goes round it once in a year. Before they difcovered how large the fun is, people thought as you do; but now we might as well fuppole (as Mr. Ferguson faid) that if you had a fowl to roaft, it would be necessary to keep a great fire going round it, while the fpit remained immoveable. No, I think indeed, if the earth wants fo much affiftance from the fun, it is very well worth while to travel for it; and thus the matter really is ordered.

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But we must begin to think of returning, for there is dew on the grafs, and I fear we shall wet our feet and catch cold. This dew is very refreshing to the earth, and as acceptable as a glass of water to you when you are thirsty. [149]

There is as I told you, a great deal of water, in the earth, but in summer, it lies very deep, and could not get up of itfelf to moiften the plants; however, the heat of the fun draws it, and when he fets, it falls and fupplies the want of rain, of which you know there is but little in the fultry weather. Much of it would do harm; spoil the hay, beat down the corn and a hundred bad things. After all the crops are got in, it is very neceffary to make the earth fit to receive the feed, and to help it to grow afterwards; for were the ground to continue always as dry as it is now, there would be great difficulty in breaking and turning it up with a plough, and the feed, when fown, would not fwell at all however, the fun not only draws moisture out of the earth, but much more out of the fea, which goes up high in the air, and gathers into clouds, that are driven about

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by the winds till they come over different parts of the land; and when they are too heavy, they break, and fall down in showers. You may have some idea of this, if you put fome boiling water into a tea-pot, and cover it with the lid. When it has flood a little while, if you take the lid off, you will find drops of water withinfide. The heat which the fire left in the water caufed them to rife up. In the fame manner the fun acts in respect to the sea, and perhaps the fire that is withinfide the earth may heat the water at the bottom, and help to make the vapours rife.

I fhall make a little philosopher of you, Charlotte ! I do not mean, my dear, to excite a defire in your mind of entering too deeply into the study of these things. I would only have you read fome easy books on the subject, that you may not, like the ignorant common

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people, think the fun a little thing, the fize of a plate, and placed in the heavens only to be gazed at. I am glad we are almost at home, for it begins to be very cool, and I imagine you wish to go to reft. To-morrow evening we will once more look at our globe.

Oh! you are come to claim my promife which I fhall gladly fulfil. Now for the globe. I told you that the fun remains always in the fame place, and that the earth goes round it once in every year; befides that, fhe turns round every day. You think it ftrange to move two ways at once. Not at all. You can do the fame, I am fure; you may keep turning about, and contrive fo to change your place every turn, that you can get from one end of the room to the other by degrees. What I want to convince you

of at prefent is, that the earth's turning round is the caufe of day and night; you must therefore suppose this candle to be the fun standing still. Now, I will put a little pin in the middle of this fide of the globe next the candle, another in the fide which is turned from it. When I turn the globe about, the fide which is now dark will be enlightened, and the light fide will be in darknefs. This is a reprefentation of what happens to the earth every day and night. These places on which the fun fhines have daylight; those on which it does not shine are in darkness: by this means all parts of the world have the benefit of the fun's heat to warm and ripen their feveral productions; and likewife to refresh the earth, plants, and animals; for you know it is after the fun difappears in the evening that dews fall. The parts of the earth which are reprefented here where the wire

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comes out, are called the northern and fouthern poles. They are very cold places; for fometimes the fun is not feen there for feveral months, and then they never lose fight of him for feveral more. The reafon of this you will be told when you are taught the ufe of the globes, for which I will procure you a more able inftructor than myfelf. I shall only tell you that the abfence of the fun is not fo great a misfortune to those people who are subject to it as it would be to us; because those countries where it happens do not produce the fame things which England does; and all that grow there naturally are fo formed as to be able to live in that climate. The inhabitants are as happy as we; they work hard in those months while they have day-light, and lay up ftores for their long winter, when they dance and fing, and are as happy by [154]

torch and lamp-light as our country lads and laffes when they celebrate harvefthome, enlightened by the mild beams of the fetting fun.

In the laft-mentioned countries they catch whales alfo, which I must give you fome little account of.

They are fifhes of an enormous fize. I have read of fome two hundred feet long. You, Charlotte, know how much a foot is, but Henry does not. This piece of ftring is a foot long. You can count a hundred; one, two, three, four, five, &c. very well; only think then of a living creature two hundred times as long as this piece of ftring! What large eyes he must have! And such a throat, that he can swallow a man up at a mouthful; and yet this creature may be overcome, and vast numbers of them are

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killed in Greenland, particularly by people who go from Holland. Find Greenland on the globe. This is the frozen fea; fo called becaufe there is generally a great deal of ice in it. The air of this place is fo cold, that one would think nothing could induce people to venture thither; but many do, for their voyages are very profitable. They have a particular kind of veffels on purpole for whale fisheries; and when they fee one they immediately throw a fort of dart at him, called a harpoon, which flicks in, and wounds him, and then he finks under the water with the harpoon flicking in him ; but there is always a ftring tied to it, with a large gourd fastened to the other end; this floats on the water, by which they know whereabouts the whale is, and wait for his rifing up again, when they are ready to ftrike at him with their harpoons, till with repeated wounds he

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dies. When they have killed him, they lafh him to the fide of the veffel, or find means to drag him hard on the ice or fhore, and cut him in pieces and put his fat into cafks, which they boil and make oil of, and fell it for a great deal of money when they return home, for it is ufeful in dreffing feveral forts of fkins, likewife wool, and in a hundred other things.

The people who live in that cold country, where I told you they continued for feveral months without the light of the fun, burn this oil in lamps; and it is quite a treafure to them.

The large whales have two monftrous tufks, fometimes fifteen feet long, which rife out of their jaws, and ferve them to gather the weeds together, upon which they are fuppofed to feed: Thefe tufks are fplit, and made into what we call whalebone; which is like wife fold to great

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advantage; for it is used in stays, whips, and many other things. The inhabitants of these countries catch a number of wild beasts, and make very comfortable clothes for themselves of the stars.

I hope you perfectly understand me, my dears, in respect to the earth's turning round. You do, you fay, Charlotte; but Henry looks a little doubtful. You think if it were fo you should tumble off. No, you would not: for there is fomething in the earth which draws you towards the ground in the fame manner as a loadstone draws iron and steel. Pull your magnet out: take up this needle: there, see, if you turn it round an hundred times it will not drop off; and if you pull it away, it will fall towards the magnet again. So if I were to hold you up high, and let you go, you would

tumble to the earth, because it draws you. The steel of which the magnet is made is hard, and therefore the needle cannot enter it, but flicks to the outfide; the furface of the earth is likewife hard, or we should be all drawn into it The needle has no life in it, therefore cannot move about on the magnet, or it might go all over it, becaufe one part does not draw any ftronger than another. We, you know, are alive, and therefore can change our place upon the earth; but were we to attempt to fly into the air, we should certainly tumble down; and not only people, but every thing on the earth, is affected in the fame manner. If we ride upon a horse we are still attracted, but his body fupports us from falling to the earth, because it is impossible for us to tumble through a horfe; but if by any accident he shakes us off, down we come to the ground immediately.

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You wonder we do not feel the earth move. Why, do you think this little fly which flands here on the globe can feel that move? I dare fay he cannot, but feems to himfelf to ftand quite still while it is turning round; for all that he fees about him are moved as well as himfelf, and therefore he remains in the fame place on the globe. Could he be taken in a moment from this part of the globe to that, and had the understanding of a man, he would be convinced that it really does turn round, because he would find the face of the fky perfectly changed; for, suppose he was removed at midnight, when the moon was shining, and the stars glittering in the heavens, he would, to his aftonishment, find himfelf in broad day, enlightened by the meridian fun.

But till you are older you cannot underftand much about the ftars; and, indeed, I know but very little of them

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myself; sufficient, however, to fill me with wonder and admiration. I am convinced, in my own mind, that it is poffible there may be thousands and ten thousands of funs and worlds, many of them much larger than this which we inhabit: it is as probable to me, as that we might roll thousands and thousands of marbles about different parts of this earth without their touching or coming in one another's way; becaufe I am fure there is room enough for them in the heavens; and I think, if you turn your thoughts that way, and read what has been written on the fubject, when you are old enough, you will be of the fame opinion.

What do you fay, Henry? Do you think that the people on that part of the earth which is oppofite us, fland at this time on their heads? Indeed, my

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dear, they do not: they have their feet upon the ground and their heads towards the fky. The trees, plants, houfes, and all, are the right end upwards to them. They cannot poffibly fall into the fky; it would be nonfenfe to fay fuch a thing.

The air we breathe in entirely furrounds the earth in the fame manner as peel furrounds an orange, or the shell a nut; but it is fo thin that you cannot fee it. You know that chocolate is not fo thin as water, and water is a great deal thicker than air; for we can fee that, but cannot see air. If it were not fo very thin we could not breathe in it. Every time we fetch our breath we draw in fresh air; if we drew in water in that manner it would drown us. When we draw in fresh air we throw out that which is become hot by having been in our body. Convince yourfelf of what I fay; put your hand to your mouth, and draw

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your breath; does it not come out warm? but the open air feels cool to your face. If there was no air we could not live; and if we could live we should not be able to breathe. Air is of use to us in an hundred respects, being necessary for the prefervation of all living creatures in the world. Even the filhes have air bladders, which are of infinite use to them. The trees and plants in general would die without air, and we should have no winds, which are very uleful, as I told you before, in respect to blowing the fhips along, and driving the clouds about, fo that they may break and fall in different places on the dry land, instead of returning back to the fea, from whence the fun draws the vapours that form them.

The wind is a great ftream of air; and though it fometimes does mifchief, yet it is of great ufe, as the air would become

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extremely unwholefome, if it were to remain ftill and motionlefs.

Now I have made you turn your thoughts to the fky, I must not forget the moon, for that is a very beneficial thing to us. She is not a globe of fire, like the fun, but fupposed to be like the earth we live in. All the light fhe has is borrowed from the fun, for the light goes from him to the moon as it comes down to us; and the inhabitants, if there be any living on the outfide, as we do, fee the light in the fame manner, and in all probability enjoy equal advantages with us, from his warm, refreshing beams. Could we be removed thither, our earth would appear to us like the moon, only larger. The moon and earth are both fo large and thick that the fun cannot fhine through them, but only make them look. bright, as even the candle will do any thing that it fhines upon, which could not be feen in darknefs.

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Take this gold watch, put it in a dark place, and it will not be feen; let the candle fhine upon it, and it will appear very bright, becaufe it receives the light; fo it is with the moon; we fee that part light which the fun fhines on. Sometimes it is but a very little crefcent, at other times a full round moon. The fun always fhines upon half of it at once; but it happens that part of that half may be turned from us. I can make you underftand this better by the globe than from any defcription.

We will fuppofe it to be the moon, the candle the fun, and your little round head, Henry, to be the world. Now you fee the whole of the light fide fronts you, but move the globe a little from the place it now ftands in, or move yourfelf, and

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part of the dark fide will be towards you. We can fee no more of the moon than that piece of the enlightened part which fronts us, that is like a half moon. Go round to the other fide and you will fee there is no light fhining on it; it appears very different from the other; and you would not fee it at all, only that the whole room is enlightened by the candle; but in refpect to the moon itfelf you can fee no part of that which the fun does not fhine upon, any more than you would fee this globe if the candle was taken away.

The eclipfe, which you were fo entertained with a little while ago, was occafioned by the fhadow of the earth falling on the moon, which always happens when the earth is in a ftrait line between the fun and the moon. You fee, if I place a fcreen, or any thing between the candle and the wainfcot, the fhadow of it will be feen on the wainfcot : there

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is the fh dow of my hand, put yourfelf, Henry, in this place, and we fhall fee your fhadow; as the light cannot fhine through you, you keep it from falling on that part of the wainfcot which is oppofite to you, which makes a fhadow, fo you make a wainfcot eclipfe.

I shall say nothing to you about the other planets, comets, fixed stars, milkyway, &c. because I fear they would puzzle your little heads too much at prefent. It grows very late. Henry how have you been able to keep your little eyes open so long! Good night!

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PART III.

THE rain will prevent our walking out to-day, fo come and fit with me, Henry and Charlotte, and let us have a little conversation together. Did I not tell you, my dears, that we fhould find much to amuse and instruct us while we were taking our walks, if we would but pay attention to the different objects which fhould prefent themfelves to our obfervation. And have you not really found the amusement and instruction I promised you ? And yet, my dears, you have had but a very flight view of the wonders which the earth contains, nor have I faid any thing to you of the highest creatures in it-I mean MANKIND, that race of

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beings to which you yourfelves belong. Yes, Henry, though you are now but a little boy, you are really one of mankind; and I hope, if you grow up to be quite a man, you will be a good one, and live according to the dignity of your nature. It is a great honour, I affure you, to be a human creature, that is, one of mankind; as you will be convinced when I tell you what mankind are, and what GoD has done for them.

Mankind, my dear children, are rational creatures, they have immortal fouls, and God defigned them to be angels hereafter, and to live happy for ever and ever in heaven. You know we have taken notice in our walks of many different kind of living creatures; fheep, oxen, horfes, birds, fifthes, infects, &cc. thefe are all called animals, and brute creatures; and very wonderful they are, in refpect to their make, and the various [169]

qualities belonging to them, from the least to the biggest, whether they move about upon the land, fly in the air, or fwim in the waters. But they are greatly inferior to mankind. In respect to their bodies, indeed, mankind are animals themfelves, and greatly refemble the inferior animals, for they have flesh, bones, blood, eyes, ears, feet, and the fenfes of feeing and hearing, and they move about from place to place; but mankind are more noble in their form than the inferior animals, and by walking erect they have a more majestic appearance; they have alfo the faculty of fpeech, by means of which they can converse together, and make their thoughts and wifhes known to each other in a great variety of languages, while the inferior animals are dumb; they can only utter a few founds peculiar to their respective kinds, to call their young, and express their fears and

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fufferings, when they are in danger, or greatly hurt. Some particular kinds of birds, fuch as parrots and magpies, may, it is true, be taught to pronounce a few words without knowing the meaning of them; but no creatures in this world befides mankind have the faculty of fpeech, fo as to converse together. But, my dear children, the great difference betwixt mankind and the inferior animals confifts in their having immortal fouls. The foul is that part of a human creature which thinks. You wifh me to describe the Soul to you, Henry; this, my dear, I cannot do, any farther than that it is of a spiritual nature, and confequently invisible, for a spirit has not bodily parts, and therefore cannot be feen with the eyes; but I am convinced that I have a Soul by what paffes within myfelf, and that human creatures have Souls by what I observe in other people.

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Do not each of you, Charlotte and Henry, find that there is fomething within you which thinks! that is which concrives, refolves, recollects, and remembers? Are thefe things done by your bodies? Do you think with your eyes, your ears, your hands your feet, or any part of you which can be feen? What can it be then that thinks? Your Soul, to be fure.

It is by means of the foul that mankind have fo many ingenious contrivances; that they know how to make ufe of the different things of the earth; for inftance to convert iron into tools, to to build houfes with wood, ftone, and bricks; to make clothing of the flax of the field, and the wool of the fheep; to prepare food for themfelves, of milk, vegetables, and the fleth of beafts, and, in fhort, to do numberlefs things befides which the inferior animals cannot do,

And it is by means of the Soul, my dear children, that mankind are capable of knowing God, and of paying that tribute of prayer and praife which is due to the great CREATOR.

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I told you, my dear, that the Soul is immortal, and fo it certainly is, it will live for ever; the Body is condemned to die, but the Soul will remain alive to everlafting ages. Every human creature dies fooner or later; the foul leaves the body, and the body turns to corruption, but the foul cannot die, for the CREATOR has faid it shall live. The Soul then is by far the better part of us. Do not you think fo, Henry? I believe, my dears, I have told you as much as you can at prefent understand about the nature of the Soul, and I shall not talk to you now of its future state, because what relates to that important subject will be best learnt from the scriptures, which

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you will fhortly read. I hope the weather will be fine to-morrow, for I want to fay a great deal to you about GOD the CREATOR of all things, before you read his WORD, that is the BIBLE. You may now go to your ufual leffons, but I fhall rife early to-morrow morning, and you may come to me in my dreffing room as foon as you pleafe, to hear what I have to fay to you about GOD.

You are early visitors indeed, Charlotte and Henry; it is no more than fix o'clock, and you are already equipped for walking! however I am delighted to find that you are defirous of knowing your MAKER, and we will go in search of Him prefently, for the morning is favourable to our wishes, and every thing is very beautiful after the showers of yesterday; but first let me say a few words to you concerning that great and wonderful Being whom we call GoD.

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In speaking to you, my dear children, of GOD, I feel myfelf at a lofs to adapt my expressions to your tender capacities. The idea of God in his infinite perfections is too great for the highest human understanding, and were even the fentiments which at this moment fill my own mind to be communicated to yours' they would overpower you fo that you would be loft in wonder and admiration. Yet, young as you are, you may contemplate the Deity notwithstanding, for God has graciously made himfelf known to mankind under the endearing character of a Father. Yes, my dear children, the greatest and best of Beings allows all who believe in him, and are defirous to ferve him, to look up to him as a HEAVENLY FATHER, ready at at all times to do good to those whom

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he has created! Nay GoD does more: he first inclines the hearts of mankind to know him; it is from God that the defire which you now have to know him proceeds, and it is my part as a parent, to cultivate this good feed, which I will do most affiduously; listen to me then while I tell you as much as I think you are capable of understanding of the nature and attributes of GoD.

GOD, my dear children, is the greateft and the beft of Beings; he is almighty, moft wife, moft merciful, and moft holy. God formed all things from nothing; he can do whatfoever he pleafes. GOD knows all things, paft, prefent and to come; nothing can be hidden from him. GOD is in all places at the fame time, but he fhews forth his glory in a peculiar manner in heaven, where he has a glorious throne brighter than the fun, and is attended by multitudes of happy and

good fpirits called angels. God is perfectly happy in himfelf, and he is the caufe of happiness to all creatures who enjoy it in any degree. God created mankind, to be happy in heaven, and whoever shall miss of this happiness will do fo by their own fault, as you will be convinced when you read God's Word, which tells us what GOD has done for mankind, and what rewards he has gracioufly provided for those who obey him. Do not you wish, my dear children, to know that best of Beings who created you from nothing, has given you life, health, the use of your eyes, ears, and all your fenfes; who provides for you from day to day, and who has prepared for you in heaven an eternal inheritance which exceeds all that we can poffibly conceive or defire? Come then, and let us go and see the great CREATOR in his works-I mean, let us fee whether we

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cannot convince ourfelves that there is a God by the Works of Creation.

Before we examine particularly any of the works of GoD, tell me, Charlotte, whether you think the houfes which mankind inhabit could come into the form they appear in of themfelves? or do you think any creature not endued with reason could build them? It is true that birds, and beafts, and infects, make nefts and places for their young, and to shelter themselves from the cold; but without any great contrivance of their own, for all creatures of the fame kind make their nefts alike; you may know, for inftance, when you fee a bird's neft, whether it was built by a linnet, a magpie, or any other kind of bird ; and there is a great difference betwixt a houfe completely finished and the most curious bird's neft that ever was built; the fame may be faid of the habitation of the most

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fagacious of the brute creation. It is very certain then that neither birds nor beafts could build and furnish a house, and yet there must have been builders; nay, you have feen bricklayers and carpenters building houfes. You know for a certainty that houses are built by men; but did they alfo create or make from nothing the materials of which houfes are composed? Certainly not; trees, earth, ftone, iron, lead, and the materials used in building, are far beyond the art of mankind to produce; we must therefore look higher than mankind for a CREATOR : nay, my dear children, if we carry our thoughts ever fo high, and think of creatures vaftly fuperior in knowledge and power to the human race, we must come at last to one God, the CREATOR of all things, for creatures can neither make themfelves nor one another. But to prevent

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all our doubts, and fatisfy our minds at once, we are told by GoD himfelf, as you will fhortly read in the BIBLE, that in the beginning He created all things in heaven and earth. Now let us fet off. Which way shall we go? Up this shady lane, where we shall hear the sweet melody of the birds.

What have you got there, my dear Henry, a leaf? Do you know any man, Charlotte, that could make fuch a curious, thing as this? See how delicate the texture! how curious the veining, how delightful the colour! But obferve that there are upon the plant it was taken from hundreds of leaves equally curious, and flowers which are ftill more beautiful. What did all thefe fpring from ? A little feed which was put into the earth.

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And where did this feed come from? A bloffom of the fame kind, with thefe before our eyes. Let us carry our thoughts back to plants of this kind, which have fprung from the earth before it for thoufands of years, and we must come at last to a CREATOR, who made from nothing the first of the kind, with feed in itself, from which, in fucceffion from year to year, all the plants of this kind which have ever adorned the earth originally came; and this exactly agrees with what you will read in God's Word of the creation of trees, plants, and herbs of every kind : and it is the fame in refpect to all kinds of creatures, whether animate or inanimate, nay the earth itfelf; they must all have been formed originally from nothing. Do not you then, my dear children, perceive the hand of God in every little leaf and flower? Are you

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not convinced that if there were no GoD, there would not have been any of thefe things? or, in fhort, any thing that now exifts?

Let us ftop a little and liften to that fweet lark which is mounting in the air; how delightful his note, and how wonderful the ftrength of his voice! Do you not hear the nightingale alfo, the blackbird, the thrufh, and the linnet? What an harmonious concert! How perfect is each little fongfter in its part! Who has inftructed them to fing to fuch perfection? The almighty CREATOR, my dear children, has indued them with the powers of harmony, and they are impelled by him to ufe them for the delight of mankind.

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My dear Charlotte, did you not greatly admire the fine clothes and jewels which ledy Mary wore the other day when the was going to court? If I afk you who made and trimmed her drefs ? you will, tell me, the mantua-maker and milliner; and who made her jewels ? you will fay, Mr. Somebody the jeweller: but if you confider the matter you may trace every thing with which her ladyship was adorned to the CREATOR. Henry, I dare fay, can tell what little infects spun the filk of which the drefs was made, and where the gold and diamonds came from. The people who made use of thefe things were certainly very ingenious; but who created them and gave them understanding superior to the brute creatures? Here we find the CREATOR again, my dear children, nay, we may even find patterns for these fumptuous dreffes among the works of GoD; for,

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the highest efforts of human ingenuity are but faint imitations of the beauties of creation.

What little flying infect have you caught there, Henry ? take care you do not hurt it. Poor little flutterer, we will not detain you long, but pray let us look at your beautiful dress. Take this microscope, my dears, and look one after the other at this infect. Do not you perceive that it is adorned as it were with gold and velvet ; that its drefs is embroidered in a most beauti ul pattern ; that it is fringed with gold, and fpangled in the most delightful taste? Yet no mantuamakers, milliners, or jewellers, have been here employed! No, this delicate and complete creature came first of all from a little egg no bigger than a small pin's head; and the first of its kind was formed from nothing. Is not the hand of the CREATOR visible here also, my

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dear children? Were you not greatly delighted Henry, with the beautiful collection of coloured drawings of flowers, birds, and infects, which you faw the other day? Yet what were they, my love, but imitations of the works of God? They refembled flowers, birds, and infects, in nothing but their outward appearance; they had none of their qualities, they had no life; no one can give life but the CREATOR. And is not a growing flower, a living bird and infect far more excellent than the picture of it? And could mankind with all their ingenuity produce even this picture without fome part of the works of God? Even the materials for paper, paint, and pencils, are all furnished by the CREATOR.

It is to be fure a charming thing to have ingenuity, for it fets mankind greatly above all other creatures in the world, and they can make the different

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things of the earth useful to them in a variety of ways; and make the living creatures work for them, though they do not know it. The filkworm has no notion that he is fpinning dreffes for fine ladies, neither does the sheep know that his woolly coat will be converted into coats for gentlemen, and for clothing for the poor. It is well for mankind that they have REASON, or they would be fad destitute creatures; but the CREATOR has made all things partly for their use, and has given them dominion over the other creatures, as you will read in the Bible.

But there is one advantage above all, which mankind poffefs over the animal creation; they alone are capable of admiring the works of GoD, and of making a fuitable return for his bountiful goodnefs difplayed in the creation. Surely the Maker of all thefe wonderful things deferves praife, and those who are capa-

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ble of it should give him thanks ! Do not you think, my dear children, that it is a very great advantage to be capable of studying the works of God, and a very great indulgence to be allowed to view them ? You thought yourfelf much obliged the other day, when Mr. Thirkle shewed you his collection of curiofities, and allowed you to turn over the leaves of the large folios of natural hiftory, which had cost him fo much money; but the CREATOR is boundlefs in his indulgence; every garden, every field, is a collection of curiofities; and the creation itself (I mean the earth we tread on, the ocean which furrounds it, and the sky which is over our heads) forms the great BOOK OF NATURE, which proves the existence, the power, and the goodness of God in every page of it, and should awaken the gratitude of mankind for the numberless bleffings he has be-

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flowed upon them. What can we render to God for all the benefits we have received at his hands ? Nothing but our thanks. Do not you think, my dear Charlotte, that all who have leifure should study the great Book of Nature ? I hope, my dear children, you will both do fo to the end of your lives, and not flight the beautiful works of GoD, as if they were unworthy of attention. But there is still another book in which the goodness of God to mankind is more fully displayed, I mean the B BLE; from which you may learn how to worship your Creator, to please and obey him; but of this I will talk to you to-morrow.

Well, my dear children, have you been reading the Book of Nature, or have you in your morning walk paffed over Q4

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the works of God without examining any of them or bestowing a thought on their excellency? I judge not, by the collection which Henry has got in his little basket; plants, flowers, snail-shells, pebbles, and I know not what befides. Here are materials for study in abundance! and we will confider them all in the afternoon. But we have another book to talk about, fo the Book of Nature must be laid aside for the present. Here, my dear children, is THE BIBLE, GOD's best gift to mankind. I told you that the foul of man is immortal, and that Gon gracioully defigned mankind, when he created them, for eternal happinefs in heaven. This facred book instructs them what to do in order to obtain this happiness, for it cannot be thought reasonable that GOD should do so much for mankind without requiring fomething on their part, as he has made them capable

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of knowing the difference between right and wrong, and has given them powers and faculties by means of which they can pleafe and obey him.

Do not you, my dear children, with to pleafe that good and gracious Being, who has given you life, and beftowed fo many other bleffings upon you? Do not you with to be admitted to his glorious prefence in heaven, and to dwell for ever in that bleft place where there is nothing but joy and goodnefs? If you really have thefe withes, you must read THE BIBLE, and practife the leffons it teaches.

There is not in the whole world fuch another book as THE BIBLE, for it is really and truly the BOOK OF GOD, the HOLY SCRIPTURES. Men indeed were the writers of it, but they were infpired, that is, GOD himfelf put into their minds what to write; and it is full of wildom

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from beginning to end. This most excellent book, my dear children, was written for all forts of people; it is calculated to inform the ignorant, to improve the wife, to comfort the afflicted, and to increase the joy of the happy; it contains precepts fuited to people of all decriptions, from childhood to old age; it teaches the poor to be contented in a flate of poverty, and instructs the rich how to make their riches a bleffing to themfelves and others; and above all, it infructs every human creature how to think of God, how to pray to him, and how to thank him, and points out the means by which they may prepare themfelves for the fociety of angels in heaven.

When you come to read THE BIBLE, my dear children, you will be quite furprifed to find what the greatest of all Beings, who fills heaven and earth, who

is the Creator of all things, has done for mankind, for those finful creatures, who, as you will learn from the fcriptures, broke his commandments, and forfeited all the bleffings he gracioufly beftowed upon them. But I will not tell you in my own words what cannot be fully expreffed but in the words of scripture : you shall learn of God himself, in his Holy Word, what he has gracioufly done, and what he has been pleafed to reveal; but remember, my dear children, that you are not to read THE BIBLE either as a reading tafk, or as a book of amusement; but as the WORD OF Gon.

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Open the Bible and read the TITLE PAGE, Henry; you find, my dears, it is called the HOLY BIBLE, which is, in other words, THE BOOK OF GOD. It confift, you fee, of two principal parts, the Old Testament and the New Testa-

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ment; the first of these contains what Gon was pleafed to make known to mankind before the coming of our LORD JESUS CHRIST; the other gives us the hiftory of our Saviour's life and doctrine, and of the preaching of his Apoftles. The BIBLE is here faid to have been translated out of the original tongues. You know what translating is, Charlotte. THE BIBLE was first written in Hebrew, Greek, and Latin; and then it could only be read by the learned; but at length it was translated into English, which was a most happy thing for the nation. Do not you think, my dears, that it is a great bleffing to have the WORD OF GOD in the language we all understand? Now turn over leaf; this is no part of the Bible itself, it is called the epistle dedicatory : you would not underftand this if you were to read it, fo' turn over leaf again, Henry. THE BIBLE is

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a large volume; it was not all written by the fame perfon, nor at the fame time, but God inspired different people at different ages of the world to write the feparate books of which it is composed; and these BOOKS are divided into chapters, and the chapters into verses. Here you fee are the names of all the books as they follow one another in the Old Teftament. Here are the books called Apocrypha, which are reckoned as making no part of the Bible, because it is not known that the writers of them were infpired; but they are very pious good books: and here are the names of the books of the New Testameni, as they follow one another; these figures show the number of chapters each book contains. Look here, my dear Henry, this is the beginning of the first book of the Bible, called Genefis in the table of contents; here you fee is chap. i.

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and it is divided into verses; look down the left-hand fide of the page, and you will fee the numbering of the verfes from one to thirty-one. Now let us fee how many chapters there are in the Book of Genefis. What fays the table of contents? Genesis bath chapters fifty. Let us turn over and find the last chapter: fifty you fee. Which is the fecond book of the BIBLE? Exodus. Well, is not Exodus immediately at the end of Genefis? And you will find all the reft of the books agreeing with the table of contents. Do not you think, Charlotte and Henry, you fhould be a long while reading through fuch a great book as the Bible? You would indeed, my dears; and a hard tafk you will find it; for a great part of the fcripture is too difficult for children to understand; but it contains the most delightful and instructive histories in the world; and

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thefe I have got feparated from the difficult parts of scripture, that you might have both the pleafure and benefit of reading them : to-morrow you fhall begin with fome leffons from the Old Testament, which I will explain to you as you go on; and 1 truft it will please God of his infinite goodness to open your minds to understand the fcripture, and that he will gracioufly incline your hearts to do his Holy Will and obey his commandments, that you may enjoy his bleffing upon earth, and dwell with him in heaven hereafter.

THE END.

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