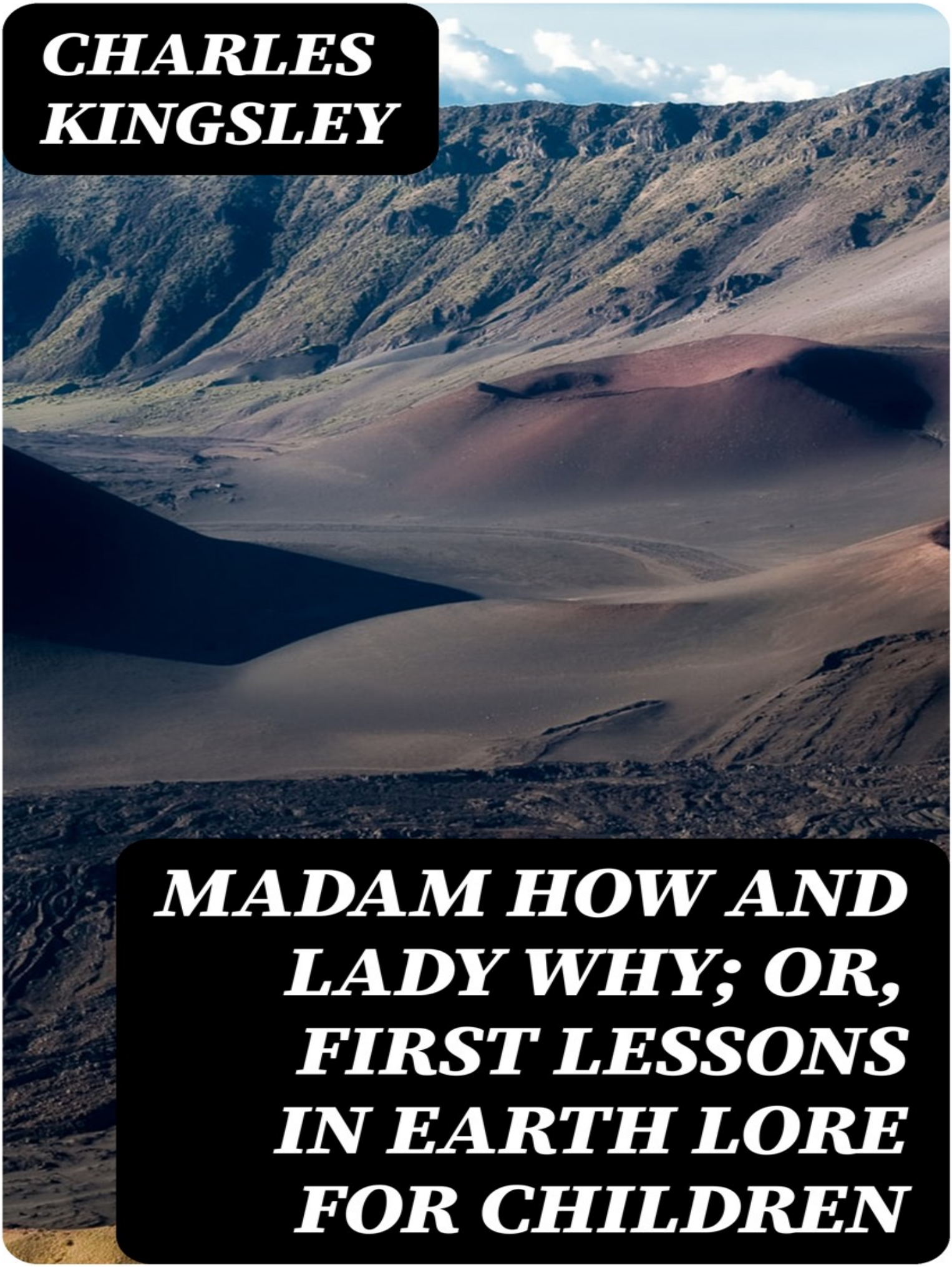
CHARLES KINGSLEY



MADAM HOW AND LADY WHY; OR, FIRST LESSONS IN EARTH LORE FOR CHILDREN

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PREFACE

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My dear boys,—When I was your age, there were no such children's books as there are now. Those which we had were few and dull, and the pictures in them ugly and mean: while you have your choice of books without number, clear, amusing, and pretty, as well as really instructive, on subjects which were only talked of fifty years ago by a few learned men, and very little understood even by them. So if mere reading of books would make wise men, you ought to grow up much wiser than us old fellows. But mere reading of wise books will not make you wise men: you must use for yourselves the tools with which books are made wise; and that is—your eyes, and ears, and common sense.

Now, among those very stupid old-fashioned boys' books was one which taught me that; and therefore I am more grateful to it than if it had been as full of wonderful pictures as all the natural history books you ever saw. Its name was *Evenings at Home*; and in it was a story called "Eyes and no Eyes;" a regular old-fashioned, prim, sententious story; and it began thus:—

"Well, Robert, where have you been walking this afternoon?" said Mr. Andrews to one of his pupils at the close of a holiday.

Oh—Robert had been to Broom Heath, and round by Camp Mount, and home through the meadows. But it was very dull. He hardly saw a single person. He had much rather have gone by the turnpike-road.

Presently in comes Master William, the other pupil, dressed, I suppose, as wretched boys used to be dressed forty years ago, in a frill collar, and skeleton monkey-jacket, and tight trousers buttoned over it, and hardly coming down to his ancles; and low shoes, which always came off in sticky ground; and terribly dirty and wet he is: but he never (he says) had such a pleasant walk in his life; and he has brought home his handkerchief (for boys had no pockets in those days much bigger than key-holes) full of curiosities.

He has got a piece of mistletoe, wants to know what it is; and he has seen a woodpecker, and a wheat-ear, and gathered strange flowers on the heath; and hunted a peewit because he thought its wing was broken, till of course it led him into a bog, and very wet he got. But he did not mind it, because he fell in with an old man cutting turf, who told him all about turf-cutting, and gave him a dead adder. And then he went up a hill, and saw a grand prospect; and wanted to go again, and make out the geography of the country from Cary’s old county maps, which were the only maps in those days. And then, because the hill was called Camp Mount, he looked for a Roman camp, and found one; and then he went down to the river, saw twenty things more; and so on, and so on, till he had brought home curiosities enough, and thoughts enough, to last him a week.

Whereon Mr. Andrews, who seems to have been a very sensible old gentleman, tells him all about his curiosities: and then it comes out—if you will believe it—that Master William has been over the very same ground as Master Robert, who saw nothing at all.

Whereon Mr. Andrews says, wisely enough, in his solemn old-fashioned way,—

“So it is. One man walks through the world with his eyes open, another with his eyes shut; and upon this difference depends all the superiority of knowledge which one man acquires over another. I have known sailors who had been in all the quarters of the world, and could tell you nothing but the signs of the tippling-houses, and the price and quality of the liquor. On the other hand, Franklin could not cross the Channel without making observations useful to mankind. While many a vacant thoughtless youth is whirled through Europe without gaining a single idea worth crossing the street for, the observing eye and inquiring mind find matter of improvement and delight in every ramble. You, then, William, continue to use your eyes. And you, Robert, learn that eyes were given to you to use.”

So said Mr. Andrews: and so I say, dear boys—and so says he who has the charge of you—to you. Therefore I beg all good boys among you to think over this story, and settle in their own minds whether they will be eyes or no eyes; whether they will, as they grow up, look and see for themselves what happens: or whether they will let other people look for them, or pretend to look; and dupe them, and lead them about—the blind leading the blind, till both fall into the ditch.

I say “good boys;” not merely clever boys, or prudent boys: because using your eyes, or not using them, is a question of doing Right or doing Wrong. God has given you eyes; it is your duty to God to use them. If your parents tried to teach you your lessons in the most agreeable way,

by beautiful picture-books, would it not be ungracious, ungrateful, and altogether naughty and wrong, to shut your eyes to those pictures, and refuse to learn? And is it not altogether naughty and wrong to refuse to learn from your Father in Heaven, the Great God who made all things, when he offers to teach you all day long by the most beautiful and most wonderful of all picture-books, which is simply all things which you can see, hear, and touch, from the sun and stars above your head to the mosses and insects at your feet? It is your duty to learn His lessons: and it is your interest. God's Book, which is the Universe, and the reading of God's Book, which is Science, can do you nothing but good, and teach you nothing but truth and wisdom. God did not put this wondrous world about your young souls to tempt or to mislead them. If you ask Him for a fish, he will not give you a serpent. If you ask Him for bread, He will not give you a stone.

So use your eyes and your intellect, your senses and your brains, and learn what God is trying to teach you continually by them. I do not mean that you must stop there, and learn nothing more. Anything but that. There are things which neither your senses nor your brains can tell you; and they are not only more glorious, but actually more true and more real than any things which you can see or touch. But you must begin at the beginning in order to end at the end, and sow the seed if you wish to gather the fruit. God has ordained that you, and every child which comes into the world, should begin by learning something of the world about him by his senses and his brain; and the better you learn what they can teach you, the more fit you will be

to learn what they cannot teach you. The more you try now to understand *things*, the more you will be able hereafter to understand men, and That which is above men. You began to find out that truly Divine mystery, that you had a mother on earth, simply by lying soft and warm upon her bosom; and so (as Our Lord told the Jews of old) it is by watching the common natural things around you, and considering the lilies of the field, how they grow, that you will begin at least to learn that far Diviner mystery, that you have a Father in Heaven. And so you will be delivered (if you will) out of the tyranny of darkness, and distrust, and fear, into God's free kingdom of light, and faith, and love; and will be safe from the venom of that tree which is more deadly than the fabled upas of the East. Who planted that tree I know not, it was planted so long ago: but surely it is none of God's planting, neither of the Son of God: yet it grows in all lands and in all climes, and sends its hidden suckers far and wide, even (unless we be watchful) into your hearts and mine. And its name is the Tree of Unreason, whose roots are conceit and ignorance, and its juices folly and death. It drops its venom into the finest brains; and makes them call sense, nonsense; and nonsense, sense; fact, fiction; and fiction, fact. It drops its venom into the tenderest hearts, alas! and makes them call wrong, right; and right, wrong; love, cruelty; and cruelty, love. Some say that the axe is laid to the root of it just now, and that it is already tottering to its fall: while others say that it is growing stronger than ever, and ready to spread its upas-shade over the whole earth. For my part, I know not, save that all shall be as God wills. The tree has been cut down already again and again; and yet has always

thrown out fresh shoots and dropped fresh poison from its boughs. But this at least I know: that any little child, who will use the faculties God has given him, may find an antidote to all its poison in the meanest herb beneath his feet.

There, you do not understand me, my boys; and the best prayer I can offer for you is, perhaps, that you should never need to understand me: but if that sore need should come, and that poison should begin to spread its mist over your brains and hearts, then you will be proof against it; just in proportion as you have used the eyes and the common sense which God has given you, and have considered the lilies of the field, how they grow.

C. KINGSLEY.

CHAPTER I—THE GLEN

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You find it dull walking up here upon Hartford Bridge Flat this sad November day? Well, I do not deny that the moor looks somewhat dreary, though dull it need never be. Though the fog is clinging to the fir-trees, and creeping among the heather, till you cannot see as far as Minley Corner, hardly as far as Bramshill woods—and all the Berkshire hills are as invisible as if it was a dark midnight—yet there is plenty to be seen here at our very feet. Though there is nothing left for you to pick, and all the flowers are dead and brown, except here and there a poor half-withered scrap of bottle-heath, and nothing left for you to catch either, for the butterflies and insects are all dead too, except one poor old Daddy-long-legs, who sits upon that piece of turf, boring a hole with her tail to lay her eggs in, before the frost catches her and ends her like the rest: though all things, I say, seem dead, yet there is plenty of life around you, at your feet, I may almost say in the very stones on which you tread. And though the place itself be dreary enough, a sheet of flat heather and a little glen in it, with banks of dead fern, and a brown bog between them, and a few fir-trees struggling up—yet, if you only have eyes to see it, that little bit of glen is beautiful and wonderful,—so beautiful and so wonderful and so cunningly devised, that it took thousands of years to make it; and it is not, I believe, half finished yet.

How do I know all that? Because a fairy told it me; a fairy who lives up here upon the moor, and indeed in most places

else, if people have but eyes to see her. What is her name? I cannot tell. The best name that I can give her (and I think it must be something like her real name, because she will always answer if you call her by it patiently and reverently) is Madam How. She will come in good time, if she is called, even by a little child. And she will let us see her at her work, and, what is more, teach us to copy her. But there is another fairy here likewise, whom we can hardly hope to see. Very thankful should we be if she lifted even the smallest corner of her veil, and showed us but for a moment if it were but her finger tip—so beautiful is she, and yet so awful too. But that sight, I believe, would not make us proud, as if we had had some great privilege. No, my dear child: it would make us feel smaller, and meaner, and more stupid and more ignorant than we had ever felt in our lives before; at the same time it would make us wiser than ever we were in our lives before—that one glimpse of the great glory of her whom we call Lady Why.

But I will say more of her presently. We must talk first with Madam How, and perhaps she may help us hereafter to see Lady Why. For she is the servant, and Lady Why is the mistress; though she has a Master over her again—whose name I leave for you to guess. You have heard it often already, and you will hear it again, for ever and ever.

But of one thing I must warn you, that you must not confound Madam How and Lady Why. Many people do it, and fall into great mistakes thereby,—mistakes that even a little child, if it would think, need not commit. But really great philosophers sometimes make this mistake about Why and How; and therefore it is no wonder if other people make

it too, when they write children's books about the wonders of nature, and call them "Why and Because," or "The Reason Why." The books are very good books, and you should read and study them: but they do not tell you really "Why and Because," but only "How and So." They do not tell you the "Reason Why" things happen, but only "The Way in which they happen." However, I must not blame these good folks, for I have made the same mistake myself often, and may do it again: but all the more shame to me. For see—you know perfectly the difference between How and Why, when you are talking about yourself. If I ask you, "Why did we go out to-day?" You would not answer, "Because we opened the door." That is the answer to "How did we go out?" The answer to Why did we go out is, "Because we chose to take a walk." Now when we talk about other things beside ourselves, we must remember this same difference between How and Why. If I ask you, "Why does fire burn you?" you would answer, I suppose, being a little boy, "Because it is hot;" which is all you know about it. But if you were a great chemist, instead of a little boy, you would be apt to answer me, I am afraid, "Fire burns because the vibratory motion of the molecules of the heated substance communicates itself to the molecules of my skin, and so destroys their tissue;" which is, I dare say, quite true: but it only tells us how fire burns, the way or means by which it burns; it does not tell us the reason why it burns.

But you will ask, "If that is not the reason why fire burns, what is?" My dear child, I do not know. That is Lady Why's business, who is mistress of Mrs. How, and of you and of me; and, as I think, of all things that you ever saw, or can

see, or even dream. And what her reason for making fire burn may be I cannot tell. But I believe on excellent grounds that her reason is a very good one. If I dare to guess, I should say that one reason, at least, why fire burns, is that you may take care not to play with it, and so not only scorch your finger, but set your whole bed on fire, and perhaps the house into the bargain, as you might be tempted to do if putting your finger in the fire were as pleasant as putting sugar in your mouth.

My dear child, if I could once get clearly into your head this difference between Why and How, so that you should remember them steadily in after life, I should have done you more good than if I had given you a thousand pounds.

But now that we know that How and Why are two very different matters, and must not be confounded with each other, let us look for Madam How, and see her at work making this little glen; for, as I told you, it is not half made yet. One thing we shall see at once, and see it more and more clearly the older we grow; I mean her wonderful patience and diligence. Madam How is never idle for an instant. Nothing is too great or too small for her; and she keeps her work before her eye in the same moment, and makes every separate bit of it help every other bit. She will keep the sun and stars in order, while she looks after poor old Mrs. Daddy-long-legs there and her eggs. She will spend thousands of years in building up a mountain, and thousands of years in grinding it down again; and then carefully polish every grain of sand which falls from that mountain, and put it in its right place, where it will be wanted thousands of years hence; and she will take just as

much trouble about that one grain of sand as she did about the whole mountain. She will settle the exact place where Mrs. Daddy-long-legs shall lay her eggs, at the very same time that she is settling what shall happen hundreds of years hence in a stair millions of miles away. And I really believe that Madam How knows her work so thoroughly, that the grain of sand which sticks now to your shoe, and the weight of Mrs. Daddy-long-legs' eggs at the bottom of her hole, will have an effect upon suns and stars ages after you and I are dead and gone. Most patient indeed is Madam How. She does not mind the least seeing her own work destroyed; she knows that it must be destroyed. There is a spell upon her, and a fate, that everything she makes she must unmake again: and yet, good and wise woman as she is, she never frets, nor tires, nor fudges her work, as we say at school. She takes just as much pains to make an acorn as to make a peach. She takes just as much pains about the acorn which the pig eats, as about the acorn which will grow into a tall oak, and help to build a great ship. She took just as much pains, again, about the acorn which you crushed under your foot just now, and which you fancy will never come to anything. Madam How is wiser than that. She knows that it will come to something. She will find some use for it, as she finds a use for everything. That acorn which you crushed will turn into mould, and that mould will go to feed the roots of some plant, perhaps next year, if it lies where it is; or perhaps it will be washed into the brook, and then into the river, and go down to the sea, and will feed the roots of some plant in some new continent ages and ages hence: and so Madam How will have her own again. You

dropped your stick into the river yesterday, and it floated away. You were sorry, because it had cost you a great deal of trouble to cut it, and peel it, and carve a head and your name on it. Madam How was not sorry, though she had taken a great deal more trouble with that stick than ever you had taken. She had been three years making that stick, out of many things, sunbeams among the rest. But when it fell into the river, Madam How knew that she should not lose her sunbeams nor anything else: the stick would float down the river, and on into the sea; and there, when it got heavy with the salt water, it would sink, and lodge, and be buried, and perhaps ages hence turn into coal; and ages after that some one would dig it up and burn it, and then out would come, as bright warm flame, all the sunbeams that were stored away in that stick: and so Madam How would have her own again. And if that should not be the fate of your stick, still something else will happen to it just as useful in the long run; for Madam How never loses anything, but uses up all her scraps and odds and ends somehow, somewhere, somewhen, as is fit and proper for the Housekeeper of the whole Universe. Indeed, Madam How is so patient that some people fancy her stupid, and think that, because she does not fall into a passion every time you steal her sweets, or break her crockery, or disarrange her furniture, therefore she does not care. But I advise you as a little boy, and still more when you grow up to be a man, not to get that fancy into your head; for you will find that, however good-natured and patient Madam How is in most matters, her keeping silence and not seeming to see you is no sign that she has forgotten. On the contrary, she bears a grudge (if one may

so say, with all respect to her) longer than any one else does; because she will always have her own again. Indeed, I sometimes think that if it were not for Lady Why, her mistress, she might bear some of her grudges for ever and ever. I have seen men ere now damage some of Madam How's property when they were little boys, and be punished by her all their lives long, even though she had mended the broken pieces, or turned them to some other use. Therefore I say to you, beware of Madam How. She will teach you more kindly, patiently, and tenderly than any mother, if you want to learn her trade. But if, instead of learning her trade, you damage her materials and play with her tools, beware lest she has her own again out of you.

Some people think, again, that Madam How is not only stupid, but ill-tempered and cruel; that she makes earthquakes and storms, and famine and pestilences, in a sort of blind passion, not caring where they go or whom they hurt; quite heedless of who is in the way, if she wants to do anything or go anywhere. Now, that Madam How can be very terrible there can be no doubt: but there is no doubt also that, if people choose to learn, she will teach them to get out of her way whenever she has business to do which is dangerous to them. But as for her being cruel and unjust, those may believe it who like. You, my dear boys and girls, need not believe it, if you will only trust to Lady Why; and be sure that Why is the mistress and How the servant, now and for ever. That Lady Why is utterly good and kind I know full well; and I believe that, in her case too, the old proverb holds, "Like mistress, like servant;" and that the more we know of Madam How, the more we shall be content with her,

and ready to submit to whatever she does: but not with that stupid resignation which some folks preach who do not believe in lady Why—that is no resignation at all. That is merely saying—

“What can’t be cured
Must be endured,”

like a donkey when he turns his tail to a hail-storm,—but the true resignation, the resignation which is fit for grown people and children alike, the resignation which is the beginning and the end of all wisdom and all religion, is to believe that Lady Why knows best, because she herself is perfectly good; and that as she is mistress over Madam How, so she has a Master over her, whose name—I say again—I leave you to guess.

So now that I have taught you not to be afraid of Madam How, we will go and watch her at her work; and if we do not understand anything we see, we will ask her questions. She will always show us one of her lesson books if we give her time. And if we have to wait some time for her answer, you need not fear catching cold, though it is November; for she keeps her lesson books scattered about in strange places, and we may have to walk up and down that hill more than once before we can make out how she makes the glen.

Well—how was the glen made? You shall guess it if you like, and I will guess too. You think, perhaps, that an earthquake opened it?

My dear child, we must look before we guess. Then, after we have looked a little, and got some grounds for guessing, then we may guess. And you have no ground for supposing

there ever was an earthquake here strong enough to open that glen. There may have been one: but we must guess from what we do know, and not from what we do not.

Guess again. Perhaps it was there always, from the beginning of the world? My dear child, you have no proof of that either. Everything round you is changing in shape daily and hourly, as you will find out the longer you live; and therefore it is most reasonable to suppose that this glen has changed its shape, as everything else on earth has done. Besides, I told you not that Madam How had made the glen, but that she was making it, and as yet has only half finished. That is my first guess; and my next guess is that water is making the glen—water, and nothing else.

You open your young eyes. And I do not blame you. I looked at this very glen for fifteen years before I made that guess; and I have looked at it some ten years since, to make sure that my guess held good. For man after all is very blind, my dear boy, and very stupid, and cannot see what lies under his own feet all day long; and if Lady Why, and He whom Lady Why obeys, were not very patient and gentle with mankind, they would have perished off the face of the earth long ago, simply from their own stupidity. I, at least, was very stupid in this case, for I had my head full of earthquakes, and convulsions of nature, and all sorts of prodigies which never happened to this glen; and so, while I was trying to find what was not there, I of course found nothing. But when I put them all out of my head, and began to look for what was there, I found it at once; and lo and behold! I had seen it a thousand times before, and yet never

learnt anything from it, like a stupid man as I was; though what I learnt you may learn as easily as I did.

And what did I find?

The pond at the bottom of the glen.

You know that pond, of course? You don't need to go there? Very well. Then if you do, do not you know also that the pond is always filling up with sand and mud; and that though we clean it out every three or four years, it always fills again? Now where does that sand and mud come from?

Down that stream, of course, which runs out of this bog. You see it coming down every time there is a flood, and the stream fouls.

Very well. Then, said Madam How to me, as soon as I recollected that, "Don't you see, you stupid man, that the stream has made the glen, and the earth which runs down the stream was all once part of the hill on which you stand." I confess I was very much ashamed of myself when she said that. For that is the history of the whole mystery. Madam How is digging away with her soft spade, water. She has a harder spade, or rather plough, the strongest and most terrible of all ploughs; but that, I am glad to say, she has laid by in England here.

Water? But water is too simple a thing to have dug out all this great glen.

My dear child, the most wonderful part of Madam How's work is, that she does such great things and so many different things, with one and the same tool, which looks to you so simple, though it really is not so. Water, for instance, is not a simple thing, but most complicated; and we might spend hours in talking about water, without having come to

the end of its wonders. Still Madam How is a great economist, and never wastes her materials. She is like the sailor who boasted (only she never boasts) that, if he had but a long life and a strong knife, he would build St. Paul's Cathedral before he was done. And Madam How has a very long life, and plenty of time; and one of the strongest of all her tools is water. Now if you will stoop down and look into the heather, I will show you how she is digging out the glen with this very mist which is hanging about our feet. At least, so I guess.

For see how the mist clings to the points of the heather leaves, and makes drops. If the hot sun came out the drops would dry, and they would vanish into the air in light warm steam. But now that it is dark and cold they drip, or run down the heather-stems, to the ground. And whither do they go then? Whither will the water go,—hundreds of gallons of it perhaps,—which has dripped and run through the heather in this single day? It will sink into the ground, you know. And then what will become of it? Madam How will use it as an underground spade, just as she uses the rain (at least, when it rains too hard, and therefore the rain runs off the moor instead of sinking into it) as a spade above ground.

Now come to the edge of the glen, and I will show you the mist that fell yesterday, perhaps, coming out of the ground again, and hard at work.

You know of what an odd, and indeed of what a pretty form all these glens are. How the flat moor ends suddenly in a steep rounded bank, almost like the crest of a wave—ready like a wave-crest to fall over, and as you know, falling over sometimes, bit by bit, where the soil is bare.

Oh, yes; you are very fond of those banks. It is “awfully jolly,” as you say, scrambling up and down them, in the deep heath and fern; besides, there are plenty of rabbit-holes there, because they are all sand; while there are no rabbit-holes on the flat above, because it is all gravel.

Yes; you know all about it: but you know, too, that you must not go too far down these banks, much less roll down them, because there is almost certain to be a bog at the bottom, lying upon a gentle slope; and there you get wet through.

All round these hills, from here to Aldershot in one direction, and from here to Windsor in another, you see the same shaped glens; the wave-crest along their top, and at the foot of the crest a line of springs which run out over the slopes, or well up through them in deep sand-galls, as you call them—shaking quagmires which are sometimes deep enough to swallow up a horse, and which you love to dance upon in summer time. Now the water of all these springs is nothing but the rain, and mist, and dew, which has sunk down first through the peaty soil, and then through the gravel and sand, and there has stopped. And why? Because under the gravel (about which I will tell you a strange story one day) and under the sand, which is what the geologists call the Upper Bagshot sand, there is an entirely different set of beds, which geologists call the Bracklesham beds, from a place near the New Forest; and in those beds there is a vein of clay, and through that clay the water cannot get, as you have seen yourself when we dug it out in the field below to puddle the pond-head; and very good fun you thought it, and a very pretty mess you made of yourself.

Well: because the water cannot get though this clay, and must go somewhere, it runs out continually along the top of the clay, and as it runs undermines the bank, and brings down sand and gravel continually for the next shower to wash into the stream below.

Now think for one moment how wonderful it is that the shape of these glens, of which you are so fond, was settled by the particular order in which Madam How laid down the gravel and sand and mud at the bottom of the sea, ages and ages ago. This is what I told you, that the least thing that Madam How does to-day may take effect hundreds and thousands of years hence.

But I must tell you I think there was a time when this glen was of a very different shape from what it is now; and I dare say, according to your notions, of a much prettier shape. It was once just like one of those Chines which we used to see at Bournemouth. You recollect them? How there was a narrow gap in the cliff of striped sands and gravels; and out of the mouth of that gap, only a few feet across, there poured down a great slope of mud and sand the shape of half a bun, some wet and some dry, up which we used to scramble and get into the Chine, and call the Chine what it was in the truest sense, Fairyland. You recollect how it was all eaten out into mountain ranges, pinnacles, steep cliffs of white, and yellow, and pink, standing up against the clear blue sky; till we agreed that, putting aside the difference of size, they were as beautiful and grand as any Alps we had ever seen in pictures. And how we saw (for there could be no mistake about it there) that the Chine was being hollowed out by the springs which broke out high up the

cliff, and by the rain which wore the sand into furrowed pinnacles and peaks. You recollect the beautiful place, and how, when we looked back down it we saw between the miniature mountain walls the bright blue sea, and heard it murmur on the sands outside. So I verily believe we might have done, if we had stood somewhere at the bottom of this glen thousands of years ago. We should have seen the sea in front of us; or rather, an arm of the sea; for Finchampstead ridges opposite, instead of being covered with farms, and woodlands, and purple heath above, would have been steep cliffs of sand and clay, just like those you see at Bournemouth now; and—what would have spoilt somewhat the beauty of the sight—along the shores there would have floated, at least in winter, great blocks and floes of ice, such as you might have seen in the tideway at King's Lynn the winter before last, growling and crashing, grubbing and ploughing the sand, and the gravel, and the mud, and sweeping them away into seas towards the North, which are now all fruitful land. That may seem to you like a dream: yet it is true; and some day, when we have another talk with Madam How, I will show even a child like you that it was true.

But what could change a beautiful Chine like that at Bournemouth into a wide sloping glen like this of Bracknell's Bottom, with a wood like Coombs', many acres large, in the middle of it? Well now, think. It is a capital plan for finding out Madam How's secrets, to see what she might do in one place, and explain by it what she has done in another. Suppose now, Madam How had orders to lift up the whole coast of Bournemouth only twenty or even ten feet higher

out of the sea than it is now. She could do that easily enough, for she has been doing so on the coast of South America for ages; she has been doing so this very summer in what hasty people would call a hasty, and violent, and ruthless way; though I shall not say so, for I believe that Lady Why knows best. She is doing so now steadily on the west coast of Norway, which is rising quietly—all that vast range of mountain wall and iron-bound cliff—at the rate of some four feet in a hundred years, without making the least noise or confusion, or even causing an extra ripple on the sea; so light and gentle, when she will, can Madam How's strong finger be.

Now, if the mouth of that Chine at Bournemouth was lifted twenty feet out of the sea, one thing would happen,—that the high tide would not come up any longer, and wash away the cake of dirt at the entrance, as we saw it do so often. But if the mud stopped there, the mud behind it would come down more slowly, and lodge inside more and more, till the Chine was half filled-up, and only the upper part of the cliffs continue to be eaten away, above the level where the springs ran out. So gradually the Chine, instead of being deep and narrow, would become broad and shallow; and instead of hollowing itself rapidly after every shower of rain, as you saw the Chine at Bournemouth doing, would hollow itself out slowly, as this glen is doing now. And one thing more would happen,—when the sea ceased to gnaw at the foot of the cliffs outside, and to carry away every stone and grain of sand which fell from them, the cliffs would very soon cease to be cliffs; the rain and the frost would still crumble them down, but the dirt that fell