



## WHAT GIRLS MIGHT DO IN DECEMBER.

By "MEDICUS."

"The wintry west extends his blast,  
An' rain and hail do blaw,  
Or, the stormy north, sends driving forth  
The blinding sleet and snaw;  
While tumbling brown, the burn comes  
down,  
An' roars frae bank to brae;  
An' bird and beast in covert rest,  
An' pass the heartless day."—Burns.

It is hardly yet the end of autumn, and very early on a wild wet morning, still I have found my way through the dripping jungle to my wigwam, and have got my war-paint on. Why? Did you ask why? I put on my war-paint to write to you, and give you some advice suitable to the dreary month of December. My war-paint, girls, is simplicity itself, and consists merely of an excise ink-bottle, which wouldn't spill, you know, even if you were to turn it upside down over that pretty blouse which becomes you so, an excise ink-bottle slung to my button-hole, and a penny pen-holder. It is not always in my wigwam, however, that I write my monthly sermon to my lassies of the grand old "G. O. P." No, for in fine weather, even in winter, I cycle away to the woods, where there is nothing to disturb me and everything to soothe. The mournfully monotonous croodle of the wood-pigeon or purring of doves from a neighbouring thicket, or the flap-flap-flap of their wings, as the male birds fly away to bring food to their pretty mates, is only music to me. In the silence of the woods if tired I can sing myself a song with none to listen, or snatches of many songs. The Bonnie Wood o' Craigeleee, for instance, a beautiful Scottish love-lilt, that teaches kindness to birds. Here is a wee bit of it—

"Far down thy dark green plantin' shade,  
The cushat croodles amorously,  
The mavis in thy buchtin glade,  
Gars\* echo ring frae † tree.  
Awa' ye thochtless murdering gang,  
That tear the nestlin's ere they flee,  
They'll sing you yet a canty song.  
In the bonnie woods o' Craigeleee.  
Thou bonnie wood o' Craigeleee,  
Thou bonnie wood o' Craigeleee,  
In thee I've spent life's early day,  
An' won my Mary's heart in thee!"

The music is sweeter even than the words.  
In those woods and wilds, whose melancholy

\* Gars = makes.

† Pronounce "fray," the æ in all Scotch words is pronounced like the ay in "way."

gloom enchants the soul, I can never feel lonesome, for to say nothing of the companionship of my St. Bernard "Lassie," *alias* "Fair Helen of Troy," is there not the great book of Nature spread open before me.

O the wonderful little mites and midgets and hoppers that fly on to my paper, and everyone of them has a little story to tell me, although I have to look at some through a huge magnifying glass. So minute are my little visitors at times, that the stroke of the letter "t" forms a river they dare not ford. For example, one alighted on a fine summer's day right in the centre of a capital "O" which I had just written. The ink was not yet dry, so he walked round and round inside, feeling here and there with one little foot for a place to get out. This he kept up for fully half a minute, then he sat down to think and ponder for another half minute, after which he tried again. By this time the ink was dry and the tiny prisoner escaped. And now he raised his elytra—the little blouse he wore—and shook from under a pair of bran-new transparent wings and darted off away into the glad sunshine. Now, girls, listen, this little visitor was one of a species all too well known to us cyclists, because when we ride under trees one often gets into the eye, and if we can't wipe it out we've got to weep it out. But the specimen who found himself imprisoned in the letter "O" with a dark rolling river of ink all around him, was no bigger than the tail of a comma (,) . But perfect in shape, head, limbs, body and wings. And he had a life and existence of his own, as well as you or I have, ay, and duties to perform also and probably connected with these duties and his home-life a good deal of worry and care. For mind you this, God makes not even a midge in vain.

None of us, for instance, cares much for a rat, or blue-bottle, or mosquito, and these pests are usually killed on sight. And yet the rats are the best scavengers of sewers, and of badly-kept farms and piggeries in the country; the blue-bottle is so useful that, but for them, plagues would oftener break out in large cities of the tropics such as Zanzibar, while in malarious districts life would be impossible to mankind were there no mosquitoes to devour the microbes.

Sitting silently in the woods, I see droll things at times. I generally choose a glade with an oak or pine tree over-shadowing one end of it. Here Lassie and I are so quiet and still that the denizens of the woods soon take us for part and parcel of the scenery. A

weasel popped out of a furze bush at the other side of the glade one day and stood on its hind legs to study us. Then came a few yards nearer and stood up again. Lassie looked up with one dark eye, but never moved. She was asking me to let her go for the weasel. I lowered my brows and that meant, "No, certainly not."

Back went the weasel now to the bush and presently re-appeared and crossed the glade with five wee baby-weasels all in a row, but close behind her. A wild-eyed rabbit will sometimes hop into the centre of the sunny glade, and sit down to wash his face in the sunshine. If either Lassie or myself makes a move, he stamps his hind legs angrily on the ground and darts off.

One day something stirred in the withered grass close beside the bank and tree-foot. I thought I could throw out a beautiful glittering grass or ring snake. I darted my hand quickly down and brought up, only a poor mole. Of course I apologised and let him go. But he looked as savage as only a mole can. This snake—the one I expected to capture—is called also the green snake, water snake—they can swim well—or hedge snake, and in the Scotch highlands, where they grow to an immense size, they are often known as the heather snake. I have seen specimens on the Grampians and in Skye little short of six feet long.

I am telling you all this, readers, because I wish to interest some of you, at all events, in the most charming and intellectual study in the world—that of natural history. Those who attempt such a study in schools, only throw away precious time and money. At schools and universities they teach this science as they do French, by beginning at the wrong end. French must first be studied in the simplest conversational way; if a young girl can at first get hold of the names of things around her, with adjectives to suit them, and a knowledge of the simplest verbs, such as "to give," "to make," "to take," "to be," etc., she has made a good beginning; next in importance is accent, next may come orthography, and, last of all, learned composition and grammar.

It is the same with natural history, professors, as they are called, simply sicken their pupils with long-winded Latin words and classification, and a march through a fusty old museum completes the nausea. I am certain that during my university career, as a gown student, I never learned anything from the dilapidated old fossil who occupied the Natural History chair. I had begun my studies long



before then, when only four years of age. I began by lifting big stones or pieces of old wood in meadows, and studying the life-stories of the creeping things that lived thereunder. Then the birds and the beasts of the woods and moors became my study, and all the wildlings of Nature became my friends, and are to this day. Yet the longer I live the more I seem to have to learn; I may often forget, too, and all my knowledge seems but like a drop of rain in the ocean of life everywhere around me. But yet I am happy, inexpressibly happy, in my studies. It is a joy that is pure and unalloyed. The only thing that does hurt and annoy me is to foregather with some young idiot who is "making a collection," and thinks himself a naturalist, because he pins down a hundred moths and sticks up as many unhappy beetles, with Latin names (generally wrong) beneath. From such an awful individual I make the speediest escape possible.

Well, now, in the month of December, and dreary it usually is, despite the fact that Christmas comes in towards the end of it, I should advise my kindly-hearted, thinking readers to try to get a little nearer to God by studying some of His most marvellous works. If you read and study the little books I'm going now to recommend, you will be able, by the time the year begins to open, and Nature unfolds her hands, while the earliest spring brings bud and burgeon to the trees and song-birds to the woodlands, to take charming country walks, and just feel yourself part and parcel of all the love and light and beauty you see around you.

Study the life-story of the trees and shrubs for instance. Take one or two of the simplest of these that happen to grow in your

immediate vicinity, or not far away, and write in a note-book an account of a visit to them, say, once a week, and for the whole year from the end of January, until the tree again falls into the dead, deep sleep of winter. If to this story of a tree\* you add the life-story of the visitors or a few of them that you find therein or thereon, then in a twelvemonth's time you will have gained knowledge far in advance of the ordinary fossil who dubs himself a naturalist.

Or take up with ants or earwigs as a study. The latter I do not love, and this year they swarm everywhere. Nevertheless, having already made a few guineas by studying their tricks and manners, with more perhaps to come, I must not grumble, despite the fact that I often find one in the oatmeal "brose" I have for breakfast. But there is no insect in the world with which I am acquainted that is more wise or more affectionate in their family relations than the earwig. The knowledge of the lives and ways of earwigs, or of any other insect, is not to be found in books. You must find this knowledge from your own careful study, experiments, and observations.

Well, the little books I should propose your studying are those of my late friend and true naturalist, the Rev. J. G. Wood; and I think they are published by Routledge. *Common Objects of Country Life* for instance, *Common Objects of the Seashore*, etc. Anyhow, you have only to write to this publisher to get a list, and the books cost but a shilling each.

Our publisher at 56, Paternoster Row, has also many most interesting and intelligible handbooks on butterflies, moths, beetles, etc.,

\* The title, *The Story of a Tree* is my own copy-right.

and there are books on woodlands and hedgerows also. But here is a hint to you or rather a bit of advice, while you study trees and insect life, etc., take lessons at the same time in drawing and in water-colours. Then, you see, you needn't make a collection or stick the beautiful things up, you can just paint them and let them go home to their wives and families. Beneath each drawing of, say, a moth or beetle, write a *brief description*, of where you found it, the tree or shrub on which it was, the scenery around, the weather, etc. And what sunny memories of pleasant rambles these will afford you in after life!

You see then that I not only wish to have a few of my readers studying natural history as it ought to be studied, but that I wish them to begin in drear December.

The age of specialism is, I am happy to say, now drawing towards us. When the noon of this glad day arrives, there will be a revolution in school-teaching. We will no longer have girls learning a smattering of everything that appears to be an accomplishment. All will learn to read and write and talk well, but painting, music and literature, to say nothing of natural history, shall be taught only to those who have a bent in those directions. To give just one example and with this I must close my paper. Every girl sent to a boarding-school nowadays is supposed to learn music, and afterwards every girl thinks she can play piano or fiddle. Well, they may bring out the notes and *strum* on the instrument, but only a girl with music and poetry in her soul—one in a hundred perhaps—can ever learn to play with true taste and feeling. And yet every girl has a talent for something. Why not cultivate that? I pray for the speedy arrival of specialism!

## GLUE.

BROKEN desks! Broken chairs! Pieces of veneer broken off furniture! What household, no matter how well conducted, is free from such ills? I know a household that has been plagued for months with a broken chair-back. You do not notice the break till you sit down, when it tears your dress. A penny-worth of glue, properly applied, would remove this constant cause of annoyance. But, although possessed of a glue-pot, no one in the house knows how to use the glue.

Do you know how to use glue? If not, the following hints may be useful. To begin with

*The Glue-Pot.*—The best form consists of two iron pots placed one within the other, so arranged as to leave a space for hot water between them. It should not be too large, one in which the inner pot holds about a quarter of a pint is a very useful size. Always keep both pots very clean, and before putting away, after use, empty the water out of the larger pot. Never allow cakes of hard, semi-burnt glue to accumulate on the sides of the inner pot. Never allow cinders, ashes, or soot to find their way into the glue. I have seen a girl trying to mend a small, well-made box with glue, of which about fifty per cent. consisted of the above-named adulterations. As the best cabinet-maker in the world could have done nothing with such filth, it is perhaps needless to say that the amateur failed. She finally had recourse to tacks, which split the wood to pieces. Dirt in the glue is one of the commonest causes of failure. If the glue is in a bad condition, the pot should be thoroughly washed out with boiling water and the glue freshly made. The best way

To Mix the Glue is to put some lumps of

it in the inner pot, and let them soak till quite soft. Sufficient water should be left in the pot to just cover the lumps of jelly thus formed. If there be more, pour off the surplus into the sink. Now pour some boiling water into the larger pot, about a quarter full will be the right quantity, but to judge exactly carefully insert the smaller pot, and drawing it out equally carefully note how much of the pot is wetted. The water should have risen to about the middle of it. The water in the outer pot is, firstly, to prevent the heat applied to the glue from rising above the boiling point, and thus burning it, and, secondly, to keep the glue in proper condition while using it. Re-insert the smaller pot and place on hob, or, better still, on a gas-stove. The glue will melt quickly, and is then ready for use.

Another common cause of failure is that the glue is made much too strong. In this case it is impossible to obtain a thin flat coating, as the moment it touches the wood it settles in leathery lumps, which crumble under the brush. To be of the right strength the glue, when hot, should be of about the same consistency as salad oil. If it be thicker, add a little boiling water and stir well.

*To Use the Glue.*—Apply an even thin coating to both surfaces to be joined, and press them firmly together as soon as possible till the glue has "set," which will take a minute or two. Remove the glue which has been squeezed out of the joint about an hour afterwards with a blunt knife, and wash with a rag dipped in hot water and well wrung out. The glue will take from one to three or four days to dry in the joint.

Under certain conditions the adhesive power

of glue is enormous. The hardest woods will fracture before the joint gives. These conditions are, firstly, that the surfaces to be joined fit one another exactly; secondly, that they be free from dust and grease; and, thirdly, that the glue be rightly applied. If the surfaces be not in contact, a thick layer of glue will be enclosed, which after a time shrinks and breaks away from one surface or the other. For this reason any lumps of old glue must be carefully scraped or filed away. When the joint has been badly glued before, this will be very difficult to do, but it must be done thoroughly. Dust and more especially grease prevent the glue from gripping the wood.

A good example of gluing is to be seen in the back of a violin, which is composed of two pieces of wood joined down the centre. When well polished it is almost impossible to discover the joint, except for the fact that the grain of the wood reverses. English cabinet-makers have made gluing almost a fine art from ancient times. In the Public Record Office is preserved a document containing a complete list of the expenses of the materials used in building St. Stephen's Chapel, Westminster, dated twenty-fifth of Edward III. (1352). In the accounts for the stalls is the following:—

"Paid to Thomas Motte for forty pounds of glue bought at fourpence per pound, 13s. 4d. Paid to Thomas Atte Lee for twenty-five fish soundes bought for the same, 2s."

Glue is also mentioned in several other places in the same document.

Enormous quantities of glue were used in making mediæval reredoses, and even where the wood is worm-eaten and rotted, the glue still holds firmly.