

"Wait a moment, Ailie," returned Roger, looking very stern and pale. "The cheque was cashed the next morning by a clerk of ours who was turned away for dishonesty, but the bank did not know that, and thought him still in our employ, so the money is lost to us. My father is dreadfully angry and puzzled about the whole affair, but he does not suspect Fergusson. He flew in a perfect rage when I hinted about his gambling debts. He blames me for carelessness; he says I ought not to have left the office without locking up both the ledger and the cheque in the iron safe. Fergusson has told my father that he saw Ibbotson (that is the name of the clerk we dismissed) hanging about the yard talking to the men. He declares that while we were in the yard Ibbotson must have got into the office, turned over the letters, and abstracted my receipt; he must have read the entry in the open ledger, and he knew all the keys, and would easily find the cheque. He has gulled my father completely; he has actually made him believe that, in ten minutes, or a quarter of an hour at the most, Ibbotson could cut out the page in the ledger, track the cheque to the private drawer, hunt out my receipt, and make his escape—and all this without any preconceived plan. Why, the whole thing is monstrous and utterly improbable. I am positive that the only thing Ibbotson has done is to cash the cheque."

"Roger, oh! how dreadful it all is! Of course, there can be no doubt in your own mind who did it all?"

"There is not a shadow of doubt in my own mind, Ailie; but how am I to bring my father to believe it? Ibbotson

has left the place, or he was actually going to set the detectives on him. Fergusson has completely hoodwinked him. Circumstantial evidence is strong against Fergusson, to my thinking. Judge for yourself, Ailie. He was with me in the office when I opened the cheque; he saw me make the entry in the ledger, as well as write the receipt; he also must have seen me thrust the cheque hastily into the private drawer before I ran out into the yard. No doubt he returned to the office as soon as my attention was engrossed with poor Mitchell. A few minutes was all that was needed to accomplish the job, Ailie. I have found out to-day that he is terribly involved, and that his creditors are threatening him. I told you things are coming to a crash. I am afraid we shall lose more than the sum we received from Simmonds Brothers."

"Oh, Roger, how blind father is! What are you to do to open his eyes?"

"I am going to watch Fergusson," returned Roger, with a frown of anxiety. "Ailie, I never meant to have told you this. I have been about the town gleaning facts to-day, but I mean to keep them to myself for the next four-and-twenty hours. Fergusson has arrived at some sort of crisis in his affairs. I am afraid he will do something desperate. A sum of money has come into our hands to-day after banking hours, in notes and gold. I wanted my father to bring it up to the house, but he scouted the idea as ridiculous, as though any thief could open an iron safe; but, Ailie, I am not comfortable in my mind. Supposing Fergusson has a duplicate key? My father is so hopelessly duped, that it is no use saying any more to him.

I have made up my mind to watch the office to-night."

"But not alone, dear."

"Yes, of course. Timothy will be there if I need help; but I don't mean to take him into confidence. There is a barge that passes at ten to-night. The bargee is an acquaintance of mine. I told him to look out for me by the bridge. I will get him to land me at the lower end of the yard. Timothy will be in his shed by that time, thinking about his supper. I don't want him to see me, or he will enlighten Fergusson. There is a handy wood-pile just outside the office where I can lie snug."

"Roger!" exclaimed Alison, in a quick, determined voice, "you shall not go alone; I shall watch with you." And as he was about to interrupt her, she went on quietly: "You know Missie and Miss Leigh will be out until half-past ten. Papa is always in his study. They will think I am in bed. I can lock my door and put the key in my pocket, and you have the latch-key. I will be no trouble to you. I will be as quiet as a mouse, and not hinder you. I could not rest—I could not sleep, knowing you were with that bad man. I will be useful as a witness. You must take me, Roger."

"Are you sure that you mean it—that it will not hurt you?" he asked, slowly.

"What should hurt me on a summer's night? And the barge will be such fun."

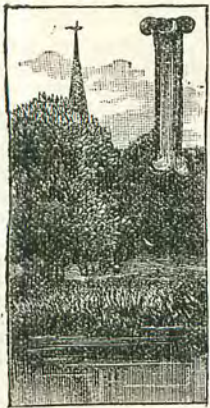
"Very well, you shall come if you like. You are a plucky girl, Ailie."

And Alison was so pleased with the permission, that she gave his arm a little squeeze of gratitude.

(To be continued.)

## PRACTICAL HINTS ABOUT THE HAIR.

By MEDICUS.



SIT down to write my present monthly contribution with the fixed resolve to be thoroughly practical, genuinely common-sensical. For this I give myself some degree of credit, for my subject is one that could very easily admit of a good deal of pleasant, if not even poetic writing. No end of pretty things have been said, and will continue to be said, about the beauty of the human hair; but

I do not mean to-day, at all events, to add even one to the list.

Well, then, I should consider it a strange thing if there were a single reader, whose eyes may scan these sentences of mine, altogether uninterested in the subject. The young wish to keep their hair as luxuriant, soft, and lovely as possible; the older wish to retain theirs at least in a state of health, and health means or implies beauty. There are a few

facts, physiological and otherwise, which are not difficult to bear in mind, but greatly aid anyone in the proper management of the hair, for it is infinitely more easy to prevent hair troubles than to cure them when they take place.

The anatomy of a human hair and its structure are but little understood by even the reading public. Indeed, the whole of what is generally known on this subject is very small. If I were to put the question, "What is a hair?" to some of even our cleverest school pupils, I would expect some such answer as the following.

"What is a hair? A hair is a hair, of course. It is attached to the head or scalp by some means or other, which I have never troubled myself to define. Hair is of different shades or colours in different individuals, having some general relation to the iris tints of the eyes. Sometimes it is black, or brown, or a golden straw-colour, which has been much admired and even imitated by the action of chemicals, but in some individuals we even find it auburn, which ill-natured people have been known to call 'red,' when it was not their own hair; but which poets have written verses about nevertheless. The hair may be harsh and hard, or soft and glossy and luxuriant; it

may curl naturally or be artificially 'frizzled' by applications, by heated tongs, or by putting it in paper or rags. The hair may fall all out during or after severe illness, and to prevent this the doctors give orders to cut it all off. Sometimes the hair comes out in combfuls, when there is apparently nothing very much the matter with one. When the hair does this it needs strengthening, and there are plenty of hair washes sold in the shops to do this, the best of which are made of lime water and glycerine, cantharides and oil, rosemary, ammonia, bay rum, borax, and bear's grease. When people get old their hair turns white, and often long before they are old, or it all falls out, leaving them bald."

Well, this little mixture of truth and nonsense really embodies about all that is known and believed about the hair.

Let me state something in addition, and more in accordance with reality.

Each hair grows from the bottom of a little flask-shaped depression or cavity in the skin. Each hair consists of three parts, the bulb and root, by which it is imbedded in the skin, the main trunk or shaft of the hair, and the point.

Each hair is composed of three different structures:—1. The outer or covering layer, composed of cells that overlap each other like

the tiles of a roof or the scales of a fish, and have their free edges directed to the point. It is this arrangement of the cells of the outer coat which causes a hair to feel rough to the fingers if pulled through them from point to root, but smooth the other way. 2. The middle layer, or principal part of the hair, in which the pigment or colouring matter is spread out; and (3) the inner layer, sometimes called the pith.

The hair is in reality a tube, then.

But attention should be directed to one point, because, as will be seen directly, it has a practical bearing on the skilful management of the hair. I refer to what are called the sebaceous glands.

These are situated near to the root of each hair, their ducts opening into the flask-shaped cavities or depressions I have already mentioned. They secrete a kind of natural oil, and this being taken up by the hair externally and internally, its gloss is thus assured.

It will be evident to all that if strong alkali in soaps or washes be applied to the head, destruction of this beautiful gloss will be the certain result. The economy and beauty of the hair depends a great deal upon the proper working or health of those little glands, and probably to some extent its growth and colour as well.

There is just the danger also of not only spoiling the gloss on the hair itself by the application of washes that little are known about, but even of destroying, partially or wholly, the glands, and thus inducing hair disease, such as scurf or dandruff.

There is no proper substitute for the loss of this gloss-giving, oily secretion. Hair-oil will make the hair shine, but it will not feed the hair itself nor keep the roots in health.

As I have mentioned the word "roots," I may as well state here that the bulb you notice at the end of a hair which has been pulled out is in reality not its root any more than the bulbous portion of a leek or onion—if I may use so familiar and simple a comparison—is the root of that succulent plant. The hair roots are embedded in the skin, and do not, as a rule, fall out; it is the hair that breaks off.

I have said enough already, I am sure, to warn the reader against the use or application of alkaline washes used injudiciously and indiscriminately. I am not going to treat of hair diseases, either acute or chronic, though some day it is possible I may describe the more easily managed of these; but there are two kinds of loss of hair which it is my duty just to mention to-day.

One is an actual thinning of the hair. It has been coming out on the comb for months, perhaps, and the results are becoming alarmingly evident. This in young people is usually owing to some derangement in the general health, although this is sometimes hardly apparent; but it must be believed in nevertheless, and obviated, or no improvement of a lasting kind will be possible with the hair itself.

The system should be regulated and cooled. Occasional aperients will do good. Perhaps one of the best, though oldest, is simply a mixture of cream of tartar and sulphur, with a little glycerine and some syrup. But a tonic would be needed as well. Quinine must be

avoided, so must iron, owing to its heating qualities. The Kepler extract of malt, with or without cod-liver oil, will be found of much service, and with this may be taken some bitter vegetable tonic—say, the tincture of quassia, which does not bind the system.

Attention to the diet will also be imperative; it ought to be regulated and improved. No eating between meals, and not too much fluid with the food. The softer the comb the better, and I may say the same with the brush. Some simple hair tonic—I shall give a recipe or two presently—may also be used.

The other kind of loss of hair is more gradual and more serious. It is a loss in length. The individual hairs do not grow long enough in time to attain length in measurement. But in this case the hair may appear just as thick as ever near the roots.

With the loss of hair there may be some degree of scurfiness, and whatever the connection between the two, to the latter is too often attributed the former, and constitutional treatment is lost sight of.

Such a state of hair requires a long course of most careful treatment, regulation of diet, attention to the rules of health, and rubbing every day with some slightly stimulating and cleansing lotion, such as a little bi-carbonate of soda with glycerine in rose water. This is to be rubbed into the roots of the hair day after day for months.

As much ease of mind and freedom from mental toil as possible should be obtained. It is a well-known fact, and illustrates how very much the nervous system has to do with growth and beauty of hair, that a shock to the mind will often cause the hair to fall out or to become suddenly grey.

But it is time for me to say a word or two about the treatment of the hair in health. I must begin with the morning. A great many of my readers have, I believe, taken my advice about the use of the matutinal sponge bath—the hot water wash first, only the mildest of soap being used, and, immediately after, the cold or tepid tub—and have doubtless found the good effects of it on the general health and spirits; but I must warn them not to take the sponge over the hair every morning. The hair (when washed it needs to be) requires separate treatment. Those who never use any pomades or oils, and I trust their name is legion, and who do not perspire much, need not wash the hair oftener than about once in three weeks, and again I bid them beware of the kind of soap used. It is better to use the egg wash, either the yolk or the white being taken.

Take precautions against catching a chill after the hair has been washed. This chill may be taken, not only when the hair is damp, but by going out too soon after it is dry. Hair-washing had better, therefore, be done in the evening, shortly before retiring to rest.

Combing and brushing the hair are best done when it is perfectly dry. The comb must not be an irritating one, and a hard brush should not be constantly used, under the mistaken notion that the growth and beauty of the hair are thus promoted. Frequent brushing of the hair does good; it keeps it clean and glossy; but the brush must never injure the skin, or scurf will be engendered, and the sebaceous glands injured.

*Pomades and oils.*—I object to the use of these. They should not be required. If the body is healthy, the hair will show to perfection, if not it will be dull and lustreless. The remedy lies not in the pomade bottle—which only hides the trouble, and tends more to injure than cure—but in renewed attention to the laws of health.

Bearing in mind that a scurf condition of the scalp is often the first sign of mischief, which may end either in premature greyness or total loss of hair, this should be seen to. But it may take some considerable time before it is quite removed.

It is not generally known that dyspepsia or indigestion exerts a marked influence for evil on the growth and beauty of the hair. This is only another reason why this troublesome and dangerous ailment should be properly and scientifically treated from the very first, and it should be borne in mind that stomach troubles issue in a very large number of lingering fatal illnesses, so that, apparently trifling though they be in themselves, they should never be neglected.

Nervousness is another ailment which affects the hair. It is rather a difficult one to treat and cure; but, whether young or old, a person who suffers from it should be to a great extent her own doctor. She must struggle not to worry even over afflictions, which, as we all know, are very often sent for our permanent good. She must live according to laws of health, and do all in her power, by taking open-air exercise, and maintaining a calm state of mind before retiring at night, to obtain good sleep.

Although, when caused by indigestion or nervousness, no washes or hair tonics are of themselves alone sufficient to remove hair ailments, still they are at times useful. I would recommend only the very mildest, because stimulating the scalp is bound to injure it sooner or later.

The following may be found serviceable: Lime water, three ounces; rose water, four ounces; eau de Cologne and glycerine, of each, half an ounce. Use every night for a fortnight to the scalp, rubbing well in; afterwards equal parts of glycerine and tincture of cantharides may be used as an application mixed with eight times the amount of rain water, to which a little eau de Cologne has been added.

I may mention, parenthetically, that there is no such thing as bear's grease sold in shops. There are thousands of quack nostrums to be had for money, but they should be avoided.

I object to the use of stimulating lotions to the hair as a rule, and also to the use of any kind of stimulants, or hot peppers or made dishes being used when the hair is out of form.

As for hair dyes and washes to change the colour of the hair, it is safest to steer clear of them. If the hair has turned prematurely grey, consult a medical man. There may be hope; at any rate grey hair and old age are not synonymous terms.

The only safe depilatory is a pair of pincers. In conclusion, let me protest against the craze many girls have of endeavouring by every means, legitimate or the reverse, to improve the lustre and quantity of their hair. I do assure them it is often the best way to let well alone.

