There is little more to say. No one can deny, if they know anything at all about it, that the *social* training of college life is very great indeed. The mixing together of students of different ages has a wonderfully good effect: the younger gaining by the experience of the elder, and the latter by the energy and ardour of the former. The joining in the social amusements of a college takes a girl out of herself, and gives her a confidence and ease

most valuable when she leaves college to enter into society.

In conclusion, let me say that in thus urging a University training for girls in suitable cases, I would, of course, except it for those who have any pressing home claims. For them college life is out of the question, and should be resolutely laid aside. Duty—"stern daughter of the voice of God"—forbids them to take it up.

## SOME FRIENDLY HINTS ABOUT THE HAIR.

BY A FAMILY DOCTOR.



ONG, long ago—a hundred years ago, so it *feels* to me, though I dare say it is not more than ten—I, your Family Doctor, wrote a paper in this Family Magazine, called "Beautiful Hair: How to Get and Retain it." I have not the article before me; the title, at all events, is a taking one,

and I doubt not I gave many useful hints under it. Yet I am perfectly willing to confess that I was, as a writer, less practical and more diffusive in those distant days than I am now. We live in an age of condensation and practicability, and every one who would succeed must follow the fashion

That, then, is my apology for returning to the subject of hair, one which I feel sure has an interest for all, whether old or young; for beauty and abundance of hair is an adornment to the latter, just as the silvery locks are or ought to be the glory of the aged.

There is much more in health of hair than most people imagine. Simply speaking, on the one hand, the hair cannot be in health if the body be not so; and, on the other, an unhealthy scalp may positively produce grievous bodily ailments; at least, I believe so; and I would adduce only one proof of this. Think you not, then, that if the skin of the head be not wholesome, and every duct, whether sebaceous or perspiratory, acting well, headaches may occur, or a dull and hot feeling of the brain? You can conceive this to be true readily enough. Well, the brain acts, for good or for evil, constantly upon the stomach and organs of digestion, and on these latter depends the whole economy of the system, and the proper nutrition of bone, muscle, and nerve as well.

Remember when I say "hair" I do not mean only the visible portion of that appendage, but its roots as well, and the glands that lubricate the whole.

It would take much more space than I have at my command at present to describe the anatomy and growth of the hair. I may, however, state briefly a few facts concerning it.

I. Each hair, then, grows from the bottom of a

minute sac or depression in the three layers of the skin —a kind of bottle-shaped cavity.

- 2. Each hair is composed of three layers, corresponding to those of the skin; first an outer, made up of scales or cells, arranged like the tiles on a house, the free ends being turned towards the point of the hair, so that the hair is, as all know, more easily smoothed one way than another. Secondly, a middle layer, called the cortical portion, and this is the chief substance of the hair, and it is this which splits in some ailments. Lastly and internally is the pith, not present in all hairs, though it probably ought to be. This pith consists simply of rows of large cells that line the cortical portion.
- 3. The colour of the hair depends upon a pigment which is found in the middle or cortical layer. This pigment is found both fluid and solid in the cells, and the intensity of colour, say of black and brown hair, depends upon the amount of this pigment more than its actual colour.
- 4. The bottle-shaped depression from the bottom of which the hair grows is called the hair-sac, and its depth corresponds with the length of the hair which is to grow therefrom; sometimes therefore the sac of a short hair will be only through the outer skin layer, while that of a long hair will be quite deep. The axis of each sac is at an acute angle; thus the hair is enabled to lie flat. If it were perpendicular, the hair would stand up. That it does so under great fear or excitement we all know. This is caused by a nervous tightening up of the skin. It is constantly seen on the backs of dogs and cats when they are enraged.
- 5. The hair grows from—is set on to, I might say—a little cone called the *matrix*, and this cone is fed from the blood, and in its turn feeds the hair and enables it to grow.
- 6. The natural gloss of the hair depends upon a secretion which is poured into the sac from two little glands called sebaceous, which secrete an oily juice. Washing the hair with hard alkaline soap entirely destroys this secretion and cannot but injure the hair.

This is all I need say at present about the anatomy of the hair.

A few words about the growth of the hair may be interesting.

The average length of the hair of ladies is, according to Dr. Pincus, of Berlin, somewhat over twenty-two inches, and it is exceptional to find it thirty inches long.

A hair can only grow a certain length, then it ceases, and in time is pushed off or thrown out, so to speak, just as the old leaves fall in autumn. The average age of hair is from two to five years or more, and it increases in length more quickly at first.

It is the generally received opinion that cutting the hair increases its growing power, but experiment in the hands of reliable authorities does not seem to bear this out.

Another erroneous opinion connected with the growth of hair should here be noticed. Ladies losing their hair, owing perhaps to weak health, sometimes tell me that it is coming out "in handfuls," and that it is coming out "by the roots," or "roots and all." The fact is, they notice at the end of the hair the bulb. But this is not the root, but the enlarged end on which it is set upon the nutrient cone or matrix before mentioned. This matrix is the real root, this it is which feeds the growing hair, and this it is which produces the new or young hair when the old one falls off.

But this *matrix* may become feeble and weak, or become entirely obliterated.

"Every hair," says Dr. Pincus, "that falls must have a root-knob" (bulb), and, as a rule, I may make the comforting statement that the stronger the root-knob, the greater is the hope of a good substitute.

Well, there is normal loss of hair, just as there is the normal fall of leaves from trees in autumn, and this in health is continually taking place.

When the hair that falls out has attained its usual length, there is little or no desquamation of the scalp; there is correspondingly little reason to be alarmed; but when the hairs that come away in brush and comb have point and "root" and are short, it indicates a serious loss of hair, more especially if the colour of it is also becoming enfeebled.

The ailments of the hair, and this of course includes the scalp, are either of an acute or chronic nature. The acute are more easily diagnosed by the sufferer himself or herself. There may or may not be any actual skin disease, but in any case a medical man should be consulted.

Meanwhile the nervous system should be kept as quiet as possible.

I need only remind the reader how much the mind and brain act on the growth and colour of the hair, as proved by the fact that great mental excitement may result in entire baldness within a very few months, and that several well-authenticated cases of the hair turning grey in a single night or single hour can be adduced:

"My hair is grey, but not with years,
Nor grew it white
In a single night
As men's have grown with sudden fears."

Poor Marie Antoinette! We all know her sad story.

Perhaps one of the most remarkable instances of sudden greyness, is that told by a physician concerning a young man of thirty. He had been walking on the quay at Rotterdam, when he noticed a crowd assembled calling loudly for help. A child was in the water. Being a powerful swimmer, he dived in and brought it to bank, dead. And the child was his own. At that moment his hair turned white.

Well, we learn from this how strong is the nervous action over the hair and scalp.

Avoid mental worry, then, in all cases of acute trouble of the hair. Be most temperate in living, in both eating and drinking. Use a comb and use it gently, but do not let the brush be too hard.

It has been recommended in the cases where there is much irritation to apply at night lukewarm olive oil, and to wash the scalp next morning with lukewarm water and soap. This last should be of the mildest description.

Now instead of treating in this paper on any particular diseases of the hair, I believe I can do more good by concluding with general advice about hair which is "not thriving," to use a simple phrase.

It may seem strange, but it is a fact, that the peculiar constitution of the hair is inherited. We notice that baldness—premature—runs in families, and so it is of the reverse condition, some men and women retaining quite a luxuriance of hair up to old age.

Still one ought to make the very best of the hair in one's possession.

The weaker and softer the hair is, the more carefully should it be treated. Children with soft, fine hair are probably more troubled with irritable scalps than others, and I desire to impress upon mothers the fact that if these are not treated immediately on their appearance, weakness of the hair is to be looked for in future, and even premature baldness.

But no great amount of hard brushing can be tolerated by the scalps of young people. It ought to be better known that treatment on this rough principle, though it may stimulate the skin and the consequent growth of hair for a time, soon does more harm than good, for the scalp becomes weak, and the hair gets shorter, thinner, and falls off.

Use therefore a soft brush, ladies, and youths of both sexes. But if you have very strong hair, then the brush may be correspondingly rougher.

Should oil be used? Probably a waxy pomatum is best, but even this should be used most sparingly. Really, in my humble opinion, the hair, to be healthy, requires fresh air and sunlight as much as does any growing plant, and all know what the result would be if a tree's bark were completely coated with any stiff paste. When oils or pomatums are used, care should be taken that they are quite fresh. Never make or buy any large quantities at a time therefore, and let the perfume with which it is mixed be of the simplest kind.

Hair that is oiled must be more frequently washed—say, once a week. Use the best and mildest soap, or lukewarm water and yolks of new-laid eggs, and dry carefully with a soft towel.

This washing is best done at night, so as to avoid a chill afterwards.

Ladies' hair to be kept in health should be carefully brushed and combed every night, and arranged loosely in a net. As to head-dresses for night use, every one must use her or his own judgment. I believe in keeping the head cool, and the sleep is often more refreshing when nothing is worn.

Splitting of the hair at the ends is caused by overdryness and improper nourishment, and in reality points to a feeble state of constitution. Use some tonic, such as iron and quinine, or cod-liver oil with malt extract. Live well, take plenty of exercise, the morning bath, and use in this case hair oil.

It is worthy of remark that the first sign of failing hair-growth in ladies is the falling off of *short* hairs. Take the trouble to measure the combings: if a quarter

of these are less than six inches long, something is wrong. Attention must be paid at once to the general health. Some change in that must be made, and cooling medicines and tonics taken.

As to local treatment, nothing is better than rubbing in a weak solution of bicarbonate of soda in distilled water three times a week; on the alternate days use a little oil: this for many months. Be careful to dry the hair with a soft cloth, else the colour may slightly change.

Brief and imperfect though these hints are, I sincerely hope many persons may be benefited thereby. The subject is a very extensive one, and difficult to condense.

One word in conclusion: beware of quack remedies, and trust as much to health of system as anything else to keep the hair beautiful.



## CURIOSITIES OF LOSING AND FINDING.

"Losing is seeking-Finding is keeping."



HETHER this old couplet can be classed under the title of "proverbial folklore" or not, I am not prepared to say; but, used as it was used in my school-days, it had all the force of an oracle. Many is the time that I have known a transfer of property effected under

its authority. One boy had lost his knife or top; another (and stronger) boy had found it; the mystic formula was pronounced, and the transfer was complete—not, let us hope, without one healthy result: that of making the loser more careful for the future.

And, indeed, there is something fateful and solemn about the saying. It appeals to our common experience, and expresses briefly some of our deepest feelings. Spoken of our most precious possessions, it tells the story of many a life.

Of losings there are more sorts than one. Those which result from carelessness are vexatious, but those which result from over-carefulness are more vexatious still. To spend hours in searching for that which one has elaborately concealed in some forgotten nook; or, in the agonies of that modern torture known as a "spring-clean," to miss a wanted paper from that corner of the study-table on which one had placed it; or to have one's sanctum of ordered disorder invaded by the demon of tidiness: these are the things to test one's self-control, if not to shorten life and turn the

hair grey. Over-carefulness causes loss of many things, and of time also.

But a little care and a wholesome order are great time-savers and strength-savers. Shelves kept for certain books, pigeon-holes for certain papers, cupboards for certain properties, days and hours for certain occupations: the man who so orders his life will do more, and do it better, than a much stronger man who is disorderly and irregular. It is Adolphe Monod who on his death-bed utters a most solemn warning on this head; and I am quite sure that I myself could do ever so much more than at present were I only more methodical.

Lost often means mislaid, and mislaid only for a while. Whether it is worth while at once and diligently to seek for what is lost will depend, of course, upon the value of the object. But it is wonderful what a little system and perseverance in seeking will do.

Not long ago I was in a certain company, of which one member amused the rest by telling stories of seekers finding; and some of these may well interest a larger circle than that there gathered.

"Two of my brothers," said the story-teller, "were walking in Switzerland, and on arriving one evening at their halting-place, the elder, who was also purse-bearer, found that his pocket-book, containing some sixty pounds, was missing. The money was in circular notes, not easy of negotiation; and a companion in travel, a German, whose acquaintance they had made on the way, at once offered to lend them any sum they might require, so that the inconvenience promised to be only temporary.