

DISEASES OF THE EAR.

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AT the request of my sister Editor I have written the following notes on the more simple and common diseases of the ear, the kind that we meet with in ordinary domestic practice and which as a rule may be either cured or relieved by the use of safe and common remedies.

To begin from the outside, the auricle, which is covered with skin, is liable to be affected by the usual skin affections. It is specially exposed to the sun and is often the seat of sunburn. Eczema is another common affection, especially in children, and it is often aggravated by scratching. The treatment is to protect it from the irritation of the air either by a dusting powder or an ointment. Starch may be used for dusting, or boracic acid, or zinc oxide, or these may be mixed. Zinc ointment is as useful as any. The B. P. ointment consists of 15 per cent. of zinc oxide in benzoated lard (benzoated suet being recommended in India instead of lard), but it does quite well to mix the same strength of the oxide with vaseline, or soft paraffin. There is a common custom in India of boring the lobe of the ear in children and then inserting a little piece of stick to enlarge the opening. The dirtiness of the stick often causes ulceration, and apart from that the irritation sometimes leads to the formation of small tumours that require surgical treatment for their removal.

In this land of superabundant insect life it is natural that flying and creeping creatures should occasionally find their way into the ear. The first thing to do in such cases is to assure the sufferer that there is no need for alarm. There is a popular belief at home that the insect called the ear-wig is specially dangerous, as it finds its way from the ear to the brain; but there is no evidence that this creature does more harm than any other. Anyone, however, who has had a moth or a fly in the ear in the full enjoyment of its vitality knows how very alarming the feeling is. The easiest way to remove insects is to make the patient lie down on the side with the invaded ear upwards and to pour a little oil, or, failing that, water, into the ear. As a rule within ten minutes the insect floats to the surface. Another way is to smoke the intruder out by the fumes of tobacco. Non-living things that find their way into the ear often give more serious trouble. In my own experience, grains of Indian corn are the favourite articles among Indian children for inserting into their ears, but in other districts it is probable that other articles are preferred. When a child is brought with the story that it has something in its ear, the first thing to do is to make sure that it is really there. As a rule an article that is large enough to cause trouble can easily be seen. It is very unwise to begin poking at it with instruments, for there is a very great danger of driving it further in. There is a bulging part of the canal where foreign bodies as a rule are

arrested and whence it is comparatively easy to dislodge them. If they are pushed beyond this point they enter a sort of recess where they are more secure. The best plan to begin with and to persevere with is syringing. An eight ounce syringe may be used, and while with the left hand the ear is pulled backwards and upwards in order to straighten the canal, the stream of water is directed as far as possible towards any opening that may be apparent between the object and the wall of canal. Instruments are sometimes necessary, for a bean or pea or grain may have become swollen and impacted. Special instruments have been devised, but for my own part I would prefer an ordinary hairpin to anything else. I never use anything else in extracting foreign bodies from the nose. I have seldom known syringing to fail in getting things out of the ear, but if instruments were necessary I think a hairpin would make a very good snare or vectis and involve very little risk. Leeches are not so much used now as they once were, but it is probable that they will regain their popularity, and it is as well to bear in mind the possibility of their wandering into the ear. The thing to do is to sprinkle a little common salt into the ear; this causes the leech to shrivel up and it can then be removed by syringing or picked out with forceps.

Of diseases that affect the interior of the ear, by far the most common is suppuration. A "running ear" is a thing that should never be neglected. Few conditions contain greater potentialities of mischief. The suppurative process may spread to the bony part behind the ear, causing mastoid necrosis. It may lead to paralysis of the facial nerve. It may work its way into the brain, causing cerebral abscess. It may give rise to fatal haemorrhage. In nearly all cases the drum of the ear is perforated and hearing affected. This disease is very common among Indian children. In my own experience it is associated with malaria, in the sense that it is specially common where malaria is rife. It has been suggested that bathing in dirty tanks or rivers may also be a cause. From the other parts of the body the water runs away, but a few drops left in the ears may set up an inflammation that goes on to suppuration.

The treatment of a suppurating ear, if it is taken in time, is easy and usually very satisfactory. The general rule is to begin by cleaning out the ear by syringing, with a four per cent. solution of boracic or a two per cent. solution of carbolic, or simply with warm water. In some cases, however, syringing is not well borne; it causes giddiness or even faintness. In such cases the matter may be removed by means of a wisp of cotton wool. In any case the ear is to be dried by cotton wool. Pure boracic acid is then applied. The use of an insufflator simplifies the operation and tends to economy in the use of the powder, but an insufflator can easily be extemporised by rolling up a piece of paper, putting the powder into one end, inserting this end into the ear, and then blowing through the other end. A little plug of cotton wool may be inserted if the discharge is not excessive. This is the treatment that may be prescribed for persons who wish to carry it out in their own homes, and it must be continued, several times a day if necessary, till the discharge has ceased. In the case of patients who are brought or who come to dispensary for treatment, I use the method that was recommended some

years ago by Dr. Rutter Williamson of Poona,—syringing with Formalin, one per cent. in adults, a half per cent. in children. Formalin is a very powerful antiseptic, but I have not seen any evil result from its use in this way, and it seems to be more effective than boracic acid. Iodoform may be used if there is an offensive smell. The odour of iodoform is disliked by most people, but it is less disagreeable than that of a septic otorrhea.

Earache is a common complaint which may be due to a variety of causes and the treatment will differ accordingly. Sometimes it is one of the early symptoms of suppuration or inflammation of the middle ear, and this must be kept in mind. (On the other hand, one of the remarkable features about a case of suppuration of the middle ear often is the absence of serious pain in a condition of great danger). Earache, again, may be the reflex result of a decayed tooth. The tooth itself may not be painful, but if it is decayed and if it becomes painful when pressure is applied to it, it may very likely be the cause of the earache. In many cases we have just to regard earache as a "neuralgia" and treat it by ordinary soothing applications. "Ringing in the ears" is often associated with recognised diseases of the ear or of the brain, but sometimes it is difficult to account for it. It may be due to a torpid liver, and relief is often obtained from a course of aperient waters, with an occasional mercurial.

A word may be said in conclusion about deafness. It is due either to a defect in the hearing apparatus, that is, in the ear and its appendages, or to an affection of the hearing centres in the brain. Deafness is sometimes due to a very simple defect in the hearing apparatus, such as the accumulation of wax in the ear, which may be removed by syringing. In a great many cases it is due to chronic catarrh. One of the appendages of the ear is the Eustachian tube, which connects the throat with the middle ear. As the result of chronic catarrh it may become closed and this interferes with hearing. Politzerisation is the treatment by means of Politzer's bag. The nozzle of the bag is inserted into one nostril and the other nostril compressed. The patient is then made to swallow a mouthful of water. When swallowing takes place the end of the Eustachian tube that is in the throat becomes patent, so when the patient obeys the word of command to swallow, air is injected into the nostril from the bag and, if the Eustachian tube has not become quite closed, finds its way into the middle ear. Anyone, however, can do his own Politzerisation. When we blow our noses with energy we sometimes feel the air rushing into our ears, and that is the whole principle and object of Politzerisation. To produce the same result more effectively, the nostrils should be compressed and the mouth closed, and the air should then be expelled from the lungs with some force. It will be felt making its way along the Eustachian tubes into the middle ear. A person who is affected with catarrh and consequent deafness on one side, will feel that the air takes longer to find its way into the ear on that side. If the catarrh is chronic and severe, he may find it difficult to force the air into any appreciable degree. Politzerisation, natural or artificial, is usually followed by at least a temporary improvement in hearing, and it is always a means of preventing things from getting worse.

In connection with deafness due to affections of the nerve centres, quinine deafness may be mentioned as an example. We all know that quinine in fairly large doses causes deafness, which in most cases passes away. In some cases, however, it becomes permanent. It is not possible to foresee this danger, for there are personal idiosyncracies in connection with quinine as well as many other drugs. A dose that may do no harm to one person may do serious harm to another. The moral is to prevent fever by taking small doses of quinine regularly, and by taking other protective measures, so that it may never become necessary to take large doses.

TOYMAKING.

BY RUBY K. POLKINGHORNE, B.A.

PART II.

IT is true that children like making toys, but the careful observation of the object to be made, selection of suitable materials, the making and putting together of the different parts is hard work to them, and the failures they meet with tests of courage. Moreover in these toymaking classes they are never passive listeners or passive learners by heart. They see the need of accuracy, the labour necessary to produce it, they suffer for every mistake they make, and best of all they realize the joy of work—active, muscular work as distinguished from their ordinary scholarly work. Nor does one spoil children by teaching them subjects that appeal to them and are suited to their young years and keeping Grammar and Sciences for the riper mind. "Everything too soon" is the motto of some teachers because they fear to spoil the child by recognizing its childhood. It is the *willing* work the child puts into the toy, that makes the work so valuable, for it is not the hard work we force the child to do, but the hard patient work he cheerfully does that develops his character and makes him a finer man, it is only the discipline that is willingly accepted that is of value. We have sometimes to compel children to do things they do not want to do because we cannot give them satisfactory reasons or reasons that are satisfactory to them. While recognizing the necessity for this compulsion sometimes, one realizes how little it helps the moral development of the child. "We are good because we *will*, not because we must." After all child and grown up are alike in this, that drudgery and sorrow are only of value if willingly borne.

In the toymaking class we have a fine opportunity of teaching children the joy of labour, the joy of overcoming difficulties, we can teach that work is not always doing disagreeable things and play pleasant things. The end in view casts a glamour and a gladness over work however monotonous and hard it may seem that mere play can never have. It is possible to begin a class in toymaking with very few tools and merely so called waste materials—empty boxes of cardboard or wood, reels, corks, broom handles, match boxes,