During the year 1903 the number doubled itself. This fact is valuable proof of the value of Killian's method.

In Bodmer's case, a boy of eleven years of age had, while playing, sucked a needle through a tube with such force that it was drawn through the larynx into the trachea. The X-rays showed the position of the needle distinctly. It appeared to be 3 cm. long and to lie over the backbone at the level of 3-5 ribs, and it was difficult to determine whether the needle was in the œsophagus or bronchus. Cocaine having been used, "upper bronchoscopy" was first done, and as nothing was seen in the trachea chloroform was given and a low tracheotomy done. From the tracheal opening the lower part of the trachea was illuminated by Caspar's hand lamp and the bronchoscope used, but without success.

Because of the narcosis the operation was not proceeded with till the next morning, when by again introducing the bronchoscope through the opening in the trachea, which did not require a general anæsthetic, the foreign body was detected in the under part of the right bronchus, and was removed by Killian's long hook. The patient recovered rapidly.

A. Westerman.

ŒSOPHAGUS.

Silver, **Lewis M.**—*Foreign Body in the Œsophagus.* "Archives of Pediatrics," March, 1904.

The case of a male child, twenty months old, who swallowed a cent. The coin was located by the X-rays and easily removed with a coin-catcher. The author also quotes a case of a child, aged eighteen months, who swallowed a scarf-pin. The body was seen by the X-rays in the rectum twenty-four hours later. *Macleod Yearsley.*

EAR.

Spira.—*Eye and Ear: their Similarity and Mutual Relationship.* "Wiener kl. Rundschan," January 17, 24, 31, February 14, 21, 1904.

Spira divides his subject into two parts. In the first he deals with the similarity between the eye and the ear, in the second with their closer relationship and mutual influence.

The first part is discussed under three heads—(*a*) morphological and anatomical, (*b*) physiological, (*c*) clinical.

(*a*) Both the eye and the ear are derived from the same embryological structure—ectoderm—and in their later development there are many similarities—retina and ductus cochlearis with the organ of Corti; naso-lachrymal duct with Eustachian tube; the accessory sinuses, frontal, ethmoid, etc., with the mastoid, antrum, and cells. Topographically the nasal cavity is common to both, and may be the seat of reflexes from both the eye and the ear, as also a means of their common infection. There is also a close relationship in the innervation of these two organs of special sense both in and out of the brain. The internal carotid supplies both structures with blood; the jugular vein, by way of the lateral sinus, drains them.

(*b*) Spira considers the relationship between the waves of light and the waves of sound—the ciliary muscle with the tensor tympani and stapedius muscles.

(*c*) In comparing the eye and ear from a clinical standpoint one must

consider (1) the similarity of the pathological process and clinical symptoms; (2) the onset simultaneously of diseased conditions in both organs.

Under (1) comes the diseases of the eyelids and external ear; the diseases of the conjunctival sacs, naso-lachrymal duct, and accessory sinuses (frontal, sphenoidal, etc.) on the one hand, and of the middle ear, Eustachian tube, and mastoid cells on the other. Many other examples are given.

(2) The simultaneous occurrence of pathological changes in the eye and the ear has either a common ætiology, or has its origin in an extension of a diseased condition of the one to the other. Common causes may be (*a*) local, such as diseases of the nose, face, or cranium; (*b*) general; (*c*) a special affection of some organ of the body; (*d*) anomalies of development. Spira takes up and discusses each of these heads separately.

Amongst local causes he refers to disease of the nasal sinuses, adenoids, etc.; to facial erysipelas, lupus urticaria; emphysema of the eyelids following the use of the Eustachian catheter; meningitis; disease of the fifth and seventh cranial nerves; fractures of the skull.

Under general causes are included (1) mental affections—hallucinations of seeing and hearing, neurasthenia, and hysteria, etc.; (2) infectious diseases—diphtheria, syphilis, scarlet fever; (3) alterations in the composition of the blood, disturbances of metabolism and intoxications; the various forms of anæmia; gout; nicotine and salicylic acid poisoning.

(*c*) includes such diseases as dental caries, diseases of the gastro-intestinal tract, of the circulatory and urinary systems.

Passing to the second part of his subject, a consideration of the nearer relationship between different conditions of the two organs, Spira states that in a number of cases, directly or indirectly, diseases of the ear are followed by the like in the eye, and *vice versâ*. In other cases irritative conditions and diseased processes of the one organ call forth in a reflex manner pathological changes and conditions in the other.

One group includes cases of facial palsy, following on middle-ear disease, with resulting paralysis of the orbicularis oculi and inability to close the eyelids. The so-called "*otic*" pyæmia may cause (1) retinal changes, (2) suppuration and retro-bulbar adipose tissue, (3) cramp or paralysis of the eye muscles, (4) circulatory disturbances in the veins of the eye—exophthalmos, œdema, etc.

The pathology of these changes is not yet clear, some holding them to be due to increase in the intra-cranial pressure, others to the presence of substances in the cerebro-spinal fluid, which penetrates to the optic nerve by the lymph-channels. On the other hand, an extension directly or indirectly of an affection of the eye to the ear is not often observed.

Another group includes such abnormal changes and appearances of a reflex character as can be either of a (1) special sense, (2) motor, (3) sensory, (4) trophic, or (5) vaso-motor nature. 1 and 2 are discussed at some length. The influence of the one organ of special sense on the other, considered from a neuro-pathological standpoint, has had a good deal of attention lately (Steinbrügge, Urbantschitsch, and others).

In conclusion Spira makes an appeal for more attention to be paid to the relationship between the eye and ear, not only by general practitioners, but also by specialists in otology and ophthalmology, who ought never to miss an opportunity of examining and investigating such cases.

There is an excellent list given of the literature on this subject up to the present date. *A. Westerman.*

Okouneff, Basile (St. Petersburg).—*Involuntary Movements of the Head showing an Isolated Affection of one of the Semi-circular Canals in Man.* "Archives Internationales de Laryngologie," March—April, 1904.

The author points out that for many years experiments on birds and animals have shown that if the superior semi-circular canal is opened, the subject involuntarily turns its head to one side.

Drawing his conclusions from this, Dr. Okouneff quotes two cases (men) in which involuntary movements of the head, forward, and from left to right, were strong indications of a lesion of the semi-circular canal. In both cases the labyrinth was involved, the patients had a peculiar way of holding the head, there was no squint, and on looking fixedly at the doctor's finger the patient became giddy and fell forward towards the healthy side. In one case the movements were confined to the head, in the second the body also was affected. The oscillations of the head were worse when the patient (first case) was sitting, and the hands could not be kept still. When the mastoid disease became more acute the number of oscillations was augmented, and the turn of the head more pronounced.

Applications of leeches and blisters behind the ear resulted in cure in the first case, and ameliorated the second, the final result of the latter being unknown, as the patient, a soldier, rejoined his regiment.

Anthony McCall.

THERAPEUTIC PREPARATIONS AND INSTRUMENTS.

An Inspiratory Nasal Irrigator, by Dr. Dundas Grant.

The central idea in this simple apparatus is the more effective employment of the action of "snuffing" in the irrigation of the nasal passages. The apparatus consists of a cylindrical glass receptacle—a neckless bottle—of about 2 oz. in capacity, fitted with a cork bung, through which pass two tubes, one of which reaches to the bottom of the receptacle, the other for a very short distance below the cork. The long tube has at its upper extremity a flattened bulbous expansion adapted to fit the nostril. The mode of employing the irrigator is extremely simple. It is filled with the necessary liquid, and held in the hand of the side on which it is to be used. The bulbous tip is placed in the nostril, and the alæ nasi of both sides are compressed by means of the thumb and fingers of the opposite hand. The patient then, by a vigorous snuffing action, draws the liquid up his nose into the naso-pharynx. The instrument ought to be removed from the nose while the the fluid in the naso-pharynx is hawked and spat out through the mouth. The advantages claimed for this irrigator are that the action of the *vis a fronte* reduces the risk of invasion of the Eustachian tubes, and the stream is drawn upwards as well as backwards, and thereby reaches the middle turbinal and middle meatus, while at the same time the forcible inspiration forms a gymnastic exercise for the breathing mechanism which in many cases is of great value. It need hardly be said that in cases of very special weakness the inspiratory effort required may contra-indicate its use, but, with the exercise of ordinary caution, it will be found a safe and