(X.) In vertigo, caused by syringing, which is of a rotatory and horizontal character (as apart from mere ill-defined giddiness), the membranous external semicircular canal is presumably exposed by caries of its bony wall, the danger is very great, and the indications are therefore obvious.

(XI.) Persistent mastoid pain, indicated by a sclerosed and eburnated mastoid, often without any antrum, is susceptible of cure through relief of tension, and this must therefore be afforded by operation on the mastoid.

NEW INSTRUMENT.

13. Dundas Grant's spinal vibrator.

This is an invention for applying indirect massage to the tympanic structures by means of vibrations communicated to the dorsal spine.

The apparatus consists of a heavy metal frame, suspending a spindle-shaped body which revolves excentrically inside and transmits a vibratory thrill to the surface with which the instrument is brought in contact. The applications are made once or twice a day for five minutes, the cases selected being dry catarrh of the middle ear of the sclerotic type. Many patients shown at a recent meeting of the British Laryngological Association testified to the improvement they had derived from the treatment, the presumption being that the stapedio-vestibular articulation had been favourably massaged indirectly by the vibrations.

DISEASES OF THE NOSE AND THROAT.

By StClair Thomson, M.D., M.R.C.P. Lond.,
F.R.C.S. Eng.,

Physician to the Throat Hospital, Golden Square;
Surgeon to the Royal Ear Hospital.

The general trend of Laryngology was indicated by M'Bride in his presidential address before the section at the British Medical Association meeting in Edinburgh. He pointed out that experience has shown that no charge of mental narrowness can be brought against the best workers in the department, but that the danger of excessive extension is perhaps more real. Indications of general disease are often first detected by the laryngoscope. We discover, it may be, some lesion of the chest, nervous system, or even kidneys, which we feel ourselves perfectly able to treat, and so, unless the laryngologist be careful, he may be led to encroach seriously upon the domain of the general physician. With regard to the surgical aspect of the speciality, the old rule used to be to call in a surgeon when external incisions were required. But the laryngologist of to-day does not confine himself to tracheotomy. He performs thyrotomy and excisions, removes goitres and sometimes cervical glands, so that he thus annexes, as it were, a considerable portion of the general surgeon's territory. If these operations are to come within our sphere of work, then it almost logically follows that we shall in the near future undertake external operations on the œsophagus and stomach, as well as extensive dissections involving the removal of tumours from the neighbourhood of the large vessels of the neck. M'Bride observed that there was a good deal to be said for and against this growing desire of the younger specialists to annex fresh territory. He held that it is a question for each one of us to decide how far he shall take part in this policy of expansion (*Journ. of Laryng.*, Sept., 1898). I venture to think that everyone is justified in embracing whatever he feels himself conscientiously able to undertake, his area of work being dependent on many things—his past experience of general work, his opportunities for perfecting his knowledge and skill, his individual tastes, etc.

GENERAL METHODS.

The Roentgen rays continue to be of great service in this department, chiefly in the localisation of foreign bodies. Mounier, by their means, was able to diagnose that a chronic nasal suppuration, accompanied with epiphora on the same side, was caused by the extremity of a lachrymal sound which had broken off and remained in the lower part of the nasal duct for no less a period than 42 years (*Archiv. Internat. de Larnygol.*, No. 3, 1898).

From various sources efforts are being made to improve upon the simple **laryngeal mirror** with which we have worked for 40 years. Kirstein's autoscope was an attempt to improve upon the indirect method of observation, but even when successful it has the objection of giving a foreshortened view of the deeper parts. We cannot really judge of the actual conditions of the walls of a closed cavity, except when our visual rays fall more or less perpendicularly on each one of them, and it is generally recognised that it is impossible to form anything but an approximate idea as to the state of the subglottic region, especially posteriorly. Post-mortem examination only too often demonstrates how we have under-estimated the extent of disease below the level of the vocal cords. It is in an attempt to remedy this that Mermod has invented the "laryngendoscopic" mirror. This is a very small oval-lanceolate mirror on a long, curved stalk, which is introduced right into the larynx, the image it receives being viewed in the ordinary mirror held in the pharynx. It is necessary thoroughly to cocainise the larynx beforehand (*Annal. des Mal. de l'Oreille*, 1898, No. 2). The same idea had previously occurred to Rosenberg (*Therap. Monats.*, 1897, Dec.).

Last year reference was made to the attention being devoted to the subject of **laryngoscopy in children**. After a critical review of previous attempts in the matter, Petersen gives his approval to the method described by Lack. This is a development of the method described by Rauchfuss in 1878, in which a laryngeal mirror is used in the ordinary way, but the tongue, instead of being held out of the mouth, is simply well depressed by a Fraenkel tongue spatula. The end of this instrument presses on the dorsum of the tongue, but in Lack's method a beaked depressor is used which fits into the fossa epiglottica, so that the tongue can be hooked forwards and upwards. Petersen uses the tongue spatula of Mount Bleyer (*Therap. Monat.*, 1898, March).

Professor Stoerk, of Vienna, is surprised that **œsophagoscopy** is not more frequently made use of, and he devotes a brochure to the subject (Wien: W. Braumüller). He employs a straight tube, 40 centimetres in length, and a frontal mirror or forehead electric lamp. The patient is seated as for passing an œsophageal sound. He finds the method of value in removal of foreign bodies, dilatation of strictures, and the diagnosis of non-inflammatory affections. It is only a certain number of patients who can tolerate it.

GENERAL THERAPEUTICS.

In **orthoform** we seem to have secured a most valuable addition to our local remedies. This drug is a light, dirty yellow powder, slightly soluble in water, and easily dissolved in glycerine, or water acidulated with hydrochloric, nitric, or acetic acid. It is feebly antiseptic, and has no poisonous properties. When applied to mucous or abraded surfaces it exerts an anæsthetic and analgesic action, the freedom from pain lasting as much as 24 hours. Lichtwitz and Sabrazès have found it of great value in dysphagia, especially in that caused by laryngeal tuberculosis, laryngeal cancer, and the removal of the tonsils by the galvano-caustic snare (*Bull. Méd.*, Nov. 21, 1897). It gives considerable, if temporary, relief in hay fever and nasal hydrorrhœa when insufflated into the nasal fossæ (Lichtwitz: *Arch. Internat. de Laryngol.*, Nov. 1, 1898).

E. S. Yonge gives the following as a list of the most suitable preparations :—

(1) The crude powder, either alone or mixed with equal parts of lycopodium, which should be accurately insufflated on to the required area, since orthoform takes effect only where it comes in contact with the abraded parts, and its influence does not extend to the tissues beyond.

(2) Pastilles, with the following formula :—

Orthoform	gr. iij. to v.
Liq. cocci	q.s.
Saccharin	gr. ¼.
Glyco-gelatine	q.s.

The pastilles are useful in mouth, tonsillar, and posterior pharyngeal affections, but less so than the two succeeding preparations.

(3) A saturated solution of orthoform in collodion, forming a species of "varnish." This is useful in those cases in which an ulcer is exposed to much friction, but as it causes acute smarting it is advisable primarily to anæsthetise the ulcer either with cocaine or with orthoform in powder.

(4) A spray, with this formula :—

Orthoform	gr. v.
Sp. vini rect.	♏ 50
Aquæ	♏ 50

This is perhaps the best form in which to administer orthoform for nasal and laryngeal ulceration. The spirit evaporates shortly after contact with the parts, leaving the precipitated powder evenly distributed over the affected area.

(5) An ointment (10 per cent.) made with any good ointment basis.

(6) An aqueous solution (10 per cent.) of the hydrochloride as a paint (*Brit. Med. Journ.*, Feb. 5, 1898).

This commendation of the new drug was generally endorsed by the London Laryngological Society, although some members had been disappointed in the results obtained.

Another promising addition is **holocaine**, a salt which occurs in small, white, needle-shaped crystals, which are soluble to the extent of 5 per cent. in cold water. Coosemans maintains that in holocaine we have an ideal local anæsthetic, and one which surpasses cocaine in the following respects :—1. Holocaine is cheap—about quarter the price of cocaine ; moreover, 1 per cent. solution is equal to 10 or 20 per cent. solution of cocaine solution. 2. It causes no pricking. 3. It is much less bitter to the taste than cocaine. 4. It produces no nausea, no sensation of tightness or of foreign body in the throat. It produces none of that cerebral excitation which is often responsible for cocaine mania. 5. It causes no vascular contraction. 6. It never induces symptoms of general intoxication. 7. The solutions are stable and antiseptic (*Rev. Hebd. de Laryng.*, Dec. 11, 1897).

Nosophen is recommended by Scott Bishop as an excellent local antiseptic in diseases of the nose and throat. It has no odour or irritating qualities, and is antiseptic and healing. Its colour is greyish-yellow, and it contains nearly 62 per cent. of iodine in combination. It is not decomposed by heat up to 220°C., and is not soluble in water. However, it is readily soluble in alkalies, and when thrown on surfaces that have just been treated with alkaline sprays it is converted into the sodium salt, antinosine (*The Laryngoscope*, Jan., 1898).

Arsenic has been strongly recommended by Costiniu in malignant tumours of the larynx, tongue, and nose. After application of cocaine, he paints on a 1 in 150 solution of arsenious acid, and in one case, which had been demonstrated by the microscope to be epithelioma, he obtained a definite cure. There were no symptoms of intoxication, the pain produced was

very slight, and the acid appears to act only on diseased tissues (*Rev. Hebd. de Laryng.*, No. 38, 1898).

CONNECTION WITH REMOTE SYMPTOMS.

Dr. W. F. Chappell (*Laryngoscope*, March, 1898) calls attention to the common dependence of throat and nose affections on the state of the general system. Atrophic rhinitis, enchondroma, perforation of the nasal septum, recurring epistaxis, etc., are often secondary to contagious affections ; marked redness of the mucous membrane and great pain and stiffness of surrounding tissues, to latent gout or rheumatism; primary syphilitic lesions of the upper air-passages have been mistaken for diphtheria, and congenital syphilitic ulcerations of the nasal septum, soft palate, and larynx for tuberculosis and malignant disease. Acute rhinitis and laryngitis often spread downward to the trachea and bronchi, and conversely, though laryngeal tuberculosis is nearly always secondary to that of the chest. Gastro-intestinal disorders play their part by causing venous congestion, especially round the base of the tongue, with glandular swelling there and on the posterior pharyngeal wall. Lithæmia is also responsible for much glandular tissue increase. Hysteria is a factor in the production of aphonia, œsophagismus, and dysphagia ; nasal headaches are often due to improper drainage or disease of the accessory sinuses. In all these conditions, full scope must be given to internal medication, and topical treatment not allowed to usurp exclusive dominion.

Certain forms of headache are undoubtedly of nasal origin, so that the method of treatment suggested by Vansant is worthy of consideration. He forcibly syringes the nasal accessory sinuses with a stream of hot dry air (medicated in some instances) or nitrous oxide gas. The relief was complete and permanent after one or two treatments in some cases, and was so quick as to be in some instances "positively startling." In most of the cases he records there was nasal obstruction present in some form or another. The forcible syringing in many instances caused a free serous discharge from the nostrils, which did not last very long. His explanation is that the headache results from the obstruction to the outlets of the sinuses, and consequent retention of fluids and rarefaction of the confined air. The forcible syringing permits the escape of the retained gases or fluids, and restores the equilibrium of the atmospheric pressure. Once freed, the outlets do not easily become obstructed again, hence the good results of treatment are lasting. No description of the technique is given (*Philadelph. Med. Jour.*, May 7, 1898).