are produced not directly by substances, but rather by the surrounding medium.

2. The olfactory nerves have the same cerebral origin as the optic nerves, and probably resemble them as to function.

3. Chemical odoriferous substances, which belong to the same group, resemble one another in their spectra.

4. Odours have the quality of absorbing radiant heat, which proves that there is an intimate relationship between odours and heat rays.

5. Many bodies from which particles are given off have no smell, while it is impossible to prove that many others with strong smells give off any particles.

6. Some bodies, each having a strong smell, when placed together antagonize each other so as to produce no smell. This is analogous to the effect of placing a hot and a cold body together.

7. The power of stuffs to absorb smells varies with their colours.

8. The sense of smell may be fatigued on one smell, remaining intact for all other odours, just as the eye may be fatigued for one colour yet remain active for all other colours.

9. Air is not the only vehicle for odours, for the author's experiments prove that one can smell quite well with the nares full of an odoriferous fluid. *Arthur J. Hutchison.* 

## LARYNX.

Ausset, E. - Dyspnæa of Two Years' Duration, in a Girl Three and a Half Years Old. "L'Echo Méd. du Nord," January 21, 1900.

When about eighteen months old the child began to suffer from difficulty of breathing and a certain amount of hoarseness. Inspiration is accompanied by a loud noise, evidently produced in the larynx, and by very marked suprasternal and epigastric retraction. Respirations are 12 to 15 per minute, both inspiration and expiration being much prolonged. During expiration the heart-beats are progressively slowed; at the beginning of inspiration they suddenly become rapid, then normal. Pulse 96 to 108 per minute. Scarcely any cough; no attacks of suffocation; no cyanosis of the face; no abnormal fulness of the veins of the neck or thorax; no collateral venous circulation in these regions; no epistaxis. The whole cervical and maxillary regions are perfectly free, no tumour, perhaps a little "micro-polyadenopathy." Examination of the chest reveals practically nothing abnormal.

Dr. Gaudier found the naso-pharynx full of adenoid vegetations. which he thoroughly removed. The larynx appeared quite healthy, the cords normal, no tumour present.

Removal of the adenoids had no effect at all on the respiration.

The author discusses fully the pathology of the affection, and concludes that the condition is one of abductor paralysis, probably due to pressure on the recurrent laryngeal by an enlarged gland. This view is supported by the fact that in introducing a laryngeal tube a considerable amount of resistance has to be overcome, and that while the tube is retained in position the stridor and traction completely disappears. As the tube is ejected in a very short time, intubation can not be used as a means of treatment. The therapeutic indication, therefore, is to combat the adenopathy by tonics, iodide of arsenic, residence near the sea, etc. Arthur J. Hutchison. Brindel.—The Motor Innervation of the Soft Palate and Larynx. "Rev. Hebdom. de Laryngol. d'Otol. et de Rhinol." March 3, 1900.

Physiological experiments show that the facial nerve has nothing to do with the innervation of the soft palate; the fifth nerve is also excluded except as regards the tensor palati (Hein and Réthi). Intracranial stimulation of the glosso-pharyngeal gives negative results, but stimulation of this nerve in the neck produces contraction of the palate (Beevor and Horsley). Now, the glosso-pharyngeal at the foramen lacerum post. receives branches from the facial and the pneumogastric, but the facial has nothing to do with the soft palate. therefore the pneumogastric is the motor nerve of the soft palate. Further, the lower roots of the pneumogastric, otherwise known as the upper roots of the spinal accessory, form the true source of the palatal nerves. One part of this nerve passes into the vague to form the laryngeal nerves; another part forms the pharyngeal nerve, which joins with branches of the glosso-pharyngeal and sympathetic to form the pharyngeal plexus, whence the muscles of the palate receive their innervation.

This view is supported by the clinical fact that facial paralysis is not accompanied by paralysis of the soft palate, also by the occurrence of hemiplegia of the soft palate and larynx, and of hemiplegia of the soft palate, tongue and larynx, without any facial paralysis. Several cases of this nature are cited, and a full report is given of a case of the author's. already reported to the Société de Méd et de Chirurg de Bordeaux A tuberculous child had a radical operation done on the left mastoid, March 22, 1899. This progressed very satisfactorily, the cavity being completely epidermized by June 15, 1899. On April 3 paralysis of the right half of the soft palate and of the right vocal cord developed; about the middle of May attacks of violent coughing came on, and on July 4 paralysis of the external rectus of the right eye supervened. The muscles of the face (right and left) remained absolutely unaffected throughout. The author analyzes this case very carefully, and concludes that it supports the physiological view of the innervation of the soft palate; unfortunately no examination of the medulla, etc., could be made. A. J. Hutchison.

P. V. Bruns.—Resection of the Trachea in Primary Carcinoma. "Beitr. z. Klin. Chirurgie," xxi., 1898.

Bruns resected the posterior and left wall of the trachea to the extent of ten tracheal rings in a primary struma maligna intratrachealis. The patient died six years later from recurrent stenosis. He describes these tumours as of round or cylindrical contour, with a broad base and smooth surface. Its extent was 2 to 5 centimetres in diameter. The prognosis of operation is not unfavourable, as the tumours are usually at the beginning or middle part of the trachea. Gwild.

Champeaux, P. de.—Pulmonary Lesion due to a Benign Growth in the Larynx. "Revue Hebdom. de Laryng., d'Otol. et de Rhinol." April 7, 1900.

M. X——, a naval officer, was invalided home from Newfoundland, supposed to be suffering from incipient pulmonary tuberculosis, with cough, haemoptysis, etc. No tubercle bacilli had been found in the sputum. When first seen by De Champeaux he had acute laryngitis and pharyngitis; later, when the swelling of the ventricular bands had diminished, a papilloma was discovered. After various unsuccessful attempts this was removed. The pulmonary symptoms and physical signs then cleared up completely. A. J. Hutchison.

## Kassel, Dr. (Posen).—On the Treatment of Laryngeal Tuberculosis. "Monatschrift für Ohrenheilkunde," June, 1899.

The curette is contra-indicated when the lung condition is bad.

A 10 per cent. solution of menthol in rectified spirit is a useful inhalation—10 drops on a handkerchief or the palm of the hand.

To relieve dysphagia, and as an anæsthethic before applying caustics, he injects 2 to 4 c.c. of a 10 per cent. solution of nirvanin (chloride of orthoform) in water with an ordinary laryngeal syringe. As soon as the injection has taken effect he blows in orthoform in powder, and so produces prolonged anæsthesia without discomfort. Lactic acid may then be painlessly applied. *William Lamb.* 

Lenzmann.—Ecchondroma of the Cricoid Cartilage. "Vereinigung Westdeutscher Hals und Ohrenärzte," December, 1899; "Münchener Medicinsche Wochenschrift," No. 15, 1900.

The patient had aphonia and dyspnœa with stridor. The laryngoscope showed a tumour immediately under the glottis. Tracheotomy was performed. Later examination showed that the tumour was connected with the left vocal cord, and that it was immobile. Microscopic examination of a part removed by endolaryngeal means showed no abnormal proliferation of epithelial elements. The probe showed that it consisted of a hard, resistant mass. It was diagnosed as a hard fibroma or chondroma. The tumour was removed by thyrotomy, and proved to be an ecchondroma growing from the broad surface of the cricoid cartilage. Guild.

## Reinhard, Dr. Paul. — Late Tracheal Stenosis after Tracheotomy "Monatschrift für Ohrenheilkunde," June, 1899.

Twelve years after a low tracheotomy for diphtheria, a young woman of eighteen began to suffer from dyspnœa, which steadily increased till it became urgent. Breathing laboured, twenty per minute, loud stridor, little movement of larynx.

At the level of the fifth tracheal ring two red symmetrical swellings were seen, touching in front, and encroaching on the lumen of the tube so as to leave only a small triangular interval. The swellings were not membranous, but seemed to be thickened bands or cords, due no doubt to hypertrophy of the old cicatrix. No evidence of syphilis.

Schröller's vulcanite bougies were passed daily for a fortnight, and left in at first for two or three, but finally for ten, minutes. The girl then became an out-patient, and under continued treatment the swellings atrophied and all symptoms disappeared. William Lamb.

## Swiatecki.—Case of Severe Stenosis of the Pharynx not of Syphilitic Origin. "Pam. Tow. Lek. Warsz.," IV., 1898.

The stenosis of the pharynx in a female, twenty years old, was caused by drinking caustic potash; the inferior part of the pharynx, except for a small opening, was occluded by a membrane. The treatment consisted in incision and methodical dilatation of the pharynx, as well as of the œsophagus. John Sendziak.