2. *Perforation of the Nasal Septum following Diphtheria.*—A patient, twenty-eight years old, had a slight diphtheria of the tonsils. Five weeks later acute catarrh of the right nostril, obstruction, and an ulcer on the left side of the septum. Sixteen days later, after the antiseptic treatment, the patient was cured, but there remained a perforation of the bone of the right side, without affection of the mucous membrane.

3. *Membranous Obstruction of the Choanæ.*—A patient, thirty-one years old, had an obstruction of the nose for two years. The rhinoscope showed a membrane covering the choanæ, and occluding the nasal orifice of the pharyngeal cavity. Galvano-caustic destruction of the membrane resulted in cure. It is difficult to decide whether the occlusion was congenital or not.

4. *Rhinitis and Rhino-Pharyngitis Fibrinosa.*—In a patient, nineteen years old, adenoid vegetations were removed by the forceps and subsequent galvano-caustic treatment. After the third visit the patient became feverish, and experienced pains in her nose and snuffling. The nasal mucous membrane was covered with white-greyish membranes. Brushings with glycerine and iodine resulted in cure. In a second case, a similar membranous rhinitis followed the extraction of a nasal polypus.

5. *Gumma of the Nose and Naso-Pharynx.*—In two cases the author had occasion to observe real gummatous tumours of the nasal septum.

6. *Cyst of the Nasal Septum.*—In an adult patient, whose face was wounded in his third year by the foot of a horse, the author found a tumour in the right nasal cavity, of the size of half a walnut. By puncture he removed serous fluid. The author believes that the patient had from the traumatism a hæmotoma, that the blood was absorbed and the cyst remained. There was no indication for operation upon the cyst.

Michael.

LARYNX.

Semon and Horsley.—*On the Central Motor Innervation of the Larynx.* "Brit. Med, Jour.," Dec. 21, 1889.

THE conclusions which the authors have arrived at are as follows :—

1. There is in each cerebral hemisphere an area of bilateral representation of the adductor movements of the vocal cords, situated in the monkey just posterior to the lower end of the præcentral sulcus at the base of the third frontal convolution, and in the carnivora in the præcrucial and neighbouring gyrus. This area has a focus of intensest representation in the anterior half of the foot of the ascending frontal convolution. Stimulation of this point produces complete bilateral adduction of the vocal cords, which lasts as long as the stimulation is continued. Should, however, the latter be unduly prolonged the "*besoin de respirer*" overcomes the influence of the artificial stimulus and evokes a momentary but powerful abductor movement of the vocal cords. Stimulation of the more

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peripheral parts of the area evokes less and less perfect adductions as we proceed from the focus outwards, and when the extreme margin of the area is excited only what is known as the "cadaveric position" is assumed by the vocal cords.

The above description applies to the monkey, dog, and rabbit. In the cat they have observed curiously different conditions, for which, at present, they are not prepared to offer any explanation.

2. They have not been able to find an area of representation in the cortex of the abductor movements of the vocal cord.

3. If one of the cortical areas for adduction be so completely excised that stimulation of the neighbourhood of the lesion produces no effect upon the larynx, and if the wound be allowed to heal aseptically, no paralysis of the cords is observed. Further, if subsequently the corresponding area in the opposite hemisphere be excited, just as completely bilateral an adduction of the cords is produced, as if the opposite area were intact.

From the above facts they infer that—

(*a*) Unilateral irritation produces bilateral effect. Thus clinically in any irritative unilateral affection of this area, spasm of the glottis, that is, bilateral adduction of the vocal cords, may occur, for example, in laryngismus stridulus. That this view is not purely theoretical is shown by the association, in severe cases of the last-named illness, of the glottic spasm with the so-called carpo-pedal contractions. This association is most easily explained on the assumption that there is an overflow of energy from the laryngeal to the neighbouring cortical areas for the limbs.

(*b*) Unilateral destruction produces no effect. There is, therefore, no such thing as unilateral paralysis of a vocal cord from lesion of a cerebral hemisphere, as has been asserted. The truth of this statement is made evident by the fact that motor aphasia is not identical with aphonia. Moreover, the observation by one of the authors of several patients with complete aphasia and right hemiplegia, only a few hours after the apoplectic stroke has conclusively shown that in such instances the movements of the vocal cords are perfectly preserved.

4. They have observed that on powerful or long-continued excitation of the laryngeal area true epilepsy of the vocal cords supervenes, gradually spreading to the neighbouring muscles of the face, neck, head, and upper limbs. From this they conclude that the epileptic cry is not, as has been so long believed, the result of a discharge primarily from the medulla oblongata, but rather represents a stage in the cortical excitement popularly termed an epileptic fit.

5. Whilst they have found so distinctly specialised an area of representation of adduction in the cortex, and no corresponding area of abduction in this region, they have, on the other hand, found that direct excitation of the accessory nucleus in the medulla oblongata evokes abduction of the cords, and never anything else.

From all the foregoing it follows that their results are in complete harmony with the most recent views of the relation of the cortical to the lower centres; for their experiments have shown that the representation of the laryngeal movements in the cortex is essentially that known as

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purposive or volitional, since it is adductional, that is, phonation; whilst, on the other hand, the bulbar representation of the larynx is essentially adapted for the so-called automatic processes of organic life, that is, abduction-inspiration.

Finally, this series of experiments, as well as those they have previously published on the peripheral innervation of the larynx, corroborates in the fullest manner the ideas which Semon has put forward in his first papers on abductor paralysis, namely, the proclivity of the abductors to fail in organic, and of the adductors in functional, disease.

R. Norris Wolfenden.

Jacob.—*Functional Disturbances of Speech.* "Brit. Med. Jour.," Feb. 22, 1890. Leeds and West Riding Medico-Chir. Soc., Feb. 7, 1890.

AFTER giving a sketch of the principal ways in which speech might be pathologically affected, the author gave an account of two cases of functional aphemia lately under his care. In the first case, that of a middle-aged man, it had come on gradually eight years before in connection with mental troubles in consequence of business anxieties. In the other case aphemia had suddenly come on a few days before in the course of ordinary conversation. Both were completely cured by the inhalation of ether. In connection with the subject of ordinary nervous aphonia, Dr. Jacob recommended early treatment by faradism, though tonics were generally also required. Mr. Teale recalled the case of a hysterical woman, who could not speak, but he induced her to try and speak French, to which she had been early accustomed. She then could speak fluently. Mr. Farrow related the case of an aphonic girl, who on two occasions on a journey to the same place recovered her voice at exactly the same station on the railway. She had been treated by faradism unsuccessfully. Dr. Bronner, in applying faradism for aphonia, used a strong current, and told the patients he would continue it till they screamed. He applied cocaine to the larynx before and after the operation, as he had seen considerable hyperæmia caused by endo-laryngeal faradism.

R. Norris Wolfenden.

Gould, G. M. (Philadelphia).—*Clinical Illustrations of Reflex Ocular Neuroses.* "American Jour. of the Med. Sciences," Jan., 1890.

AMONGST other cases, the author cites one of aphonia with other nervous symptoms due to compound hyperopic astigmatism and insufficiency. Periodical attacks of aphonia had occurred, lasting for a few days, a condition which had existed for five years. These had several times been treated by the galvanic current, when the voice had returned. While wearing a pair of spectacles for a year the patient had no aphonia. Latterly the attacks had recurred along with blepharospasm.

When she came to the author she was voiceless. The use of a mydriatic at once restored the voice. When fitted with proper spectacles for the relief of her astigmatism she was for three months without loss of voice, sick headaches, blepharospasm, and a numbness of the right side of the body, with choreic jerkings and insomnia, disappeared too.

R. Norris Wolfenden.

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Mermod.—*Endo-laryngeal Electrolysis.* Soc. Vaudoise de Méd. "Rev. Méd. de la Suisse Rom.," Jan. 1890.

THIS method of treatment, performed under cocaine, and with long laryngeal needles bent to the angle of the ordinary curve of laryngeal instruments, and covered with protective varnish is productive of the best results in the treatment of the infiltrations, etc., of laryngeal phthisis. There is no pain or hæmorrhage during the application of the current. After two or three sittings the infiltration diminishes, and the general condition improves.

M. Secrétan remarked that he had seen Mermod operate, and could confirm the good results obtained, but he thought that less complicated treatment would attain the same results. Mermod replied that electrolysis would cure a condition in which other treatment had failed.

R. Norris Wolfenden.

Schneidemühl (Kiel).—*The latest results of the Laryngeal and Tracheal Applications of Medicaments to the Treatment of Animals, and their value in Internal Therapeutics.* "Deutsch. Med. Woch.," 1890, No. 4.

THE author describes the method of application. The horse's trachea must be perforated with a trocar, the tube of the trocar remaining *in situ*. The medicament is injected by a Pravaz syringe. A great number of medicaments can be applied in this manner. The method is productive of much good in the petechial fever of horses; good results are also obtained in the treatment of chronic laryngitis in the so-called "Schweinsberger" disease, in tetanus equorum, and in epilepsy. Experiments upon men have been made by Dor (Lyon), who has applied injections of creosote oil in phthisical patients, which prove that the method can be applied without danger. *Michael.*

Moser (Hamburg). — *The Application of Wiegert's Hot-Air Apparatus in Tuberculosis of the Lungs and Larynx.* "Berliner Klin. Wochens.," 1889, No. 52.

THE author has used this method in twenty cases of pulmonary phthisis without obtaining any good result. Ulcers of the larynx, however, both phthisical and syphilitic, are sometimes cured under this treatment, but the author is forced to conclude that the method cannot be recommended. *Michael.*

Wolff, Ludwig (Gothenburg).—*Remarks on Foreign Bodies in the Air-Passages.* "Hygæa," No. 4, 1889.

AFTER some general remarks the author relates a case of a young man, who, whilst eating, got a piece of bone (the smallest diameter being eight millimètres, the largest fourteen) into his air-passages, where it remained for about two months, its situation probably being in the inferior part of the trachea. During all this time the patient suffered from slight dyspnœa, severe cough and abundant expectoration of phlegm (without any blood). Some days there were also signs of a slight inflammation of he right lung ("*Schlück-Pneumonia*" ?). After the administration of a strong expectorant mixture, the patient coughed the foreign body up, and shortly afterwards recovered completely. *Holger Mygind.*

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Baber, E. Creswell (Brighton).—*Strumous Disease of the Upper Respiratory Tract.* "Brit. Med. Jour.," June 22, 1889. Brighton and Sussex Medico-Chirurgical Society, May 2, 1889.

A GIRL, aged eighteen years, was shown, having, besides a tubercular eruption on the outside of the nose, a perforation of the cartilaginous septum, with healed edges, and signs of old pharyngitis. There was shrinking of the epiglottis and thickening of the ventricular bands. The sensitiveness of the pharyngeal and laryngeal mucous membrane was considerably diminished. It was uncertain whether the case partook of the nature of lupus. *Hunter Mackenzie.*

Simpson.—*A Report of Four Cases of Laryngeal Obstruction in the Adult, Treated by Intubation.* New York Acad. of Med., Jan. 28, 1890.

IN the four cases to be reported, the urgent symptom in all had been dyspnœa; but it was demonstrated how different might be the cause of the stenosis, and how well it might be overcome by early resort to intubation.

Case I.: *Specific Gumma of the Larynx.*—The patient, a married woman, aged twenty-six, had given a history which pointed to syphilis, but had had no laryngeal trouble previous to the present attack. Hoarseness and loss of voice had come on, and ultimately severe dyspnœa and suffocative attacks. This condition had been treated for asthma and bronchitis. Examination of the larynx showed almost entire occlusion by a large, irregular, greyish, granulating mass, of cauliflower appearance. The vocal cords were entirely hidden, though there seemed to be a small pin-hole opening, through which respiration was carried on. The patient was placed on large doses of iodide of potassium, with no improvement. The dyspnœic attacks becoming so alarming and frequent, intubation was performed, and followed by immediate relief.

The tube was retained three days, during which time the patient was able to swallow without any inconvenience. Examination of the larynx soon after removing the tube showed an entirely different state of things. All that had remained of the mass was a few small, reddish granulations, and the calibre of the larynx was practically normal. The patient had been kept under observation for some months, and there had been no return of the trouble.

Case II.: *Syphilitic Thickening and Ulceration of the Larynx, occurring in a Married Woman, thirty-five years of age.*—There was no history of syphilis, but a family history of asthma. Some time ago the patient began to have cough, then hoarseness, dyspnœa on exertion, and failure of the general health. Physical examination had revealed dulness over the right apex, both front and back. Expiration was high-pitched and prolonged. Examinations of the larynx showed the arytenoids to be clubbed. The aryteno-epiglottic folds and the ventricular bands were thickened and ulcerated from the posterior wall of the pharynx to a point below the right vocal cord. There was also a cicatrix seen at the junction of the hard and soft palates, which had led to the belief that the case was probably of syphilitic nature, instead of tubercular, as had

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previously been supposed. The patient was at once put on anti-specific treatment, but no improvement had followed.

The suffocative attacks becoming more frequent, intubation was decided as necessary. On account of the almost entire obstruction of the lumen of the larynx, intubation was performed with great difficulty. The relief from the extreme suffocation was immediate. The tube was left *in situ* for six days. There was considerable distress during this time from cough, pain and difficulty of swallowing, rectal alimentation being resorted to. The patient would have recurrence of the paroxysms whenever the anti-syphilitic treatment was suspended for any length of time, a second intubation having been performed some months later.

Case III. : *Syphilitic Stenosis of the Larynx.*—Mrs. M., aged forty-five. This patient gave a history of syphilis. The trouble had commenced with a sore throat, the pain in the larynx, with dyspnœa coming on in paroxysms, until the patient had suffered with such fearful suffocative attacks that she was afraid to lie down. Anti-specific treatment had been fully carried out. The larynx was shown to be swollen and indurated, with the lumen almost entirely obliterated. There was a small protruding mass arising from the left ventricular cavity, which had the appearance of fresh granulating tissue. Intubation was difficult in this case ; the smallest size tube had to be used. But the patient was able to retain it for eighteen days, during which time she swallowed fluids and semi-fluid foods. The appearance of the parts, after removal of the tube, had shown increased breathing space and fair motion of the cords.

Case IV. : *Bilateral Adductor Paralysis in a young Married Woman.*—There was a history of repeated attacks of dyspnœa, which lasted from two to three days, with cough and loss of voice. The last attack had lasted four days and nights, and when the patient was seen by the speaker she was in a comatose condition. She could be aroused somewhat, but would relapse at once into the former insensible condition. This was thought to be due to the morphine and atropine, which had been given the night before, to procure sleep. Examination of the larynx showed paralysis of the adductors of both vocal cords. There was no movement of the larynx ; the current of air produced only a flapping motion of the cords. Intubation was performed as soon as the patient had come out of the coma. This was followed by instant relief. About six hours after the introduction of the tube, the patient developed pneumonia, and died the next day.

In this case the pneumonia was no doubt brought on by the retained bronchial secretion, and death by heart failure in the beginning of the disease. If intubation had been performed earlier, the results would, no doubt, have been very different.

In the discussion Dr. O'Dwyer said that one of the reasons that intubation sometimes failed in acute laryngeal stenosis was, that the lower end of the tube would become occluded with the pseudo-membranous mass, which could not be expectorated. It was to obviate this difficulty that the present instruments had been devised. He then exhibited a set of intubation-tubes, which he had used for the above-mentioned purpose, and the utility of which had been practically demonstrated.

R. Norris Wolfenden.

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Koch (Luxembourg).—*The Practice of Tracheotomy in the Phthisical; its Indications and Contra-indications.* Congrès de Laryngol., Paris, Sept., 1889.

THIS operation ought only to be performed if the obstacle to respiration exists in the larynx or trachea. It is necessary always to avoid the cricoid cartilage, as this body is often affected by the tubercular process. It is only in rare cases of tubercular growths that the operation is curative, but in this case laryngotomy and excision of the tumours are performed at the same sitting. Koch related five cases of laryngeal phthisis, and concluded—(1) tracheotomy being refused by the patient, it is incumbent to prescribe absolute rest, and to make local applications; (2) if the signs of laryngeal stenosis are declared in a pregnant woman, the operation should be performed before accouchement; (3) tracheotomy prolongs the patient's life for many years. *Joal.*

Handford.—*Rupture of Tubercular Gland into a Bronchus.* "Lancet," Jan. 4, 1890. Nottingham Med. Chir. Soc.

THE accident occurred in a case of acute tuberculosis and tubercular meningitis. The author traced the general and meningeal affections to the rupturing of the tubercular gland. *R. Norris Wolfenden.*

Bull.—*A Pin in the Right Bronchus—Tracheotomy.* "New York Med. Jour.," Feb. 8., 1890. New York Academy of Medicine.

DR. BULL showed a pin, two inches and three quarters in length, which he had removed from the bronchus of a child. At the time the pin was swallowed the child had got black in the face, but the spasm had passed off. Pain was complained of for several days, but this was only experienced when the child was raised from the recumbent to a sitting position. Purulent expectoration was noticed, and the temperature had risen to 102°, with loss of appetite and some vomiting. The speaker had performed tracheotomy, and had luckily found the point of the pin resting at the angle of the incision, while the head of it lay in the right bronchus. The pin had been in the trachea five days. *R. Norris Wolfenden.*

Landgraf.—*The Pathology of Tracheal and Bronchial Stenoses.* "Verein für innere Medizin in Berlin," Dec. 2, 1889.

THE symptoms of tracheal and bronchial stenosis are produced mechanically; inspiratory dyspnœa, stridor, respiratory retraction of the thorax, unilaterally in unilateral stenosis. If in such cases the larynx remains healthy, the diagnosis is assured, but it is often not easy to determine the cause of the stenosis, especially if the site of the stenosis cannot be seen by tracheoscopy. The spot is often not visible, if it is covered by laryngeal swelling, or if there is double stenosis. The author reviewed all the causes of stenoses, and referred to a case observed by himself, in which a patient, thirty-one years of age, showed all the symptoms of tracheal stenosis, but it was impossible to see laryngoscopically any cause. A probe could be introduced into the trachea and both bronchi without meeting with any resistance, and under hydropathic treatment the patient was perfectly cured. He believes, therefore, that the case was one of "hysterical stenosis."

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LUBLINSKI observed that he had seen one such case in a young lady, which was cured by anti-hysterical treatment.

GERHARDT had seen Landgraf's patient and confirmed his diagnosis, remarking that nervous strictures are seen in other tubes of the body as in the intestines.

HEYMANN observed that he had seen a similar case.

GUTTMANN and FURBRINGER remarked that they had never seen tracheal stenosis in cases of carcinoma of the lungs. *Michael.*

THYROID, NECK, &c.

Berry, J.—*Specimens Illustrating Disease of the Thyroid Gland.* "Brit. Med. Jour.," Jan. 25, 1890. Pathological Society of London, Jan. 21.

THE author read a paper on diseases of the thyroid gland, illustrating it by a series of thirty-four specimens, forty photographs, and sixteen casts, which had been collected by him in the course of the last five years. Some of the specimens had been removed by operation during life; most of them, however, were from the *post-mortem* room. Two specimens showed the usual condition of the thyroid gland in myxœdema; the organ in each case was greatly atrophied, and quite devoid of glandular tissue. A specimen of senile atrophy was contrasted with the preceding; although much diminished in size, it still contained much well-formed gland tissue. Several photographs of different varieties of cretinism were shown; some of the patients had goitres, some had not. The majority of the specimens showed the structure of the different varieties of goitre. In the early stage of the disease there was usually general hypertrophy of the whole gland, attended with an increased amount of colloid secretion in the thyroid vesicles; to such goitres the term parenchymatous was usually applied. The specimens showed various stages between this condition and those in which one or more large cysts were present, or in which there was considerable increase in the connective tissue of the gland. Fibrous goitre was stated to be probably much less common than was often supposed; many cases diagnosed as such during life subsequently proved to be of a different nature. A specimen of goitre from a case of Graves' disease was shown, and attention was drawn to the small size of the thyroid arteries; and other facts also showed that the gland in this disease is not nearly so vascular as is often supposed. Several specimens showed distinctly encapsulated tumours, cystic or solid, imbedded in the substance of the thyroid gland. True simple hypertrophy always involved the whole gland, not merely a part of it; it never caused any great enlargement. Nearly all unilateral goitres, and goitres of very large size, were composed either of cysts or of more or less definitely circumscribed solid tumours of the gland. Examples were shown of goitres occupying unusual situations, such as near the angle of the jaw; in one specimen a process of gland extended transversely across the neck at the level of the

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