

ABSTRACTS.

DIPHTHERIA.

Donald, W. M.—*Diphtheria Antitoxin as an Immunizing Agent.* "N. Y. Med. Journ.," May 21, 1898.

THE writer is a firm believer in the immunizing property of diphtheria antitoxin; and, though the status of the serum as a curative agent is now beyond question, it requires but the careful employment of the antitoxin to make it as satisfactory a prophylactic. He gives records of several outbreaks to verify his conclusions. The doses given varied from two hundred and fifty to three hundred and five hundred units; and it was found that practically as good results were obtained from the smallest dose as from the largest.

Wachenheim, F. L.—*The Clinical Relations of the Klebs-Loeffler Bacillus.* "N. Y. Med. Journ.," June 18, 1898.

AFTER referring briefly to the views of Bretonneau and Virchow on the nature of diphtheria, the writer gives a short *résumé* of the various tonsillar inflammations from a morphological standpoint. The question whether the so-called pseudo-diphtheria bacillus is to be regarded as a distinct germ or an attenuated form of Loeffler's bacillus is still *sub judice*. Loeffler found his bacillus almost entirely restricted to the outer part of the false membrane. In nurses and others exposed to infection, the Klebs-Loeffler bacillus is very frequently found in the fauces. Many believe the bacillus to be the cause of fibrous rhinitis. Notes of sixteen cases are given, in ten of which the bacilli were demonstrated. A short exposition of the value of the early exhibition of sero-therapy concludes the article.

Walsh, John E.—*Diphtheria.* "N. Y. Med. Journ.," June 18, 1898.

THE writer gives a rather detailed account of the disease in its etiology, varieties, symptoms, and treatment. The organisms producing the different forms are, in the order of severity, (1) staphylococcus pyogenes; (2) streptococcus pyogenes; and (3) Klebs-Loeffler bacillus. For these conditions the author suggests the names "staphylo-angina," "strepto-angina," and "angina Klebs-Loeffler." He gives the technique of cultivation and methods of identification of the Klebs-Loeffler bacillus. Mortality under twelve years, treated with antitoxin, 16.3 per cent.; not treated such, 41.5 per cent.

NOSE, &C.

Bloebaum, F. (Cologne).—*The Treatment of Hypertrophic Rhinitis by Submucous Cauterization with a New Aseptic Galvano-caustic Needle.* "Monats. für Ohrenheilk.," April, 1898.

Two per cent. saline solution is injected into the submucous tissue. This produces artificial oedema and absolute anaesthesia. A glowing needle is then passed through the submucous tissue parallel to the bone, thus burning a long narrow channel, and this is repeated as often as necessary, all the insertions being made parallel to each other.

Galvano-cautery burners may be made aseptic by passing the wires through little insulating blocks of ivory, or horn, or porcelain, instead of using silk thread for this purpose.

William Lamb.

Craig, Robert H.—*Some New Features of the Accessory Cavities of the Nose.*
"Lancet," Aug. 20, 1898.

THESE notes are worthy of perusal, but they do not lend themselves to abstracting. They represent some of the anatomo-pathological teachings on the subject in the Vienna school.

StClair Thomson.

Gerber, P. H. (Königsberg).—*Statistical Report of Dr. P. H. Gerber's Poliklinik for Ear, Throat and Nose Diseases in Königsberg, for the Five Years ending December, 1896.* "Monats. für Ohrenheilk.," June, 1898.

TOTAL number of patients, 10,340. The nasal cases numbered 3541, of which—
Empyema of the antrum furnished..... 5·84 per cent.
Catarrh and empyema of frontal sinus 1·04 ,, ,,
" " " " ethmoid cells 0·40 ,, ,,
" " " " sphenoidal sinus..... 0·08 ,, ,,
Hypertrophic rhinitis 16·92 ,, ,,
Simple rhinitis 12·62 ,, ,,
Fœtid atrophic rhinitis (ozæna) 9·23 ,, ,,
Simple atrophic (without fœtor) 7·37 ,, ,,

The second decade of life furnishes the largest proportion of nasal cases.

The throat cases (fauces, larynx, and neck) numbered 4697.

Laryngitis (acute, chronic and dry) furnished ... 43·5 per cent. of this total.

Tuberculosis..... 13·3 ,, ,, ,, ,,

Paralyses, &c. 6·6 ,, ,, ,, ,,

Neoplasms 4·0 ,, ,, ,, ,,

Syphilis..... 3·6 ,, ,, ,, ,,

The third decade is the period of life most subject to laryngeal disease.

Diseases of the fauces and nose affect especially the first two decades.

Ear cases numbered 1416.

The proportion of otitis media suppurativa was very large (29·24 per cent.).

This Gerber attributes to the large number of children amongst his patients.

W. Lamb.

Heerman (Kiel).—*Adenoids and their Frequent Recurrence in the same Individual.*
"Therapeutische Monatshefte," No. 8, 1898.

IN Heerman's experience removal of adenoids only relieves the symptoms in sixty per cent. of the cases. In the other forty per cent. the patients return in a short time with the same symptoms. He finds that when these growths recur there is constantly swelling of the turbinates, which has not subsided on their removal. He divides adenoids into two forms—a primary form occurs in children with a tubercular taint, respiration is impeded, and the turbinates become swollen; their removal is followed by restoration of nasal breathing, and the swelling disappears. The other form, which he terms secondary, is due to chronic nasal catarrh, with hypertrophy of the turbinates. Removal of these does not suffice to restore nasal respiration, and they quickly reform. He prevents their recurrence by intra-nasal treatment. He recommends half per cent. solution of cocaine, and insufflation of three parts of sodium soziodol in twelve parts of boracic acid; caustic applications are seldom required.

Guild.

Poole, Wm. H.—*Rhinolith, or Nasal Calculus. A Case, with Pathological Specimen.* "N. Y. Med. Journ.," July 9, 1898.

THE patient, a woman of twenty-four years, suffered from an aggravated form of chronic rhinitis, with headaches and epiphora of the left eye. After careful observation, the calculus was discovered fixed to the posterior end of the outer side of the left inferior meatus, lying in a groove or pocket. Its anterior or loose end was sharp and black in colour. It was mobile. The left-sided epiphora was due to pressure on the corresponding naso-lachrymal canal. The patient made an excellent recovery.

Raoul, A. (Nancy).—*Rhinolith with Cherry-stone Nucleus.* "Revue Méd. de l'Est.," Mar. 1, 1898.

THE patient, a woman, thirty-four years of age, had a cherry stone in her nose, probably from vomiting in childhood. The secretions became fetid and irritating, and the nose completely obstructed. The cause of rhinitis was unknown. Removal of anterior part of inferior turbinate and of rhinolith, having a cherry kernel for nucleus.

A. Cartaz.

Root, Eliza.—*Epileptoid Seizures, apparently due to Nasal Obstruction.* "N. Y. Med. Journ.," May 21, 1898.

THE writer supplies notes of a case suffering for two or three years from the major form of epilepsy. By the merest accident a deflected and ulcerated septum nasi was discovered, with enlarged turbinals and strands of tissue passing across the nasal cavities. After the appropriate treatment the fits entirely disappeared.

Saenger, M. (Magdeburg).—*Abnormal Width of the Nasal Fosse in Relation to Diseases of the Upper Respiratory Tract.* "Centralblatt für Innere Medicin," No. 11, 1898.

THE author points out that persons with abnormally wide nasal fossæ are predisposed to catarrh of the pharynx and larynx; in these the nasal mucous membrane is anæmic, dry, and often covered with mucous crusts, so that little protection is offered to cold, dry, or dusty air. To overcome this he has had a "nasenobturator" made by H. Middendorf, in Magdeburg. It consists of two plates, which are cut of such a size that the patient can breathe comfortably with the mouth closed; the two plates are connected with a U-shaped spring. The inspiratory diminution of air pressure, and the expiratory increase of air pressure, reach a higher degree by its use; this has a beneficial effect on the circulation, the mucous membrane becomes less anæmic and more succulent, the secretion is increased and becomes more fluid.

Its use is to be recommended to workers in a dusty atmosphere, e.g., stokers, bakers, etc. It is also useful for cyclists and soldiers on the march.

He has seen cases of pharyngitis, laryngitis, and bronchitis cured by its use alone. The chances of micro-organisms being inhaled are also lessened by its use.

Guild.

Seifert (Wurzburg).—*The Relation between Nasal and Ocular Diseases.* "Munchener Med. Woch.," No. 29, 1898.

DISEASE in the nose may produce affections of the eye, directly or reflexly. Examination with the speculum or probe may produce lachrymation and hyperæmia of the conjunctiva. Bright light in photophobia or in errors of refraction may produce violent sneezing. Gruhn reported thirty-eight cases of dacryocystitis, in which nasal disease occurred in thirty-six. Gluck reported forty-eight cases of disease of the lachrymal apparatus, all of which exhibited abnormal nasal conditions.

Winckler, in Bremen, found disease in the nose in fifty per cent. of scrofulous eye affections. In Seifert's experience much better results are obtained when the nose is treated along with the eye. In affections of the lachrymal apparatus, atrophic processes in the nose, with or without fetor, are of great importance, as well as hypertrophy of the inferior turbinate and other causes of obstruction in the meatus.

Adenoids causing obstruction to secretion produce the same results. Eczema of the nares is a frequent cause of eczematous inflammation of the eye. In the majority of cases of *ulcus corneæ serpente* he found rhinitis atrophica foetida. Trachoma has been ascribed to extension from the nose, through the lachrymal duct, to the tarsal conjunctiva. Proof of extension in the reverse way has not yet been brought forward. In rhinoscleroma, changes in the tear duct and eyelids have been described. In the author's experience, extension of lupus by the same way is not so rare as is generally supposed. The tubercular process usually breaks through at the *margo infraorbitalis*. He has never seen this in tuberculous disease of the septum.

Changes in the pupil, photophobia, changes of accommodation, strabismus, narrowing of the visual field, neuritis optica, myopia, asthenopia, symptoms of Basedow's disease due to reflexes, have been described by others. He has not met with these, but in a series of cases saw epiphora and blepharospasmus.

Rhinitis hypertrophica, atrophica simplex et foetida, polypi, empyema, may cause reflex disturbance of the eye. He has seen two cases of ciliar neurosis cured by division of a nasal synechia.

The close connection between the nose and eye is due to the nerve supply. The nasal fossæ are chiefly supplied from the nasal branch of the ophthalmic. This gives off early in its course, where it crosses the optic, two or three small branches, which run along with the ciliary nerves, which meet the short ciliary nerves coming from the ciliary ganglion; they pierce the sclerotic and run forwards between this and the choroid, where they spread out in the ciliary muscle and iris.

Guild.

Spieß, G. (Frankfort-on-Maine).—*Contribution to the Surgery of the Sphenoidal Sinus.* "Archiv. für Laryngol. und Rhinol.," Bd. VII., Heft 1.

In suppuration of the sphenoidal sinus, when it is desirable to make an opening in the anterior wall as close as possible to the floor of the cavity, the author employs a fine trephine, driven by an electric motor. In order to avoid the possibility of entering the cranium he has had an instrument constructed, which is a combination of a sound and trephine. The trephine is of the same pattern as those usually employed in nasal surgery, but much longer. The sound consists of a tube, fitting closely over the trephine, to the distal end of which is fixed a rod, one centimètre long, of the same thickness as a probe. The tube is of such a length that the crown of the trephine cannot be pushed beyond the end of the sound. With such an arrangement it is impossible to injure the posterior wall of the sphenoidal sinus.

The end of the sound is introduced into the sinus, the opening of the tube being below. The trephine is then passed along the tube and bores a hole in the anterior wall. If one opening is insufficient, the sound is made to rest on the lower edge of the perforation, and another is made below. This may be repeated until the floor of the cavity is reached.

The method is also of value in diagnosis.

A. B. Kelly.

Winckler, E. (Bremen).—*The Surgery of the Upper Accessory Cavities of the Nose.* "Archiv. für Laryngol. und Rhinol.," Bd. VII., Heft 1.

In opening the upper accessory cavities of the nose two objects have to be kept

in view, namely, to expose as completely as possible the affected sinuses, and to produce the least possible disfigurement.

The incisions recommended by Grünwald for the ethmoidal and frontal sinuses fulfil the latter requirement satisfactorily, but the former insufficiently. They are of practical value only in providing counter-openings for cleansing. The incision in the corrugator fold is worthy of consideration when the frontal sinus is to be explored.

The operations generally employed in affections of the frontal sinuses are those of Jansen, Kuhnt, and Killian.

Jansen's operation, in which the floor of the frontal sinus is removed and the lamina papyracea perforated in order to clear out the ethmoid, is a risky procedure. The view obtainable can suffice only in certain cases owing to the eyeball. Smaller ethmoids may be made accessible, and in favourable cases even the sphenoidal sinus. When the ethmoids are large and broad, however, only the anterior and middle cells can be scraped. Jansen's method, therefore, so far as the ethmoid is concerned, is applicable only in a limited number of cases.

Kuhnt's method, consisting in the subperiosteal removal of the entire anterior wall of the frontal sinus, has been termed by some "the operation of the future." The procedure is associated with no danger, or technical difficulties, and an excellent view of the cavity is obtained. The cosmetic effect is favourable when the sinus is small, but less so in proportion to its increase in size.

By Killian's method the ethmoid is thoroughly taken into account from a surgical point of view: only the anterior ethmoidal cells, however, are attacked. A suitable communication between the frontal sinus and nose is established which provides good exit for the secretion that continues to be formed, and allows of energetic after-treatment from the nose. A sufficient view of the upper part of the nasal cavity, such as is necessary to clear out the ethmoid, is not obtainable by Killian's temporary resection of the nasal bone; a larger opening is necessary, which can be established if Killian's method is combined with the old one of Roser.

In a unilateral affection of the ethmoid or frontal sinus it suffices to open the nasal cavity by these two methods in order to expose both sinuses, and to render them accessible to treatment. The mode of procedure is as follows:—From the upper boundary of the frontal sinus the soft tissues are divided by a single incision to the point of the nose. The periosteum is pushed aside to show the suture between the frontal and nasal bones: this is separated, and the union of the nasal process of the maxillary bone and the frontal bone chiselled through. The lateral wall of the nose may now be bent over when a view of the upper nasal cavity is afforded, or it may be necessary to notch intranasally the superior maxillary process with a fret saw; the lateral wall may then be broken and bent aside.

With a probe the size of the frontal sinus is investigated; if small, a part of the anterior wall close to the middle line is removed so as to give a view of the cavity. If large, a bony flap, having its base above and to the outer side, may be cut with a circular saw, for which purpose a transverse incision must be made in the eyebrow. After opening the sinus in one or other manner the portion of the floor in which the ostium is situated is directly exposed. The thick part of the nasal spine of the frontal bone is removed with bone forceps or chisel. The entire nasal portion of the inferior wall is taken away. In this way passages are established which admit at least the little finger. The ethmoid is now exposed. This can be gradually cleaned out to the lateral wall and lamina cribrosa, and after the removal of the middle turbinate, the posterior cells and the sphenoidal sinus may be reached. The bleeding is pretty profuse and posterior plugging will be required. If there is

a doubt as to whether all the diseased tissue is removed, or if it is desired to keep the cavity under observation, all may be left open for three or four days.

The frontal sinus must remain open, and can only be closed after a considerable time (six to eight weeks), when the secretion is almost normal. The cosmetic result is good. There is a linear scar in the middle of the nose and forehead, provided the opening in the anterior wall of the frontal sinus was not too large.

If the upper accessory cavities on both sides are affected and demand extra-nasal measures the method of Ollier or of Gussenbauer may be employed.

Ollier's operation, consisting in the turning down of the bony part of the nose, gives a very bad cosmetic result, because the wound must be kept long open, and because a vertical incision is necessary, in addition to the horizontal one over the root of the nose, in order to expose the frontal sinus.

The method proposed by Gussenbauer gives a better view of the upper parts of the nose and causes less disfigurement than Ollier's method. It is specially to be recommended in severe cases of bilateral nasal suppuration in which intranasal treatment produces no improvement, or in which the conditions as to roominess are very unfavourable and interference is urgently demanded.

The incision begins at the inner half of the right eyebrow, runs along the process of the frontal bone to the nasal process of the superior maxilla, then along the edges of the nasal bones, transversely over the nose, and terminates, as on the right side, in the inner half of the eyebrow. The nasal process of the maxilla as far as the orbital margin, then both nasal processes of the frontal bone in continuity with the lachrymal bone, and the lamina papyracea, as well as the adjoining part of the orbital portion of the frontal bone, and, lastly, the perpendicular plate in its connection with the vomer, are divided on both sides. The flap of soft and bony tissues is turned upwards and the field of operation is thoroughly exposed.

This operation may be modified in various ways, according as it is desired to open both frontal sinuses and the anterior ethmoidal cells, or the frontal sinuses and the entire ethmoid, or, in addition, the anterior wall of the sphenoidal sinus.

The two sinuses having been exposed in the manner just detailed, all ridges and projections are removed, and the two are thrown into a single smooth cavity. As much of the floor of the frontal sinuses as belongs to the nose is removed. The ethmoidal cells can now be cleared out, and after removal of the middle turbinate the sphenoidal sinus can be reached.

The one large cavity formed by the union of all these is now stuffed with a long strip of gauze, the end of which is passed into the inferior meatus if the external wound is to be closed at once. The subsequent treatment, after removal of the tampon, consists in thorough irrigation three or four times a day.

Patients who have been operated upon as above described will be troubled with the formation of crusts in the nose. There will be no alteration in the resonance of the voice.

These operations are indicated only in very severe cases of suppuration in several cavities. The author has performed Gussenbauer's operation twice on account of orbital cellulitis with fever, cerebral symptoms, etc. He has also employed the other methods referred to above.

A. B. Kelly.

Zarniko (Hamburg).—*Miscellanea Rhinologica*. "Monats. für Ohrenheilk.," May, 1898.

THE author replies to Schech's criticisms on his method of sterilizing instruments, as set forth in his book on diseases of the nose. The instruments are taken to pieces, brushed with soap and water, boiled for five minutes in one per cent. soda solution, washed in boiled water, and dried with a sterilized cloth. Very delicate

parts are dried by dipping in alcohol. Schech is content with thorough brushing with soap and water, followed by washing in five per cent. carbolic. He refers to his twenty-five years' entirely successful experience of this method.

William Lamb.

LARYNX.

Avellis, Georg (Frankfurt).—*What is the so-called Inspiratory Stridor of Infants?* (Congress of South German Laryngologists, May, 1898.) "Munchener Med. Woch.," Nos. 30 and 31, 1898.

THE symptoms of this affection are constant inspiratory stridor, which lasts for months and varies in degree from time to time. There is drawing in of the episternal notch and ribs. Fever cough and hoarseness are absent: the larynx shows no visible changes; the child thrives and is well nourished. Over the etiology many diverse views have been given. Lori was the first to give an explanation of these cases. He states that the vocal cords come quickly together towards the end of inspiration, that the rima glottidis is closed for a moment, and that the cords go apart again in expiration.

Thomson has described five cases, which McBride examined laryngoscopically without definite results. Thomson ascribes the condition to a neurosis of co-ordination, and considers the noise to originate in the larynx. Satisfactory examination is difficult. Avellis could see neither œdema nor inflammation in the aryx; the free edges of the epiglottis were not drawn together.

Lack and Sutherland described two cases, where the epiglottis was infolded and the aryepiglottidean folds approximated during inspiration. As age advanced the larynx developed further, and the symptoms disappeared; the formation of the epiglottis remained the same. The stridor lasts during the whole of inspiration, and could not be caused by momentary closure of the vocal cords. Avellis suggests that the stridor may be tracheal and caused by pressure of the thymus. In 1852, Billiet observed a moist, gurgling tracheal stertor in children of seven to ten months old, which only disappeared momentarily when the children were quiet. He considered it due to irritation or swelling of the tracheal mucous membrane.

Siegel described a case where tracheotomy was done without benefit, and the stridor was only overcome by introducing a long tube into the trachea. The thymus was brought forward and stitched to the external fascia; the tube was removed, and the stridor ceased. Gloichler has seen three cases where, in long-standing dyspnoea, the cause of death was an enlarged thymus. The clinical symptoms in these cases were the same. In favour of tracheal stenosis are the age of the child, the frequent spontaneous recovery in the second year, congenital occurrence, the mode of recovery (stridor recurs on movement), temporary cessation when the position of the body is changed, negative laryngeal appearances, the high position of the larynx, the entrance of air being greater into one bronchus than the other, and operative results. It is possible that stenosis might also be caused by enlarged bronchial glands. To clear up this, further investigation, which might be helped by Roentgen rays, is required.

In the discussion which followed, Pröbsting agreed that thymus hypertrophy was the cause of the stridor. He has seen preparations in which the cause of the stridor was proved to be compression of the lower part of the trachea at the bifurcation.

Killian obtained such a good direct tracheoscopy, in a child two years of age