The duration of the disease till convalescence was short; fever varied from 38.5° to 40.2°. Complications observed were: once croupous pneumonia, several times otitis media, once an eruption like scarlatina, which lasted only twenty-four hours; in all cases streptococci were found. He is convinced that angina lacunaris, or follicular tonsillitis, is an infectious disease, which is easily conveyed from those affected to those in contact with them; that its period of incubation is four days; that children under three years are little disposed to it; that isolation is demanded on account of the frequent septic and pyæmic complications. Those in contact should not be allowed to go to school till after five days.

## NOSE.

Booth, Burton S.—Nasal Stenosis. "New York Medical Journal," Saturday, October 14, 1899.

The treatment of nasal stenosis due to deflected septa, with or without thickening of the convex side, was prior to 1886 rather ineffective and disappointing, the reason being that the resilient cartilaginous septum had not been thoroughly broken up, and herein lies the secret of successful correction of this deformity. author having tried almost every operation worthy of mention for the treatment of deflected septum, and having met with only a moderate degree of success, was at length tempted to try that recommended by Dr. Morris Asch, of New York City. In order to be successful in this operation the cases must be selected, as it is not suitable in all, and is really only intended to relieve deflection of the cartilaginous septum. The operation is done under an anæsthetic. The instruments used are a pair of straight and a pair of angular cutting scissors, a compression forceps, a blunt separator for adhesions which may exist between the convex portion of the deviated septum and inferior turbinated body, and some tubular splint made of hard rubber. The nostrils should be thoroughly cleansed by means of cotton wound on probes and dipped In some antiseptic solution. The head of the patient is extended over the end of the table to prevent the blood running into the larynx and producing coughing, which might interfere with the operation; under full illumination the separator is then introduced into the stenosed nostril and any adhesions broken down. The scissors are next introduced parallel to the floor of the nose, the sharp blade entering the nostril on the concave side of the septum, and the blunt on the convex side; the blade should be at right angles to the septum, and over the most dependent part of the deflection. When sure that the blades are in the right position, the handles are firmly closed, and the sharp blade passes through into the opposite nostril with a distinct snap; the scissors are now opened and withdrawn, and are immediately reintroduced in the same manner as before. This time the blades are made to cross in a vertical direction the first incision at its centre and as far as possible at right angles, thus making a crucial incision with four segments. The operator next introduces his finger into the stenosed nostril, pushing it through to the opposite nostril, at the same time breaking each segment at its base, thus destroying the resiliency of the septum, and this is the most important part of the operation, for it makes it impossible for it to resume its old position. A straightening forceps is now introduced, one blade into each nostril; the septum is grasped between its blades, and by a rotary motion is more thoroughly broken up and brought into the median line; at the same time the compression of the forceps checks the hemorrhage. After the hemorrhage is somewhat under control, a firmly fitting hard-rubber perforated splint is placed in the nostril which was stenosed, and a smaller splint is placed in the opposite nostril. The pressure of these will have a tendency to check the remaining hemorrhage.

The splint should be removed from the non-stenosed nostril after twenty-four hours, and the nostril washed out. Twenty-four hours afterwards the splint in the stenosed nostril should be removed, the nostril washed out with an antiseptic solution, and a fresh sterilized splint introduced; this splint should be removed at least once a day by the patient; the nostril should be washed out each time the splint is removed. The splint should be worn for at least four weeks, after which it may be left out permanently.

Arthur Sandford.

Broquet, Charles.—Radical Cure of Chronic Maxillary Sinusitis by Surgical Treatment. Thèse de Bordeaux, 1899.

This thesis is an excellent critical review of the methods of treating sinusitis. After a short exposition of the symptoms and pathogenesis of sinusitis, and a description of the varieties of sinusitis, the author describes the treatment applied up to the present, and particularly the operation of Caldwell and Luc, with the operative technique and their results. In a special chapter he describes combined sinusitis, indicating the treatment which is applicable to it. He recommends the performance of the frontal and maxillary operations at one sitting.

In addition to a résumé of Luc's and other observations, he gives a series of unpublished ones derived from Dr. Moure's clinique.

A. Cartaz.

Cozzotino.—Bacteriological and Histological Study of Ozæna. "Ann. des Mal. de l'Or.," July, 1899.

This contribution is one of great value, and should be read in the original (thirty-nine pages). After a critical survey of the literature of the subject, the author deals with the bacteriology in minute detail. The Bacillus mucosus is described in all its features. It was present in all the author's cases. The pseudo-diphtheritic bacillus was far from constant, and the author gives his reasons for thinking that it is present as a saprophyte of no importance. The diphtheria antitoxin treatment is wholly illusory. Attempts to obtain either an antitoxin or a bactericidal serum from the Bacillus mucosus gave a negative result.

The author next deals closely with the histology both of the inferior and middle turbinates in the early, middle and advanced stages of the disease. His observations establish the fact that the first pathological change takes place in the periosteum and medullary space of the bone. Later the erectile tissue suffers an atrophic change, while the glands suffer through obliteration of their efferent ducts, first undergoing dilatation with atrophy of the secretory cells. The surface epithelium is the last structure to show marked atrophic change, and the author claims this fact as evidence against the theory that atrophic rhinitis is a secondary result of catarrh. On the contrary, he claims that the first visible change is a periosteal one, involving the arterioles of the deeper layers of the muco-periosteum, and leading to anæmia and the ultimate atrophy of the membrane. In the stagnant glairy mucus coating the

diseased nasal fossæ the *Bacillus mucosus* finds a favourable harbour, and is the etiological factor in the production of the fector and crusts, but is no way responsible for the disease itself. As to the presence of inflammatory cells and of micro-organisms in the superficial layers of the mucosa, this is due merely to the final atrophic state of the epithelium, and the constant presence of an irritating layer of decomposing mucus. The fact that the disease manifests itself first in the periosteum affords an intelligible explanation of the inefficacy of local treatment.

We do not get ozæna without an individual predisposition favourable to its development, and this state of the organism used to go by the name of "scrofula," a term which is unscientific, but nevertheless represents a certain pathological state. The ozæna patient is predestined from birth to a nutritive deficiency, which determines a gradual change in the bone, and with subsequent atrophy and destruction of the mucosa, principally of the inferior turbinate bodies.

Waggett.

Delie.—Considerations on the Operative Treatment of Fibrous Naso-pharyngeal Polypi. "Ann. des Mal. de l'Or.," March, 1899.

The author deals with the history and literature of his subject, and in extolling the rapid method of removal devised by Doyen, he describes an instrument which he has himself recently used in following Doyen's general method. The instrument (no figure given) appears to be almost exactly similar in shape to a Gottstein's adenoid curette, but differs from that instrument in having the cutting-edge external, and not internal. The insertion of the tumour is severed by an upward and forward sweep of the instrument.

Waggett.

Flatau.—Radical Operation of the Osseous Atresia of the Choana. "Wien klin. Rundsch.," 1899, No. 40.

Resection of the inferior turbinated bone. Operation of the atresia with chisel and hammer. Cure. Operation of R, Sachs.

Hegetschweiler.—On Empyema of the Frontal Sinus. "Corr. Bl. f. Schweizer Aerzte," 1899, No. 15.

Man, thirty-two years old, with suppuration of the fronto-ethmoidal sinus. Cured by radical operation after the description given by Kuhnt.  $R.\ Sachs.$ 

Liaras, G.—Contribution to the Study of Tuberculous Infection through the Nose. Thèse de Bordeaux, 1899.

What is the rôle of the nose with regard to tuberculous infection? Such is the question which the author strives to answer. Taking up bacteriological examination of the nasal mucus, the writer shows that the nasal cavity is not so antiseptic as Würtz and Lermoyez have wished to show. It is not in the action of the nasal mucus that the barrier against microbic invasion is to be solved, but in the form and constitution of the mucous membrane which constitutes an obstacle to entrance; and if we examine, from this special point of view of the tubercle bacillus, the nasal fossæ of subjects living under hospital circumstances, such as students and nurses, we do not find, contrary to what Strauss had stated, tubercle bacilli in the nasal mucus. Neither has the bacillus been found in certain forms of coryza which might be expected to be tuberculous, such as coryza accompanied by

[June, 1900.

lupus of the face, strumous coryza, or the muco-purulent coryza found

in pulmonary tuberculosis.

Lastly, the atrophic coryza, which in producing changes in the mucous membrane and enlarging the nasal fossæ ought to favour the penetration of the microbes, does not occur coincidently with tuberculosis.

Statistics show only two cases of tuberculosis out of fifty-two cases of ozænatous rhinitis.

A. Cartaz.

Lichtwitz.—Disproportion between the Frequence of Empyema of the Nasal Accessory Sinuses in the Living and the Dead. "Ann. des Mal. de l'Or.," November, 1899.

Whereas the percentage of empyemas detected in the clinics of Chiari and of Lichtwitz amount to 2 per cent. of the total number of patients, the following figures refer to general autopsies:

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Harke ... ... 29 per cent. in 400 autopsies E. Frankel ... 43:15 ,, 146 ,, Lapalle ... ... 32:54 ,, 169 ,,
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Among sixty-three detected in the post-mortem room, only one had been suspected during life. This disproportion of figures is doubtless due to the cases of acute empyema which escape detection, and to slight chronic forms which are regarded as mere nasal catarrhs.

Waggett

Paul, George.—Pathogenesis of Ozana and Relations of Ozana to Sinusitis. Thèse de Nancy, 1899.

The author supports the ideas of Jacques (Nancy), that ozena is not a pathological entity, but only a concomitant symptom. The cause of ozena, and in his opinion the invariable cause, is focal suppuration in the nose, especially in the accessory cavities, and the radical cure of this suppuration is the only means of definitively arresting the course of the ozena. In all cases, if a careful examina tion is made, there will be found in one or another or in several sinuses at a time some chronic suppuration. The treatment must in the first instance be directed to sinusitis.

A. Cartaz.

Réthi.—The Negative Air-douche as Diagnostic Help in Diseases of the Accessory Cavities of the Nose. "Wien. klin. Rundsch.," 1899, No. 43

The author highly recommends this well-known method as a very simple and very good diagnostic help, and in some cases also as a remedy for diseases of the accessory cavities of the nose. R. Sachs.

Robineau, Mademoiselle M.—Study of the Microbe of Ozana. Thèse de Paris, 1899.

The microbe of ozæna is a polymorphous bacillus, immobile, unprovided with spores, and unstained by Gram. It often presents filamentous forms, and in old cultures various involution forms. In the nasal mucus of ozænatous subjects it exists in almost a pure state. In cultures it gives off odorous products, but under no circumstances agreeable ones. On the other hand, old cultures give off ammoniacal compounds having the odour of old cheese.

The morphological and biological characteristics are identified with those of the bacilli of Friedländer; and in the opinion of the author the microbe of ozena only differs from it by its slighter pyogenic action.

A. Cartaz.

Schlagenhaufer, Fr. (Vienna). — Case of Cystic Degeneration of the Mucous Membrane of the Nose and Accessory Sinuses. "Wiener Klinische Wochenschrift," No. 35, 1899.

Patient was fifty-eight years of age, and died shortly after coming under observation with symptoms of meningitis. The cause was found post-mortem to be inflammation of the mucous membrane of the sphenoidal sinus; further, there were numerous cysts, some as large as a hazel-nut, in the nose, both antra of Highmore, ethmoidal cells, base of the tongue, epiglottis, pharynx, and left upper eyelid. The sphenoidal sinus was dilated, but not by cystic formation; the antra of Highmore showed no enlargement, although their mucous membrane showed cystic degeneration.

From the micro-chemical analysis of the cystic contents, the author is of the opinion that some of the glands of the nasal mucous membrane are mixed glands which produce mucous and serous secretion, and a similar condition is present in the glands of the accessory sinuses

Sharp, J. Clarence.—The Use of Suprarenal Capsule in the Nose and Throat. "New York Medical Journal," August 12, 1899.

In cases where the turbinated bones are very much hypertrophied, and the mucous membrane is not too sensitive, cocaine can be dispensed with and the aqueous extract of the capsule applied locally. It is best to apply the solution to the anterior portion, and wait about two minutes, by which time the mucous membrane is so contracted that the solution can then be applied to the middle and posterior portions. When fully under the effects of the solution the parts appear white. In very large hypertrophies, when the mucous membrane is in folds and of a grayish colour, cocaine exerts but feeble power in reducing the hypertrophy, but after an application of the suprarenal capsule a reduction is plainly noticed. Hæmorrhage, both primary and secondary, after operation on the turbinates, is considerably reduced by the use of the capsule.

In acute amygdalitis the solution applied directly to the tonsils will

relieve the congestion and soreness.

Spraying with the aqueous extract in cases of subacute laryngitis will give much relief, as it relieves the congestion almost immediately.

In hay fever, the use of suprarenal capsule should be much appreciated, as it contracts the mucous membrane quite as much as cocaine, without having any of its depressing effects.

Arthur Sandford.

Wertheim, Edmund (Breslau).—Complications following Intranasal Operations. "Arch. of Otol.," vol. xxviii., p. 272.

The author considers that the protective agent in the nose has not yet been found. The nasal secretions of healthy individuals, after disinfection of the vestibule, were blown upon agar plates or into bouillon, with the result that numerous colonies of cocci and bacilli of various kinds developed, showing that the nasal secretions do not possess permanent bactericidal qualities. As regards complications following intranasal operation, the mode of production may vary as follows:

- 1. Local, due to direct invasion of microbes, e.g., fibrinous rhinitis, with Loeffler's bacillus.
- 2. General, viz., (a) Transmission through the lymph paths, e.g., angina (common), meningitis (rare). (b) Through the circulation, by emboli, e.g., renal or pulmonary.

Absolute asepsis in nasal operations is strongly insisted on.

Antiseptics are not available, but the hands and instruments must be aseptic. Cauterization of the middle turbinal should be avoided. Plugging should be done with antiseptic gauze sterilized by steam, and ought not to be left longer in the nose than twenty-four hours. After the cessation of hæmorrhage, the parts should be covered by antiseptic (iodol, iodoform) or indifferent, sterilizable (dermatol) powders.

Dundas Grant.

## LARYNX.

Botey.—Vocal Troubles in Singers, and their Treatment. "Ann. des Mal. de l'Or.," August, 1899.

This article of eighty pages, written in an easy conversational style, takes the reader into the confidence of a writer who has been intimately concerned for twenty years with the larynx as a professional instrument. Those who have no large opportunity of studying the organ in its relation to the public should not fail to read the paper in the original. The writer appears to be quite free from any special fads with regard to hygiene, respiration and production, and pleads for a more natural training of the vocal function than is now in fashion. He draws a number of clinical pictures of those slight functional (muscular, vascular, secretory, etc.) defects which serve as danger-signals to the observant laryngologist, and indicates the precautions and treatment which they demand. The prenodular stage is clearly described. A quotation may be introduced from the section dealing with this portion of the subject:

"With the head-notes produced by soprani and mezzos the image is more distinct. The trained observer will notice that it is only the anterior three-quarters or two-thirds of the cord which vibrate. The force and amplitude of these vibrations, limited in the highest notes to a section of the cord 8 or 9 millimetres in length, are extraordinarily intense. Consequently soprani, in using the head-notes, expend an energy five or six times as great as that which they employ for the three or four chest-notes which they usually possess. During the production of the head-notes, the point of union of the anterior third with the rest of the cord is constantly the central point or belly of a vibratory oscillation extremely intense, and displaying its greatest amplitude over a surface of 2 or 3 millimetres, exactly corresponding to the seat of election (of the singer's nodule). This rarely occurs in baritones and more rarely in basses, who always use the chest-notes, for here the region of intense vibration extends over a much greater length of cord, for the latter oscillate throughout their entire length and thickness."

Baritones seldom, and basses hardly ever, are subject to nodules. The elements of prognosis, both for nodules and other vocal disorders, are added, as well as various forms of simple treatment adopted with success by the author. Figures are given of his guarded galvanocautery point, but in the case of nodules he is better satisfied with the results of removal with cutting forceps. In the latter he has had 20 per cent. of recurrences, with the cautery 50 per cent. Waggett.