admitted the discomforts of packing. Zarniko had experienced the advantages which Brünings achieved through his new procedure ever since he had done submucous resections. He obtained exactly the same results by not using any packing at all.

Goris (Brussels) demonstrated *Specimens of Primary Tuberculosis of the Tonsils.*

Neugass (Mannheim).—*A Case of Primary Syphilitic Lesion of the Nasal Septum.*

The patient, aged twenty-two, had an ulcer the size of a ten-pfennig-piece on the right side of the septal cartilage at the usual site for idiopathic ulcers. There were no swollen glands. The ulcer did not heal, but shortly afterward a typical secondary rash appeared. The patient admitted that he was accustomed to pick his nose with his finger, and also that he had touched the parts of an infected woman.

W. G. Porter.

AMERICAN LARYNGOLOGICAL ASSOCIATION.

Thirtieth Annual Meeting held at Montreal, May 11, 12, *and* 13, 1908.

(By courtesy of the *Medical Record.*)

Dr. Herbert S. Birkett, *of Montreal, President.*

(*Continued from p.* 580.)

Wednesday, May 13—Third Day.

The Morphology of the Turbinals.

Dr. John M. Ingersoll, of Cleveland, O., gave a description of the turbinal bones as occurring in fishes, loons, reptiles, panthers, apes, and man, illustrating his remarks with some excellent drawings. His recapitulation was as follows: The turbinal structures of fishes except dipnoi were used only for olfaction, and were simply ridges covered by olfactory mucous membrane. In reptiles, owing to the changed manner of respiration, the nasal organ functionated both in respiration and olfaction and both respiratory and olfactory turbinals were found. They were, however, quite simple structures. In birds the importance of the respiratory function increased and the respiratory turbinals showed a high degree of development.

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The expanse of respiratory mucous membrane was very largely increased by the coiled structures of the turbinals. The olfactory turbinals were simply ridge-like structures. In microsmatic mammals all of the turbinals exhibited a very high degree of development. Their numerous fine branches and coils enormously increased the amount of mucous membrane exposed within a comparatively small space, and thus increased the efficiency of the nasal organs. In apes, all of the turbinals had degenerated or reverted to some of the more primitive types. In man the turbinals were quite similar to the turbinals of the ape and were all rather simple structures. Rudiments of the fourth and fifth ethmoidal turbinals were sometimes found. The agger nasi was the rudiment of the nasal turbinal. Such rudiments were much more frequently present in the embryo than in the adult.

Dr. D. Bryson Delavan called attention to the fact that in saw operations on the septum we often came in deep section on a slightly oval space, which might be the remains of Jacobson's organ or of the channel leading to it. It was difficult to explain its origin and line of communication through the hard palate with the mouth.

Dr. W. E. Casselberry had never been able to find the space referred to by the previous speaker.

Dr. H. P. Mosher said that in discussing Jacobson's organ we were greatly helped by comparative anatomy. He described the appearance of this organ in the human fœtus and its gradual evolution to the condition found in the adult.

Hypertrophic form of Syphilis Involving the Fauces and Epiglottis.

Dr. W. F. Chappell, of New York City, reported the case of a boy, aged fourteen, who had previously been treated in hospital for tonsils and adenoids. Some four years later he again came under observation, with symptoms of snoring in sleep, guttural voice, laboured breathing, and dyspnœa on exertion. Frequent choking and strangling spells came on, though the boy seemed in perfect health. Examination showed both faucial pillars hypertrophied and much hypertrophic tissue occupied the position of the tonsil. The uvula was much enlarged in each dimension and nearly filled the pharyngeal cavity, and was probably the cause of the choking. The same condition existed in the epiglottis, which had lost its flexibility and allowed food to enter the larynx. The arytænoids shared in the general hypertrophy. No implication

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of other laryngeal structures could be made out. The mucosa covering all these parts was greyish, smooth, and shiny. Adrenalin had no particular effect on the hypertrophied tissue. A portion of the uvula was removed, with much relief to the symptoms of choking and strangling. Examination of the portion of the uvula excised suggested a diagnosis of hereditary specific infection, though nothing corroborative could be obtained in the personal or family history. Under mixed treatment and later Donovan's solution of arsenic and mercury considerable improvement resulted, but considerable hypertrophy of the parts involved still remained. Most of the obscure cases of pharyngeal hypertrophy on record had proved to be of an amyloid nature. Such a case as the author's was unique.

Membranous Tertiary Syphilitic Lesions.

Dr. D. Braden Kyle, of Philadelphia, reported three cases resembling Vincent's angina. In all there was a membranous deposit on various areas in the throat. All the patients were males over thirty years. The membrane could be easily stripped off and left a ragged, worm-eaten surface, which bled easily. There were no associated systemic symptoms at the time. The symptoms were the usual ones of irritation from an ulcerated condition in the mouth. In all there was a denial of specific disease. All sorts of remedies were applied without avail, and then the iodides and finally mixed treatment, but without result. The membrane continued to form and the ulcerations grew deeper. Bacteriological examination was non-decisive in one case; the two other cases revealed Vincent's spirilla, but many other bacteria as well. The author finally decided that in spite of the negative results of treatment the cases were specific, and that if the patients would enter the hospital and receive treatment by inunction and obtain the proper nourishment they would recover. His surmise proved correct, as inside of ten days the membranes began to disappear and recovery was fairly rapid. Up to the present time there had been no relapse, though there was slight scar tissue in the mouth. The author's aim in reporting these cases was to note (1) the unusual form of tertiary lesion, (2) its close resemblance to Vincent's angina, and (3) the importance of the therapeutic test. In the cases with Vincent's spirilla he did not believe a mixed infection was present, but that the presence of the latter organism was purely accidental.

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Cysts, Abscesses, and Œdema of the Epiglottis.

Dr. HENRY L. SWAIN, of New Haven, reported several cases and discussed their pathology. In the depths of the branchial clefts in the embryo, epiblast and hypoblast were seen separated by only a network of a single layer of fibres. An inclusion cyst, such as these epiglottis cysts were, might come on one or the other side of the partition, but when in later years these cysts filled up, the swelling would be at the base of the inside or outside of the epiglottis. Also in the region under discussion we might have dermoid cysts and supernumerary thyroid glands. The exact cause of the sudden swelling of all these structures was often obscure. They might become infected from some previous inflammation, but often their enlargement, with the usual symptoms of throat discomfort and mechanical disturbance of the parts, was the first thing noticed. The indications for treatment were plain and clear. Dr. Swain also reported three cases of what he called "idiopathic inflammatory œdema of the epiglottis" for lack of a more definite name. The attacks were in no way connected with previous disturbance in the throat. In one case there had been a leptothrix deposit on the tonsils, which had caused considerable disturbance. In this case the trouble was supposed to have been due to a small abscess which could not be located, but which, from the sudden subsidence of symptoms, had evidently ruptured. In the former two instances the simplest explanation would be to assume the existence of a perichondritis, which was accompanied by œdema and pus formation. It might be that there was an inflammation of a small retention cyst on the epiglottis.

Dr. W. E. CASSELBERRY said that Dr. Swain had grouped two classes of disease which had received very little attention in literature. We quite frequently met with cysts in the region of the larynx, epiglottis, aryepiglottic folds, and base of the tongue classified simply as "cysts," but it might well be true that branchial cysts occurred in the region of the epiglottis. As to those cases resulting from idiopathic inflammations of the epiglottis, we must remember that most conditions in this region formerly styled idiopathic were in reality infections and caused by micro-organisms. This was notable in some epidemics of diphtheria in which some cases seemed to show an exudate, while others showed merely œdema, and yet in both we found the Klebs-Loeffler bacillus.

Dr. J. E. NEWCOMB said that diphtheria always meant the presence of a membrane somewhere, although it might be only a

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small patch down in a bronchus, but the old conception of diphtheria without membrane must be given up.

Dr. EMIL MAYER referred to a case of inflamed epiglottis causing obstruction, for which a tracheotomy was about to be done, but under hot inhalations and adrenalin applications the swelling had subsided. Later, after the case had cleared up, it was noted that more than half of the epiglottis was gone, and his final conclusion was that the case was one of acute inflammation of that portion of the epiglottis remaining after a previous specific destruction.

Dr. E. FLETCHER INGALS had recently cured a cyst of the ary-epiglottic fold by aspiration and injection with iodine and carbolic acid.

Dr. J. M. INGERSOLL had treated two retention cysts of the epiglottis by simply cutting the tops off, and there was no recurrence.

Prolonged Intubation in the Adult.

Dr. W. K. SIMPSON, of New York, reported a case of a woman who had come under observation in 1903. For five months she had been wearing a tracheotomy tube inserted on account of urgent laryngeal dyspnœa. The latter had come on in connection with a severe cold, during which she had cough, hoarseness, and increasing difficulty in breathing, so that tracheotomy became necessary. She greatly desired to be freed from the wearing of the tube. Examination of the larynx showed it to be practically closed, all the landmarks being obliterated. The superior portion, including the arytænoids, was incorporated in a more or less uniform bilateral mass of a rather dense character, leaving a mere slit in the centre. There was no apparent loss of tissue and practically no motion of the parts. Anti-syphilitic treatment was given, though the question of old specific infection was doubtful. Results were not at all definite. Finally, under chloroform, a medium-sized hard rubber intubation tube was passed and the tracheotomy tube withdrawn. The tube was worn well, but was finally coughed out and replaced, and this happened several times. Still later the tracheotomy slit was closed. In due time the intubation tube was removed, having been worn over four years. At the present time the voice was in fair condition. At times the quality was excellent, but it became hoarse on slight cold. The laryngeal colour was rather pale. Motion was somewhat restricted owing to induration about the left crico-arytænoid joint, while the right side moved more freely. The right cord was fairly normal in contour, colour, and

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motion, while the left seemed to have been more or less absorbed. The glottic space, though irregular, was ample for breathing. The author would lay stress on the following points: (1) The tolerance of the larynx to long-continued pressure; (2) the superiority of such pressure in causing absorption over the older methods of temporary introduction of dilating instruments; (3) the comparative comfort with which such tubes might be worn indefinitely; (4) the improved general condition of the patient while wearing an intubation tube in contrast to the debilitating influence and local annoyance of the tracheotomy cannula; (5) the superiority of the hard rubber over the metal tube in the lessened formation of calcareous deposit, thus lessening the dangers of ulceration and formation of exuberant granulation tissue.

The Question of Rheumatism originating through Tonsillar Infection.

Dr. George B. Hope, of New York City, presented a paper with this title. He traversed the familiar paths of the discussions of the last few years on this mooted question, and declared his disbelief in the theory that rheumatism gained access to the body through the tonsils. These organs did not disseminate bacterial infection to the degree commonly conceived. Bacteria were rarely allowed to pass beyond the capsule into the surrounding lymph nodes to develop active inflammatory processes. Hope believed that the theory of a tonsillar infection with reference to rheumatism rested on inference rather than on proved facts. Tonsillectomy for this condition was as illogical as rubbing the joints for the prevention or cure of arthritic rheumatism. Hypertrophied and indurated tonsils should be removed, it is true, but this was a matter wholly independent of their having a causative relation to rheumatism.

The Treatment of Inoperable Tonsillar Hypertrophy by Interstitial Injections of Silver Nitrate.

Dr. J. L. Goodale, of Boston, presented the results of his observations on injections of enlarged tonsils with silver nitrate. Three cases with hæmophilia and tonsillar enlargement had recently come under his observation, and crypt dilatation with cheesy detritus was evidently to blame for the infectious arthritis present in all the cases. One objection to the employment under such conditions of chromic acid or the galvano-cautery was that the diminution in

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the size of the tonsil was followed by irregular contraction with narrowing of the orifices of the crypts, out of proportion to the diminution in the size of the lumen near its base. Such contractions might not prevent the incarceration of detritus. The author consequently employed silver nitrate solutions ranging in strength from 4 to 8 per cent., making the injections every five to eight days. The amount of reaction had depended on the strength of the solution and had varied from slight to severe pain. Under this plan progressive diminution of the tonsils had taken place and the results had been gratifying. In one case the organs were reduced to one quarter of their former size. A blunt, strong needle such as was used by dentists for injecting gums was the best one to use. It might be straight or curved. Dr. Goodale believed that the effect of the silver was, theoretically at least, in harmony with the normal process of retrograde metamorphosis of the organ, in that it was a sclerosis proceeding from the base to the periphery and led to a symmetrical diminution in the size of the crypts. He was encouraged to give it a further trial.

Hæmorrhage following Quinsy; Ligation of the Common Carotid Artery; Recovery; with a Study of Fifty-one Cases of Hæmorrhage in Connection with Pharyngeal Suppurations.

Dr. James E. Newcomb, of New York City, read a paper with this title. His patient was a man, aged fifty-five, seen in consultation with Dr. J. D. McBarron. He had had quinsies all his life, but an immunity for the past ten years. The attack in question came on without any special features, and on the fourth day the presence of pus was evident, and it seemed to be located rather far out in the soft palate. The patient's kidneys seemed to act well, but there was distinct arterio-sclerosis. Incision of the quinsy was followed by escape of healthy pus and almost immediate bleeding. The latter was easily checked, but recurred several times, and finally became so profuse and persistent that a radical measure was deemed necessary. It was impossible to locate the bleeding point, and the condition of the parts involved rendered any plan of suturing out of the question. It was found that the ulcerative process had worked backward and that the soft palate had perforated. Ligation of the common carotid artery was decided on and was done by Dr. C. N. Dowd. Recovery was without incident. No disturbance of cerebration resulted. Dr. Newcomb had found fifty additional cases reported in which hæmorrhage occurred in

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connection with suppuration in the pharynx. Of this number forty-one occurred in connection with quinsies. They might be classified as follows: (1) Spontaneous opening of the abscess, with immediate hæmorrhage, 11, with 7 fatal and 4 recovering; (2) spontaneous opening, with secondary hæmorrhage, 15, with 8 fatal and 7 recovering; (3) opening by incision, with immediate hæmorrhage, 7 cases, with 4 fatal and 3 recovering; (4) opening by incision, with secondary hæmorrhage, 8 cases, with 4 fatal and 4 recovering. In addition there were 5 cases following retro-pharyngeal abscess, with 2 fatal and 3 recovering; 3 cases in connection with scarlatinal suppuration, 1 fatal and 2 recovering; and 2 cases in connection with gangrenous tonsillitis, both fatal. Summarising, there were 51 cases, with 23 recoveries and 28 fatalities, or 54·8 per cent. Operations had been done as follows: Ligation of the common carotid, 16 times, with 11 recoveries and 5 deaths, once of external and internal carotid with recovery, and once of all three vessels with recovery. Two points were considered in detail by the author: First that relating to the invasion of vessel walls by suppurative processes. For a long time it was not believed that such a thing happened, but now it was universally admitted. In the case of quinsies the sudden diminution of pressure of confined pus when rupture of the abscess took place (or incision was made) on a weakened arterial wall might lead to immediate rupture of the latter. In the second place we had to consider the differential diagnosis of swellings in the tonsillar region when accompanied by evidences of inflammation. We might have simple inflammation, tonsillar tumour, or aneurysm. The choice of operation would depend on our diagnosis. Autopsy records had shown that in the class of cases considered in this paper the internal carotid had often been involved. Ligation of the external carotid alone would not be sufficient to check bleeding. The dangers of ligation of the common carotid were not to be overlooked, but this latter point must be decided by the criteria of general surgery.

Dr. W. E. Casselberry thought that more stress should be laid on the dangers of ligation of the common carotid. It was disastrous to ligate the vessel for hæmorrhage and get a paralysis of the opposite side. While the emergency named in Dr. Newcomb's paper had never occurred in his own experience, he had always thought that ligation of the external carotid would suffice as it did in tonsillar hæmorrhage.

Dr. W. L. Ballenger said that he had learned by experience that

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in dissecting tonsils if we avoided injuring the musculature of the pillars and of the bed of the tonsillar fossa we would not have severe hæmorrhage, but if we did injure these structures severe bleeding was apt to follow. In opening quinsies he separated the anterior pillar as if he was going to remove the tonsil and then by pushing the pillar out of the way and separating it from the superior constrictor muscle the abscess could be located with accuracy.

Dr. J. O. Roe preferred the Hilton-Fagge method of opening these abscesses with curved scissors and never used a knife.

Dr. Newcomb, in closing, said that the question of danger to brain integrity in ligating the common carotid was the same, no matter for what emergency this operation was done. The autopsy records in the material collected by him showed in several instances the internal carotid was the vessel which had been perforated. Ligation of the external carotid in such cases would be useless, and he again emphasised the fact that the conditions in a condition of suppuration and after ordinary operation for tonsillotomy or tonsillectomy were entirely different. In one case we were working in healthy tissue, notwithstanding the hæmorrhagic complication; in the other we were working in tissue which had lost its vitality and to which the application of styptic measures was conditioned by this fact. In an ordinary post-tonsillotomy hæmorrhage the bleeding site was often visible, but this was not the case in hæmorrhages in connection with pharyngeal suppurations. There was no objection to a primary ligation of the external carotid, but it would not always stop the bleeding.

CORRESPONDENCE.

To the Editor of The Journal of Laryngology, Rhinology, and Otology.

My dear Sir,—In an editorial on page 6 in the January number of the Journal of Laryngology for 1908 the statement is made that "No modification of the submucous resection (Killian) operation for the relief of septal deformities of any real importance has been suggested, and this method of procedure, as originally advocated by Killian, retains the popularity it so richly deserves."

The impression the reader obtains from this paragraph is that Killian was the first one to describe a useful method of resection of deviations of the septum, that his method has justly extinguished all others, and that it is so classically perfect that it is practically incapable of further improvement, not to speak of displacement, by better ways of operating.

This attitude seems to me unfair to the others who have worked to develop the submucous resection, and among them to me. My first descriptions of my way of performing the operation were published in 1902 and 1903, included the careful preservation of the mucosa on both

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