to the primary corroding action of the poison upon the tissues. (It is a matter of general interest to know that no traces of mercury were found by a chemical expert in the organs, tissues, or secretions.)

HUNTER MACKENZIE.

SINCLAIR, A. J. (Edinburgh).—**Case of Phosphorus Poisoning.**
Edin. Med. Jour., March, 1887.

A CHILD, aged twenty-two months, had sucked some phosphorus matches, traces of which were found in her mouth and on her lips. When the writer attended he found the cheeks red and flushed, and a dark treacle-like fluid was occasionally vomited. White-coloured fumes emanated from the mouth (after the administration of the white of an egg with flour). Death took place in about six hours. No necropsy was permitted. Neither the stools nor the vomited matter showed any traces of phosphorescence.

HUNTER MACKENZIE.

ASSOCIATION AND CONGRESS MEETINGS.

The French Society of Otology and Laryngology.

ON April 13, 1887, M. MENIÈRE opened the meeting, ceding the chair to M. GOUGENHEIM, the newly-elected president. The bureau was constituted as already reported (this Journal, May, 1887). The following papers of laryngological interest were read :—

1. *Case of Hemorrhagic Laryngitis.* By Dr. GAREL. (An abstract of this paper has already appeared in this Journal, *vide* p. 222.)

M. POYET questioned whether the case was really one of hæmorrhagic laryngitis. M. Garel merely stated on the part of the larynx, rupture of vessels, lesions of the mucosa, and violent cough, which had determined the flow of blood. But besides this, M. Garel admitted a grave cardiac and vascular condition, which might of itself be the primary cause of the disseminated hæmorrhages, and the blood might have coagulated in the larynx. M. Poyet regarded the hæmorrhage as the result of a diapedesis, and not of a laryngitis. Strübing, in his observations, says that the reddened and inflamed vocal cords present blackened points where the flow of blood had occurred.

M. DELIE agreed with his colleague Poyet. There was in this case a general condition dominating the laryngitis, which was only secondary. He could not see that the larynx of the patient presented any degeneration of the mucous membrane. "I cannot," said Delie, "understand the case enunciated by our estimable confrère as one falling under the category of hæmorrhagic laryngitis. It is essential not to confound hæmorrhages, or sanguineous transudations, manifested in all organs under conditions of profound alterations of the blood, with inflammations of the larynx sufficiently violent to lead to a local rupture, either superficial or deep, of the laryngeal arteries. The clots of blood met with on, or between, the vocal

cords in patients who expectorate blood, and who are subjects of chronic albuminuria, cirrhosis, scurvy, etc., proceed from the deeper portions of the respiratory passages; the blood is arrested in its passage, and during sleep and the consequent repose of the larynx, it collects on the free edge and inferior surface of the vocal cords. In the majority of cases the sanguineous transudation is minimal at the surface of the laryngeal mucosa."

M. MOURE thought that the hæmorrhage in Garel's case was as much laryngeal as tracheal, nasal, etc., and the clots were fixed on the vocal cords just as they were formed in the nasal fossæ. He cited the case of a singer who had ruptured a vessel during a vocal effort. On laryngoscopic examination Moure found a true hæmorrhage from the upper surface of the left vocal cord, the mucosa being red and ecchymotic. In another case laryngeal hæmorrhage was produced after the use of alum pulverizations.

M. MOURA thought that the existence of a hæmorrhagic laryngitis could not be affirmed from the simple occurrence of clots in the various regions of the larynx. Before this could be done, the site of the lesion giving origin to the blood must be determined, and the larynx must first be cleared of all clots. He had seen two cases of hæmorrhagic laryngitis; in one, the blood flowed, or rather trickled, from the left ventricle; and in the other, from a deep ulceration, which, after having destroyed the mucosa, had attacked the thyroid cartilage immediately below the commissure of the lips of the glottis.

M. JOAL did not believe that the term hæmorrhagic laryngitis should be applied to Garel's case. The very term laryngitis presupposes inflammatory conditions, with vascular rupture and ecchymotic spots, such as are seen in singers after great vocal efforts. In the case related there was a general condition, and the hæmorrhage was not the consequence of inflammation.

M. VACHER thought that under the term laryngeal hæmorrhage, or hæmorrhagic laryngitis, should be meant a typical local condition. On the other hand, he could not see how, according to Moura, one could be assured of the state of the larynx when this was covered with adherent clots; and to provoke the expulsion of these clots, or to remove them, appeared to him to be a dangerous proceeding.

M. GAREL answered, regarding his case as a veritable hæmorrhagic laryngitis, since the issue of the blood clearly took place at the level of the larynx, not only on the vocal cords, but on the mucosa of the arytenoids, and the epiglottis. After the disappearance of these clots, he was able to state opaline marblings over the points previously occupied by them. While admitting that hæmorrhages can be observed to occur from the larynx after vocal efforts, in the course of acute laryngitis, attacks of whooping cough, etc., most frequently these are hæmorrhages which do not possess the aggregate of symptoms remarked by himself, and which do not last long. The influence of the vascular state of the individual should be considered in the same line as the hæmorrhagic laryngitis; the other cases deserve only the term "hæmorrhage from the larynx."

2. *The Treatment of Catarrh of the Maxillary Sinus.* By DR. SCHIFFERS (of Liege). (This paper is abstracted at p. 253 of this Journal.)

M. BARATOUX believed that the condition was most frequently due to dental caries.

M. CHATELLIER thought it could not always be attributed to dental caries. He recently made an autopsy upon a patient who had died from pericarditis with effusion, and who had been the subject of an *ozæna* emitting a repulsive odour. At the autopsy was found an increased roominess of the nasal fosse, small inferior turbinates, and the left antrum of Highmore, with the sphenoidal sinus full of

pus, without, however, having any odour like ozæna. There was no ulceration in the nasal fossæ.

M. NOQUET thought that catarrh of the maxillary sinus might be consecutive to an inflammation of the nasal mucosa ; but was oftenest provoked by dento-alveolar lesions. He had seen during the last year one case in which it sufficed to extract a very carious molar in order to obtain evacuation of the sinus. The patient was rapidly cured by antiseptic injections made through the aperture.

M. GAREL had treated a case of nasal obstruction from polypi, with infectious suppuration. Suppuration was arrested after the extraction of a carious tooth.

M. BOUCHERON related the history of Louis XIV., who was afflicted with a suppurating dental caries, and for which his surgeon successfully employed the hot iron. He had also published a case of extensive malformation of the palatine arch due to old inflammation of the maxillary sinus ; the inflammation had formed an enormous cyst, which had displaced the floor of the nasal fossæ from the arch of the palate. The cyst was opened.

M. GELLÉ thought that sometimes the dental origin was undeniable, and these were the ordinary cases. Sometimes the origin was prothetic apparatus, as he had observed in one case, and the operations necessitated by dental caries when they are multiple.

M. VACHER thought that inflammation of the antrum of Highmore might be caused by violent coryzas.

M. POYET found that irrigation of the sinus is more easily performed through the maxillary opening than through the nasal meatus.

M. SCHIFFERS did not contest the dental origin of the condition, but the question to be decided is whether the nasal origin is not the most frequent. He thought that this latter was the case, considering the frequency of dental caries and the rarity of its complication with inflammation of the sinus. The foetid odour exhaled by the patient is not a sign of this inflammation, it may proceed from the mouth alone ; the pus may also have its origin solely in the alveolus. The necessity of a rhinoscopic examination is to be insisted on for the purpose of diagnosis. The purulent stream issues out of the middle meatus ; it is unilateral and intermittent. It is evident that when dental caries is pronounced and osteoperiostitis exists, surgical opening through the alveolus is indicated. It may occur spontaneously.

M. BARATOUX had observed thirteen cases of inflammation of the sinus and had stated the presence of purulent concretions at the level of the antrum of Highmore. Dentists habitually treat such cases by removing the carious roots, and washing out the sinus by injections through the perforated alveoli, and they cure their patients very well.

M. GOUGENHEIM believed that Schiffers had attributed to rhinitis an excessive influence in the production of catarrhs of the maxillary sinus. That dental affections play an important part in the production of these affections is well known to dentists. A certain number of such cases escape throat and nose specialists.

Meeting of 14th April.

3. *On Supplementary Glottides.* By M. GOUGENHEIM. (To be abstracted in next number.)

M. MOURE observed that the title of this paper should have been "Supplementary Vocal Cords," not "Glottides," the glottis being a space comprised between the true vocal cords, and not being able to give rise to vibrations. "We have all had occasion," said he, "to observe patients like those spoken of by Gougenheim. Many times I have met with patients who, having no vocal cords, were able to speak by means of the ventricular bands supplementing, in a certain fashion, the true lips of the glottis. The voice was rough, but sonorous."

M. MOURA remarked that cases often occurred in which the superior bands, and even cicatricial productions permitted of speech in the absence of true vocal cords, but the voice is no longer able to modify sounds in an ascending and descending manner. These false cords are capable of vibration, but they give to the voice a low timbre. Their vibrations are always "vibrations d'emprunt."

M. VACHER understood under the term glottis, not only the space between, but also the free edges of the vocal cords. He cannot admit that they can be supplemented as vibrating and sonorous cords.

M. GOUGENHEIM said that in the case described by him, he had observed the gamma ascend through the range of an octave. It seemed to him inadmissible that the superior vocal cords could have by their vibrations engendered the sounds produced, in this case. He admitted that bruits could be emitted by parts of the larynx other than the inferior vocal cords, but could not accept the view of Joal and Moure, that the upper musical notes of the voice could be attributed to the action of a deformed organ only able to give origin to unformed sounds.

M. JOAL admitted with Moure that the superior bands could vibrate in certain circumstances, although the inferior bands were destroyed. Patients whose vocal cords are destroyed by syphilis or tubercle will sometimes produce vocal sounds by the approximation of the superior vocal cords. He had recently observed this in a patient whose true vocal cords were totally destroyed. When there was no inflammation the voice was very deep; when there were acute phenomena, he spoke with a falsetto voice. During phonation the superior vocal cords approximated.

4. *Classification of the Laryngeal Muscles.* By M. MOURA. (This paper is not yet published.)
5. *Indurated Chancere of the Right Nasal Fossa.* By M. MOURE (of Bordeaux). (This paper is not yet published.)
6. *Tumour of the Thyroid.* By Dr. AIGRE. (See this Journal, p. 259.)
7. *Presentation of an Instrument for Scarification of the Vocal Cords.* By M. GAREL.

Meeting, April 15, 1887.

8. *Atrophic Rhinitis.* By M. NOQUET (of Lille). (See this Journal, p. 214.)

M. CHATELLIER thought that the term atrophic rhinitis should be rejected, since it expresses a false idea of the nature of ozena. The partisans of this pathological idea themselves admit that the atrophic period is preceded by a phase of hypertrophy. But histological research proves that the tissue which constitutes pituitary hypertrophy has no tendency to atrophy; it resembles mucous tissue; one even finds mucous tissue with evident infiltration with mucin, easily demonstrated by histo-chemical reactions. The mucous tissue does not atrophy; quite the contrary.

M. MOURE replied that there is not only atrophy of the mucosa but of the turbinated bodies.

M. GELLÉ said that the detailed exposition given by Chatellier of lesions of the mucosa left quite inexplicable the remarkable atrophy of the osseous portions of the turbinated bodies.

M. CHATELLIER replied that this atrophy proceeded from a rarefying osteitis.

M. GELLÉ did not see the necessity for admitting an osteitis. He thought that the nutrition of the bone suffered a grave alteration in nutrition consecutive to a lesion, or parallel with the evolution of lesions of the submucous periostitis, which is not sufficiently insisted upon. A slow atrophy is there produced by arrest or insufficiency of nutrition.

M. CHATELLIER remarked that pathological anatomy has taught us that

portions of the skeleton can be arrested more or less completely in their development at variable periods in the growth of young subjects, and that bones symmetrically placed may, at the end of a certain time, have an unequal volume as regards one another, or both may be inferior in volume to the normal condition. But atrophy, or absorption of bone, is a fact of which there does not exist any example in the economy. Why admit that the nose is an exception to the general rule, and that one portion of the skeleton is susceptible of atrophy, after having acquired and preserved a normal volume for some time? M. Chatellier rapidly reviewed the condition known as rarefying osteitis, a condition which could not be regarded as explanatory of the disappearance of the turbinated bodies. This atrophy of the turbinated bones and mucosa, has never been demonstrated either by observation or pathological anatomy, and is opposed to what we know of the pathological anatomy of osseous tissue. He further thought that before affirming the fact of the diminution of a bone (turbinated), irrefutable proof should be advanced of the fact. M. Chatellier has no knowledge of the theory of Fraenkel, referred to by M. Moure, as establishing anatomically turbinated atrophy.

M. RUAUT referred to the micrococcus theory of Loewenberg, cited by Noquet, which attributes to micro-organisms of large dimensions the phenomena of ozæna, the organism when grown in gelatine being said to give to the cultures the odour of ozæna. Loewenberg's work did not seem to have sufficiently attracted attention. It required repetition, and if confirmed was a fact of the highest importance, the ozæna being the symptom which caused the patient most trouble, and if definitely proved to be due to a micro-organism one might hope to find some means of combating it. Since ordinary antiseptic irrigations do not effect a cure, it would not be unreasonable to suppose that the organism existed in the tissues in larger or smaller quantity, and being prolonged on to the mucous surface (by reason of its great length) re-infected the surface continually. The same kind of thing is observed in the gonococci which inhabit excretory canals of the glands of Bartholin, and keep up a constant blenorrhagia. Ozæna accompanied with dryness of the nasal mucosa often becomes spontaneously cured. Such cases are frequently met with in young girls, more frequently than would be supposed. The determination of the origin of the odour is a factor of prime importance, and no sufficient explanation has yet been advanced. It is certainly not due to deficiency of expiratory current through enlargement of the nasal fossæ, with consequent accumulation of secretions and putrid degeneration, as suggested by Lantal, else all patients who suffer from naso-pharyngeal obstruction and respire through the mouth should have ozæna. In such patients dry crusts are found, but without odour. The opinion of Krause that ozæna is due to fatty degeneration of the mucous cells with consecutive development of volatile fatty acids is less satisfactory than the microbe theory of Loewenberg. There is no proof that ozæna may not be contagious under certain conditions.

M. BARATOUX admits that ozæna may be the result of absence or arrest of development of the turbinated bodies, or of atrophy of the nasal mucosa. At the recent Berlin Congress, Habermann read a memoir in which he sought to establish that ozæna commenced at the surface of the mucosa—*i.e.*, at the orifices of the glands. Baratoux thought this form susceptible of cure, having observed many cases in which the turbinated bodies had recovered their normal condition.

M. NOQUET recognized the importance of Chatellier's microscopic researches. His own remarks were entirely based on clinical experience. What he wished to establish, was that in three cases the atrophied mucous membrane had been regenerated, and the odour had completely disappeared. He could not say if a hypertrophic stage existed, but was disposed to admit it. When competent observers like Moure and Bayer affirm its existence, we must believe them.

M. MOURE had only given his opinion with extreme reserve that atrophied turbinated bodies were regenerated; in every case this structural modification is only obtained after very prolonged and persevering treatment.

M. MIOU did not believe in a hypertrophic stage of the complaint. He had during some years watched a child six months of age, who had smooth, thin mucosa over the inferior turbinated bodies. The nasal fossæ developed, but the inferior turbinated bodies preserved their small contour. This child would probably eventually suffer from ozæna.

9. *On the Lymphatics of the Larynx.* By M. POIRIER (of Paris).

THE author exhibited two large diagrams, tracing the lymphatics of the inferior aspect of the glottis to a subcutaneous gland and passing through the crico-thyroid ligament.

10. *Cysts of the Larynx.* By M. GAREL (of Lyons). (This paper is abstracted at p. 254.)

M. RUAULT remarked that on some of the drawings presented by M. Garel in explanation of his paper, the appearance of the tumours of the inferior vocal cords is apparently identical with that of the small myxomata sometimes seen there. It would be impossible to establish the diagnosis if the tumour were crushed in the forceps, for the crushing would cause the protrusion of a drop of liquid just like a small cyst.

M. GAREL said he had been fortunate enough to meet with a number of cases, and had not only seen the liquid escape from the cyst, but had been able to demonstrate the nature of the tumour microscopically.

11. *The Treatment of Laryngeal Tuberculosis.* By M. HERING (of Warsaw). (This paper is abstracted at p. 256.)

M. GOUGENHEIM presented, on behalf of the author, a number of drawings and a photograph, showing cicatrices of the laryngeal lesions, curettes, scarifiers, hypodermic syringes, etc., for the lactic acid treatment.

12. *On the Anterior Rhinoscopic View.* By CRESSWELL BABER (of Brighton). (See p. 251.)

13. *On Extirpation of the Larynx.* By Dr. CH. FAUVEL (of Paris). (See p. 256.)

14. *On Nasal Vertigo.* By M. JOAL (of Mont Dore). (See p. 252.)

M. RUAULT recognized that in one of the cases related by Joal the nasal origin of the vertigo seemed indisputable. One could not only produce vertigo by touching the least permeable portion of the posterior part of the nasal fossæ with a sound, but a cure was effected by removing the hypertrophied portions by means of the galvano-cautery.

M. GELLÉ, without refusing to admit the evident etiology of the vertigo in Joal's observations, drew attention to the modifications and alterations of the static and dynamic conditions of the ear by naso-pharyngeal affections, apparently of the slightest nature. By means of centripetal pressures he had been able to provoke vertigo each time, and thus to affirm its evident auricular origin, when the absence of auditory trouble, and the excellence of the auditory function, seemed to point to any origin rather than auricular.

M. RUAULT said that he had not tried to produce auditory vertigo in the manner indicated by M. Gellé. It is possible to do so, but that would not prove the auricular origin of spontaneous vertigo, whilst the cure of the complaint after the disappearance of the nasal condition clearly showed it to be of nasal origin.

[From the *Compte Rendu Officiel de la Société Française d'Otologie et de Laryngologie.*"] JOAL.