row, and the septum frequently deviated. Many of the patients have been life-long snorers. The reflex symptoms are produced by the local irritation in the nose and nasopharynx acting on the terminal ends of the trifacial nerve. Mention is made of the studies of Voltolini, Haenisch, Sommerbrodt, and Hack on the subject of nasopharyngeal reflexes, and also to Tornwaldt's researches "On the bursa pharyngea in its relation to the diagnosis and treatment of certain diseases of the nasopharyngeal space." Dr. Jacobi is of the opinion that the improved knowledge of the anatomy of the nasopharyngeal cavity will probably clear up the etiology of many a case which was not diagnosed correctly, and both pharyngeal bursa and tonsil will come up for their share in both etiology and treatment.

THE COCCI OF PNEUMONIA IN THE NOSE.

Dr. Arthur Thost⁵ publishes the results of his observations, made with a view to determine whether the cocci which Dr. Klaumann found in the nasal secretion of a case of ozæna, corresponded with the pneumococci described by Friedländer. Dr. Thost obtained his material from the clinics of Professors Schrötter and Störk, in Vienna, and conducted his observations in the laboratory of Prof. A. von Frisch.

Out of seventeen cases of ozæna examined, cocci, with distinct envelopes, were found in twelve. After Dr. Thost had perfected his staining methods, he was able to demonstrate the presence of characteristic cocci in the secretion from cases of simple coryza, and in that of different forms of chronic rhinitis.

He obtained pure cultures of these cocci, and decided that they were identical with Friedländer's pneumococci. In order to test this point, he injected into the right lung of five mice, one drop of liquid from the pure culture. Three mice were inoculated with cocci from the nasal secretion of patients with ozæna, and two with pneumococci. In the blood taken from the tail of one of the mice inoculated with pneumococci, such an enormous quantity of cocci were seen, that they appeared to be as numerous as the blood-corpuscles. They were also found in the blood of the mice inoculated with the nasal cocci, but were not so numerous. All of the animals died in from one to two days, with pulmonary symptoms. The autopsies showed double pleuro-pneumonia, with serous exudation mixed with blood, and congestion of the spleen and kidneys. Microscopic examination of the pleuritic exudation revealed cocci, with distinct capsules; they were also found in the blood, and in the sections of the lungs, spleen, and kidneys. The appearances resembled, even to the smallest detail, those described by Friedländer.

Dr. Thost gives also the results of his experiments on rabbits and guinea-pigs, and his staining methods are described in full. He concludes by saying that more extended observations must determine what relation there is between croupous pneumonia in man, and these pneumococci in the nose. If a cold in the head depends upon the presence of these cocci, it will be an interesting question whether certain affections of the lungs can originate from micro-organisms in the nose.

CIRCULATION IN THE NASAL MUCOUS MEMBRANE.⁶

The anatomists, Hyrtl and Henle, admit that in the normal state, the cavernous or spongy tissue of the

nasal passages is swollen. According to Bresgen, we ought only to recognize the normal condition when the mucous coat is closely applied to the osseous framework. He combats the opinion of Hack, that the mucous membrane itself remains unaffected when any considerable swelling of the cavernous tissue is present. Fraenkel and Zuckerkandl teach that a cavernous tissue does not exist apart from the mucous coat itself; and from the histological examinations of Fraenkel, it appears that in all cases of swelling of the cavernous tissues, there is some hyperplasia of the mucous membrane. But Bresgen argues that, normally, there is no cavernous tissue in the nose, but only a venous plexus, which, by the irritation caused through the passage of air, is transformed into a cavernous tissue. The same spongy tissue that is frequently found around the lachrymal canal is held to be abnormal, and due to the propagation of a chronic rhinitis, which leads to swelling, with hyperplasia of the venous plexus.

HICCUGH CURED BY INDUCED SNEEZING.

Dr. G. A. Gibson, in a paper entitled "A Classical Remedy,"⁷ calls attention to the Hippocratic aphorism, "Sneezing occurring after hiccough removes the hiccough," and states that tickling the nostrils in cases of obstinate hiccough has been tested by him with very successful results. Hiccough, he says, as well as sneezing, is one of the specially modified respiratory movements, and it is quite in accordance with what we know of the transference of nervous action, that the spasmodic contractions of the diaphragm should cease on the induction of the explosive expirations which constitute the facts of sneezing. But it is not necessary, according to Dr. Gibson, that the stimulus applied to the nose be followed by sneezing; the application of a gentle irritant to the nasal mucous membrane may be quite enough to put a stop to the hiccough, by diverting the nervous energy into other channels, although it may not be of sufficient power to induce sneezing.

Clinical Memoranda.

"RHEUMATISMAL NODULES."

BY F. E. PORTER, M.D., OF AUBURNDALE.

A PARAGRAPH in the *Medical Record* of June 5th, calls attention to "Rheumatismal Nodules" as exhibited in a hospital patient. The case is so similar to one that has just passed from my attention, being the first of the kind ever seen by me, I venture to call attention to it through the JOURNAL.

On the evening of May 29th, Mrs. J. came to my office to say she thought her maid had the "hives." The back of her hand was swelled and bunches appeared both there and down her right leg. She was also somewhat stiff, and complained of her right knee. On the 31st, the trouble not getting better, but the patient growing stiffer in several joints, I was asked to see her. I found she had had the prodroma of acute disease. Her pulse and temperature were above normal, the hand and wrist were puffed, while irregular nodules, hard and somewhat tender, presented themselves. The metacarpo-phalangeal joint of the middle finger was the centre of tenderness. The knee was also swollen, while down the leg were nodules

⁵ Deut. Med. Wochenschr., March 11, 1886.

⁶ Lancet, November, 14, 1885.

⁷ Edinburgh Medical Journal, April, 1886.

from the size of a split-pea to that of a hazel-nut. The left elbow had also begun to be tender. I at once pronounced it rheumatism, yet had misgivings about the nodular phase of the case. The salicylates were prescribed, and in two days the patient was about the house, with only an occasional pain in a joint. The nodules had disappeared and the puffiness of joints also. The salicylates were continued in diminishing doses three days longer.

In the limited round of complications of rheumatism at hand, I find nothing corresponding to this condition. Abscesses, purpura hæmorrhages, urticaria and scrofulous swelling would, perhaps, be thought of. As abscesses are a later development in rheumatism, it might be questioned whether the above conditions untreated would result in abscesses, but they certainly did not present the appearance of commencing abscesses. Purpura does not present the swelling of upper joints, though swelling of the lower extremities takes place; but such swellings are not attended with fever, are not inflammatory; and neither abscess nor purpura is attended by the sweating present in rheumatism. The wheals of urticaria have a white centre with red areola, are accompanied by intense itching and burning; they are raised, while these nodules, though raised, invaded the subcutaneous cellular tissue. In scrofula other characteristic signs would be found, and it is also chronic in its course.

The few lines in the *Medical Record* give a picture of the nodules. . . . "Nodosities in the subcutaneous cellular tissue and certain muscles which closely resembled gummy tumors. They had grown very rapidly until they were as large as hazel-nuts, at which size they remained stationary. . . . the tumors were to be distinguished from those of syphilitic origin by their rapid growth, the pain attending their evolution, and the ecchymotic tinge of the skin covering them." These particulars make the two cases alike, it seems to me.

Reports of Societies.

ASSOCIATION OF AMERICAN PHYSICIANS.¹

THURSDAY.—AFTERNOON SESSION.

The first business of the afternoon session was the discussion of the question,

DOES THE PRESENT STATE OF KNOWLEDGE JUSTIFY A CLINICAL AND PATHOLOGICAL CORRELATION OF RHEUMATISM, GOUT, DIABETES, AND CHRONIC BRIGHT'S DISEASE?

Referee, Dr. James Tyson, of Philadelphia. Co-referee, Dr. William H. Draper, of New York.

DR. TYSON, the referee, began by defining the diseases included in the subject. The usual definitions of rheumatism and gout as general diseases with local expressions were given. Diabetes was subdivided into two varieties, the milder and the more severe form. The former consists essentially in a defect in that particular metabolic office of the liver, by which glucose is converted into glycogen. It is due to over-stimulation of the liver cells by the excess of absorbed glucose arising from the habitual over-use of saccharine and starchy foods. The more severe form of diabetes may be termed neurogenous, and is caused by some

direct or reflex influence on the vaso-motor centre, whence arises a hyperæmia and accelerated circulation through the liver, as the result of which the glucose, absorbed during intestinal digestion, is carried too rapidly through the liver to permit its conversion into glycogen. To this is added, in advanced stages, glycogen resulting from the splitting up of the products of digestion of nitrogenous foods.

Taking up the discussion, first as to rheumatism and gout, the referee called attention first to the difference in the morbid anatomy of the two diseases, in the absence of anything specific or peculiar in the changes in the joints in rheumatism, while in gout there is the peculiar deposit of sodium urate in the joints or their vicinity. The composition of the blood is definitely altered in gout by the almost constant presence of an excess of uric acid in combination with sodium, whereas no change of corresponding importance is found in the blood of rheumatism. Heredity plays a much more important rôle in gout than in rheumatism, reaching in the former, according to various observers fifty to one hundred per cent., while in rheumatism the maximum claimed is thirty-four per cent. The early age at which rheumatism presents itself as compared with gout implies a difference in the etiology, as does also the absence of renal and the presence of cardiac complications. Alcoholic liquors and over-indulgence of food have no influence in the causation of articular rheumatism. In gout they are all-powerful.

The exciting cause of rheumatism is always cold, dampness, or both. The cause of the explosion or the acute attack of gout, is the cause of the disease itself, and is due either to the over-accumulation of uric acid in the blood, whether as the result of increased formation or defective elimination, or to diminished power of resistance of the organism through some accidental cause, atmospheric or physical.

Moreover, except in the case of salicylic acid which is admitted by all to be useful in both affections, Dr. Tyson thought that the treatment required by the two diseases was different. The treatment of gout is eliminative, that of rheumatism is restorative. It is true salicylic acid is efficient in both diseases, but this is not sufficient proof that they are the result of the same cause, so long as that cause is so easily demonstrated in one and not in the other. Nor is the case strengthened by the theoretical reasoning which so well explains the action of salicylic acid that it prevents the formation of uric acid in the blood by seizing upon the glycocine out of which uric acid is formed.

The relation of gout to that form of chronic renal disease known as chronic interstitial nephritis is a true correlation, since there is every reason to believe that the cause of gout is one of the causes of this form of chronic renal disease, so common in gout, and the evidence of renal disease is often found long before the gout manifests itself.

To estimate the relation between gout and diabetes it is necessary to remember that there are two forms referred to. With neither of them is there any pathological relation. Between gout and the first or mild form of diabetes there is a clinical correlation, although many of the facts on which it has been founded, the referee believed to be erroneous. Thus although uric acid sediments are quite common in diabetes, yet careful quantitative analysis showed no increase in the amount of uric acid excreted. The uric acid sedi-

¹ Continued from page 598.