paroxysms of asthma were associated with a condition of chronic (atrophic) inflammation of the nasal mucous membrane, and ceased on the application of nasal remedies; and by the following case that has recently come under my notice.

A boy, aged 13, was brought to me on January 23rd, 1885, on account of a copious watery discharge from the nose, and asthma. He had suffered from these for about ten years, with slight periods of remission. The asthmatic attacks were often very severe, and generally occurred about 4 or 5 A.M. The condition of his nose necessitated the use of from twenty to thirty handkerchiefs daily. Anterior and posterior rhinoscopy showed chronic catarrh of the nasal mucous membrane, with a slight amount of muco-purulent secretion. There was no polypus or thickening of the membrane. Though not robust, he presented no indications of disease elsewhere. (This patient has, apparently, quite recovered, under the after-mentioned treatment.)

What is the explanation of such cases? I believe the asthma to be owing, not to any mechanical obstruction of the nasal passages, but to a condition of abnormal irritability of the nasal mucous membrane, due to, or aggravated by, chronic inflammation. Polypi may, or may not, co-exist; when present, they doubtless assist in maintaining the augmented irritability of the mucous lining. The high degree of normal sensitiveness of the mucous membrane of the nose is well known; and when this membrane has been the subject of long-continued inflammation, its irritability appears to become highly augmented, and more easily excited. Reflex acts are then readily induced, of which sneezing, cough, and asthma are the principal indications.

The peripheral irritation may be caused by dust or pollen, and hence the attacks are usually worse in midsummer and autumn; by cold, therefore their frequency in the early morning hours; or by the irritation of a polypus. Dr. John Mackenzie has recently stated (*Transactions of the Medical and Chirurgical Faculty of Maryland*, 1884) that asthmatic attacks in cases of nasal polypus only occur when the growth is, by force of gravity, brought against the posterior part of the nostril, corresponding with the most excitable spot in the sensitive area. On the other hand, Hack, quoted by Morell Mackenzie (*Manual of Diseases of the Throat and Nose*, vol. ii, p. 361), considers that reflex phenomena may be produced by irritation of any part of the lining membrane of the nose.

Associated with the asthma are, usually, excessive sneezing, and profuse discharge of mucus from the nose, occasionally cough. There is more or less impairment of the general health, with languor, and depression of spirits.

The treatment of these cases must obviously, in the first place, be directed to the removal of the exciting cause. The patient ought to be directed to reside in an atmosphere as free as possible from dust and other atmospheric impurities. Above all, active medication should be directed to the nose; and, after a fair trial of various remedies, I have found none so efficacious as belladonna, applied in the form of buginaria (nasal bougies). From one-twelfth to one-sixth of a grain of the extract ought to be incorporated in each bougie, one of these being introduced into each nostril night and morning, and allowed to thoroughly dissolve there. I have found their employment most beneficial, alike in regard to the sneezing, the secretion, and the asthma. Their use is usually followed by a burning sensation in the nose, but this is never severe, and soon disappears. I have also experimented with the sulphate of atropia in the same way, but have found it less efficacious, and probably more irritating than the extract. Previously to the introduction of the bougie, the nasal mucous membrane may be cleaned by the anterior nasal spray. The use of the bougies may be gradually made less frequent, according to the amount of success achieved.

The cases which I have hitherto watched, have rather belonged to the atrophic than the hypertrophic form of rhinitis, but where vascular engorgement is present, it seems probable that the use of eucaine bougies would be beneficial. According to Bosworth (*Internationales Centralblatt für Laryngologie und Rhinologie*, No. 8), this drug has a remarkable effect in diminishing the vascularity of the lining membrane of the nose. In acute nasal catarrh, its local application has only a temporary effect.

The treatment may be combined with the administration of tonics, and such other general remedies as may be deemed suitable by the physician. By themselves, these are, however, singularly inefficacious. I venture, therefore, to commend to the profession the use of nasal bougies, containing belladonna, as an effectual method of treating the troublesome and obstinate complaints dependent upon chronic nasal catarrh and irritability, of which asthma is alike the most important and most intractable.

NOTE ON THE USE OF HARROGATE WATERS.

By JAMES A. MYRTLE, M.B., C.M., Harrogate.

IN December, Dr. Eddowes, of Shrewsbury, wrote, saying he had a most obstinate case of eczema, and asked how soon the patient might be sent to Harrogate for the baths and waters. I answered, any time, as the action of the waters in such cases was quite as beneficial in the winter as in the summer.

On January 5th, Mrs. J., the patient, arrived. I have only seen one worse case of impetiginous eczema, which was in the skin-wards of the Allgemeine Krankenhaus in Vienna. Mrs. J.'s head, face, neck, breast, arms from the elbow-joints, and hands, were a mass of yellow crusts, with a putrid, but not favus-like, smell. No favus-microbe was discovered. The patient's liver and organs of digestion were completely clogged; the urine was high-coloured, and very small in quantity. A calomel purge was given, and oil and lime-water poultices were applied to soften and remove the crusts. Two days after her arrival, the patient was put upon purgative doses of the strong sulphur-water before breakfast, and diuretic doses of the mild sulphur-water during the day. As she was too weak for baths, I ordered warm mild sulphur-water to be used as a lotion morning and evening. In four days she was strong enough to go to the baths, and continued for a fortnight taking a mild sulphur-bath every alternate day, and the sulphur-waters.

At the end of the third week all signs of the impetiginoid tendency had disappeared, and the skin was rapidly becoming healthy. I then ordered her Kissingen-water as an aperient before breakfast, and small doses of the same water as a tonic during the day, also needle-baths on the alternate days. In a week her strength had increased so much, that I ordered her to have a sulphur-bath every day, to continue the Kissingen water as an aperient, but to change to the chloride of iron spa as a tonic. A fortnight later, the patient went home entirely recovered.

Mrs. J. had had slight attacks of eczema before, but never of the impetiginous form. The attack had lasted for ten weeks previously to her arrival in Harrogate, and had thoroughly resisted the ordinary methods of treatment.

On January 10th, my father received a letter from the Rev. E. G. T., stating that his skin was very troublesome, and asking how soon he might venture to visit Harrogate. Before he could receive a reply, Mr. T. arrived, and reported himself at once. His age was 37. He had had four previous attacks, and when seen had eczema from head to foot, partly squamous and partly weeping. From the knees downwards, we found, superadded to the eczema, a crop of purpuric spots, very numerous, with a distinct pustule filled with yellow pus in the centre of each. On the arms, from the elbows, and on the balls of the thumbs, were numerous scattered subcutaneous nodules, very hard, neither painful nor irritable, about the size of a millet-seed. There was no fever; the pulse and temperature were normal; the tongue coated. The patient slept badly, owing to the violent irritation of the eczema. The combination of the pustules with the purpura on the legs, and the hard millet-seed nodules with the eczema on the arms, was so unique, that the patient's history was very fully gone into. We learned that he had been living in a house adjoining an old brewery, built before the drainage-system of the town was completed, and never connected; it had been occupied by a care-taker for some years previously to his taking possession. Soon after he went into it, he and his friends perceived a smell in the kitchen and bath-room; the sinks and closets were trapped, but the smell remained very bad at times. Mr. T. had three servants, and three friends living with him. The health-record of the six was as follows. The cook, aged 22, often had fainting fits, and contracted a troublesome cough, which lasted for months, and is not yet entirely shaken off. The housemaid, aged 19, was obliged to leave, and go into the infirmary for some female disorder, but had been well ever since leaving. The housekeeper had slight attacks of low fever. Friend No. 1 had bad health all the time he lived in the house; on going home, he had an attack of diphtheria. Friends No. 2 and 3 did not suffer. As regards Mr. T. himself, he had a bad attack of eczema, constantly woke with headache, and felt languid and tired. We put Mr. T. upon purgative doses of the sulphur-water in the morning, and the magnesia-water at midday; he was ordered a sulphur-bath every day. After very few baths, the purpuric pustules were gone, and the millet-seed nodules were less. In ten days the water was changed from sulphur to Kissingen, and from magnesia to chloride of iron; the purpura and remains of the millet-seed bodies rapidly disappeared, and, at the end of five weeks, the eczema was also cured. In a letter to us, three weeks after leaving, the patient says he is perfectly well.

I publish these cases, because they show clearly that the Harrogate waters and baths can be had recourse to with quite as much success in the depth of winter as in the more genial periods of the year; and I think it as well to remark that, unlike the Continental spas, where the kursaals, hotels, etc., are closed out of the season, Harrogate affords the same opportunities for treatment and accommodation all the year round.

A NEW METHOD OF ADMINISTERING PEPSIN.

By PROSSER JAMES, M.D.,

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IN adding another to the numerous preparations of pepsin, it is unnecessary to enter upon its physiological or therapeutical action. Pepsin has conquered for itself an important position in modern practice, and the new preparation is simply designed to render its administration more easy, as well as more satisfactory. The importance of administering it within a short time of taking the food on which it is expected to act, has been generally appreciated, so far as giving directions for the dose to be taken a little before or a little after a meal; but too often these directions are not implicitly followed, partly, perhaps, from the prejudice many patients have to take physic with their food; moreover, this plan is ineffectual. In natural digestion, the pepsin is not all poured on the food at once. By the movements of the stomach, its contents are successively exposed to the action of the gastric juice as they come in contact with the walls. To imitate this, we might take pepsin in successive portions; but patients, who mostly think it hard to swallow a single dose of medicine with a meal, will not be easily persuaded to sip it, and they usually object to the taste of the liquids. There are other reasons why some of the preparations in common use are ineffectual. Thus, when taken with strong wines, the pepsin is precipitated, and the vinum is perhaps the worst preparation we can employ.

To secure pepsin being taken at the time it is required, that is, with the food on which it is to act, I have endeavoured to convert it into a condiment. At first I tried a sauce, but with less success than I had hoped. Considering that pepsin is so associated in digestion with hydrochloric acid that some have held that a definite compound—pepto-hydrochloric acid—is formed, it occurred to me that, as chloride of sodium is the universal condiment, a combination with that salt offered the most likely solution of the problem I had set myself.

A simple mixture of pepsin with salt may be successfully employed as a digestive condiment, provided it be freshly prepared each time; for such a mixture, if kept, is apt to decompose, and the patient who has once observed this will take no more of the putrefying powder. How to overcome this difficulty was the next problem; and this has been also solved. The pepsin and the chloride must be brought together in such a way that possibly a compound, or pepto-chloride, may be formed. Whether such union occur or not, a powder thus prepared is quite stable. I have before me now a sample made many months ago, which has been used at intervals at the table, in place of common salt. It has a faint colour, which is not objectionable, and used as table-salt is nearly indistinguishable from that condiment. Here, then, is a digestive condiment, a peptic salt, which many may be glad to try, and which has already given me satisfaction.

Messrs. Savory and Moore, who manufacture digestive preparations on so large a scale, are now prepared to supply my preparation. I propose to call it "peptic salt," or "digestive salt," or it may be ordered in prescriptions, if preferred, as sal-pepticus, or as pepto-chloride of sodium. Ten grains of my peptic salt will dissolve nearly 200 grains of hard-boiled albumen, or 2 ounces of lean cooked meat. It may take the place of table-salt in the dyspeptic's dietary. The special modes of using it in different cases and with different foods, would unduly lengthen this communication.

REQUESTS AND DONATIONS.—Miss Shand, of Cardiff, has bequeathed the "residue" of her estate, which, it is expected, will amount to nearly £5,000, to the Glamorganshire and Monmouthshire Infirmary and Dispensary, for the maintenance of a ward for children in the new infirmary buildings, to be called "The Shand Memorial Ward," in memory of her late brother.—Mr. George Sturge has given £1,000 to the Samaritan fund of University College Hospital, the income from which is to be applied in assisting necessitous in-patients to procure proper nourishment, clothing, or change of air, for the first three months after their discharge.—The annual report of the Queen's Hospital, Birmingham, acknowledges the receipt of £600, from the "William Dudley" Trust.

PATHOLOGICAL MEMORANDA.

NOTE ON THE SO-CALLED CHOLERA-BACILLI.

IN an article on the so-called cholera-bacilli, published in the *BRITISH MEDICAL JOURNAL* for May 2nd, 1885, Mr. Watson Cheyne says, on page 878: "One of the most peculiar forms which I have seen was found in the contents of the large intestine of the guinea-pigs, which died after injection of cholera-bacilli" (killed by the injection of cholera-bacilli into the duodenum). "I tested the fluid by cultivation at the time very carefully, and found that it contained almost a pure cultivation of cholera-bacilli; there was certainly not more than one other kind of bacterium for every 100 cholera-bacilli. The appearance of this material, on microscopic examination, after staining, is shown in the accompanying figure (see Fig. 6). Large fat, coiled, almost worm-like organisms, will be seen, which, as I know by cultivation, are cholera-bacilli....."

Upon these statements of Mr. Watson Cheyne, I wish to make the following comment. Anyone desirous to see and examine these comma-bacilli ("cholera-bacilli") need not wait for "guinea-pigs, which died after injection of cholera-bacilli." If he have a perfectly normal half-grown or adult guinea-pig killed, that has not been the subject of any experiment whatever; and if he will take the trouble of examining the contents of its cæcum, he will there find crowds of the very identical "cholera-bacilli," accurately represented by Mr. Cheyne in his Fig. 6, as well as the typical comma-bacilli of Koch.

In some places, in the stained cover-glass specimens, the material thus obtained appears to be "almost a pure cultivation" of them.

E. KLEIN, M.D., F.R.S.

TOXICOLOGICAL MEMORANDA.

POISONING BY SNOWBERRIES.

SOME time ago I was called to attend four children of one family, who were all suffering from vomiting, purging, and delirium, after which they became semi-comatose. They all recovered, but one of them had a narrow escape from death, and I was anything but easy about the other three. Their vomit left no doubt of their having eaten largely of snowberries, the fruit of *Lymphoricarpus racemosus*, and they did not appear to have taken anything else of an injurious nature. I can find no similar accidents recorded, and shall be thankful for any information on the subject.

There is another berry, of very bright and attractive aspect, now becoming plentiful in many gardens, but unknown till the last few years, on account of the absence of the male plant—I mean the fruit of *Aucuba Japonica*. I suspect it to be innocent, and Burnett (who evidently had not seen it) says that it "is said to have a sweetish, eatable pulp, and a bitter kernel." As children are sure to eat these berries, it would be well to know more about them.

THOMAS EDWARD AMYOT, Diss, Norfolk.

OBSTETRIC MEMORANDA.

BREECH-PRESENTATION: DELIVERY OBSTRUCTED BY HYDROCEPHALIC HEAD.

A FEW days ago, I was sent for to a case of labour (second child) by the midwife in attendance. On my arrival, I learnt that the breech had presented. The legs and body of the child were born, but the midwife had been unable to effect the delivery of the head. There was no pulsation in the umbilical cord, and the child, to all appearances, was dead. I easily liberated one arm, which had not descended, but could make no progress with the head, although the chin and mouth had passed the brim of the pelvis, in spite of using considerable force. I now noticed a spina biida in the lumbosacral region of the child. There was no tumour, but a raw surface, two inches and a half in diameter, exposing the spinal sheath, and evidently communicating at its upper part with the spinal canal. Whilst endeavouring to bring away the head, I saw some brain-like looking substance slowly exude from the raw surface; and directly afterwards, upon making forcible traction on the body of the child, a stream of watery fluid spouted out from the same place, and, so long as I kept up pressure on the head by pulling upon the trunk, the flow continued. The head now rapidly descended into the pelvis, and was born without difficulty. It presented the appearance of a hydrocephalic head without the fluid. In short, it looked very like a bag of loose bones. The