of a silver dinner knife, having on one edge a streak of bright red blood and considerable amount of greenish yellow matter on the end." With these conditions unchanged the patient was married two years later, that is, in 1881. Marital life and duties exerted a most pernicious effect. She failed steadily, and when I first saw her, two years later, she was in a deplorable condition: emaciated, exhausted by pain, spending most of her time in bed, unable to walk or even stand for any length of time. She said she did not mind the backache or dysmenorrhœa, but that the trouble in the rectum was "killing her." At first I thought there must be malignant disease of the rectum to produce such depressing symptoms, but recognizing the sharply retroflexed uterus pushing into the rectal walls, and the presence of adhesions, I determined to try uterine treatment alone. A few attempts convinced me of the impracticability of accomplishing anything by this plan until there was greater tolerance of the rectum toward the necessary manipulations. Under either the sphincter was dilated, showing several superficial and one deep fissure, and permitting the escape of a gush of blood and pus. When the sphincter was fully opened and the speculum in position, a single ulceration appeared, extending from the anus to a point about five inches up the bowel and involving the entire circumference of the rectum, except a strip of mucous membrane, varying from one-half to three-fourths of an inch in width, on its anterior aspect. This little strip of membrane was swollen and boggy from infiltration, and there were deposits of lymph on the surface from which the epithelium was very easily detached. A dark, grayish, dirty-looking coating covered the surface of the ulceration, exposing an easily bleeding granular base on its removal. Whatever the remote cause of this state of affairs might be, there was evidently but one course of treatment to pursue, and that was to promote as rapidly as possible the cicatrization of the rectum. I thoroughly curetted through the slough and granulations to a firm base and then brushed over with nitric acid, using the greatest care not to encroach upon the little remaining strip of mucous membrane. For three weeks the patient was kept absolutely recumbent in bed, and then for an equal space, allowed to move only about her room, spending most of the time upon the lounge. The medical treatment was a broth and beef-tea diet, aloin as a laxative, and enemata of hot water, and iodoform suspended in liquid vaseline. The rectum at first would reject two ounces of hot water immediately, but at the end of six weeks would retain three pints and more for about fifteen minutes. At the end of ten weeks there was most gratifying improvement, but still the symptoms were not all gone. Blood and pus had disappeared from the dejections, there was almost no pain accompanying them, but the feces retained their peculiar shape, and there was still the sensation of fullness in the rectum, inducing frequent attempts at defecation.

Examination showed, that the rectum was now completely cicatrized and the fissure healed. There was no change in the uterine condition. The patient was competent to attend to the rectal treatment and faithfully obeyed all my instructions, but after resuming her household duties, and being upon her feet a considerable portion of the day, she reported in July, five months subsequent to the operation, that the old rectal symptoms were returning, and she was alarmed lest she should relapse into her former state. Under its

improved condition the rectum was tolerant of the course of packing that was necessary to raise the uterus, and this treatment was carried out until the adhesions were so far stretched that a pessary could be introduced to complete the cure. I abandoned the packing for the pessary sooner than is my custom, because of the irritating effect upon the rectum, and also because vaginismus made the operation of packing both tedious and painful. Immediately upon the successful replacement of the uterus, the remaining rectal symptoms disappeared and have never since returned. I saw the patient two weeks ago, and she said that she now had a regular daily evacuation of perfectly formed feces, unaccompanied by pain or mucous discharge, that there was no abnormal sensation whatever referable to the rectum, that she never took a laxative to secure a dejection. In a word, as she stated it, "I never should know I had a rectum."

In reporting the foregoing cases, I have purposely refrained from entering upon the particulars of either the uterine or the rectal treatment, that the attention might not be drawn from the point under discussion by a confusing mass of details, and for the same reason have omitted mention of uterine complications that had no especial significance in this connection.

The cases have been selected from among a number as especially illustrative of the type of rectal diseases, that are dependent upon a uterine cause. That the cause of the rectal trouble was a direct consequence of the removal of the existing uterine lesions, not a coincidence, is shown by the fact, that, with one exception, Case III, the patients had previously received rectal treatment for years, improving but never getting thoroughly well, and always relapsing.

RECENT PROGRESS IN OTOLOGY.

BY H. L. MORSE, M.D.

DR. CHARLES H. BURNETT publishes¹ an article on "Hernial protrusion of the mucous membrane of the tympanic cavity, through the membrana tympani, in some cases of chronic purulent otitis media." This affection closely resembles granulation tissue, or a polypus with a broad base, the points for a differential diagnosis and for treatment, are as follows: The hernia of the mucous membrane is sensitive to the touch, forms suddenly, does not bleed easily upon being touched, but bleeds profusely if wounded, and yields quickly to the proper treatment.

Polypi and granulations are not sensitive, bleed easily, as a rule, upon being touched, and are cauterized, or removed by means of the snare without pain. On the other hand, hernia of the mucous membrane of the tympanic cavity, is made worse by any endeavors to cauterize, or to remove it by the snare. It can be properly treated in two ways only, first either by the application of powdered boric acid, or boric acid and alum in the proportion of ten grains of the latter to one ounce of the former, or by the instillation of absolute alcohol. The discharge attending it, is usually slight, and of a thick, purulent character. There is no tendency to spontaneous bleeding from the protruding mucous membrane, though Dr. Burnett has observed a tendency to recurrence of the hernia at the menstrual epoch. It is also worthy of note that this

¹ Medical News. Vol. xlvii, No. 17.

affection of the tympanic mucous membrane has been observed only in women. In conclusion, Dr. Burnett says, "I have seen only two or three such cases, but their peculiar liability to be mistaken for polypi or polypoid growths, as well as their resentful demeanor to the treatment applicable to true polypi or granulations, has induced me to record my experience with them."

We notice an instructive article² by Herr Adolf Hommel, on a new method of treatment for deafness resulting from what is known as sclerosis of the tympanic cavity, or chronic dry catarrh with ankylosis of ossicles of the middle ear. Dr. Hommel gives the history of his own case, and that of one patient, and the results are so good, and the method of treatment so easy to carry out, that the article is here quoted, notwithstanding the small number of cases in which the method has been tried. In 1877, examination of Dr. Hommel's ears gave the following results.

Chronic catarrh of both middle ears. Hearing distance for the watch, left ear 20 cm., right ear 260 cm., moderate central cloudiness of the membrana tympani. A second examination in the year 1879, showed the hearing to be, left ear 15 cm., right ear 200 cm., and at a third examination in 1881, the hearing distance for the watch, had decreased to 10 cm. in the left ear, and 150 cm. in the right ear. Bone conduction on both sides was good.

This steady increase in deafness had come on, in spite of treatment by means of Politzer's air douche. At this time Dr. Hommel began to make use of the treatment to be described. At the end of one month the hearing distance had increased in the left ear to 15 cm., and in the right to 190 cm. At the end of six months to 30 cm., and 380 cm., respectively, and at the last examination given on his chart, a little more than four years after this treatment was begun, the hearing distance had increased in the left ear to 40 cm., and in the right ear to 615 cm., that is to say, his hearing for the watch had been quadrupled. As compared with the previous four years, when he was either without treatment, or was treated by means of the air douche, and during which time his hearing diminished in the left ear one-half, and in the right ear more than one-third, this result is, to say the least, a very satisfactory one.

The other case reported is that of a thirteen-year-old boy, who had previously had a perforation of the membrana tympani, and a discharge from the middle ear on the left side, and progressive deafness increasing from year to year on the right side. At the time treatment was begun, examination showed, a dry perforation of the anterior inferior quadrant of the left membrana tympani—bone conduction was good—hearing distance for the watch was 5 cm. There was marked cloudiness of the whole of the right membrana tympani, slight tinnitus, bone conduction was good, and the hearing distance for the watch in the right ear was 12 cm. After seven months' treatment the hearing distance in the left ear had improved to 160 cm., and in the right to 340 cm. That is to say, the hearing in the left ear was thirty-two times as great as before, and in the right ear twenty-eight times as great. The cloudiness of the membrana had gradually disappeared. The method of treatment pursued by Dr. Hommel in producing these very favorable results is as follows: With the finger, press the tragus against the meatus

auditorius externus so as to close the latter completely, making it an air-tight chamber filled with compressed air, which forces inward the membrana tympani and the chain of ossicles, then allow the meatus to open again; the outward rush of the compressed air, assisted by the springing back again of the membrana tympani to its usual position, will carry with it some of the air normally in the external auditory canal, and cause a partial vacuum there, and this partial vacuum will suck outward the membrana tympani and the chain of ossicles. So that each inward movement of the membrana tympani, will be followed by an outward movement of it, and of the ossicles. This is to be done rhythmically about 120 times a minute, four or five times a day. Dr. Hommel found that too long and too frequent use of this manœuvre brought on pain in the ear, but that by temporarily omitting all treatment this disappeared.

The principles upon which this method depends, are not new, namely, a sort of passive motion of the chain of ossicles in the middle ear which increases their mobility, and an increased activity of the lymphatics and consequent absorption of pathological material. It is by this latter process that the disappearance of the cloudy thickening of the right membrana, in the second case reported, is explained. Alternately compressing and then partially exhausting the air in the external auditory canal, is one of the well-recognized methods of increasing the mobility of the stapes and of the other ossicles, by what is analogous to the passive motion which is used to increase the mobility of a stiff knee or elbow joint. The simplicity of the method proposed in this article for accomplishing this, makes it well worth a fair trial.

In the "Transactions of the American Otological Society," Vol. III, Part 4, occurs an article by Charles H. Burnett, M.D., on "The relation between chronic otitis media catarrhalis and chronic rhinitis," in which he says, "chronic catarrh of the middle ear, that is, otitis media catarrhalis chronica (non-suppurativa) is invariably associated with some form of chronic rhinitis. The latter is usually of the hypertrophic form, since only about four per cent. of all cases of chronic rhinitis are of the truly atrophic form." . . . "It will be found that the catarrhal processes in the Eustachian tube and middle ear proceed from those in the nares and naso-pharynx, and hence partake of their nature, or, that they occur simultaneously with them, and are relievable by treatment of the nasal disease; therefore, all cases of chronic naso-aural catarrh, that is, catarrh of the middle ear, may be divided into two classes, namely, the hypertrophic and the atrophic." Again he says, "It may have been observed that I have said nothing about the faucial and pharyngeal symptoms in chronic aural catarrh. It is because the nasal symptoms are so much more important, because in fact, the pharyngeal symptoms, in comparison with the nasal are unworthy of consideration as causative elements in aural disease." For the description of the symptoms and appearances of the membrana tympani in these cases, and for the methods employed by the author to treat the nose and naso-pharynx, the reader must be referred to the original article, as space to describe them fully cannot be given here; the following, however, are three of the four conclusions formulated by Dr. Burnett at the end of his article.

(1) "That there is a constant causal relation between chronic nasal and chronic tympanic catarrh, in

¹ Archiv. für Ohrenheilkunde. B. xxxiii, heft 1 erstes heft.

which throat and faucial diseases play only a subordinate part, and this naso-aural catarrh is found under two chief forms, namely, the hypertrophic and the atrophic."

(2) "It follows that, owing to this close connection between the nose and the middle ear, treatment of chronic catarrh of the middle ear, to be efficient must be coupled with that of the coexistent and causal rhinitis, and that treatment of the throat alone is of little avail in chronic aural diseases. Treatment of and by the way of, the external ear is of course useless." . . .

(4) "It behooves the aural surgeon, therefore, to inspect and treat the non-surgical forms of nasal catarrh as they occur in chronic catarrh of the middle ear, laying more stress on the condition of the nares than upon the fauces, so far as any causal relations between these parts and the deafness are concerned."

Dr. Burnett's article states forcibly the intimate connection between chronic rhinitis, and chronic catarrh of the Eustachian tube and tympanic cavity, and the necessity of treating the former, in order to secure a lasting improvement to the latter. Improper treatment of the nose is worse than no treatment at all, for by it fluids are often forced through the Eustachian tubes into the ears to the detriment of the latter, but proper treatment of the nose, such as Dr. Burnett has described in his article, combined with treatment of the ears, is the true way to obtain satisfactory results in these too often most unsatisfactory cases.

Reports of Societies.

BOSTON SOCIETY FOR MEDICAL IMPROVEMENT.

E. M. BUCKINGHAM, M.D., SECRETARY.

FEBRUARY 8th, 1886, the President, DR. F. W. DRAPER, in the Chair.

DR. GEORGE B. SHATTUCK reported the following case of

ACUTE MILIARY TUBERCULOSIS.

B. K., twenty-one years of age, single, housework, born in Ireland, had scarlet fever last August, from which she made a good recovery. Otherwise, her health had always been good. Her father was said to have died from typhoid fever; the family history in other respects, was of a negative character. She was brought to the Boston City Hospital February 1st, in the ambulance, having been found by the police in a fainting condition in the street, when on her way to the Dispensary, where she had been under treatment for some days. She reported that her sickness began four weeks before — about January 1st — with languor, general malaise, pains in her bones, and chilly sensations. She had previously, a slight cough, which kept her awake somewhat at night. She kept on with her work for a week, and then gave it up, although she continued to expose herself to changes in temperature, to do some washing, etc. She had amenorrhœa for three months before coming to the hospital, and quite profuse epistaxis two weeks before; had been annoyed by vertigo, and had sweat considerably both by day and by night. She had lost, she thought, a good deal of flesh and strength, but was well developed and very well nourished.

February 1st, the temperature was 101.3°, pulse 120, respirations 40, the heart-sounds were feeble; the resonance over the lungs was normal, but there were very numerous coarse and fine sibilant and sonorous râles over both lungs, front and back; some dyspnoea; no cerebral or intestinal symptoms; urine negative. February 2d. Increased dyspnoea; some cyanosis; profuse perspiration; temperature, 101.2°, A. M., 103.2°, P. M.; respirations, 40, A. M., 48, P. M. February 3d. Same conditions, accompanied by increasing weakness. February 4th. About 6 A. M., after a fairly comfortable night, developed severe dyspnoea, the temperature rising to 105°, the pulse to 138, the respirations 48. Face and finger-tips markedly cyanosed; profuse sweating; perfectly conscious, and continued to take nourishment freely and easily. Number of fine râles much increased, heart-sounds weaker, physical signs otherwise unchanged. Steam was administered at noon, and her condition improved for a time, only to relapse towards evening, and she died about 9 P. M.

DR. W. W. GANNETT, who had made the autopsy, described the appearances found, and showed the specimens, the case being a typical one of acute milary tuberculosis.

The body was that of a well-developed and remarkably well-nourished woman. In the pia of the under surface of the frontal lobes, were several tubercles. The pericardial surface of the left auricle showed the presence of many tubercles and a circumscribed tubercular pericarditis, evidently an extension from the neighboring portion of the lung. Both lungs were voluminous, of a red color, and very thickly studded throughout with gray, milary tubercles.

The spleen, kidneys, and liver, showed similar tubercles, and in the spleen were also agglomerated, cheesy tubercles, the size of hemp seeds. The bronchial and lumbar lymph-glands were enlarged, and contained cheesy nodules. The lumbar lymph-glands were the larger, and were evidently the primary focus of infection. The thoracic duct and the abdominal veins were free.

DR. SHATTUCK said that the case suggested some points for discussion, arising from the difficulty of diagnosis. He had sought for the cause of disease in the history of the patient, but without finding it. She could have inherited the disposition from no one, so far as could be learned at the hospital. The great number of coarse and fine râles, unaccompanied by cerebral or intestinal symptoms, was suggestive of bronchitis extending into the smaller bronchi, and she had been much exposed to the weather. Such diffused and constant râles he had never met with before in acute milary tuberculosis. He had not detected any dullness. Some slight change in resonance or elasticity might have been found by one who believed that it ought to be present; but in any such case, being bilateral, as well as exceedingly slight, it would be extremely difficult to detect. The mutual relations of pulse, temperature, and respiration, are of value in doubtful cases as a means of diagnosis, the respiration of acute milary tuberculosis being sometimes rapid, out of proportion to the other signs mentioned. The only way, however, of reaching a certainly correct diagnosis in this case, so far as the speaker knew, would have been by an examination of the sputa for bacilli.

DR. GEORGE C. SHATTUCK said that he was reminded by the case, of one seen under his own obser-