

*Medical Journal* (November 19, 1881), states that little confidence can be placed in drugs after the symptoms have developed. He advocates cauterization as a prophylactic and as practised successfully by Youatt in four hundred cases; and he quotes Sir William Gull, who states: "If I had to choose for myself, I would inhale ether and have the whole track of the wound destroyed by strong nitric acid or nitrate of silver." But Ewart places himself on the side of Sir Joseph Fahrer, who says: "If I were bitten by a dog or other animal, *even suspected of rabies*, I would suck the wound, put in a ligature, inhale ether . . . and have the bitten part thoroughly cut out, and then cauterized with nitric acid or nitrate of silver, so as completely to disorganize any virus there might remain. Excision, he remarks, may be practised successfully after the wounds are thoroughly cicatrized."

**SPINAL ARTHROPATHY, OR CHARCOT'S JOINT DISEASE.**—At the meeting of the Clinical Society of London, held October 14, 1881, Mr. C. B. Keetley exhibited a patient having the curious disease which was first described by Charcot. He was a shopkeeper, aged thirty-four, had been married ten years, and had three healthy children. Previous to October, 1880, he had experienced the following symptoms: slight weakness in the legs, attributed to "corns," and of twelve years' duration; pains in the muscles, described as rheumatic; attacks of diarrhoea, occurring fortnightly. In October of 1880 the "corn" ulcerated, and the great toe became greatly swollen. A week afterward, the hip, groin, and thigh became enormously swollen, but were painless. A fluctuating tumor then developed in the lower part of the front of the thigh, and finally discharged, liberating a synovia-like fluid. After two months the patient was able to move again, but the limb was shortened one and one-half inch; it was everted, and gave a peculiar crepitus. Apparently the head of the femur had disappeared. Afterward the left hip was affected in its turn, and seemed to undergo anatomical changes similar to the right. Now there were some symptoms of tabes dorsalis. There were loss of patella-reflex, of iris-reflex, of the power of standing with the heels together and the eyes shut, partial loss of sensation on the outer sides of both feet, perverted sensation in the right foot, slight deafness in the left ear. There were also "intestinal crises," as indicated by the periodical attacks of diarrhoea. The treatment had been iodide of potassium and salicylate of soda, of each five grains, three times a day. Stress was laid upon the fact that this rare disease may and doubtless has been often overlooked, especially as the ocular and other symptoms might long antedate the tabetic.

**A SUBSTITUTE FOR CARBOLIC SPRAY.**—In the *British Medical Journal* (October 15, 1881) is published a paper by Mr. H. W. Mayo Robson, F.R.C.S. Eng., on the subject of substitutes for the carbolic spray. The value of the Listerian method of dressing wounds is recognized by all surgeons, but its disadvantages and dangers are also apparent to many. By its use the operator has his vision obstructed, and his sense of touch impaired. He is obliged to spend much of his time in an unpleasant atmosphere. To the patient the risk of carbolic acid poisoning is constant, especially in abdominal surgery. The spray, as is known, has been abandoned by Dr. Keith in ovariotomy. Mr. Robson himself remarks that he has known death to be caused in the use of the spray by chilling of the viscera.

Mr. Robson has experimented with such volatile substances as the oil of eucalyptus, cajuput, and peppermint, and has demonstrated their antiseptic powers. Infusion of hay, having been boiled, was subsequently placed—capped with cotton-wool—in an incubator, at a temperature of 100 F. The infusion was taken from the incubator, uncapped, and different specimens were placed in vessels containing a small amount of oil of eucalyptus, or oil of cajuput.

After different periods of time the specimens were again capped with cotton, placed in an incubator, and then examined at leisure. The following results were obtained: 1. Hay infusion, sterilized August 18th, placed in the incubator for two days, exposed to eucalyptus air for two hours on the 22d, and then placed in the incubator for two days. Examined on September 7th, and found to be absolutely free from living organisms, but to contain what appeared to be dead micrococci in the slight sediment. 2. Sterilized August 18th, in incubator till the 20th, in eucalyptus air for thirteen hours, in incubator till the 23d. Examined on September 7th, under a one-eighth object-glass, and found free from living organisms.

Numerous flasks were examined with like results, showing that these volatile substances, properly placed and handled, may render the atmosphere of the operating-room aseptic, if not antiseptic.

**A NEW METHOD OF REMOVING THE COCCYX IN CASES OF COCCYODYNIA.**—A very neat and satisfactory method of removing the coccyx has been devised and recently practised by Professor James E. Garretson, of Philadelphia. The woman, according to Dr. Garretson's description, had sustained, thirteen years previously, a fall from a carriage, which caused a fracture, or, perhaps, dislocation of the coccyx. The displaced bone had never been adjusted, but projected forward at a right angle to the sacrum, and was somewhat movable. Great pain and general nervous disturbance had existed for years, so that the woman's health was greatly deteriorated. On December 1, 1881, the bone was removed by the use of a powerful surgical engine, which has probably never been used for the enucleation of any bone in this manner.

To appreciate the procedure, it is necessary to recall that the coccyx is enveloped by periosteum, and separated from the external world by skin, superficial fascia, some muscular tissue, and dense fibrous structures. It is separated from the rectum by pelvic fascia, fibrous tissue, and muscular fibres of the coccygeus and levator ani muscles.

The operation was done as follows: after etherization, the patient was placed in position and a median incision made through the skin and supra-coccygeal structures down to the periosteum, so that the bone, with its periosteum intact, was exposed from base to apex. This was accomplished by plunging a bistoury through the tissues, over the middle of the bone, and enlarging the incision upward and downward as much as necessary. The next step was to uncover the posterior surface by loosening the tissues laterally as far as the margins of the bone—this was done with a few strokes of the knife. The periosteum was then incised in the median line along the whole length of the bone and detached by means of a chisel-shaped knife, as is done in osteoplastic operations for cleft palate.

When the posterior aspect of the bone had been thus exposed, a powerful surgical engine was brought into requisition, carrying in the mandril a burr,

having a cut face of one-third or one-half inch in diameter. This was given ten thousand revolutions in a minute, which made the burr appear as if at rest. To the exposed coccyx the revolving burr was applied and carried from side to side, ascending gradually from the apex to the sacro-coccygeal articulation. In this manner the bone, in a few moments, was removed in fine, dust-like particles, and the anterior layer of periosteum, with its attached muscles and fascia, left uninjured. In other words, the offending bone, which had caused neuralgia of many years' duration, was taken from its periosteal envelope, as cleanly as a mailed letter is removed from its envelope through a single incision. The attachments of the bone, which are, of course, inserted only into the periosteum, were uninjured, and the unimportant wound closed by sutures. No hemorrhage of sufficient moment to demand ligatures occurred.

The patient subjected to this operation is doing well, and will probably be out in a week or less after the day of operation.

This method of enucleation is certainly more artistic than the ordinary operation, by which the bone is cut loose with the knife, or torn from its attachments by forceps after being partially freed. The increasing number of cases to which the surgical engine is being applied shows that its development from the original dental engine was a distinct advance in operative therapeutics.

**CONNECTION OF CARDIAC AND RENAL DISEASE.**—The *Cincinnati Medical News* (November, 1881) publishes a paper on the above subject, by Dr. Robert T. Edes, read before the Boston Society for Medical Improvement, May 9, 1881.

Dr. Bright noticed that hypertrophy of the heart was especially constant with that form of kidney disease known as interstitial nephritis. His sequence of phenomena was "renal disease, poisoning of blood from imperfect deuration, increased resistance, hypertrophy of heart." But Dr. Edes calls attention to the fact that hypertrophy of the heart exists almost constantly with that form of kidney disease where deuration is not prevented. Moreover, Grutzner and Litten found injection of urea—one of the excrementitious products—did not cause hypertrophy, though it increased the blood-pressure. Again, chemical analysis of the blood does not always show superabundance of the blood-excrement, where the cirrhotic kidney and heart enlargement have co-existed for some time. Drs. Gull and Sutton have found a thickening of the arterioles throughout the body to accompany interstitial nephritis; but while others doubt this, Ewald demonstrates that the disease in the vessels of the kidney is of a different nature from that of other parts of the vascular system. Mahomed has clinically demonstrated a pulse of high tension to be characteristic of Bright's disease, and gives for the cause of this pulse those agents which have already been recognized as causes of Bright's disease, viz., scarlatina, lead, alcohol, gout, etc.

According to this view the sequence of phenomena is the reverse of Dr. Bright's. It is first blood-poisoning and obstruction, and afterward increased tension, hypertrophy of the heart, and arterial and renal disease.

**NATURE'S INVISIBLE POLICE.**—A very interesting lecture on "The Intimate Nature of Zymotic Diseases," was delivered by Dr. John Dougall, at the Glasgow Royal Infirmary School of Medicine, Oc-

tober 26, 1881. Whatever zymotic poison really is, it differs from every other poisonous substance in that it renders the poisoned person poisonous. The affected body is an alembic in which a special virus is elaborating and multiplying enormously, by an apparent destructive distillation of the blood and secretions, so that the tissues may literally become soaked and the body enveloped in an atmosphere of infection. This poison is named from the Greek word ζυμη, or leaven, and a person under its influence is held to be in a condition of fermentation. Taking small-pox as an example, we see how closely the zymoticæ resemble fermentation. 1st. A saccharine solution is fermented by the addition of a minute quantity of yeast. The human blood equally yields to the small-pox virus. 2d. A rise in temperature is noticed in both cases. 3d. There is a great multiplication of yeast in the sweet solution, and of the small-pox lymph in the blood. 4th. The yeast frothing to the surface of the fluid, and the eruption forming vesicles. 5th. Both are infectious—a cell of the new yeast can cause fermentation—a speck of the new lymph can produce small-pox in a susceptible person. 6th. The sweet solution is no longer capable of fermentation, the small-pox patient is no longer susceptible to small-pox poison.

Germ-theorists, as is well known, hold that each zymotic disease has its special poison, and that this special minute organism entering the blood produces morbid changes, which result in the particular disease of which it is the *germ*. Moreover, they hold that the air is filled with germs, which alighting in a proper medium, cause putrefaction. On the other hand, the believers in the physico-chemical theory hold that all such organisms are the *result* of the morbid conditions of their habitat. Their grounds are: 1st. That these organisms are only found on the parts of animals or vegetables of lowered vitality, or in their dead tissues. 2d. That on strengthening the vitality in living, or arresting decay in dead parts, they disappear. 3d. That when present in infectious matter it loses its power to infect, as observed in small-pox and vaccine virus. On these grounds the functions of such organisms are held as beneficent, and Professor Owen calls them "Nature's Scavengers," for maintaining the salubrity of our atmosphere, and "Nature's Invisible Police" for arresting the fugitive organized particles, and turning them back into the ascending stream of animal life. —*Medical Press and Circular*, November 16, 1881.

**MURIATE OF PILOCARPINE IN WHOOPING-COUGH.**—According to Albrecht, the muriate of pilocarpine, when given at a sufficiently early period, never fails to cut short the most serious stage of whooping-cough, namely, the period of suffocative attacks, although the duration of the disease as a whole is not materially shortened thereby. The formula recommended is pilocarpin. muriatic., .025 grm.; cognac f. champ., 5.0 grms.; syrup. cort. aurant., 25.0 grms.; aq. destill., 70.0 grms.; of which mixture a teaspoonful up to a tablespoonful should be administered after every paroxysm, the dose varying with the age of the patient. The remedy acts very promptly, as may be demonstrated by laryngoscopic examination, which discloses a more profuse watery secretion and abatement of the inflammatory appearances in the mucous membrane. The drug should be discontinued as soon as the paroxysms attain a catarrhal character, but should be renewed whenever suffocative attacks recur. —*Allgemeine Medicinalzeitung*, November 9, 1881.