

He thought they were the products of nuclear degeneration, karyolysis or budding. Identity of primary and secondary forms of cancer were difficult to understand in light of the parasitic theory.

Dr. Hodenpyl reported a case of Typhoid fever without lesions of Small Intestine, but in which the *B. typhosus* was isolated from the bile.

In the discussion Dr. Hunter mentioned having seen a case in which the intestinal lesions were very slight, but the gall-bladder was acutely inflamed. Dr. Welch mentioned that the *B. typhosus* could exist in the bile for two or three months after the attack, causing excess of mucous and precipitation of bile-pigments. This, he thought, might have some bearing on the causation of gall-stones.

Dr. Patrick Manson's paper on "*A New Species of Filaria Sanguinis Hominis Nocturna*" was read by Prof. Boyce. The author had discovered this variety in the blood of 27 out of 63 patients observed. Further observations were required to determine the exact nature of its pathogenic properties, but he was inclined to think that this new filaria had distinctive qualities of its own.

Dr. H. B. Anderson reported a very interesting case of "Multiple Cyst of Stomach and Intestines," which appeared to be derived from epithelial tissue between the serous and muscular coats of the organs, and which he attributed to embryonal "rests."

Dr. Ira Van Gieson read an important paper on "Hæmato-myelopathy," a condition of the spinal cord following on trauma, which had to be distinguished clinically as well as pathologically from springomyelia. Three such cases were recorded—one spontaneous, the others from trauma. The condition, which he regarded as a newly defined one, was characterised by sharp-cut canalisation of the spinal cord, usually in the posterior bones. The amount of degeneration and cavitation was out of proportion to the traces of blood effused. His experiments in injecting fluids into the cord proved that the separation of fibres always took place in a vertical direction, and usually in the grey matter. Such conditions, he thought, might be differentiated clinically from springomyelia by the history of trauma and the rapid onset of symptoms, usually with a rapidly fatal result.

Dr. Boyce thought that the condition was rather due to disturbance of absorption than to hæmorrhage, or else one would see more traces of blood pigment. But Dr. Van Gieson thought that as cases were so rare, his having taken ten years to collect, that he was inclined still to regard those he had studied as the result of hæmorrhage.

Dr. Barker, of Baltimore, read a paper on "Certain Changes in the cells of the Ventral Horns and in those of Nucleus Dorsalis in Epidemic Cerebro-spinal Meningitis."

G. PSYCHOLOGY.

President: R. N. Bucke, M.B., London, Ontario.

Hon. Secs.: J. V. Anglin, M.D., Montreal; G. Villeneuve, M.D., Montreal; J. G. Blandford, M.R.C.S., Banstead, Surrey.

The President opened the proceedings with an address on Mental Evolution in Man. Claiming that the mind is the essential part of man, he said that owing to the imperfect method of its study, namely by introspection, but little advance has hitherto been made, but just as with regard to bodily life, so does the mental require to be studied from the comparative standpoint, the mind of man being the product of gradual evolution of faculties already in existence in the lowest forms with the addition of new faculties, like new branches springing from the parent stem. The mental growth of the individual can be traced from infancy, when its capacity is on a plane with that of the higher animals, until about the age of three years self-consciousness is born—the distinctively human faculty, although the child has still to acquire other faculties, such as the colour sense, the sense of fragrance, the human moral nature and the musical sense, and full mental maturity is not attained until about the age of 35. In the history of the race, self-consciousness must have first appeared at maturity, and doubtless several hundred thousand years have elapsed between that period of mental infancy in the race and the present status of the human mind. Of mental faculties below self-consciousness, each has its own time of appearing in the human infant; e.g., memory and simple consciousness earliest, the curiosity, use of tools, shame, remorse and a sense of the ludicrous—these latter amongst animals being almost limited to the anthropoid ape and the dog. And just as the higher faculties appear in the individual with his growth, so in the history of the race there has no doubt been a gradual

acquisition of these faculties, so that although a hundred thousand years may have passed since self-consciousness was acquired, and 30,000 years since the colour-sense was gained, the human moral nature has probably not been an appanage of man for more than 10,000 years. These faculties which appear latest in the individual, and have been the most recently acquired by the race, are less firmly implanted than the simpler and older faculties—and in the dreaming state the mind as it were reverts to the pre-human state. Dr. Bucke then proceeded to contrast some of these faculties in the following order: (1) Simple consciousness; (2) shame; (3) self-consciousness; (4) colour-sense; (5) moral nature; (6) moral sense; and expressed his firm conviction that "in this idea of evolution lies 'enfolded the mystery of the past, the explanation of the present, and the prescience of the future—what we were, what we are, and what we shall be.'" He concluded a most interesting address by referring to the atavistic theory of idiocy and insanity, and the possibility of the acquisition of newer faculties, and indeed declared that such a nascent faculty of a higher form of consciousness is even now occasionally exhibited—as telepathy and so-called spiritualism. Whatever the explanation of these phenomena they seem to indicate the further evolution of mind, and point towards the origin, in the course of a few more milleniums, from the present race of man of a higher type—which is even now in course of evolution.

Dr. G. H. Rohé introduced the subject of the "Etiological Relation of Pelvic Disease to Insanity," and Dr. A. T. Hobbs, of London, Ontario, read a paper on "Surgical Gynaecology in Insanity." Dr. J. Russell, of Hamilton, also read a paper.

The discussion on the subject introduced by Dr. Rohé was continued, Dr. R. Dewey, Dr. D. Clarke, Dr. J. W. Burgess, Dr. E. N. Brush, Dr. Urquhart, Dr. Alexander, Dr. Spitzka, Dr. Meek, and Dr. Turner taking part, and, in view of the interest taken in the subject, the discussion was adjourned till Thursday.

H. OPHTHALMOLOGY.

President: Edward Nettleship, F.R.C.S., London.

Hon. Secs.: W. H. Smith, M.D., Winnipeg; J. Jehin-Prume, M.D., Montreal; T. H. Bickerton, M.R.C.S., Liverpool.

The President in opening the meeting stated that owing to the large amount of work to be overtaken, his remarks would be very brief, but stated that he felt it a great honour to have been chosen to fill the Presidential Chair of so important a section as that of Ophthalmology. The only regret he felt in connection with the matter was that none of his colleagues from the British Isles had been able to be present.

Dr. Buller, of Montreal, was then called upon and showed a case illustrating Mules' operation. The patient, a boy, had his eyesight totally destroyed by a toy pistol two weeks ago and a perfect result had been obtained.

Dr. H. Noyes, of New York, introduced the subject of antiseptics in eye surgery, and related his experience and his methods in connection therewith. He stated that all were agreed that antiseptics was essential and he described his method as to preparation for operations as follows: (1) a patient in hospital practice was given a bath, his clothes cleaned, his head, eyebrows and eyelashes treated with soap and hot water and then with bichloride. The conjunctival sac was inundated with a solution of acid boric, which he considered was all that is necessary to wash away the mucous coagula. In some cases an occlusive bandage was used for twenty-four hours previous to operation. (2) Instruments were boiled for five to ten minutes in 4 per cent. carbolic solution and covered with an antiseptic cloth. In using jointed instruments extra care was required. In practice outside the hospital the instruments are boiled before going to the patient and then immersed in alcohol immediately before using. (3) The hands of the operator were cleansed by scrubbing with soap and hot water and powered borax, particular care being taken as to the nails, after which the hands were immersed in bichloride. (4) Dressings were sterilised by steam and kept in a tight glass jar and the wound dressed with a moist bichloride solution, 1 in 3000, for twenty-four hours. He had given up washing out the anterior chamber with iodide of mercury, and questioned if the normal salt solution were not the best. Asepsis was probably better than antiseptics in these cases. In private houses he had sometimes had suppuration take place owing to defective plumbing.

Dr. Randolph, of Baltimore, agreed that a neutral solution was the best for the conjunctival sac, as there was much danger from the use of bichloride. He thought that