

THE
BRITISH AMERICAN JOURNAL

OF

MEDICAL AND PHYSICAL SCIENCE.

Vol. II.]

MONTREAL, OCTOBER, 1846.

[No. 6.

OBSERVATIONS ON THE NATURE AND TREATMENT OF VARIOUS DISEASES,

BY ROBERT L. MACDONNELL, M.D.,

Licentiate of the King and Queen's College of Physicians, and of the Royal College of Surgeons, Ireland; Lecturer on the Institutes of Medicine, McGill College; Physician to the Montreal General Hospital; Consulting Physician, Montreal Eye Institution.

No. 2.—ON THE USE OF THE MICROSCOPE IN THE PRACTICE OF MEDICINE.

For the last nine or ten years the Pathologists of Europe have been in the habit of using the microscope for the elucidation of many departments of Practical Medicine, but more especially for the examination of urinary diseases.

The researches of Prout and others, who examined this difficult subject with the assistance of chemistry, did much, no doubt, towards removing a great deal of the obscurity in which it was enveloped; but the physician in the active practice of his profession, although he could not shut his eyes to the great importance of chemistry, in renal diseases, had to neglect the minute study of these affections, inasmuch, as at every step his progress was arrested by the necessity for chemical analysis, and the great length of time which a careful examination of the urine required, when conducted in this manner. But now that the writings of Rayer, Bird, and Simon, have placed in the hands of the practitioner a speedy and simple method of analysing urinary deposits, no matter how small in quantity, by means of the microscope, no excuse can be offered for his remaining ignorant of this subject, except that, which with equal propriety, he might adduce for his want of acquaintance with other improvements in medicine, viz., indolence or indifference.

But I am not without hope, that the recital of the following cases, in illustration of the value of the microscope to the medical practitioner will be productive of good; and that some of my brethren, who may not as yet have turned their attention to this important matter, will be induced to commence its study, which, I can assure them, will be productive of more unalloyed pleasure than any other department of their profession is capable of affording.

For some years back I have been in the almost daily habit of using this instrument, in the investigation of diseases of the kidneys, urethra and bladder, and in those affections which, though situated in distant organs, produce sympathetic derangements of the renal functions.

On my arrival in this city, I made some of my friends acquainted with these investigations; amongst others, I may allude to Dr. Crawford, whose zeal for the science of his profession is well worthy of imitation. He soon saw the great assistance the instrument afforded in many difficult cases, and availed himself of his being in London to order out two excellent ones, which I believe he is constantly employing.

Indeed I could hardly adduce a case more conclusive of its utility than the following, which occurred in his practice.

CASE I.—A boy, aged about six or seven years, was brought to Dr. Crawford last autumn, by his mother, who stated that he laboured under various symptoms, which led Dr. C. to suspect the presence of a calculus in the bladder. He accordingly introduced a sound, but did not obtain any conclusive evidence of the presence of a stone. The boy laboured under the symptoms for some time longer, and in my presence the sound was again introduced, but neither the doctor nor myself could feel any calculus. I obtained a small quantity of the boy's urine, and examined it with the microscope, and although to the naked eye it appeared quite healthy, yet it exhibited a good number of pus globules, as well as a deposit of the triple phosphate in prismatic crystals.

As the boy had no symptoms of disease of the kidneys or ureters, and his age precluding the probability of these appearances being due to gonorrhœal irritation, the opinion we formed was, that the mucous membrane of the bladder was in a state of subacute inflammation. Soon after the employment of treatment which this diagnosis suggested, the symptoms became alleviated.

CASE II.—Last winter a gentleman, aged twenty-four, called upon me for advice, for what he termed a disease of the liver. He had been under the care of one physician for three years, and had lately consulted