THE CANADA LANCET,

A MONTHLY JOURNAL OF

MEDICAL AND SURGICAL SCIENCE.

Vol. XIV.

TORONTO, JAN., 1882.

No. 5.

Original Communications.

ELECTRICITY IN THE TREATMENT OF SPECIAL DISEASES.*

BY A. M. ROSEBRUGH, M.D. SURGEON TO THE TO-RONTO EYE AND EAR DISPENSARY.

Read before the Toronto Medical Society, Dec. 1st, 1881.

ELECTRICITY IN INSANITY.

The first systematic use of electricity in the treatment of mental diseases, according to Althaus, was made in France in 1845. Teilleux and Auzouy found that although it was no specific, it nevertheless did good in well selected cases. Remack and Benedict report favorably of its use, and Dr. Arndt of Griefswald, who has given special attention to the subject, asserts that electricity is an invaluable remedy, of equal importance with quinine, iron and baths, and of far more importance than narcotics, in the treatment of insanity. In 1873, Drs. Williams and Newth of the Sussex Lunatic Asylum, and Dr. Bryce of the Alabama Lunatic Asylum, reported favorably of the use of electricity in mental diseases. Dr. Bartholow states that the treatment of psychical disorders by electricity has been productive of some very striking results: and Drs. Beard and Rockwell predict that an important future is in store for the scientific and faithful use of electricity in our public and private asylums.

Up to the present time, the best results seem to have been obtained in those forms of insanity associated with or dependent upon debility and nervous exhaustion. Arndt recommends "peripheral faradization" (general faradization?), and Bartholow,—a modification of central galvanization. Beard and Rockwell recommend central galvanization as the best means of influencing the central nervous system, and in cases associated with bodily depression, they would alternate central galvanization with general faradization. They

make the first tentative applications very cautiously, and the strength of the application and the time of the sitting gradually increased, as the patient is able to bear the treatment.

Dr. Clifford Albutt of the West Riding Lunatic Asylum, Leeds, uses galvanism in acute primary dementia, in mania, and in atonic melancholia. He states that in mania and in atonic melancholia, distinct improvement takes place, and that in acute primary dementia the improvement is marked.

SPASMODIC DISEASES.

"Of spasmodic diseases this general law holds, that when recent, even though violent, they yield readily to electrical treatment; but when long-standing, they are easily palliated, cured with difficulty, and are prone to relapse."—(Beard and Rockwell).

According to Bartholow, there is no fact in regard to galvanism more conspicuous than its power to allay spassus; that when a strong (continuous) current is passed through a muscle, irrespective of direction, it remains quiescent and relaxed until the current is broken.

In Writers' cramp the treatment should be adapted to the condition present-whether local and muscular-local and nervous, or whether the affection arises from intra-cranial lesions. To the muscles fatigued from over use, the galvanic current is applied, and to the muscles affected with paresis, and degeneration, the faradic current is applied. The individually affected muscles are picked out and the current applied with Duchenne's small electrodes. The current should be just strong enough, when interrupted, to cause contractions, and the muscles should not be fatigued by long applications. In some cases the galvanic current is also applied to the upper part of the spine, and to the median and radial nerves. Or the positive electrode may be placed over the cervical plexus and the descending current applied by the labile method to all the muscles from the shoulder down. When there is anæsthes a, the faradic current and the metallic brush should be Systematic gymnastic training is recommended, and rest from occupation is said to be almost imperative.

Torticollis or way neck, in the early stages, may be cured or relieved by electrical treatment alone. Spasm of the muscles of the neck on one side

^{*} Continued from page 101.