

neurological work the Leclenché or the chloride of silver battery is rather more convenient.

Having thus briefly described the new electro-therapeutic apparatus, I will conclude with a few words regarding the dosage of electricity, and I do not know that I can introduce the subject better than by referring to cases now under treatment.

CASE 1. Torticollis. Dr. Oldright's patient, a girl aged 8 years. Electrical treatment: central galvanization, galvanization of contracted muscles and faradization of the weak antagonistic muscles. From 5 or 6 milli-amperes are applied to each cervical sympathetic, 8 or 10 to the head, and 10 to 12 to the nape of the neck—with the positive pole—the negative being applied by means of a large electrode to the sternum; 10 or 12 milli-amperes are passed through the upper part of the spine and about the same strength of current is passed through the contracted muscles. The application to each part lasts about three minutes. The current is gradually increased from zero to the maximum and as gradually decreased, by means of the rheostat, very great care being taken that there shall be no interruption to the current, especially when at the maximum. In galvanizing the cervical sympathetic nerves it is usual to make the application by means of a narrow electrode pressed against the spine in front of the sterno-mastoid muscle. In the case of a child I prefer using the ends of the fingers of one hand, the other hand being made to grasp the sponge electrode connected with the positive pole of the battery, and the current passed through my own body. In this case an assistant works the rheostat, while I watch the milli-ampere meter.

CASE 2. Hemiplegia. Dr. Burns' patient. In this case the patient has nearly recovered from paralysis of the left side, leaving, however, secondary contraction of the flexors of the arm and forearm. The electrical treatment is the galvanic current to the flexors and the faradic current to the extensors. From 15 to 20 milli-amperes are applied continuously to each set of contracted muscles, for about five minutes at a time, three times a week.

CASE 3. Sciatica. The same patient has sciatica on the right side. Treatment: 25 milli-

ampères for five minutes; positive pole on sacrum and negative on popliteal space. In chronic cases, 30 or 40 milli-amperes may be used, and it may be repeated twice a day.

CASE 4. Locomotor Ataxia. Dr. Mewburn's patient. The electrical treatment is the application of the galvanic current to the spine and the faradic current by means of the dry electric brush to the back and limbs; 15 milli-amperes are applied to the spine for five minutes every second day, and the electric brush (faradic current) is applied at home daily.

CASE 5. Opacities in Vitreous. Patient of Dr. Fisher, Warton. Electrical treatment: 8 milli-amperes daily for five minutes, the positive electrode being applied to the eye and the negative applied to either the hand or the cheek.

CASE 6. Parenchymatous Inflammation of Cornea. Electrical treatment: 10 or 12 milli-amperes for ten minutes with negative pole, the positive being applied to either the cheek or the well wetted hand.

CASE 7. Atrophy of optic nerves. A young woman. Electrical treatment: 6 milli-amperes for five minutes to each eye (positive pole), with the negative pole to either the nape of the neck or the hand.

In the report of these seven cases I have given the electrical treatment only. It is to be understood, of course, that this was not the only treatment. With the exception of the case of sciatica, the electrical treatment was an adjunct only to other treatment. The cases are reported here simply with the object stated, namely, to give some idea of the dosage of electricity. I may add that, whatever battery is used, I put the entire number of cells in circuit (usually about 30), and I modify the strength of the current by the rheostat.

My arrangement is as follows: The rheophore or insulated wire attached to the positive sponge-electrode, is connected with the first plate (carbon) or positive pole of the battery. The negative rheophore is connected with the milliamperemeter; this latter is connected with the rheostat, and this in turn is connected with the last plate (zinc) or negative pole of the battery. The circuit is then made up as follows: namely, from the positive pole of the battery through the rheophore and sponge-electrode to