

action in the sympathetic fibres which go to the heart.

The therapeutic measures applied in Basedow's disease have been manifold. Digitalis, iron, quinine, bromide of potassium, cold water, strychnia, and lately arsenic and galvanism have all been used with some success. It will, of course, greatly depend upon the condition the patient is in, when first seen, what remedy should be employed. Arsenic and iron internally, and galvanism together have lately been highly recommended by some French authors and I had occasion to give this method a trial.

Miss A. F., 25 years of age, sister of a medical man, consulted me in November last on account of protrusion of the eye-balls. She had been suffering from palpitation of the heart for many years, and for four years she had noticed a gradual protrusion of the eyes, after having been aware of an intermittent swelling of the thyroid gland for some time. When I saw her she was a very thin, anæmic, little individual; she had no appetite, vomited frequently, and could not do any work, the least exertion bringing on very fierce palpitation of the heart. The patient was very nervous and excitable and was very restless at night. Her pulse was 130 a minute; the carotid arteries and jugular veins were dilated and beating fiercely. Besides the protrusion of the eye balls, there was a slight degree of divergent strabismus. The loss of co-ordination in the downward movement of the eyes and upper lids was very marked. The movements of the eyes were a little restricted in all directions. No struma was present. Patient had never menstruated. I diagnosed Basedow's disease, and treated her according to the method recommended by the French authors, by giving her liquor potassa arsenitis, and tincture of iron internally, and applying the constant current of 5 to 8 elements to the eyes and sympathetic nerve. Increased the dose of arsenic rather rapidly, and when after 4 weeks treatment, the first sign of poisoning, a severe conjunctival catarrh, put in an appearance, I left it off altogether, and went on giving iron alone.

Twenty two sittings of from 5 to 15 minutes at a time, sufficed to improve the patient very considerably, so much so, that no further treatment but iron internally, was deemed necessary. When I saw the lady some time ago, she was

as well as when she was discharged from treatment. There was no more exophthalmus, the lid-symptoms had disappeared, palpitation of the heart was very rare, and came on only after over-exertion. Appetite and general feeling were good. Although this case so far, is considerably improved, I doubt whether this improvement will be durable. The patient certainly is suffering from a great disorder of her sexual apparatus; what it is, I cannot tell, since she refused to have any physician examine her. The removal of this trouble, would in my opinion, be a necessary condition for the cure of Basedow's disease. I may add yet, that Von Graefe advised tarsoraphy, *i.e.*, partial closure of the palpebral fissure in cases of excessive protrusion of the eye and expansion of the cornea during sleep. This operation has so far met with great success. It not only prevents the ulceration of the cornea, which is caused by exposure of that membrane, but it seems to have moreover, a direct healing effect upon the protrusion of the eyes. Later on Von Graefe advised tenotomy of the levator palpebrarum muscles, this operation however has not been adopted, the opinion of the professor being highly in favor of the tarsoraphy.

THE THEORY OF GERMS, AND ITS APPLICATION TO MEDICINE AND SURGERY: BY DRS. PASTEUR, JOUBERT, AND CHAMBERLAND.*

(Translated from the Portuguese,)

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"All the sciences profit by mutual support. When, in consequence of my first communications on fermentations, in 1857 and 1858, it could be admitted that ferments, properly so-called, are living beings; that germs of microscopic organisms abound on the surfaces of all objects, in the atmosphere and the waters; that the hypothesis of a spontaneous generation is actually chimerical; that wines, ale, vinegar, blood, urine, and all the liquids of the economy undergo, in contact with pure air, none of their common alterations, medicine and surgery presented new aspects under these lights. A French physician, Dr. Davaine, made the first happy application of these principles in medicine in 1863.

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