

process which merely acts by impeding the progress of those centripetal impressions which seem essential to healthy nutrition? While one would say, perhaps, that he could not conceive a destructive lesion which did not irritate, another might plead that every irritative lesion must be also destructive. If the theory of "irritation" is to be accepted, I should prefer to imagine that the irritation travels centripetally to the spinal cord, and is thence reflected to the vaso-motor fibres. The fact that pain is directly referred to the area of distribution of the nerve is, of course, no proof of "irritation" being conveyed directly centrifugally; and although experiments with the lingual and hypoglossal nerves have shown us that *both* kinds of nerve-fibres can conduct in *both* directions, we have no reason for assuming that such is ordinarily the case.

I have thus referred all trophic changes resulting from lesions of the nervous apparatus to the arrest of reflex action. I have shown that impressions originating at the periphery may produce motion both in muscles and vessels; and, by an appeal to clinical facts, I have tried to show that in all cases of rapid wasting of paralysed muscles, of the abolition of vascular reaction, and of trophic changes affecting the skin as a result of nerve-injury, the effect is perhaps due to the fact of the part having been cut off from the possibility of reflex stimulation. Charcot's theory of nerve-irritation as the cause of these various trophic changes—a theory which has been adopted by the most recent English writer on systematic medicine—does not seem to me to be adequately supported by facts. Whether the theory adduced in this paper is of a more convincing kind I must leave to others to judge.

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CASES OF IRIDEREMIA TOTALIS.

By JOHN A. NUNNELEY, M.B. LOND.,

SENIOR OPHTHALMIC AND AURAL SURGEON TO THE GENERAL INFIRMARY AT LEEDS, ETC.

IRIDEREMIA TOTALIS, or entire congenital absence of the iris of both eyes, is a deformity of rare occurrence. Among several thousand patients, hospital and others, I have met with but three instances in which the absence has been complete. Cases in which a part only of the iris is present, and coloboma in various forms, usually in both eyes, and either alone or accompanied by microphthalmos or other diseases depending upon arrest in development, as well as cataract, are more frequent. These deficiencies are often hereditary, and sometimes found in more than one child of a family.

In the first of the cases of total absence referred to, the eyes were alike, the corneæ and lenses clear, the retina and deeper parts of the eyes apparently healthy, the accommodation was fair, and the sight good, especially for distant objects. No improvement was obtained by any stenopæic apparatus, and no treatment was required; indeed, the state of the eyes was discovered by accident.

In the second case, a boy about eight years old, the condition of both eyes, when first seen, was much the same as above. On another visit, twelve months after the first, the right lens was found to have become quite opaque, the sight of the other eye being fair. No treatment was desired. In a sister of this boy the eyes were small, soft, and ill-developed; the irides thin, dull, and sluggish; and the pupil placed considerably to the nasal side. The eyes of a second sister presented similar appearances, though to a less remarkable extent. The eyes of the parents were healthy; and there was no history of defective eyes in other relations.

The third case is that of a young man who originally came under observation ten or twelve years ago, when about twelve years of age, on account of the defect in his sight, which, it was stated, had formerly been good, but within the previous few months had failed somewhat, and the eyes had been red, watery, and irritable, so that while attending the village school he had had difficulty in reading his lessons like the other boys. The cornea in each eye was perfectly clear and natural, and the sclerotic healthy in appearance; but there was entire absence of the iris—in neither eye was there a vestige to be found; and with the ophthalmo-

scope, and by oblique illumination, the shaded edges of the lenses were distinct, with a narrow, clear margin of illuminated fundus all round. There were distinct spots of dense white opacity on the capsules, anterior and posterior, of both eyes, and the lens of the right was muddy at and around its axis. The fundus of the eyes seemed healthy, but the choroid was light-coloured, and apparently contained but little pigment, as, when the ophthalmoscope was used, the light illuminating the interior of the eye shone through the sclerotic, just as in the albino. There was no oscillation of the eyeballs, and but little intolerance, except of a strong light. Nothing more was seen of this patient for several years, when he was brought with a view to operation, as both lenses had become entirely opaque. The eyes presented a curious appearance. It had been intended to remove the right lens by suction; it proved, however, too firm to be safely drawn through the suction curette; it was therefore only slightly broken up by a needle. A considerable amount of general irritation of the eye followed this proceeding, but the whole lens was rapidly absorbed. A large piece of capsule which remained was subsequently removed, and a very excellent result obtained. The second eye was treated in a similar way, with equally satisfactory results; and with convex lenses of four inches' focus he now sees to read and write, and is able to carry on his business as a farmer without much difficulty. Various diaphragms and stenopæic apparatus were tried with a view of increasing his defining power; these, however, all failed to help him, and the simple lens answered decidedly the best.

Leeds.

SIR HENRY THOMPSON ON UNIVERSITY COLLEGE HOSPITAL AND SCHOOL.

THE speech of Sir Henry Thompson at the recent annual dinner of University College Medical School contained the following important passages on the subject of the advantages resulting from the connexion of a school of medicine with a hospital:—

"A hospital associated with a large medical school is a more valuable institution in relation to its original design as a house of charity than a hospital which has no medical school, and is, therefore, other things being equal, a more worthy recipient and almoner of the public charity, mainly on two grounds. First, because every visit made by the chief medical officers for the investigation and treatment of each case is conducted in the presence of a number of young men who have to be taught, who are desirous to learn, and who are very intelligent critics of the practice and teaching of their chiefs—a fact which enforces the highest possible standard of work on the part of the officers whose reputation is greatly determined thereby. Compare the pains taken and the time devoted to each case by medical men in the hospital which has no school and in the hospital which has, and the difference is manifestly to the advantage of the latter. It must be so in the nature of things. Secondly, the school furnishes a set of skilled attendants in the shape of clerks and dressers, who do some of the most important work of the hospital in the best possible manner. Symptoms are investigated, important facts of history are determined, work which could by no other class of attendants, such as nurses, be accomplished. Then the bandaging and dressing, and endless other manipulations, are performed in a manner which no man, however great his wealth, can by means of it secure to be better done, and which people without wealth, not in a hospital, cannot get so well done. It is notorious, moreover, that the patients themselves prefer to be the objects of close observation and attention, as it is a kind of guarantee that their cases receive all possible consideration. I will not dilate on these topics, but I assure you, and through you the public at large, that if it were necessary for me to be treated in a hospital, desiring the best possible attention, with intelligent watching and manipulative skill, I should say, 'Send me to a hospital where there is a large medical school, and not to one which is without one.'"

The speaker then proceeded to say that if any defect existed in the combination of school and hospital at University College it was this, that the power and size of the school rather exceeded the resources of the hospital, a defect which was certainly rather in favour of the patients,