

that their exhibition depends upon the inability of cerebral functions to maintain their balance and control over spasmodic spinal action, either by their defective development or their being in temporary abeyance.

The immediate cause of the convulsion in both instances is *reflex*, and in children we have specially to investigate the various special exciting causes, or sources of nerve irritation. Says Gowers, "By far the most potent cause of convulsions in children is the constitutional conditions termed 'rickets'." With the defects of development, notably in bony tissue, belonging to this condition, we have an excessive activity of the centres of the brain, on which reflex spasm and convulsion depend. It is impossible for one whose observation is mostly of persons of mature years to fully realize the extreme liability of many infants to show symptoms indicative of nerve irritation. What peripheral irritation of nerve filaments in the intestinal mucous membranes means, can be in some degree appreciated by a foreign particle on the conjunctiva, or a thistle hair beneath the cuticle. Teething is frequently stated to be the commonest cause, but with intestinal irritation, due to indigestible food, worms, etc., it is not to be wondered at that most writers nowadays are agreed as to this latter being by far the commonest source of convulsions. Apart from these direct causes we have the induced exciting causes, due to general exhaustion, as of mal-nutrition and diarrhoea, producing hydrocephaloid conditions, *i.e.*, imperfect nutrition of nerve elements and mechanical congestion, due to deficient blood pressure, *i.e.*, defect of arterial blood.

As regards treatment, minute search by careful enquiry as to provoking causes, as bad feeding, etc., and hereditary tendency, must be made. If due to intestinal irritation, the exhibition of castor-oil in sufficient dose to produce thorough purgation is advisable, while the injection of a large, warm dose of the same at once has frequently proved good treatment in our hands. Gowers lays naturally great stress on the bromides, giving five grains at a dose to a child of six months. We confess to the opinion that apart from the likelihood of this being vomited, such a heroic dose will in most cases be found unnecessary to prevent the repetition. Similarly we doubt the propriety of his remarks on the uselessness on most occasions

of the hot bath, since it certainly has a physiological reason in the diversion of venous blood from the brain (given by him as exciting cause) to the skin. Similarly he states that lancing of the gums "as the sole, or even the chief element in the treatment, is a mistake, since it deals with the least important, and often quite unimportant, elements in the causation of the convulsions." We quite agree with the absolute necessity for improving by every means possible, as prophylactic measures, the digestive and assimilative functions; and must primarily insist upon food being used, whether milk, gluten flour, barley water, etc., of the most perfect character. Frequently minute, but regular doses, of alcohol, greatly aid to supply a stimulus to weak digestive powers. Apart from scrupulous attention to hygienic measures of the person and of the atmosphere wherein the child lives, we recommend, as in the highest degree beneficial, the daily and repeated frictioning of the body in a warm room with, in the same process, the inunction of cod-liver oil. The results will, we believe, be found in every case, when carefully carried out, to be better than in any other single method of supplying nutrition.

OPENING OF THE MEDICAL SCHOOLS.

A YEAR ago, with a degree of pleasure which only those who realize the full meaning of the science of Medicine, Professor Ramsay Wright delivered the opening lecture of the resuscitated Medical Faculty of Toronto University. A year has gone, and we again realize in the characteristic address of Dr. Thomas Richardson, that the University Medical School has become an accomplished fact. The address was historical in character and decidedly vigorous, as might be expected, when we remember who delivered it. He referred to the beginning of Toronto University, to its Medical Faculty, and to the political circumstances which occasioned the abolition both of the Medical Faculty and the Faculty of Law. "For thirty-four years," said the speaker, "the University of Toronto was deprived of the rights and powers conferred upon it by its original charter and rights which it should never have been deprived of. . . . A very specious argument was used for the abolition of the Medical Faculty. It was that no State aid should be furnished for the study of professional education. He thought the present generation had got a little be-