eating-houses have fallen off, and a tendency to go back to the private shops has manifested itself.

There are numerous co-operative building-societies in Sweden, but the system has not been extended to agriculture, nor, to any considerable extent, to fishing.

MENTAL SCIENCE.

Healing Wounds by Mental Impressions.

PROFESSOR DELBOEUF of Liège is certainly the most versatile of living investigators, when one considers the great originality and suggestiveness of all the work he does. Ancient and modern languages, logic, general physics and physiology, and especially experimental psychology, have received his attention by turns. His latest contribution is to therapeutics, and is a communication made on June 4 to the Belgian Academy, which will probably turn out to be of the greatest theoretical as well as practical importance.

We all are familiar with accounts of the wounds inflicted on themselves by African dervishes; but the statement which the narrators always make, that the wounds do not inflame, or may even be quite healed in twenty-four hours, probably often tends to discredit their whole description in the reader's mind. Delboeuf's observations now make these stories wholly plausible. It is well established that in certain hypnotic subjects a suggestion made during trance, that to a part of their body a cautery or a blister is applied, will produce, after due lapse of time, an actual vesication of the skin. The hallucinatory feeling of inflammation produces in these persons a genuine inflammation. M. Delboeuf argued from this, that the feeling of pain, however useful in other respects, must itself be an inflammatory irritant, and went on to infer that the abolition of it from an actual wound ought to accelerate its healing. He immediately thought of some hypnotic subjects whom he had made anæsthetic, and in whom he had often admired the rapidity with which the marks of punctures and pinchings disappeared, and proceeded to more systematic experiments, which, so far as they go, seem to verify his hypothesis perfectly. On a young woman whom he could make insensible by suggestion, he marked two corresponding spots, one on each arm, and made on each an identical burn with the hot iron, announcing to the patient that the one on the right should not be felt. The suggestion took effect; and the next day, when the bandages were taken off, and the left arm presented a vesicled sore with an inflammatory area three centimetres in diameter, the right arm showed only a clean scorch of the skin of the exact size of the iron (8 millimetres diameter), without redness or inflammation. On another subject similar results were obtained with burns and blisters, the spots chosen being near together on the same arm or on the neck. The experiments are few in number, and ought to be multiplied; but the reader will immediately see the vista which they open. Many of the results of the 'mind-cure,' and the strange fact, so long known, of opium controlling inflammations, are explained by M. Delboeuf's principle. So is the popular belief in 'hardening' one's self by a little judicious indifference, and neglect of one's condition. Local pain is useful in leading us to protect the wounded part from mechanical abrasion, — several of M. Delboeuf's experiments were inconclusive, because the subjects, being insensible at the seat of their injuries, allowed them to get scraped, etc., — but it has the drawback of exciting reflex changes of nutrition of an unfavorable kind. Anæsthetizing a wound prevents these reflex changes. M. Delboeuf, suggesting to a very sensitive subject that she should not feel a severe dental operation, was assured by the dentist that what he found most extraordinary in the whole performance was the absence of the salivary secretion which would usually have accompanied it.

It is to be hoped that others, with better facilities for surgical experimentation than a professor of classical literature like M. Delboeuf, will follow the example he has so happily set them.

BOOK-REVIEWS.

Technical School and College Buildings. By EDWARD C. ROBINS, F.S.A. New York, Van Nostrand. 4°.

THIS handsome volume by a gentleman who holds a most honorable position among architects and friends of technical education, is inscribed to Professor Huxley. It is a treatise on the design and construction of applied-science and art buildings, together with a description of their suitable fittings and sanitation. Its value will be apparent at once to every one, but especially to those professors and instructors who desire to utilize the results of the best European experience in their laboratories, museums, and lecture-rooms. Our medical and educational readers will recall the pains taken by the trustees of the Johns Hopkins Hospital in Baltimore to obtain the benefit of the best thought and ripest experience of the world in relation to their work, and will readily understand how a book of this scope relating to hospitals would have lightened their labors.

In this country we are now passing rapidly forward in the construction of school-buildings and laboratories, and, whether they are large or small, our desire is to have them as complete as possible. It is here that European experience is so valuable, and Mr. Robins has done us a great service in putting into a readable form accounts of what has been done in the great schools and universities of Europe. His book contains full descriptions of such famous institutions as the Bonn, Berlin, and Munich Chemical Laboratories, Du Bois-Reymond's Physiological Institute at Berlin, the laboratories of the Royal Trade School at Chemnitz, the Würzburg Physical Institute, the Royal Technical School at Stockholm, the laboratories at Charlottenburg, Zurich, Paris, and Strasburg. Most of these are accompanied with cuts and diagrams, so that their interior arrangements may be studied in minutest detail. Following these come full descriptions of the laboratories at South Kensington, Finsbury, Leeds, Bristol, Manchester, Huddersfield, Oxford, Cambridge, and other English cities. The chapters which follow on the fittings of these buildings are in one sense the most valuable of all; for they give us the most detailed information concerning the hundred and one minor things which go to make up the perfect laboratory. They discuss and describe, for example, the working-benches, demonstration-tables, drawing-rooms, and so on. The heating, ventilation, and sanitation of applied-science buildings are also elaborately treated and profusely illustrated. An appendix gives statistics as to the technical schools in Great Britain, and we find there particulars as to the area occupied by the buildings, their cubical contents, the cost of land, cost of fittings, annual expense of maintenance, number of students, and so forth.

Mr. Robins's book is one which our investigators in physics, chemistry, and biology, our university architects, and our technical educators, cannot do without.

The Natural History of Thought, in its Practical Aspect from its Origin in Infancy. By GEORGE WALL. London, Trübner. 8°.

THIS volume is in many ways a serious disappointment. Much of this effect is due to the fact that the expectations raised by the inviting titlepage are not in the least realized. Had these pages appeared with a less ambitious title, one could have judged them much more leniently than it is possible to do when considering them as an attempt to write a life-history of the thinking process; and this failure is made a hundred-fold more striking by the consideration that science is in a far better position to deal with this problem than ever before. At no very distant date it will be possible to write a natural history of thought that shall be regarded as an illustrious consummation of a most important movement, — the application (as the term 'natural history' suggests) of the biological point of view to the consideration of mental phenomena. Even now a master-hand could sketch the outlines of such a comprehensive undertaking. To blame Mr. Wall for not being such a master-hand would be very unjust; but the same cannot be said when fault is found with his lack of appreciation of the complexity of the problem before him, and the important light which recent experimentally discovered facts have shed upon it. The natural history of thought can be far better gleaned from such a volume as Mr. Tylor's 'Primitive Culture,' or (to make the comparison more immediate) from M. Perez's 'The First Three Years of Childhood,' than from the pages of Mr. Wall's book.

The volume is really a collection of educational essays, written by an observant thinker, deeply imbued with the high pedagogical value of moral training, and in particular with that portion of it usually termed 'religious,' and appreciating here and there the