In treating of the diseases of the joints in children, the lecturer very truly remarks that there is scarcely any amount of mischief to the articulations which in early life is not remediable by natural processes, although it may be with ankylosis; the only exception, perhaps, is when any necrosed bone is present to keep up the irritation, and thus interfere with the process of cure. The chronic inflammatory affections of the articulations are essentially diseases of debility, occurring in children who are naturally frail, or who have been brought into a cachectic condition by an attack of fever or other exhausting disease. Let the general health of the patients be established, and the local affection will certainly improve also. The surgeon must, therefore, first of all improve the general condition of the child by hygienic means, good food, good air, suitable exercise, bathing, etc., aided by such tonic remedies as appear best adapted to each case; without this all local treatment will be futile. Specific remedies, as mercury, etc., may, according to the lecturer, be of service in some few instances; but such instances are few and far apart. In respect to local treatment in all joint affections, the diseased joint must be kept at perfect rest by means of an appropriate splint, which leaves the joint open for inspection, while the pain in the part is soothed by warm fomentations. Counter-irritation in children is hardly ever required, and must be employed with great care and caution. When only the effects of disease remain, firm, equal, and steady pressure will be found of decided advantage. The pressure may be applied by a proper application of strapping. There are few things which have a greater influence in causing the absorption of inflammatory deposit, and of thus restoring the parts to their normal condition. Very few cases of joint disease, occurring in children, require operative interference; as a rule, such interference is not only unnecessary, but mischievous. When, however, the bones are extensively involved, and have become necrotic, suppuration being kept up, and reparation prevented by the presence of dead bone; by the removal of this we insure a more complete and speedy recovery. It is in such cases alone that any operation is called for by local considerations. In certain cases, however, the general health of the child may fail under the continued local irritation, and his life be imperilled unless the latter be removed by an operation.

We have now presented an analysis, not of the entire contents of the volume before us, but of, perhaps, the more important of them. We have read the entire work with both pleasure and profit. The chief fault we have to find with the author, is the very brief manner in which most of the subjects embraced in his lectures are treated. What he has done, he has done well; we only wish that he had taken the time to fill up and perfect the very able outline he has given. The several cases interspersed throughout the lectures have been well chosen, and are admirably adapted to illustrate the author's teachings.

D. F. C.

ART. XXII.—*Lectures on Medical Education, or on the Proper Method of Studying Medicine.* By SAMUEL CHEW, M. D., Professor of the Practice and Principles of Medicine, etc., in the University of Maryland. 12mo. pp. 152. Philadelphia: Lindsay & Blakiston, 1864.

THE term "medical education" is most commonly used in a restricted sense, to express the study of the elementary branches of medicine and of its collateral sciences; in other words, the pursuit of that preliminary knowledge the acquisition of which is essential to a successful entrance upon the proper study of medicine as a science and of its practice as an art. If the term medical education is not used in a sense quite so restricted as this in the lectures before us, yet it is only in its limitation to the studies to be pursued preparatory to an entrance upon the career of a medical practitioner that it is considered. And thus applied, the subject of medical education is discussed by Dr. Chew skilfully and profitably. No one who proposes to enter upon the study of medicine, or who has already entered upon it, can fail to be benefited by the practical remarks

of the lecturer, while by the adoption of the various judicious hints and councils with which the lectures abound, the medical novitiate will find his career facilitated and the desired goal more readily and certainly secured.

The leading subjects discussed in the lectures of Dr. Chew, are the talents necessary for the successful study and pursuit of medicine; the means for the acquisition of medical knowledge—reading, lectures, clinical instruction and conversation. These several topics are examined with great skill, while the conclusions at which the lecturer arrives are marked by sound sense; the absolute necessity of the strictest industry, even with the most ample means and the best arranged method, in the acquisition of every species of knowledge, being fully recognized.

The fifth and concluding lecture is devoted to the subject of medical schools, their advantages and defects. We copy from it the concluding paragraphs.

"The student should be on his guard against attaching undue importance to schools, and should understand that the character and quality of his medical education, whether good or bad, will depend not entirely nor chiefly upon the teachers by whom he has been usefully instructed, or by whom he has been neglected or misled. What the schools, even the best schools, can do for their pupils is trivial and insignificant in comparison with what the pupils can do for themselves, with what they must do for themselves, if they wish to acquire knowledge, ability, and fitness for their profession.

"I mean in thus speaking no disparagement to the schools; for I think highly of their value and ability. They are, no doubt, useful to many of their pupils. But they help only those who co-operate with them, and labour to help themselves. To such as cannot or will not assist themselves, no effectual assistance can be given by teachers, or by any other extraneous agents. The most important service that a medical school can afford its pupils, is to furnish them with the means and opportunity for the study of anatomy, and the means and opportunity for the study of diseases in the wards of an hospital. Other modes of assistance may be useful, but these are indispensable; and if these are supplied, the student will seek in vain for any valid excuse for an insufficient medical education.

"With opportunity for the study of anatomy, and of clinical medicine, and with the abundant supply of useful books on medical science which is now everywhere at hand, if the student continue in ignorance, it may be doubted whether any combination of external circumstances could have endowed him with the requisite qualifications for his profession. The deficiencies of his education will probably be found to depend upon causes nearer to himself than any negligence or incapacity of his teachers, and they would have been the same had he sat at the feet and listened to the teachings of the wisest Gamaliels of the present or any former age."

"In any of our schools, even in the worst, the student who will be faithful to his duty and interest, and will exert himself with energy and diligence, may obtain useful assistance and preparation for the successful prosecution of that part of his education, infinitely the most important of all, which he is to bestow upon himself and which consists in the intelligent observation and study of the facts which will be continually presenting themselves to his notice as long as he continues engaged in the practice of his profession. In any of our schools, even in the best, the student who inertly and passively depends upon his teachers, and hopes to learn science by proxy, and to become a physician without thought, effort, or labour, will be fatally disappointed, and will inevitably and utterly fail. This truth is so evident, that it seems almost idle to assert it; and yet, it is so often overlooked by students that a teacher cannot, without culpable neglect, omit to recall it to their attention. '*Non est ad astra, mollis e terris via.*' There is no royal road to Heaven, or to Geometry, or to Medical Science; and the schools have no power to construct such a road for their pupils. If for any reason, good or bad, whether honourable ambition, 'that last infirmity of noble minds' or the pure love of knowledge for its own sake, or the pure love of knowledge for the sake of the power to do good, which its possession bestows; if for any of these, or for any other motive, you wish to be wise in the science

and art of your profession, remember that for this, or any other excellence or emiuece in life, you must consent to pay the appointed price, and that price is labour, your own labour, and not the labour of your teachers." D. F. C.

ART. XXIII.—*The Nervous and Vascular Connection Between the Mother and Fœtus in Utero.* By JOHN O'REILLY, M. D., F. R. C. S. I. Τὸν αὐτὸν. 8vo. pp. 76. New York, 1864.

THIS is a curious and interesting little treatise; and, like all the productions of Dr. O'Reilly, is replete with learning and original thought. Even where we cannot coincide with the correctness of the author's premises or the validity of his conclusions, we have to admire the plausibility of his views and the ingenuity with which he attempts to sustain and enforce them.

The question as to the nature and extent of the connection which exists between the fœtus in utero and its mother, is one, the solution of which has for a long period occupied the attention of physiologists, and has given rise to numerous hypotheses, all of which, after enjoying a brief period of popularity, have been, one after the other, rejected as untenable.

In the work before us it is maintained that between mother and fœtus there is both a nervous and a vascular connection. That branches of organic nerves accompany the minutest ramifications of the maternal vessels in the placenta and of those also of the fœtus, and that these two sets of nervous branches inosculate in the placental lobule, thus accomplishing the nervous connection; while the vascular connection between the mother and fœtus is effected, as between all of the tissues and organs of the body, by the interposition of capillary vessels: into those of the placenta terminate the uterine arteries of the mother, and the hypogastric arteries of the fœtus, and from them take their rise the uterine sinuses and the umbilical vein of the fœtus. These positions Dr. O'Reilly attempts to sustain, as well from the absolute necessity of the existence of a nervous and vascular connection between mother and fœtus, as from a variety of facts adduced, which he believes explicable only by the admission of such connection.

According to Dr. O'Reilly, the brain is composed of *hollow nerve fibres*, and the nerves, of *hollow nerve tubules*, which fibres and tubules communicate with each other. By the gray substance of the brain and of the spinal cord, which consists of organic glands, is secreted "a volatile or phosphoric agent," whose office is the stimulation of the nerve fibres of the brain and spinal cord and the tubules of the nerves, and which by passing into the nerve fibres of the brain rouses the mind to action, and passing onwards through the tubules of the nerves render the operations of the mind coextensive with the terminations of the nerves. Impressions made upon the animal, or cerebro-spinal nervous system, are communicated and made to extend to the organic or vital nervous system, by the inosculatation of the nerves of the two systems with each other. Life being exclusively located, according to Dr. O'Reilly, in the ganglionic nervous centres, and in the ramifications of the nerves of the organic, or ganglionic nervous system, hence, as without the presence of organic nerves there could be no life, it is evident, therefore, that wherever there is life, organic nerves must necessarily exist, even although we cannot demonstrate their existence to the eye.

All this appears, at first sight, to be clear and conclusive—the only satisfactory explanation of the manner in which nervous influence is transmitted, from the central points of production of nerve power, to every part of the animal organism, and yet, when we come to consider it more nearly, we find it to be all a mere hypothesis based upon no possible show of evidence and opposed by numerous serious and incontrovertible difficulties.

To explain and illustrate the uses of the placenta, Dr. O'Reilly compares its structure and functions with those of the liver. Thus he points to the four sets