The statistics are the only original matter in the book, and we cannot say they have influenced our opinions very much. The treatment of consumption, especially in its climatic aspect, can never be definitely settled on such a basis. There are too many disturbing elements, social as well as physical, to allow of its being so. Still, much information and guidance may be afforded from Dr Williams' point of view, and his book may be consulted as a fair epitome of what is known on the subject.

The name of Professor Sayre has been so long associated with the special department of orthopedic surgery, that any work from his pen is sure to receive a hearty welcome in this country. The volume now before us will certainly increase his reputation, not only as a most ingenious and successful surgeon, but also as an able writer and clear expositor. While it is in the form of clinical lectures delivered to the students of the Bellevue Hospital, it may yet be said to possess all the completeness of a systematic treatise combined with the freshness and interest only to be obtained from a series of admirably reported clinical demonstrations. Accepting Andry's definition of orthopedy "as embracing the study of all deformities of the human frame," Professor Sayre, in his first lecture, gives a short history of orthopedic surgery. This is followed in the next few lectures by a general statement of the various kinds of deformities, their causation and treatment. It is to paralysis that Dr Sayre attributes the great majority of all cases of deformity, both congenital and acquired, and on this theory his whole practice depends. He thinks that if cases of so-called congenital deformity like club-foot are only seen early enough, tenotomy and other severe measures will hardly ever be required. Several interesting cases of reflex paralysis producing deformity are also reported, as, for instance, three cases, where talipes equinovarus was dependent on congenital phimosis and adherent prepuce, and was only cured after circumcision. Dr Sayre's plan of treatment may be summed up thus: Manipulate the parts thoroughly, yet gently, and as long as may be neces-
sary to bring them back to their normal position, and at all
times allow freedom of movement to promote their healthy
nutrition. No fixed apparatus of any kind is to be used,
except, for a very short time only. All must be elastic or
jointed, and at first must be adapted to the deformity, not
the deformity to the apparatus. Fixed apparatus like the
ordinary Scarpa’s shoe is wrong in principle and mischievous
in results. Even in the worst possible cases there ought
never to be the slightest irritation of the skin, far less ulcer-
ation or sloughing from the use of apparatus. Dr Sayre’s
watchword is a negative one: “No anaesthetics. No pain.
No crying.” The cases in which tenotomy is to be employed
must respond to a definite test, the rationale of which, how-
ever, we must confess, we fail to see. Here it is expressed
in his own words:—

“The law which is of universal application in deciding
this question is the following:—Place the part contracted
as nearly as possible in its normal position by means of
manual tension gradually applied, and then carefully retain
it in that position; while the parts are thus placed upon the
stretch, make additional point-pressure with the end of the
finger or thumb upon the parts thus rendered tense, and if
such additional pressure produces reflex contractions, that
tendon, fascia, or muscle must be divided, and the point at
which the reflex spasm is excited is the point where the
operation should be performed. If, on the contrary, while
the parts are brought into their normal position by means
of manual tension gradually applied, the additional point-
pressure does not produce reflex contractions, the deformity
can be permanently overcome by means of constant elastic
tension, and the more you cut the greater will be the amount
of damage done.”

How pressure on a fascia or tendon can produce reflex
contraction, we quite fail to see. Having next described the
operation of tenotomy in the usual way, he goes on to de-
scribe the further treatment of the part. If the case have
been one of talipes, then immediately after section he fixes
the foot to a thin sole piece of wood by a bandage and two
strips of adhesive plaster, one carried from the toes to a
point two-thirds up the front of the leg, and the other across
the sole and up the outside or the inside of the foot, accord-
ing as the case may be varus or valgus. Similarly he re-
stores the parts as far as possible to their normal position
immediately after section in all cases of deformity due to
muscular action alone. But in the case of acquired defor-
mity dependent on previous disease of a joint, and terminating in ankylosis, the division should be made and the external wound be permitted to heal before resorting to force to break up the ankylosis. "If motion and force are applied in this class of cases immediately after section has been made, air may enter the wound, inflammation follow, and suppuration be established." The supporters of antisepic surgery will not be much deterred by that last possibility. In all cases, Dr Sayre holds that movement should be practised every day, and as soon as the wounds heal that some apparatus like Barwell's, where an elastic band is used to replace each paralysed muscle, should be adopted. Dr Sayre has invented a boot for the better management of talipes cases, which may be described as a Scarpa's shoe with a joint in the middle of the sole, and another at the ankle, and elastic bands replacing all the stiff rods and steel springs. This joint in the sole is to carry out a theory of the author's, that all movements to correct the deformity of simple varus must be made at the "medio-tarsal joint." Dr Sayre curiously enough holds that there is no lateral movement whatever of the foot permissible at the ankle-joint. "Turning the toes out or in, is produced by rotation of the thigh and leg at the hip-joint, or by the revolving motion of the fibula, produced by the contraction of the biceps and tensor vaginae femoris, when the knee is flexed." To this doctrine we must reply with Professor S. D. Gross, who has already opposed it in America, "I shall still continue to make lateral motion at my ankle-joint without rotating my hip or revolving the head of my fibula." By reference to figures 68 and 69, it will be seen that on this point Dr Sayre lays himself open to a charge he himself brings against some other authors, of their theoretical descriptions not being in accordance with their actual pictures.

As regards other means of treatment of deformities, Dr Sayre also places considerable value on the use of electricity. He gives this especial caution as to its use; that the deformed part should be restored to its natural position and held there so as to relieve the paralysed muscles by approximating their origin and insertion before the battery is applied. "The principle is, the paralysed muscle should be placed in such a position that when stimulated to contract in response to the electric current, it can do so without carrying any weight."

Medicinal agents are only serviceable to remedy constitutional defects, with the exception, perhaps, of Strychnia, which, besides giving in the ordinary way, Dr Sayre also uses by sub-
cutaneous injection of $\frac{1}{10}$ of a grain once every eight or ten days into the paralysed muscle itself.

The latter half of the book is taken up with a clear and sound exposition of the nature and treatment of joint-disease, especially the class of so-called scrofulous or tubercular diseases. These joint-affections Dr Sayre does not consider scrofulous at all, but rather that they are simple traumatic inflammations which run a chronic course, and which no doubt may be found in scrofulous subjects, but in the majority of cases occur without evidence of this constitutional taint. He does not hold, as has been asserted of him by some, that scrofula is a preventive of joint disease. On the contrary, he states that, "All things considered, a smaller amount of injury will produce the disease in one of those miserable sickly children than in a healthy robust child. But the sickly scrofulous child who clings to his mother's apron does not run the risk of getting hurt as do those active restless children who run races, climb over fences, jump out of apple trees, kick their playmates downstairs, ride down balusters, and are generally careless and reckless." He supports these opinions by elaborate statistics drawn from his own practice, and has thus arrived at almost precisely the same results as have been already published in this country by, among others, Bryant and Holmes, in their recent text-books.

Dr Sayre also combats at great length the view formerly so general among surgeons that spontaneous dislocation of the head of the femur may take place in the last stage of morbus coxae. He declares that no surgeon has ever yet sustained this assertion "by the evidence of a single post-mortem examination." In this, however, he goes a little too far, as both Mr Erichsen and Mr Holmes, in their text-books, describe cases and give drawings of actual specimens of such dislocations. Mr Holmes has studied this disease very carefully, and states that while actual dislocation is rare, it yet does occur. (For cases, see Surgery, its Principles and Practice, p. 443, and Surgical Treatment of Children's Diseases, p. 438.) The more common deformity, however, consists, as Dr Sayre states, in enlargement of the acetabulum, erosion of the head of the femur and relaxation of the ligaments, so that the femur rises higher in the hip than usual and being rotated inwards, simulates dislocation.

In the treatment of these joint affections, Dr Sayre displays great ingenuity and skill. His various splints and apparatus, and the care with which they are applied—and we may add the simplicity and clearness with which they are described—are worthy of all praise. His short hip splint is already well
known in this country, but his long splint, his knee and leg splints are not so, while they seem as worthy of adoption. But we cannot particularize further. Dr Sayre's book is that of a learned and ingenious surgeon who has spared neither time nor pains to master his subject, and to explain its difficulties to others.

IV.—A Directory for the Dissection of the Human Body. By John Cleland, M.D., F.R.S. London: Smith, Elder & Co. 1876.

The "Directions for Dissection," which appeared at the end of the second volume of Quain's Anatomy, seventh edition, having been omitted from the issue of that work recently published, are now put before us in a separate form (with numerous additions and alterations), under the above title. Originally published by Dr Sharpey for the use of his students, when he lectured on anatomy in Edinburgh, the "Directions for Dissection" were adopted by his successor, Dr Allen Thomson, and have been used in his laboratories for many years. They underwent revision at the hands of Dr Cleland before they appeared in the edition of Quain's Anatomy to which the names of Sharpey, Allen Thomson, and Cleland were attached; but we are by no means sure that such revision gave him the right to ignore his fellow-labourers so completely as he does in the work now before us.

The method of teaching anatomy herein pursued is open to discussion, and has undoubtedly serious defects. A description of the order of dissection is given, and each structure which is to be displayed receives mention, but none of these are described, it being supposed that the student will be able to make out from his dissections the origins and insertions of the muscles, the relations and branches of the arteries, the connections and distribution of the nerves. To a student who is thoroughly acquainted with his subject this will be possible, and will, moreover, be an interesting mode of study; but for the beginner the inevitable result will be the destruction of important structures, and from that will spring disheartenment, which will end in his confining his attention to books and plates, so that the dissecting room will "know him no more."

We believe that it is far better for the student to have, as his companion in dissecting, a book which gives a detailed description of the parts which he sees before him, so that he may be enabled readily to identify them, may compare the