

BIBLIOGRAPHICAL NOTICES.

ART. XIV.—*Remarks on Fractures.* By A. L. PEIRSON, M. D. 8vo., pp. 108. Boston: 1840.

THE dissertation of Dr. Peirson formed the address for 1840, which is annually delivered before the Medical Society of the State of Massachusetts; and the author was induced to make choice of the subject of fracture, not because he had any new views to offer, or novelties in practice to recommend, but from its being a subject of deep and universal interest to the profession.

The kinds of displacement after fracture, the causes, symptoms, prognosis, and mode of union, are all concisely considered; and the general indications in the treatment of these injuries, are well set forth. The subject of non-union is also cursorily glanced at; but the chief part of the address is occupied in treating of the peculiarities presented by fractures of the different bones in their diagnosis and treatment. Appended in the form of notes, are the details of six cases treated by the author with the immovable apparatus, and an interesting series of tables relating to fractures, collected from the records of the Massachusetts General Hospital, from 1821 to 1840. The whole number of fractures which occurred in this institution during the period mentioned, was 367; but out of this number of cases, owing to defects in the record, but a small proportion only could be used for analysis. The small number of cases included, detracts considerably from the value of the results obtained by their analysis; but nevertheless, as they may materially aid in future investigations on the subject of fracture, we shall lay them before our readers. With the exception of the tables compiled from the records of the Pennsylvania Hospital, by Dr. Wallace,* we know of none which have been so carefully drawn out as those contained in the work before us, and cannot but regret that so little statistical information of a similar kind is furnished by those connected with the public institutions in this country.

In regard to the influence of age on the time of union of bone, in cases of simple fracture, the following are the results of analysis:

Clavicle.—In seven cases under thirty years of age, the average time of union was 20.85 days. In six cases over thirty years of age, the average time of union was 21.50 days. Average union of the whole thirteen cases, 21.15 days. Average time of discharge of twelve cases, 28.25 days.

Humerus.—In six cases under thirty years of age, the average time of union was 25.16 days. In four cases over thirty years of age, the average time was 28.50 days. Average of the whole ten cases, 26.50 days. Average time of discharge, 36.62 days.

Femur.—In eighteen cases, thirty years of age and under, the average time of union was 35.88 days. In seventeen cases, upwards of thirty years of age, the average time of union was 43 days. Average of the whole thirty-five cases, 37.62. Average time of discharge of twenty seven cases, 51.29 days.

Tibia and Fibula.—In eighteen cases of thirty-one years and under, the average time of union was 32.33 days. In seventeen cases, upwards of thirty-one years of age, the average time was 38.64 days. General average of thirty-five cases, 35.08 days. Average time of discharge of twenty-eight cases, 47.53 days.

Tibia alone.—In six cases under forty years of age, the average time of union was 23.50 days. In six cases of forty years and upwards, the average time was

* Medical Examiner for 1838, and this Journal for Nov. 1839, p. 259.

31.33 days. General average of twelve cases was 27.41 days. Average time of discharge for seven cases, 35 days.

Fibula alone.—In eight cases of thirty-two years and under, the average time of union was 22 days. In eight cases, upwards of thirty-two years, the average time was 30.87 days. The general average of sixteen cases was 26.43 days. Average time of discharge of ten cases, 30 days.

Patella.—In three cases under thirty years of age, the average time of union was 58.33 days. In three cases of thirty years and upwards, the average time was 23.33 days. General average, 40.83 days. Average time of discharge of four cases, 41 days.

"Thus it appears, that in all cases except those of fractured patella, there is a remarkable uniformity as to result in the influence which the age of the patient exerts in fixing the period when union takes place; the average time of union being shortest in the younger class of subjects."

In looking over the tables we have been much struck with the great mortality following the amputations made in the cases of fracture. In the whole number of cases, (367,) eighteen patients are stated to have undergone amputation, of which five are marked cured, ten as having died, and the results of three are not mentioned.

The following notices of cases we extract from the address without comment. They are rare and curious, one of them perhaps *unique*; and it is to be regretted that they have been mentioned with so little detail.

"A seaman was brought under my care, who forty-five days before, while at sea, had fallen from the main-top-sail-yard upon the deck of the vessel, fracturing the humerus obliquely. The superior fragment penetrated the skin, and after ploughing a furrow in the plank half an inch deep and two inches long, was finally broken off in it. On my first visit, this fragment, which was about three inches long, was presented to me, which the captain assured me he had much difficulty in extracting, two days after the accident, from the plank in which it had buried itself. The final consequences of the accident were, after the patient's recovery, ankylosis of the elbow, shortening of the humerus, partial ankylosis of the shoulder joint, and displacement of the fragment of the fractured scapula." p. 7.

"A waggoner was crushed, by the passing of the wheel of his loaded wagon over the lower jaw. A double fracture was occasioned, and the detached portion of bone, with the tongue, was forced down the throat, so as nearly to occasion suffocation. The accident occurred in the night, hut, fortunately, near a house whose inhabitants were awake; and the patient obtained the loan of an iron spoon, with which he contrived to drag the tongue forward, and prevent the impending suffocation, till I was enabled to secure the fragments by wiring the teeth. Great swelling followed, preventing deglutition for many days; hut the patient, being supported through an œsophagus tube, eventually recovered. p. 41.

"A man twenty-one years old fell from a tree, at the height of fifteen feet, and struck his head upon the pavement beneath. His head was bent down upon his chest, and the weight of his body brought a strain upon the cervical vertebræ. A severe laceration of the scalp was his most obvious injury; but he constantly asserted that 'his neck was broke.' I could discover no perceptible crepitus, by the slight movement I dared to make; and there was, at first, no paralysis. After death, which occurred twenty-two hours after the accident, three of the cervical vertebræ were found fractured, and their intervertebral substance crushed and comminuted. The remarkable symptoms in the case were, the absence of paralysis, till within two hours of death, the undisturbed state of the intellectual functions, and the patient's own consciousness of the real nature of the injury under which he was suffering." p. 42.

In terminating our notice of the Remarks of Dr. Peirson, we must express the pleasure that we have derived from a careful examination of them. They come evidently from a practical man and acute observer. The observation made at the commencement of the address, that the honest views and faithful

experience of any member of the profession, on even the most common practical topics, are worthy of attention, is eminently just; and we cannot but wish that gentlemen called upon to perform duties similar to that of which Dr. P. has so well acquitted himself, would give us plain and honest views of their experience, in the diseases or accidents of every day occurrence, in place of the vain attempts at oratory on thread-bare subjects, which we so frequently meet with.

G. W. N.

ART. XV. *Remarks on the Surgical Practice of Paris.* Illustrated by cases. By W. O. MARKHAM, M.D., 8vo. pp. 114. London: 1840.

THE work before us constitutes the thesis of the author, to which a gold medal was assigned by the *Senatus Academicus* of the Edinburg University, at the graduation of 1840. That our readers may be able to judge of its character, we proceed to furnish some extracts from it, premising, however, that by his own confession, Dr. Markham passed but a few months among the Parisians—a time hardly long enough for one well versed in the subject, and of mature mind, much less for “a young and not very experienced observer,” to give an account of the general practice adopted at their hospitals, and pronounce judgment on their surgeons.

Much has been said of M. Louvrier's apparatus for the cure of ankylosis. The subject is thus noticed by Dr. Markham.

Ankylosis. M. Louvrier's operation. A woman, 45 years of age, under M. Blandin's charge at the *Hôtel Dieu*, had been affected with ankylosis of the knee for ten years, an ankylosis consequent on white swelling. The leg was very much flexed upon the thigh, forming an acute angle with it; motion was almost entirely destroyed; but on rubbing the parts together forcibly, a slight crackling was heard and felt. The back of the condyles, and *not* the lower surface of the femur, rested on the tibia, and the patella was forced on the under surface of the femur, and appeared fixed and united there. All the parts which surrounded, and entered into the composition of the joint, were retracted. Such was the condition of this woman's knee when she presented herself for relief. Her health was good, and she was willing to undergo any suffering even amputation of the limb, rather than submit to the endurance of this impediment, which rendered her life (always hitherto an active and industrious one) burdensome.

“It was evident, that all the simple and ordinary methods employed for the resolution of ankyloses, were futile in respect to this case, both by reason of the long period of the existence of the malady, and its extent. So grave an operation as amputation, M. Blandin thought was inadmissible, though I believe in like cases it has occasionally been performed at the request of the patient.

“After some discussion it was at last determined, at the particular request of the patient, and after many pressing instances from M. Louvrier, that this gentleman should be permitted to practise his operation (which was much the subject of discussion in Paris at the time) on the knee, though still much against M. Blandin's opinion.

“The object of M. Louvrier's operation is, by the aid of powerful machinery, to extend the ankylosed joint, disregarding utterly all impediments, and the nature of these impediments. The apparatus employed, it is impossible to describe, as it is of infinite complexity, and requires much time, labour, and dexterity to arrange; but the principle of its action is plain: The thigh is made a fixed point, and extension is applied to the leg by aid of the two mechanical powers, the screw and the lever, sufficient to reduce the limb from its highly flexed, to a perfectly extended position. What is going on in or about the joint, during the operation, it is impossible to observe, as the whole limb is thickly enveloped in coverings of brass, leather, &c., &c. When the apparatus is adjusted, all that is visible is the limb thus covered, placed in a wooden case,