pregnancy. She was tapped as for ovarian dropsy; unhappily it was an hepatic cyst, not united to the abdominal parietes, some of the fluid escaped into peritoneum, succeeded by death in eighteen hours. Insufficient stress had been laid upon the sufferer's statement that the swelling commenced at epigastrium.

It is probable that if the nature of the tumour had appeared doubtful, and the opening into cyst had been cautiously effected through the intervention of potassa fusa, the patient's life would have been spared. This unfortunate instance may be serviceable as a warning and as a hint in Dr. Markham's interesting case.

CLINICAL OBSERVATIONS ON THE TREATMENT OF FRACTURES BY THE IMMOVABLE APPARATUS.

By JOSEPH SAMPSON GAMGEE, Staff-Surgeon of the First Class, and Principal Medical Officer of the British Italian Legion during the last war; late Assistant-Surgeon to the Royal Free Hospital, House Surgeon to University College Hospital, etc.

[*Continued from page* 156.]

IT was remarked in my last communication on the treatment of fractures, that the question is one of fact, and that *by fact it must be solved:* a process much more intricate and fraught with sources of fallacy, than its professed or apparent simplicity would lead one to suppose. Let any one examine the long catalogue of disputed questions in matter of fact in medicine and surgery, and he will arrive at the conclusion that their solution has been prevented, not so much by illogical reasoning, as by error in the observation of fact, and misstatement of the question at issue. To use the words of Sir Charles Bell,* "what are professionally called facts are for the most part only those notions which a man insensibly adopts in the course of his practice, and which take a colour from his education and previous studies. It is this which makes the facts of one age differ from the facts of another age; and the opinions of men differently educated to vary in what they are inconsistent enough to call matters of fact." The medical fact—I use the expression in its largest sense—is not, like the physical, a matter of simple and direct observation: it is, in the majority of instances, only arrived at by observation of several subordinate facts, by an exercise of extreme philosophic caution in excluding fallacy from inquiry into cause, and by logical severity in enunciating a statement of this mental process and its results. The laws of causation—always most intricate in the organic world—are so to a peculiar extent in all that affects deviation from the healthy standard of structure and function, wherein the relation of sequence is of itself no evidence whatever of causal affinity. The number of circumstances to be considered before a pathological or therapeutical fact can logically, and therefore with any sound hope of practical advantage, be referred to one or more causes, is so great, and requires so keen an analytical spirit, as to inspire doubt, whether many of those who specially devote themselves to medical inquiry have anything like a correct appreciation of its legitimate views, requirements, and processes. The following case of difficulty in diagnosing fracture is full of instruction in point in proportion to its simplicity.

An old man had fallen on the pavement, striking the left hip. Unable to rise, he was carried to bed; and a surgeon diagnosed fracture through the femoral neck, from the three following facts: very great difficulty and pain in raising the limb; ecchymosis and crepitation over the trochanter; shortening to half an inch. On being consulted as to the treatment to be adopted, I thus weighed the diagnostic signs. The difficulty of movement and ecchymosis, which were undoubted facts, were perfectly consistent with simple bruise. The crepitus and shortening, however, appeared an unmistakable sign of fracture; but, on examination, I found they were not facts. The crepitus was a slight superficial crackling, not a dull deep seated grating. On placing my hand over the sound trochanter, and moving it, I felt precisely the same crackling, which I consequently regarded as due on both sides to friction between the surfaces, most probably thickened and lengthened, of the old man's bursæ, the subcutaneous one on the trochanter, and the deeper one between that bony process and the insertion of the gluteus. At first the shortening seemed real; but, on placing the hips perfectly bent, and tracing down the bones, I discovered a curious congenital deformity of the internal malleolus on the sound side; it was almost twice its natural size, both in breadth and length. This fact, conjoined with the observation that the length of the two femora, as measured to the patellæ, was perfectly equal, demonstrated the fallacy of the previous measurement, as due, not to shortening of the injured member, but to congenital inordinate length of a bony process of the sound one. The grating and shortening excluded, I suspected the case might be one of simple bruise; such it proved to be, after the old man had been in bed three days, with the benefit of cold lotions.

I have related this simple case to illustrate the complexity of simple medical facts, and the care necessary to their appreciation, even in what is considered one of the most simple departments of surgery—the diagnosis of a fracture. How much more difficult is all that relates to the very beautiful but really intricate subject of therapeutics! a branch of which is the theme of my present series of communications.

To avoid what has been above referred to as the second great obstacle to the attainment of truth in medical and surgical controversy—*a wrong statement of the question*—I purpose clearly to establish the object I have in view in the publication of these clinical reflections on the treatment of fractures of the limbs by the immovable apparatus—a plan of treatment much more comprehensive than might be supposed by its designation according to the instrument employed for carrying it into effect. Its most essential features refer—1. To the principle of immediate reduction, whatever be the direction or character of the fracture; 2. To the immobilisation of the severed fragments, so as to allow movement of the body, whether for mere comfort or more cogent reason, as in the case of fractures in military practice; 3. The employment of gentle and uniform compression as the preventive and curative of the swelling which so frequently complicates fracture; 4. The plan of treatment under consideration aims at discarding the multifarious contrivances at present generally employed in the treatment of fractures, and establishing on a scientific basis general rules of treatment, so far as is warranted by known facts, and by the peculiar difficulties attending generalisation in medicine.

[*To be continued.*]

16, Upper Woburn Place, Russell Square, February 25th, 1857.

* Observations on Injuries of the Spine and of the Thigh-Bone. London: 1824. p. 73.

LARYNGISMUS STRIDULUS: ITS PATHOLOGY AND TREATMENT.

By THOMAS PAGET, Esq., F.R.C.S., Senior Surgeon to the Leicester Infirmary, etc.

I HAVE been led to select the present subject of to-night's consideration by but slight, if any, merit of originality in the view I am about to bring forward of a very serious infantile disorder. I have not, however, under the head of asthma infantum or cynanche stridula of Parr and Miller, or laryngismus of Good and others, found the disease so systematically and clearly considered as its dangerous import to life and its complications seem to demand; nor any principle indicated in the various treatments named, which by an intelligible philosophy and a simplicity of aim would commend itself to confidence. I cannot hope that my paper will evince any other merit than that of an attempt to supply this deficiency. Others have most probably adopted the views and treatment. I shall have pronounced them.

The phenomena of laryngismus stridulus I need not describe to professional brethren in technical phraseology, much less define with didactic precision. Who has not been sitting by the infant whose mother was recounting the suffocating spasms which had torn her child for the last few days (or rather nights, for the days have been less distressed), while she had gone on hoping from day to day without sending for medical aid? Which of us, while so occupied, has not seen suddenly come a frightened, staring expression in the child?—seen its pallor of cheeks with lividity of lips and orbitar areolæ?—then noticed two or three coughs, expiratory jerks, or shrill cries short as explosions, it is difficult to say which to call them?—and witnessed the tussle that follows, when, the breath being thus jerked out, a closing of the glottis by spasm renders fresh inspiration impossible? How the poor thing writhes, struggles and stretches into opisthotonos, until want of air increases the pallor and lividity, which were at first only those of terror, to those of asphyxia, and the insensibility and relaxa-