though stiff, exceedingly useful. The ordinary simple dis­locations are now at once detected by the observant and well-educated surgeon, and as readily reduced if recent; so that branch of the profession promises to be soon rescued completely from the maltreatment of ignorant empirics.

The whole treatment of fractures has been simplified and improved ; the process of reparation in disunited bone is better understood, and the means which favour it are more skilfully and effectually adapted. In fractures, whether compound or simple, of the smaller bones, more particularly of the upper extremity, the gum-splint will be found very suitable. By the employment of these or other light splints, —of wood, pasteboard, leather,—well padded, so as not to fret the integument, and always of sufficient length to command the neighbouring joints, the bones are not only kept accu­rately in their proper place, but perfect quietude and freedom from all motion are likewise secured,—a point all-important here, as in the treatment of diseased joints. Broken limbs are no longer laid out in state on pillows, altogether unre­strained. Absolute rest, following early reduction of the bones, and combined with strict attention to the workings of the general system, usually succeeds in preventing inter­ruption of the cure by undue excitement in the neighbour­hood of the injury. Should this nevertheless occur, the retentive apparatus can be so arranged as to admit of the part in fault being attended to as freely and as often as is necessary, without disturbance of the rest of the limb ; for example, blood may be abstracted locally, fomentation or poultice applied to a particular part, abscesses opened, and wounds dressed, without undoing all the retentive apparatus, and so jarring the fracture. In severe compound fractures this advantage is particularly important. The soft parts can be looked after as well as if no apparatus at all were applied; and the untoward results likely to follow such a serious ac­cident can consequently be sometimes averted, and always moderated, while the hard parts are uniformly kept in the condition most favourable to their union. In fractures of the lower extremity near the hip-joint, Desault’s splint is still in use, somewhat modified When the break is lower in the limb, an improvement of Macintyre’s double inclined plane is by much the most suitable apparatus, combining in an eminent degree the advantages of complete rest of the whole limb, with ready and convenient dressing of particu­lar parts.@@1 The patient is also able, with safety, to be out of bed, and in the erect posture, at an early period of the cure ; a circumstance very favourable to the preservation of the general health.

When, notwithstanding care and skill, gangrene occurs after severe fracture, either immediately, or in consequence of greater vascular excitement having taken place than the hurt parts are able to bear, amputation must be had recourse to, and the period of its performance is now no longer a subject of dispute. It must be done immediately, in sound parts, at a distance from the gangrene, without waiting for a line of separation, as in chronic gangrene, else the sur­geon will expect the opportunity in vain, and meanwhile his patient will sink.

Sometimes, either by the carelessness of the surgeon and in­efficiency of his treatment, or from the fault of his patient or defect of his constitution, union of the fracture fails to take place. In recent cases of such disunion, adjustment of the broken ends in accurate apposition, and undisturbed rest of the fracture and of the whole limb, will occasionally effect a tardy union. But usually it becomes necessary to rouse the parts ; and the method now followed, the most conveni­ent, as well as most successful, is the introduction of a seton between the fractured extremities, gradually increasing the size of the tape, but taking care to remove it altogether as soon as it appears that excitement has been produced, suf­ficient for establishing the regenerative process. A few days are usually enough ; when ignorantly permitted to remain for a long period, the mere presence of the foreign body, and more particularly the constant discharge which it maintains, tend most powerfully to prevent the result in favour of which it was employed. After removal of the seton, the limb is placed in the proper position, and must be preserved in a state of most complete rest.

In fractures and other injuries of the cranium, the tre­phine is now used with better judgment than formerly ; more sparingly in most cases, more readily in others. It is not considered necessary to convert every fissure of the skull into a chasm, by following it out with the trephine ; in depressed fracture with compression of the brain, the application of the trephine is imperative, but no more bone is taken away than is necessary for the raising of the de­pressed portion, and the removal of what is so injured by the accident as to render its retention of vitality improbable; and to bore one or more holes in the cranium in search of extravasated blood, is generally regarded as a proceeding equally mischievous and unprofitable. But in punctured fracture, the necessity for the trephine is urgent; it must be used freely and at once ; and as this important point of practice is perhaps not yet sufficiently attended to, we shall be a little more explicit on the subject. The punctured or star-like fracture is occasioned by a sharp body striking the head with considerable force. The integuments are divided, and the surface of the bone presents an appearance of injury somewhat resembling what is often seen in ice when struck in a similar way. But this is a very slight extent of damage compared with what the inner table suffers, when the punc­turing weapon has passed through the diploe, as is usually the case. The inner table, being by much the more vitre­ous, is shivered into numerous spiculæ, which being driven inwards by the force of the blow, perforate, or at all events grievously irritate, the coverings of the brain, producing in­flammatory action, soon affecting that important viscus, and, if not arrested, proving speedily fatal. After the infliction of such an accident, therefore, even should the patient be at the time so little affected as to walk to the surgeon to have his wound dressed, the trephine should be immediately ap­plied to the punctured point, in order that a portion of the bone may be removed, sufficient to allow extraction of all the displaced portions of the internal plate. In no other way can we avert intense inflammatory action from the wounded dura mater, extending in all probability to the brain and its more immediate investments. Even should the practitioner be in some degree successful in moderating the more imme­diate mischief by antiphlogistics alone, the necessity for tre­phining will still remain, on account of abscess under the bone, occasioned and kept up by the spiculæ ; the matter must be evacuated, and the cause of its formation must be removed. It is surely infinitely better, therefore, to operate in the first instance, and so avert all such calamities. Ab­scess sometimes forms between the dura mater and the bone, as a consequence of mere contusion ; its occurrence, and usually its site, are indicated by constitutional disturbance, peculiar oedema of the scalp, unhealthy discharge from the wound, and a pale necrosed appearance of the bone. In such cases, also, perforation of the skull should not be delayed ; for it will usually succeed in evacuating the matter, and re­lieving the patient. But, on the whole, “ trepanning of the skull, which, with our forefathers, appears to have been an everyday occupation, is an operation now very rarely resorted to.” After its performance, from whatever cause, there is now no rasping of the bone, or cutting away of the integuments ; the edges of the circular aperture are denuded of their pe-

@@@, For more minute details regarding these splints, see Liston's Practical Surgery, p. 80, *et* *seq*.