is oppoſed, the reduction is eaſily completed either by the action of the muſcles alone, or, if that is not sufficient, by gentle pressure.

2. After the reduction there is ſeldom any difficulty in retaining the bone in its place, unleſs it has often been diſlocated before. All that is necessary is to place the limb in a relaxed poſture, and to ſupport the bone with a bandage till the parts have recovered their tone.

3. The moſt urgent ſymptoms which accompany diſlocations are, pain, inflammation, and ſwelling. Theſe uſually abate ſoon after the reduction. If any degree of inflamma­tion remain, the uſe of leeches is the beſt remedy.

When diſlocated bones are accompanied with fracture near the joint, the fracture muſt be allowed to heal before reduction be attempted. This, however, is not always neceſſary in very ſmall bones, as thoſe of the fingers. When the fracture is at a diſtance from the joint, the diſlocation may generally be reduced immediately. Compound luxations are to be treated nearly as compound fractures. After the bone is replaced, leeches ſhould be applied to abate the in­flammation ; after which the ſore ſhould be dressed with Goulard’s cerate, or any other mild ointment, and the pain moderated by opiates and a low regimen: care ought alſo to be taken that no matter lodge about the joint. When luxations are produced by tumors or collections of matter in the neighbourhood of the joints, they may be conſidered as incurable : when they proceed from too great a relaxation of the ligaments and tendons of the joint, the bone can hard­ly be prevented from being now and then diſplaced ; but the inconvenience may be ſomewhat obviated by ſupporting the limb with a proper bandage, by the uſe of the cold bath, and by electricity.

Sect. II. *Luxations of the Bones of the Head and Neck.*

If the bones of the cranium be ſeparated by external in­jury, all that can well be done is, to ſupport the parts by a bandage, to prevent inflammation, to keep the patient quiet, and in a proper poſture during the cure. The bones of the noſe are ſeldom luxated without fracture : when they are, the injury is eaſily discovered by the touch. When one of the bones is driven inwards, it may be raised and reduced by puſhing a tube of a proper ſize, and covered with ſoft lint, into the noſtril ; which may be afterwards retained till there is no danger of the bone being again diſplaced. If the bone be luxated outwards, it may be reduced by the fingers, and retained by a double-headed roller. The lower jaw is luxated moſt frequently when the mouth is opened widely ; it can only take place forwards and downwards, which are leaſt surrounded by the neighbouring parts : both sides are generally luxated at once ; and in that case the mouth is opened wide, the chin thrown forwards and towards the breaſt. When only one side is diſlocated, the mouth is diſtorted, and wideſt on the found side of the jaw, which is drawn a little towards the contrary side. The patient ſhould be ſeated, and his head ſupported. The ſurgeon ſhould puſh his thumbs, protected by a covering of ſtrong leather, as far as poſſiible between the jaws, and then with his fingers, ap­plied on the outside of the angle of the jaw, endeavour to bring it forward till it move a little from its ſituation. He ſhould then preſs it forcibly down, and the condyles will im­mediately slip into their place. The thumbs ought to be inſtantly withdrawn, as the patient is apt to bite them involuntarily. The patient ſhould for ſome time avoid much speaking or opening his mouth wide.

When the head is luxated, it commonly falls forward on the breaſt, the patient is inſtantly deprived of ſenſe and mo­tion, and ſoon dies if the luxation be not quickly reduced. In reducing the luxation, the patient ſhould be placed on the ground, and ſupported by an aſſiſtant : the ſurgeon ſtanding behind ſhould gradually pull up the head, while the ſhoulders are preſſed down by the aſſiſtant till the bones are brought into their place, which is known by a ſudden crack or noiſe : if the patient be not dead, he immediately recovers his faculties, at leaſt in ſome meaſure. He ſhould then be put to bed with his head elevated and retained in one poſ­ture. He ſhould lose a quantity of blood, and live for ſome time on a low diet.

Sect. III. *Luxations of the Spine, Os Coccygis, Clavicle, and Ribs.*

The vertebræ are ſometimes partially, but hardly ever completely, diſlocated without fracture. When they occur high up, they are attended with the ſame ſymptoms as diſlocation of the head : when farther down, beſides diſtortion of the ſpine, paralyſis enſues of every part of the body ſituated under the luxated bone ; there is commonly alſo either a total ſuppression of urine, or it is diſcharged involuntarily together with the faeces. As luxations of this kind are ge­nerally owing to falls or violent blows, the diſplaced verte­bra is driven either forwards or to one side ; it is therefore very difficult to reduce it. The beſt, as well as the simpleſt method, is to lay the patient on his face over a cylindrical body, as a large caſk, and at the ſame time to attempt to re­place the bone with the fingers. If the bone be very much diſplaced, there is very little reaſon to hope for ſucceſs. The os coccygis is more liable to diſiocation than any other part of the ſpine. It is ſometimes forced outwards in labo­rious births. This is diſcovered by the great pain which is felt at the connection of the os coccygis with the ſacrum, and by the bone appearing to be diſplaced when examined. It may generally be eaſily reduced by preſſute with the fingers. The beſt ſupport afterwards is a compress, with the T bandage. When the coccyx is luxated inwardly, the patient complains of ſevere pain, teneſmus, and a ſenſe of fulneſs in the rectum ; the faeces are passed with difficulty, and in ſome caſes a ſuppression of urine takes place. The injury is eaſily diſcovered by introducing the finger into the anus. In this caſe the bone ſhould be preſſed outwards, by introducing the sore and middle fingers of one hand dipped in oil into the rectum, and ſupporting the parts which correſpond with it externally till the reduction is accompliſhed. Diſlocations of theſe bones are apt to excite inflammation, which often terminates in dangerous abſceſses ; it ought therefore to be guarded against by every means in our power.

The clavicle is moſt frequently luxated at its junction with the ſternum ; becauſe the violence which produces the injury is generally applied to the ſhoulder. The luxation is diſcovered by pain in the part, by the projection of the bone, and by the immobility of the ſhoulder. It is eaſily reduced by puſhing the bone into its place with the fingers, while an aſſiſtant draws back the arms and ſhoulders. It is not ſo eaſy to retain the bone in its place. When it is the inner extremity of the clavicle which has been diſlocated, the ſhoulder ſhould be kept in its natural ſituation, neither raised nor depreſſed : the fore-arm ſhould be ſupported, as ſhould alſo the head and ſhoulders, and a moderate preſſure ſhould be made upon the diſplaced end of the bone. For this purpoſe the machine represented fig. 104. the invention of Mr Park of Liverpool, anſwers beſt. But when the outer extremity of the clavicle has been diſlocated, the ſhoulder muſt be considerably raised, the arm ſupported in a ſling, and the bone kept in its proper ſituation by a ſmall compreſs placed over its end, and ſecured by a rol­ler forming the figure 8 ; or it may be retained by the