

suit. If in case of fracture you manipulate the broken bones and apparently get them in proper position, but are still in doubt as to whether the ends of the bones are in perfect apposition, all that is requisite is to place your subject before the ray, and with the use of the fluoroscope you will be able to satisfy yourself whether or not they are now in their natural position. If the splints be carbonous, you may at intervals look through them and determine whether the bones are kept immovable and that healing is going on properly.

We find the ray also very useful in determining tubercular and cancerous disease of the bone, caries and necrosis, exostosis, floating cartilage of osseous formation and hypertrophy of bone ; in fact, any disease whatever which shows increase or loss of bony substance. Many times we are consulted for troublesome pains referable to the bony structures. So localised is the pain that the patient is strongly under the impression that the bone is affected. By the use of the ray you will be able to convince your patient that such is not the case, but that the symptoms complained of are those caused by a probable localised neuritis, and treat the patient accordingly. And so in a great many instances, where the patient imagines that something is wrong with the osseous structure, you have only to use the ray, which will aid in the diagnosis and also gain the confidence of the patient and so aid materially in your endeavor to relieve the existing troublesome condition.

It is also very important to diagnosticate whether ankylosis, caused by a fracture or disease, is due to fibrous or bony union, inasmuch as the former may be remedied with good success and the latter not. The ray, in passing through an ankylosed joint, due to fibrous union, will show a light space between the ends of the bones ; if due to bony union this space will appear opaque. Consequently the surgeon is in a position to enlighten his patient on the probable result if operative procedure be performed in either case.

In dentistry the ray is occasionally made use of in detecting whether or not a fang of a tooth remains in the socket, even if it be covered with soft tissue. The surrounding bone is more penetrable than are the teeth, thereby distinguishing the alveoli from the teeth or fangs. The lost end of a broken drill may be located if the dentist unfortunately breaks his instrument while operating upon his patient ; also the central cavity of a tooth may be outlined so that diseased conditions within the tooth may be detected. The growth and development of the teeth may be studied before and after they begin to protrude above the gums, thereby greatly aiding in the diagnosis of certain obscure cases of convulsions occurring during infantile teething.