

articular surface and formation of bone between the adjacent bony structures; this occurs in fractures only very rarely. On the other hand, severe stiffness is usually found in those cases in which there has been a long period of poor splinting without real immobilization and where there has been continued irritation, mechanical or infections, or both. It is a very common thing for the tendons to practically unite with tendon sheaths, adjacent fascia and muscle sheaths.

In such cases, there is usually no bony ankylosis whatever. These conditions occur almost never as a result of immobilization. They do occur regularly with poor splinting, with continued irritation from motion and inflammation. That splinting and real fixation may be quite different things can be noticed in almost any general hospital. In other words, stiffness in joints after fractures is more often due to failure to immobilize than to prolonged fixation. Stiffness charged to splinting is practically always due to pathological changes in the soft tissues. In these tissues as well as in many ankylosed joints, stiffness would never have occurred if, by adequate fixation, the parts had been protected from the first against motion and consequent damage and more severe pathological change.

There are a few points that must be emphasized in this connection:

1. The usual splint applied to fractures does not immobilize at all. This applies even to the usual plaster of Paris cast.

2. A considerable number of splints applied to fractures that are followed by joint stiffness,

have been put on too tight. This fault is as serious as having splints too loose. Even splints that are bandaged too tightly may not immobilize. Continued congestion of the extremities due to overtightness of a bandage may cause serious stiffness in the ligaments, fasciae, tendons and muscles without any bony changes, whatever.

3. Uniformity in results after fractures was obtained in France during the military activity more nearly by a standard method of splinting and bandaging, than has ever been accomplished in civilian practice.

4. In fractures of the femur, the general adoption of the Thomas splint, which gives traction and immobilization (if properly applied) either from the skin or from the bones themselves, without constriction, will contribute greatly, not only to better results in the alignment of the fragments but also to a very great reduction in the amount of joint stiffness and disability after such injuries.

5. In other fractures, especially of the forearm, leg and spine, the more general use of plaster of Paris, applied so as to give real immobilization, will reduce the amount of pathological change, secure more rapid healing of the injured parts and give more and better function in adjacent joints than can be obtained in any other way.

## HENNESSEY'S

DRUG STORE,

87 YONGE ST., TORONTO.

Where quality reigns supreme,  
The Hennessey store commands the  
confidence of the Medical Profession.