

injury, and signs of fracture are not evident, it is not advisable to conduct the examination for obtaining a knowledge of the exact nature of the injury in too inquisitive a manner. If the limb be treated on the principles enunciated above, it will be well either for a severe sprain or a fracture without displacement. Possibly the patient might be unsettled at not being definitely informed whether there be fracture or not, for the oft repeated question of the patient or parent as the surgeon examines the part is, "is the bone broken?" But I am speaking merely of the principle involved in the surgery.

Absolute rest is demanded as long as heat of the surface and intra-articular pains persist. As the pains subside recourse must be had to frictions and rubbings, and, he use of stimulating liniments and cold douches. The rubbings should be executed always in the direction of the venous and lymphatic return, and may be combined with firm fingering about the part and the rubbing in of olive oil. When effusion persists over the painless joint, one may apply over the joint the even compression of a Martin's elastic roller for a certain length of time each day, the skin being duly protected by a soft covering. This is a highly satisfactory method of treatment in cases of chronic thickening and effusion. Leslie's soap strapping, too, when evenly and liberally applied over a sprained joint, is an excellent therapeutic measure in the days following close upon the injury.

At other times nothing seems to render such efficient aid as a wetted calico bandage. Compression in some form is needed.

On physiological grounds the early treatment of a sprained joint by poultices or fomentation is inexpedient. The application of warmth produces a vascular fullness of the part, and a relaxed condition of the tissues which are in need of being toned up and strengthened; though if synovial inflammation of an acute kind follow the sprain, leeches and fomentations may not improperly be indicated later on. For the promotion of the absorption of the lingering products of effusion, an alternation of douchings under streams of hot and cold water gives valuable aid. In no stage of the pathological process associated with a sprain should arnica solution be applied. One has met with instances in which painful and serious cellulitis has followed its use, even where there has been no previous lesion of skin. How is it that arnica has earned its reputation in the treatment of sprains, and how has that reputation managed to survive so long?

A surgeon was driving his wife in the country when the pony fell and the occupants of the carriage were thrown out into the road. When I saw him a few hours after the accident, he was wearing his right arm in a sling, the elbow being at an obtuse angle. He said that in the fall the right hand (in which he was holding the reins) and the arm were doubled and twisted underneath him, and that though he was sure no bone had been

broken, he could neither bend nor straighten the elbow on account of the severe sprain it had received. He said that on his way home, and certainly well within an hour of the fall, on placing his left hand under the damaged elbow, he found a soft swelling which seemed pretty nearly as large as an egg; his wife could also feel it through his coat sleeve. Having taken the limb out of the sling and removed some water dressings, universal and extensive effusion in the articulation was evident; the distended synovial membrane was especially bulging about the head of the radius. The intra-articular pain was intense. There was no contusion of the skin nor any definite ecchymosis; movement caused great distress.

Beginning at the fingers, we firmly bandaged the extremity with a roller of domette (which from its softness and elasticity adapts itself with delightful evenness and comfort), drawing the turns which surrounded the swollen joint itself more closely and firmly for the sake of compression. Then, having bent to the proper form of the arm a padded, flexible iron splint, and carefully adjusted it, the elbow was packed round with cotton wool, and having enclosed all in a second and wider domette roller, and having got the patient to bed, we arranged the arm upon a pillow. The compression and the security afforded by the roller and the splint gave great satisfaction. On the second day we readjusted the splint and the bandages which had now become slack. Most of the tenderness and swelling had departed. Two days later and at other intervals we tightened the bandage, finding always steady improvement. In ten days the splint was removed and cautious use of the arm was allowed, but for the entire removal of the stiffness a course of shampooing from a professional rubber was resorted to. The effusion which had come on so quickly, within an hour of the injury, was evidently not inflammatory in its nature; probably it consisted of synova, blood and serum.

The other occupant of the carriage had severely sprained her left ankle, which was painful, stiff, and full of sero-synovial effusion. There was no fracture. The swelling was confined within the limits of the synovial membrane; it did not extend up above the external malleolus in the manner so characteristic of Pott's fracture. The treatment adopted consisted in surrounding the ankle with an even layer of cotton wool and in bandaging from the metatarsus upward with a soft roller, the turns of which were continued well up the calf of the leg. The foot thus firmly encased was raised upon a pillow. In a few days all the excess of synovial fluid had disappeared, but the firmly applied bandage was still worn. In a week she began to use her foot, and was finding comfort in having it and the ankle rubbed with oil several times during the day. On the occasion of my first interview the patient volunteered the important clinical statement that after the accident her foot and ankle were fairly comfortable until her boot