

910 heatings for all cases, including 157 cases of recent sprains, eight of the shoulder-joint, seven of the elbow, twenty-two of the wrist, eighteen of the knee, fifty-five of the ankle, twenty-four of the thumb, and twenty-three of the fingers, with most excellent results.

In cases of traumatism of the shoulder it was impossible to get the full effects of the heat because of the difficulty experienced in getting the shoulder within the cylinder of the apparatus ; in general, however, applications to the upper extremity are followed by good results. Each case was treated for from forty minutes to one hour, with a general average of five heatings. In none of these cases was any retentive dressing applied, with the exception of the ankle ; in all other joints the full limit of heat was applied for forty-five minutes for small joints, as the fingers and thumbs, and one hour for the larger joints. Our best results were obtained in sprained ankles, all of these cases being heated for a full hour, at a temperature ranging from 300° to 380° F. After each application of heat a Coterell dressing was applied, and the patient told to use the joint as much as possible. The majority of the cases were treated daily ; some every third day. Usually one application gave perfect ease from pain ; in some cases two applications were necessary before the pain was entirely relieved ; and in the great majority of cases three applications were necessary to restore perfect function of the joint. In some of our cases the rapidity of cure seemed marvelous.

We have noticed that in subjects with an excessive amount of subcutaneous fat the first application seemed to be followed by an increase of pain and discomfort : this, however, rapidly wears away within a few hours, and the usual relief of pain is then experienced. This we especially noted in a medical *confrère*, and to use his words, the pain and discomfort were greatly increased after the application of one hour, but within three hours he experienced a most delicious sensation of comfort and freedom from pain ; the second application was followed by complete relief of all symptoms, and he was able to walk after the fourth day of treatment, the function of the joint having returned to the normal state. In this case the gentleman weighed something over 220 pounds. Of course in this class of injuries the intense heat prevents the extravasation of blood and the exudation of lymph between the tendon and its sheath, and if blood or lymph be present they are rapidly absorbed.

CASE II.—A strikingly successful case. L. E., aged forty, who after a fall of twenty feet sustained a very severe sprain of his right ankle ; was suffering excruciating pain when