

make a more accurate statement. The size to be preferred is a width of three inches and a length of three yards. Into the meshes of such bandage material the plaster is to be rubbed by hand, and then each roller is to be wrapped in paper if it is not to be used at once. They can be best kept in the tins covered by a layer of plaster. From unsized cheese cloth, from bleached Canton flannel, from cheap, that is cotton-containing flannel, or from old blanket, all other plaster dressings may be made. As a protection for osseous prominences and as a lining generally for plastic dressings, unbroken rolls of the finest cotton batting, white cotton wadding in roller form or blanket flannel will be required. A solution of the bicarbonate of soda in water or the white of an egg will remove the unpleasant feeling left in the hands after using plaster.

Methods—Upon the principles of the treatment of fractures there is general agreement, but on no subject in surgery do opinions differ more widely than upon the methods by which these should be carried out. In part this is due to the fact that similar good results may be obtained by so great a variety of means. The particular plan employed is of much less importance than the skill and judgment used in its application. A surgeon with strips of wood, padded with moss, and secured by thongs of basswood bark, will succeed, where a mal-adroit backed by a brigade of surgical machinists will fail. Progress of late has been in the direction of simplicity with efficiency, and these are marked characteristics of plaster dressings. The material affords scope for the ingenuity and dexterity of the ablest of surgeons, while on the other hand it may be used in safe and simple ways by any one who will take the trouble to master the *technique* of such dressings. Not to every one is given the ability to invent modifications, as special cases require them, but good methods and correct models are not hard to follow. The plans we shall consider are not the results of any one man's work. Many have labored and we enter into their labors, since that which is of value the profession retains and develops. We may justly claim that

"All of good the past hath had
Remains to make our own time glad."

The spiral bandage with plaster in its meshes applied over a leg fracture may be taken as a type of all the uses of the roller. I shall describe some-

what minutely what I hold to be the best manner of its application. The limb, if hairy, is to be oiled, and then it is to be enveloped in a thick layer of cotton batting taken unbroken from a roll. This layer should extend from the toes to the mid-thigh, should meet in the middle line in front and should be held in position by thread wound around the leg. Over this is to be applied with moderate firmness by the figure of 8 turn, and without reverses, a dry cotton roller. This must not be confounded with that relict of the dark ages a "primary bandage." The gauze cloth or crinoline bandages before described are to be next placed two at a time on end in a bowl of warm water. When the bubbles cease to escape they are taken out pressed to expel surplus water, and are applied from the toes up. No one turn should be drawn more snugly than another. If too tight there is danger of strangulation, while if too loose the risk is that co-aptation of the fragments will not be maintained. Each layer as applied should be well rubbed by the hand to expel the air between it and the one next beneath it. From three to six layers will be required. An assistant is to make moderate extension during the application, and for from ten to thirty minutes afterwards. The heel should rest in his right palm, while his left hand is passed around the instep. If seated comfortably, and able to rest his forearm against his knees he will be able to hold the foot at right angles with the limb, prevent rotary displacement by sighting over the great toe and inner margin of the patella and will not become unsteady through muscular fatigue. To bring the toes up after the dressing is completed is dangerous, since it is apt to constrict at the instep. To allow them to drop is to run the risk of having the heel permanently elevated. When the limb is a heavy one, an inch wide stiffener of perforated tin may with advantage be interwoven in the bandage at each side. When the shell has become fairly firm the limb is to be placed upon a moulded pillow on which in from two to four hours it will become sufficiently rigid to stand being suspended. Such an apparel, light, shapely and perfectly fulfilling the indications, is the one I ordinarily employ in the *later* stages of leg fractures. It gives a firmer support than any hinged splint, and its use will materially shorten the period of confinement to bed. An elevated shoe on the sound side will assist the patient to keep the promise exacted from him that