

Additional strength and an elegant finish can be given to such splints by an outside coating of silicate of soda.

Practice of this kind wastes no time, since, so far as fractures are concerned, it helps to make us independent of the instrument maker.

In the second division, as starch dressings are practically obsolete, I shall consider only silicate of soda and plaster-of-Paris. The silicate I have used for a number of years. As it is not easily obtained here, and may not be familiar to all present, I place a sample before you. From it light, clean, strong and elegant splints can be made, but it is sticky to handle, and dries so slowly as not to give security against displacement by the time the physician is ready to leave the patient. It has been charged with causing extensive sloughing when allowed to remain in contact with the skin.

My personal experience with plaster-of-Paris, in the treatment of leg fractures, includes a series of thirty-eight consecutive cases, put up as soon as reduced, in one or other of the forms of splint presently to be described. I have never completely encased the limb in plaster bandages during the first week of treatment. In no instance was it thought necessary to wait and see if swelling would come on or for it to subside, and no increase in its amount was ever noted after the dressing was applied. The amount of ensheathing callus thrown out in these cases was surprisingly less than that which I have seen in cases treated by other methods. My three first cases were treated by the regular Bavarian splint, made by pouring plaster mud between two layers of flannel secured together down the back of the leg. Becoming dissatisfied with the weight and clumsy look of this dressing, I substituted, as many others have done, layers of cloth soaked in plaster for the plaster alone. Later, the doubled piece of flannel was omitted and layers of gauze or blanketting, cut by the measure of the patient's stocking and bandaged to the sides of the limb somewhat after the manner suggested by Mr. John Croft, became the favorite method. Finally I adopted, and have now used for four years, the plaster posterior splint, essentially, as it was perfected by my friend, Dr. Kingman, and others in the Boston city hospital. No new principle is involved in the making of this splint. It is not the posterior

splint described by Esmarch or by MacCormac. It is not the same thing as a plaster bandage with an inch-wide strip removed down its centre line in front. It differs from, and is better than either of these for the early treatment of simple fractures. I show you samples and photographs of the completed splint, and will now demonstrate the method by which it is made. The materials required are, cotton-wadding, cheese-cloth and plaster-of-Paris. I have lately been substituting scrim, a coarse and strong fabric, for the cheese-cloth as a less number of layers will give equal strength. I have this material here and also a splint made

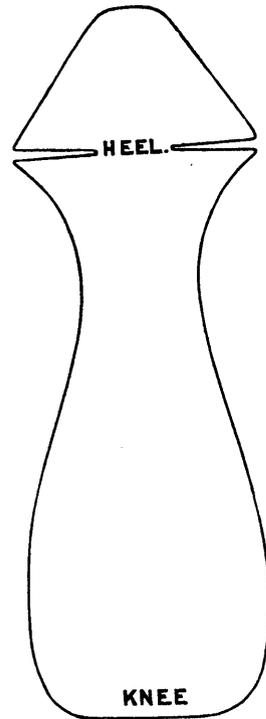


FIG. 1.

from it. The leg is to be bandaged with the batting, which, for the purpose, is torn into strips four inches wide and applied as a roller. Using the sound leg as a model, to save the injured one from movement, a pattern is cut which shall cover in all of the leg excepting a space an inch wide along its anterior aspect. Deep slashes opposite the heel allow the part for the sole of the foot to be brought into a right-angle with that for the leg without forming clumsy folds at the ankle. From this pattern four or five layers of scrim or from six to nine of cheese-cloth are cut. Then