expenditure of time, and also to be sure that the quality of the bandages shall be first-class.

The ordinary method of manufacture of these useful articles is very time-consuming, and the quality of the manufactured product is frequently so inferior as to be exasperating to a surgeon who knows what a really good plaster-of-paris bandage is.

The text-books direct that plaster-of-paris bandages should be made by sprinkling and rubbing the plaster into the fabric which is chosen as the basis of the bandage. This method is so exceedingly inconvenient, however, that a very brief experience with it drove me to seek a more satisfactory way. At first I tried the plan of using a broad-bladed knife with which the plaster was spread over the upper surface of the bandage material with one hand while the bandage was rolled with the other.

For the broad knife I soon saw the advantage of substituting a rectangular piece of wood or glass or metal, with which the excess of a small heap of plaster deposited upon the surface of a strip of bandage was scraped off as the bandage was rolled up, leaving just sufficient in the meshes to produce a good plaster



Fig. 1.

bandage. This was a great advance and for a time proved fairly satisfactory. But with further experience the advantage of having some kind of a frame to hold the scraper, leaving both hands free to roll up the bandage, became manifest, and the machine shown in the illustrations, Figs. 1 and 2, was devised to meet this indication.

It is an extremely simple and homely device, consisting of a piece of board about nine inches wide by two feet in length, with two metal sides, which in my own machine are made of aluminum. Riveted to each of these metal sides are two cleats with just sufficient space between them to allow the scraper to slide up and down easily. The cleats are not perpendicular but at such an inclination that the angle which the scraper forms with the wooden bottom is about 75° in front and 105° behind. (The front end is that which is farthest from the operator when the machine is in use.) A couple of screws are placed, one at each side of the board, with their heads barely projecting above the surface, in such a position that the scraper rests upon them, and a very small space is thus left between the lower edge of the scraper and the board. By