

(No Model.)

J. A. JOHNSTON.

STRETCHER AND FORMER FOR GARMENTS.

No. 249,058.

Patented Nov. 1, 1881.

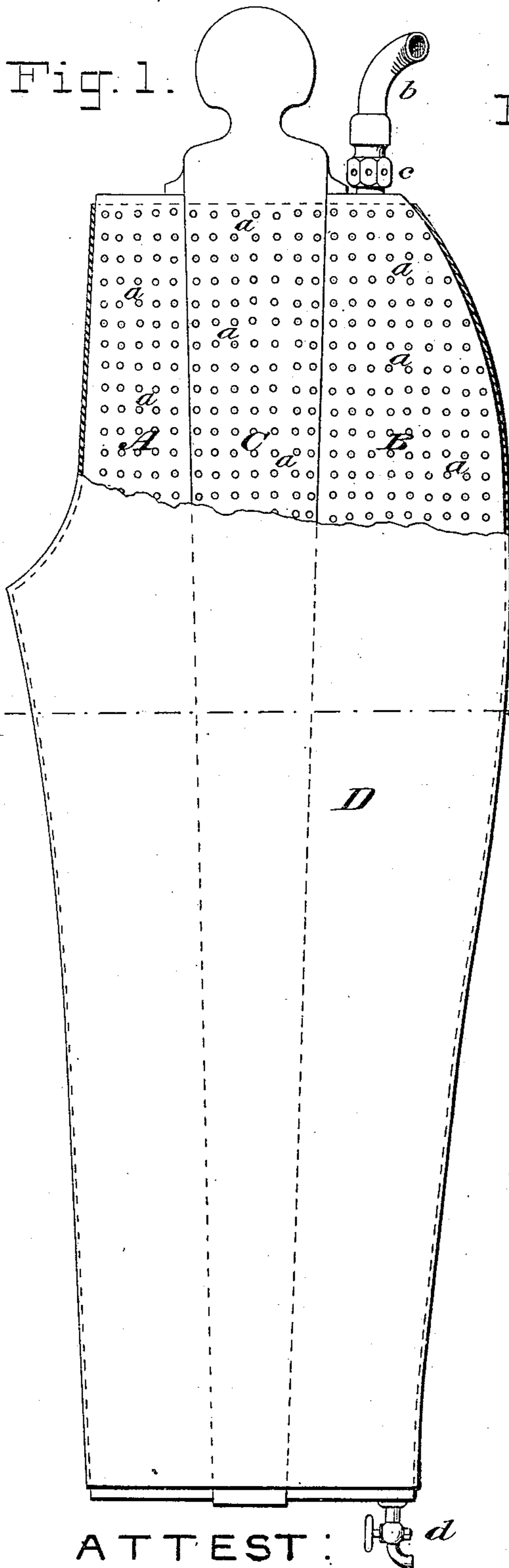


Fig. 2.

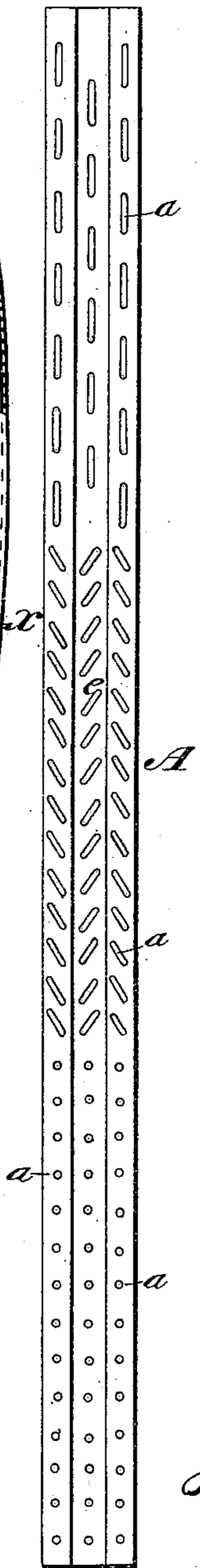
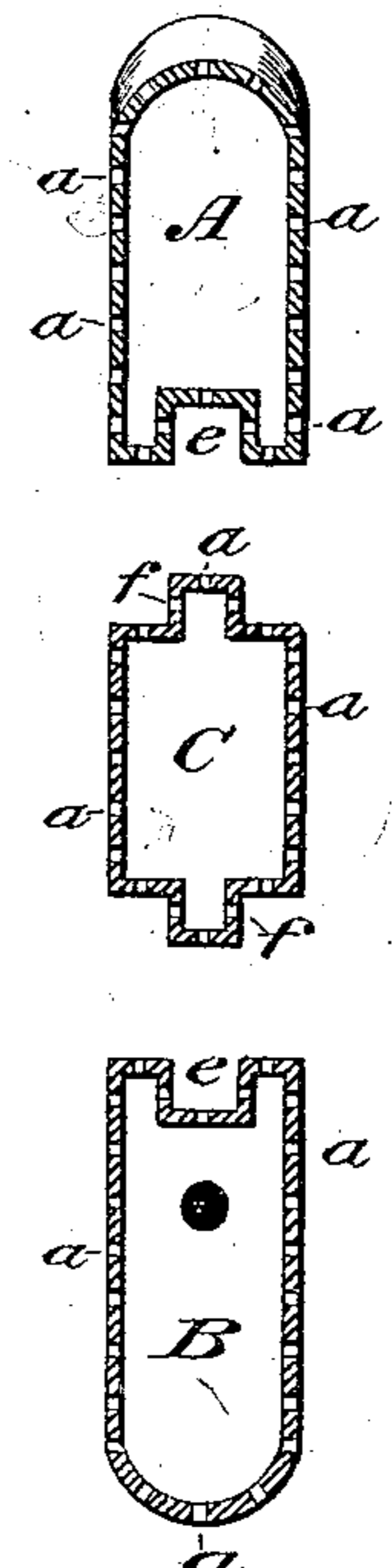


Fig. 3.



ATTEST:

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UNITED STATES PATENT OFFICE.

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STRETCHER AND FORMER FOR GARMENTS.

SPECIFICATION forming part of Letters Patent No. 249,058, dated November 1, 1881.

Application filed March 12, 1881. (No model.)

To all whom it may concern:

Be it known that I, JOSEPH A. JOHNSTON, a citizen of the United States, residing in the city, county, and State of New York, have invented a new and useful Machine or Device for Sponging, Shrinking, and Pressing Garments, of which the following is a specification.

This invention is intended to take the place of, and obviate the necessity of, the usual sponging and shrinking of the cloth from which pantaloons, coats, and other garments are to be made, and the pressing after the garment is completed. I may say that all of these requirements are accomplished by my machine, but in an entirely different manner from that usually employed. I accomplish the whole operation after the garment is made up.

The invention consists, essentially, in a hollow form or stretcher adapted to be expanded so as to stretch the garment which is drawn over it, said stretcher being provided with an inlet for steam and numerous small perforations to permit the steam to escape and moisten the material of the garment, all as will be more particularly hereinafter set forth.

In the drawings, Figure 1 is a side view of my machine or device as adapted to a pair of trousers. Fig. 2 is an edge view of one of the two parts or divisions of the stretcher, showing the groove to receive a tongue on the key. Fig. 3 is a cross-section taken in the plane of the line *xx* in Fig. 1. This view shows the parts separated.

Let A and B represent the two parts or divisions of the stretcher, and C an interposed key of a wedge shape to force them apart laterally. The divisions A and B are shown as properly shaped, when the key is interposed, to fit a leg or one-half of a pair of trousers.

For larger or smaller garments I may employ wider or narrower keys, and with one stretcher I generally employ several keys.

I prefer to construct the parts A, B, and C of sheet metal; but I may employ any suitable material for the purpose. These parts are made hollow, and are provided all around with numerous small perforations, *a a*, these being made in the edges where the key impinges upon the parts A and B, as well as in the sides.

Steam is admitted to the interior of the stretcher through a pipe or hose, *b*, attached to one of the parts by a suitable coupling attachment, *c*, and the condensed water may be drawn off at a cock, *d*.

I provide the parts A and B with grooves *e* in their edges, fitted to receive tongues *f* on the edges of the key. This is a convenience only, and is designed mainly to keep the surface of the stretcher smooth and level, and thus avoid forming creases or marks in the garment. If no means for guiding the key were provided it would be apt to raise above the level of the other parts and form a shoulder. The tongues may as well be formed in the divisions of the stretcher and the grooves in the key.

I may make the perforations in the edges of the divisions and key elongated, as shown in Fig. 2, so as to always insure such coincidence of the openings in the several adjacent parts as will permit of a free passage of the strain from one to the other, whatever may be the relative position of said parts.

D is a sponging-cloth, preferably of flannel, made to draw over the stretcher, as shown in Fig. 1, where a portion of it is broken away to show the perforations in the stretcher.

In the operation of sponging, shrinking, and pressing garments with my improved device, the garment—as a pair of trousers, for example—is made up from cloth not previously shrunk, and into this garment the stretcher (previously covered with the sponging-cloth) is placed. The key is now driven in with sufficient force to stretch and smooth the garment properly, and steam is admitted through the hose or pipe *b*. The steam escapes from the interior of the stretcher at the numerous perforations and heats and moistens the garment sufficiently to give it the proper shrinkage, after which it is carefully pressed without removal. When properly dried and set the garment is removed, and will then be found to retain its shape as well as or better than a garment in which the cloth has been sponged and shrunk before making up and afterward pressed in the usual way.

It will thus be seen that the whole operation of sponging, shrinking, and pressing is done

at once, and with a great advantage in respect to time and labor.

I do not limit myself to any particular size or shape of stretcher, these peculiarities depending upon the size and shape of the garment to be operated on.

Having thus described my invention, I claim—

1. The combination of the hollow perforated divisions or parts A and B and a hollow perforated key, C, to form a sponging, shrinking, and pressing device for garments, said device being provided with a suitable inlet for the admission of steam, substantially as and for the purposes set forth.

2. The combination of the hollow perforated divisions A and B, one provided with a suitable steam-inlet, a hollow perforated expanding-key, C, and a sponging cloth or cover, D, of flannel or some similar absorbing fabric, substantially as and for the purposes set forth.

In witness whereof I have hereunto signed my name in the presence of two subscribing witnesses.

JOSEPH A. JOHNSTON.

Witnesses:

HENRY CONNETT,
ARTHUR C. FRASER.