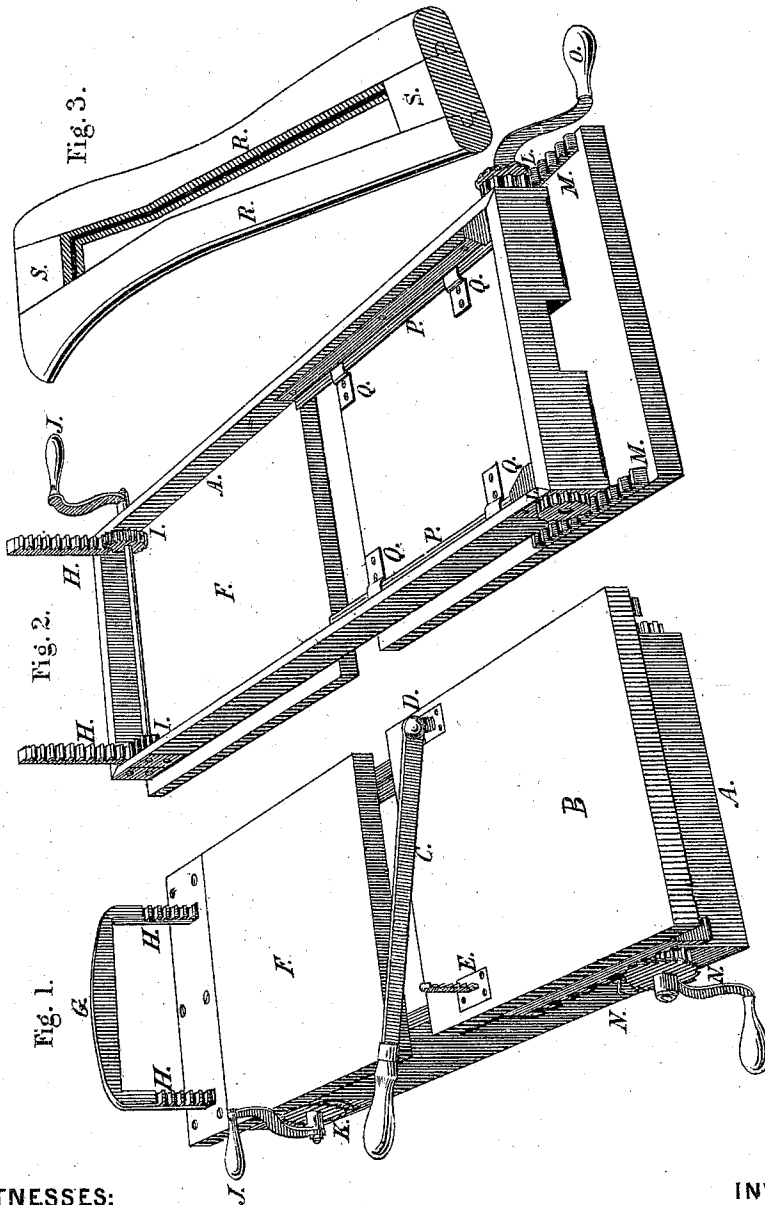


L. KALTENBACHER.
Pantaloons Stretchers.

No. 142,025.

Patented August 19, 1873.



WITNESSES:

Will. B. Boies.
John W. Henshaw

INVENTOR:

Louis Kaltenbacher
by J. P. Herriott
Attorney

UNITED STATES PATENT OFFICE.

LOUIS KALTENBACHER, OF LOUISVILLE, KENTUCKY.

IMPROVEMENT IN PANTALOO-STRETCHERS.

Specification forming part of Letters Patent No. 142,025, dated August 19, 1873; application filed June 25, 1873.

To all whom it may concern:

Be it known that I, LOUIS KALTENBACHER, of the city of Louisville, county of Jefferson and State of Kentucky, have invented a certain new and useful Improvement in Pantaloon-Stretchers, of which the following is a specification:

The first part of this my invention consists in a frame made of wood, somewhat in the form of a table without legs, the top or covering of which is made in two parts, one of which is secured permanently to the frame, while the other is provided with jaws, and slides on the inside of the frame in such a manner as to permit it to be drawn out by means of the racks on the sides, operated by cog-pinions on a small shaft passing through the end of the frame. This shaft is also provided with a crank to operate it, and a ratchet-wheel to hold it in place when in use. The movable cover is also provided with a small lever extending across the top, near the inner end, hinged to a pin or knob inserted in the cover by means of a screw, in order to adjust the lever to suit the thickness of the article to be placed under it to be held down, and is kept in its place, when down, by a ratchet-catch near the handle, as shown in the drawings. The stationary part of the frame-top has a stirrup or clamp, the legs of which pass down through the inner corners of the frame, and are made sufficiently flat one way to admit of cogs or teeth being cut in the edges to answer as racks to operate it, which is done by means of pinions on a small shaft passing through the end of the frame, operated by a crank on the outside, and is held in position by a ratchet and catch for the purpose. The above-named stirrup is bent square at the corners, but the part forming the top or cross-bar is made slightly circular on the top, but straight on the under side, where it rests on the article to be held, and may be made as described; or screws may be substituted for the racks, and operated by thumb-nuts on the top of the cross-bar; the above being a description of the device used for stretching the articles, while the second part of my invention consists in a device for forming or shaping the legs, which is made of two flat pieces of wood of sufficient thickness and length to suit the legs, with the outside edges cut out or formed in

such a manner as to suit the desired shape, while the inner edges are tapered from the center to the ends, with a deep groove cut in them to receive the ends of the cross-pieces, which constitute the wedges by which they are expanded when in use, which is done by forcing them up toward the center. The object of this my invention is to provide a neat, cheap, and durable device for the purpose of stretching and shaping the legs of pantaloons after being scoured, while they are yet wet and in a condition to be formed; for it is generally known that all woolen articles will contract more or less in the process of scouring, and will remain so if no means are used to restore them to their former condition, which would render them almost useless; but by the use of my invention all this difficulty is obviated by simply securing the end of the legs under the clamp and lever on the top of the table and turning the crank at the corner, when they can be stretched as desired, after which they are taken out and the shapers placed in the legs and held under the clamp until expanded, so as to suit the form required, after which they are permitted to dry on the formers or shapers, and when taken off they will retain their shape, which is a great advantage over hand-work or any other means now in use for the same purpose, especially in the saving of labor and a large percentage in cost, and the superior quality of the work when finished.

Figure 1 is a perspective view of the device, showing the lever and clamp-stirrup on the top. Fig. 2 is a perspective view of the under side, showing the racks and pinions by which the several devices are operated. Fig. 3 is a view of the shapers, showing their general construction.

In the drawing, A is the frame of the table, which is made of wood, and in form as shown in the drawings. B is the sliding part of the top or cover, which is kept in its place by slides and jaws, so as to be drawn out in order to stretch the article placed on it. C is a lever for holding down the end of the pantaloons-legs preparatory to stretching them. D is the knob or pin to which the lever is attached. This knob is secured to the table by means of a screw in such a manner as to be

easily raised or lowered to suit the thickness of the article placed under the lever. E is the ratchet-catch by which the lever is held down, which is still held more firmly when the pressure comes upon it. F is the stationary part of the table-top. G is a clamp-stirrup for holding the large end of the pantaloons-legs. This stirrup is made in form as shown in the drawings, and is closed down on the article to be held by means of the racks H H and pinions I I under the cover. J is the crank by which these pinions are operated. K is the ratchet and catch by which it is held when set, or the clamp is closed down. L L are the pinions, and M M the racks, by which the sliding part of the cover is operated. N N is the catch and ratchet by which the clamp is held down while the article is being stretched. O is the crank for operating the device. P P are the slides on the loose cover. Q Q are the jaws by which the cover is held in its place. R R are the parallel bars of the device for shaping the legs after being stretched. These bars are made of wood and in form as shown in the drawing, with the inner edges tapered from the center to the ends, and a groove cut in them to receive the end of the expansion-wedges to hold them in place. S S are these expansion-wedges or cross-pieces, which are made to slide in between the bars to expand them in shaping the article, which is done by

placing them within the legs and securing them under the clamp, while the expansion-wedges are forced up until the desired shape is attained, when they are set aside to dry on the formers, so that when taken off they will still retain their shape.

Having thus fully described the drawings, what I claim as new, and desire to secure by Letters Patent, is—

1. The combination of the several devices hereinbefore described for stretching the legs of pantaloons, consisting of the table-frame A with its sliding top B, lever C, knob-screw D, and catch E, stationary top F with its clamp G, racks H H, pinions I I, and crank J with the ratchet and catch K, pinions L L, and racks M M for operating the sliding cover, with the ratchet and catch N N and crank O, and the slides P P and jaws Q Q, when constructed and arranged to operate substantially as and for the purpose set forth.

2. The combination of the devices for shaping the legs, as hereinbefore described, consisting of the grooved bars R R and expansion-wedges S S, when constructed and arranged to operate substantially as and for the purpose hereinbefore set forth.

LOUIS KALTENBACHER.

Witnesses:

WILL. B. BOIES,
JOHN W. HENDRICKS.