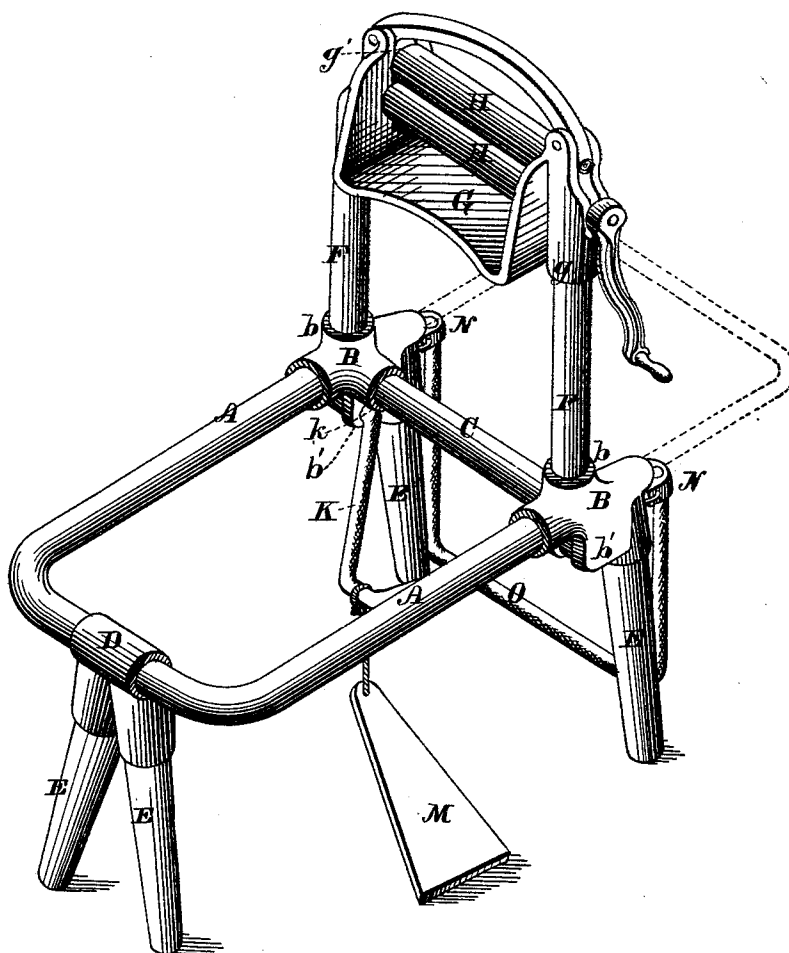


R. H. St. JOHN.
WRINGER.

No. 175,197.

Patented March 21, 1876.

Fig. 1.



WITNESSES:
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John R. Young

INVENTOR:
R. H. St. John, by
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Fig. 2.

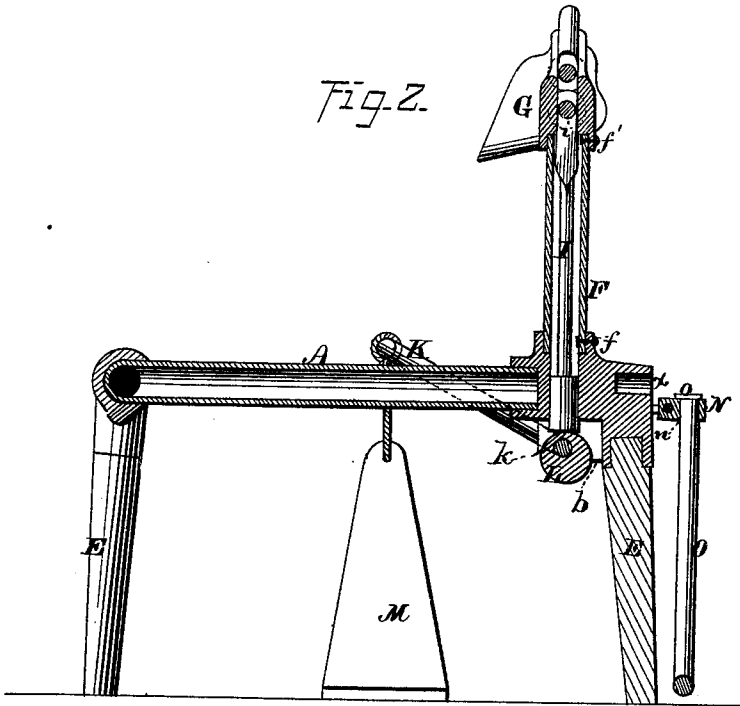
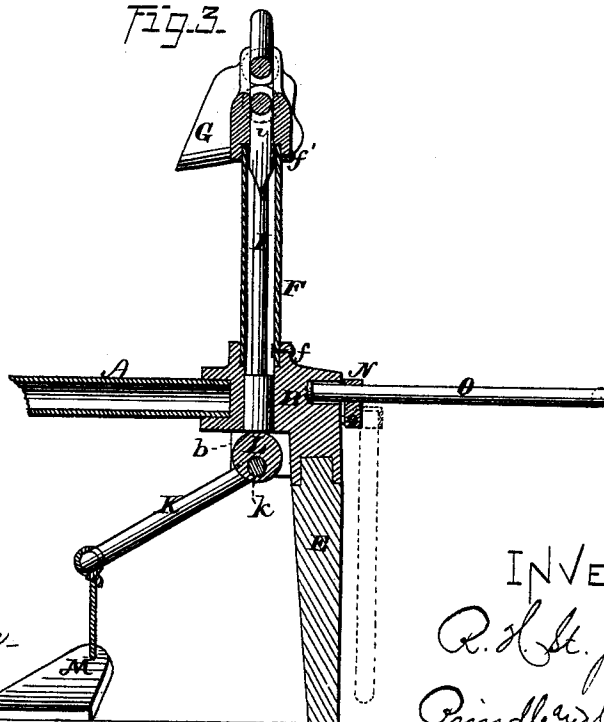


Fig. 3.



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UNITED STATES PATENT OFFICE.

ROSWELL H. ST. JOHN, OF BELLEFONTAINE, ASSIGNOR TO ST. JOHN
SEWING-MACHINE COMPANY, OF SPRINGFIELD, OHIO.

IMPROVEMENT IN WRINGERS.

Specification forming part of Letters Patent No. **175,197**, dated March 21, 1876; application filed
December 1, 1875.

To all whom it may concern:

Be it known that I, ROSWELL H. ST. JOHN, of Bellefontaine, in the county of Logan and in the State of Ohio, have invented certain new and useful Improvements in Wringers; and do hereby declare that the following is a full, clear, and exact description thereof, reference being had to the accompanying drawings, making a part of this specification, in which—

Figure 1 is a perspective view of my improved device, the full lines showing the folding table dropped downward, and the dotted lines as raised for use. Fig. 2 is a vertical longitudinal section of the same through the centers of one of the side rails and standards, said table being dropped and the compression-levers raised, so as to permit of the separation of the rollers; and Fig. 3 is a like view of the same, said table being raised and secured in horizontal position, and said levers being depressed so as to compress said rollers.

Letters of like name and kind refer to like parts in each of the figures.

The design of my invention is to increase the efficiency and ease of operation of a wringer and wash-bench; and to this end it consists, principally, in the means employed for compressing the wringer-rollers, substantially as and for the purpose hereinafter specified. It consists, further, in an extension-table secured to or upon the front end of the wash-bench, and capable of being raised to and secured in a horizontal position, or of being turned downward to a vertical position, substantially as and for the purpose hereinafter shown. It consists, finally, in the means employed for securing together the standards and couplings, substantially as and for the purpose hereinafter set forth.

In the annexed drawings, A and A represent the side rails of my wash-bench, which, at their forward ends, are secured within cast-metal couplings B and B, and the latter connected together by means of a cross-rail, C, while at their rear ends said side rails curve inward, and are united by means of a third coupling, D. From suitable sockets formed upon the lower sides of the couplings B, B, and D, suitable legs E and E extend down-

ward and slightly outward, and furnish the necessary support for the bench. Upon the upper side of each coupling B is formed a socket, *b*, which receives the lower end of a hollow standard, F, said standard being secured in place by means of one or more rivets, *f*, that pass through the same and through said socket. At their upper ends the standards F and F fit into corresponding sockets *g* and *g*, that are formed within the ends of a combined roller-frame and drip-trough, G, where said ends are secured in place by means of one or more rivets, *f'*, which pass inward through said parts. Within suitable vertical slots *g'* and *g'* in the roller-frame G are contained the journals of two pressure-rollers, H and H, which slots have such length as to enable said rollers to be separated to the necessary distance to enable any desired article of clothing to be passed between. The journals of the upper roller have bearings at the upper ends of said slots, while the journals of the lower roller rest upon the concaved ends *i* and *i* of two rods, I and I, that are contained within the interior of the standards F and F, and are capable of vertical motion therein. In order that the rods I and I may be moved vertically when it is desired to force the rollers H and H together, a V-shaped lever, K, having its ends *k* and *k* turned outward in a line with each other, is pivoted within suitable lugs *b'* and *b'*, that are formed upon the lower side of each coupling B. Between each pair of lugs *b'* and *b'* an eccentric, L, is secured upon the corresponding end *k* of the lever K, and receives the lower end of the rod I, said rod and the lower roller H being thus supported upon or by said eccentric. The eccentrics L and L are so adjusted upon the lever K as to cause the lower roller H to be at its lowest point when said lever is raised to the position shown in Fig. 2, while by depressing the free end of said lever said roller will be raised in a corresponding degree.

By dividing the lever K at its rear end and connecting the parts at that point by a loose or toggle joint, the downward pressure of the treadle M, employed for operating said lever, will be so transmitted to the lower roller as to cause the latter to yield at either end when-

ever a greater thickness of cloth is passed between the same and the upper roller than is passed between the opposite ends of the same.

Hinged to or upon the front end of each coupling B is a block, N, which may be caused to occupy a horizontal or a vertical position, as shown in Figs. 3 and 2, respectively. Within the blocks N is provided an opening, *n*, that receives and loosely contains one end of a U-shaped rod, O, which end is provided with a head, *o*, that prevents its withdrawal therefrom. An opening, *x*, corresponding in size and shape to the like features of the head *o*, is provided in the coupling B, and, when the block N is turned upward to the position shown in Fig. 3, permits said head and the end of the rod O to be passed inward to the position shown in said figure, in which position said rod forms a supplemental table, and is capable of supporting a tub of water or basket of wet clothing.

By withdrawing the ends of the table O from the couplings B and B said table may be dropped to the position shown in Fig. 2, where it will occupy no available space.

The advantages obtained by this construction are, first, by hinging the supplemental table, instead of causing it to be inclosed within the side rails, when not in use, as has heretofore been done, the bars employed for raising the lower roller can be made with less expense, as no openings are required for the passage of said table ends through said bars. Second, the means employed for connecting together the standards and couplings is much less expensive and quite as durable as that heretofore used—viz., by threading the exterior of the standard and the interior of the opening within the coupling, and screwing the same together. Third, the means employed for pressing together the rollers is more du-

rable and efficient than are levers alone, the force exerted upon said rollers being constant at all points, while in the use of levers alone the force is greatest when said levers are horizontal, and decreases as they pass beyond such point.

Having thus fully set forth the nature and merits of my invention, what I claim as new is—

1. In combination with the wringer-rollers H and H, rods I and I, and with the wringer-frame, the pivoted lever K *k k* and eccentrics L and L, said parts being arranged to operate in the manner and for the purpose substantially as specified.

2. In combination with the combined wringer-frame and wash-bench, the supplemental table O, attached to or upon one end of the same, and rendered capable of being raised to and secured in a horizontal position, or of being turned downward to a vertical position, by means of the blocks N and N, each of which is provided with an opening, *n*, for the reception of one end of said table, and is hinged to or upon the coupling B in front of and below the opening *x* within the latter, substantially as and for the purpose shown.

3. In combination with the couplings B and B, provided with the sockets *b* and *b*, the standards F and F, fitted within said sockets, and secured in place by means of the rivets *f* and *f*, substantially as and for the purpose set forth.

In testimony that I claim the foregoing I have hereunto set my hand this 23d day of August, 1875.

ROSWELL H. ST. JOHN.

Witnesses:

BRICE MOFFAT,
T. H. SMITH.