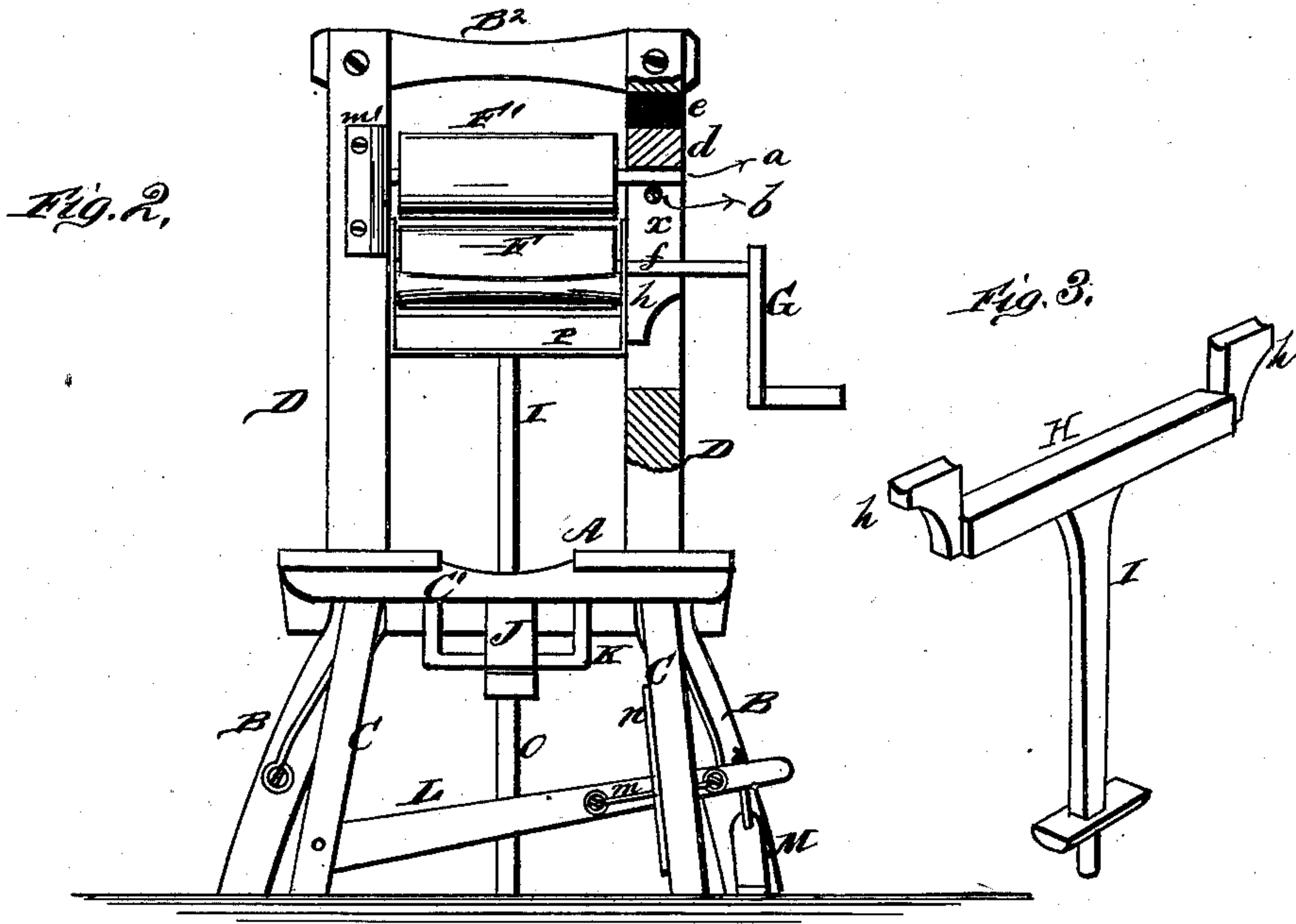
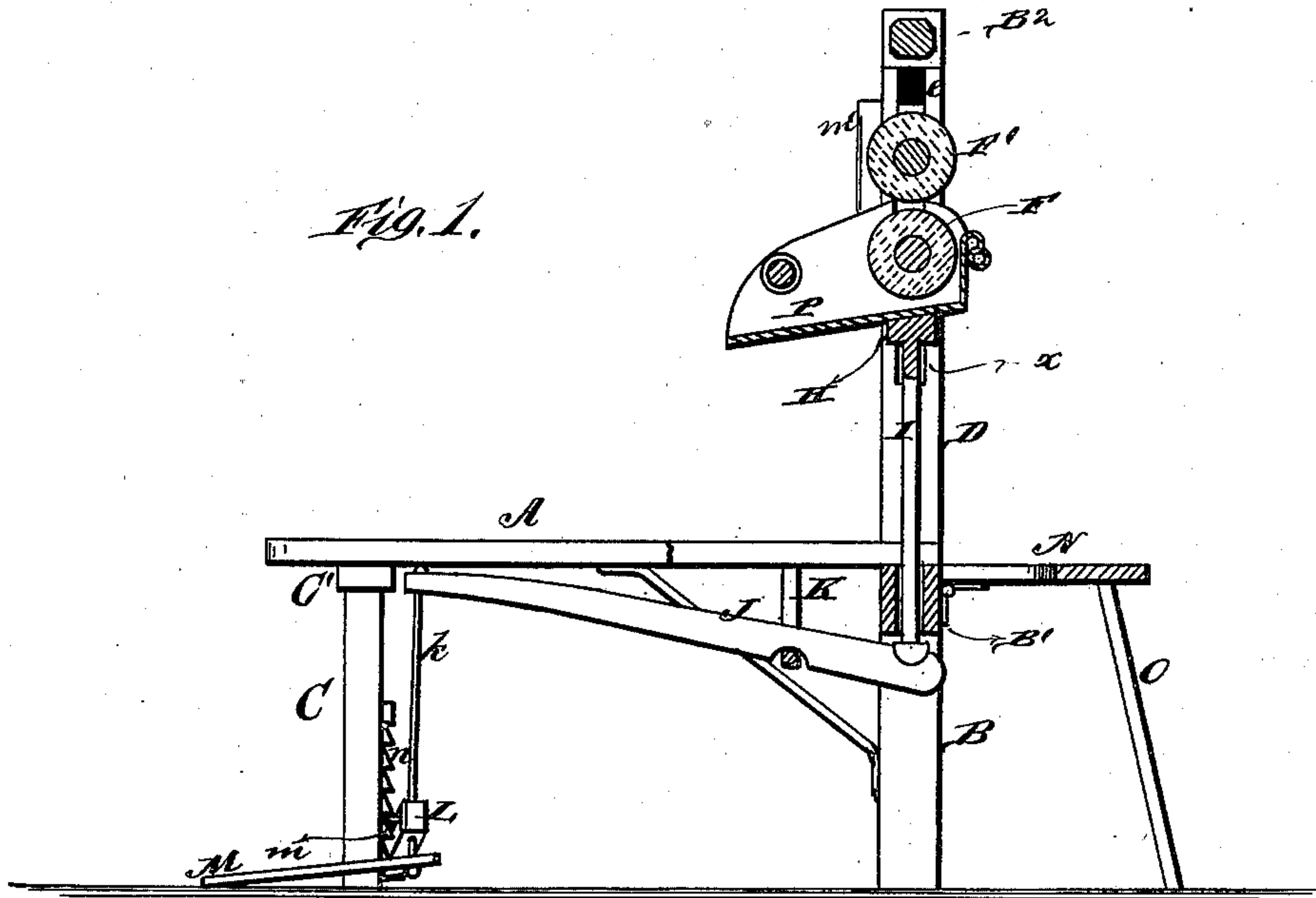


C. B. CAMP & N. GARDNER.
Clothes-Wringer.

No. 203,116.

Patented April 30, 1878.



WITNESSES

Phil. Enright
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INVENTORS.

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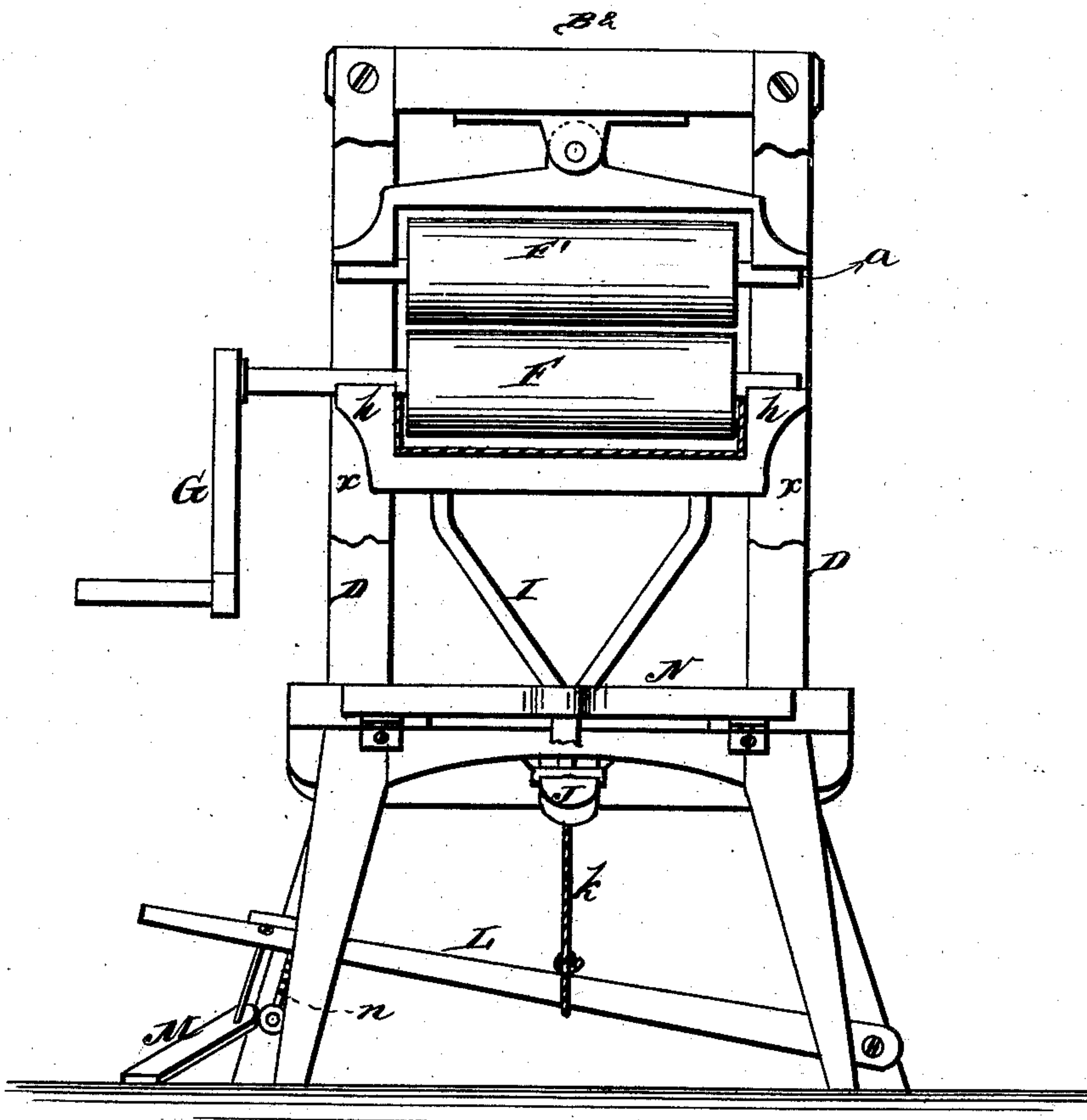
ATTORNEYS.

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Fig. 4.



WITNESSES

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UNITED STATES PATENT OFFICE.

CHARLES B. CAMP AND NATHANIEL GARDNER, OF WHITE PIGEON, MICH.

IMPROVEMENT IN CLOTHES-WRINGERS.

Specification forming part of Letters Patent No. 203,116, dated April 30, 1878; application filed January 26, 1878.

To all whom it may concern:

Be it known that we, CHARLES B. CAMP and NATHANIEL GARDNER, of White Pigeon, in the county of St. Joseph and State of Michigan, have invented a new and valuable Improvement in Clothes-Wringers; and we do hereby declare that the following is a full, clear, and exact description of the construction and operation of the same, reference being had to the annexed drawings, making a part of this specification, and to the letters and figures of reference marked thereon.

Figure 1 of the drawings is a representation of a part sectional side view of our clothes-wringer, and Fig. 2 is a part sectional rear-end view of the same. Fig. 3 is a perspective view of the cross-bar. Fig. 4 is a front-end view of the modification.

The nature of our invention consists in the construction and arrangement of a clothes-wringer, as will be hereinafter more fully set forth, and pointed out in the claims.

The annexed drawing, to which reference is made, fully illustrates our invention.

A represents a bench, supported upon cross-bars B^1 and C' , attached to the front and rear legs $B B$ and $C C$, respectively. The front legs $B B$ are bent substantially in the form shown, and extended upward, parallel, above the bench, and their upper ends connected by a cross-bar, B^2 . The upper parallel portions of the legs $B B$ form the standards $D D$, between which the wringer-rollers F and F' are located, the journals of said rollers passing into slots $x x$ in said standards $D D$. The journals $a a$ of the upper roller F' rest upon stops $b b$ when the machine is not in use. Above each journal a is a block or bearing, d , with a rubber spring, e , interposed between it and the top cross-bar B^2 . In the operation of the machine these rubber blocks e allow either end of the upper roller to rise, to accommodate any unevenness in the thickness of the clothes, so that the thin portion of the garment will be squeezed equally as much as the thicker portions. This may be accomplished also by an equalizing-bar, pivoted in the center to the under side of the cross-bar B^2 , and its ends resting upon the boxes $d d$, or upon the journals $a a$, as shown in Fig. 4.

The journals $f f$ of the lower roller F also

pass into the slots $x x$, and one of said journals is extended beyond the standard and provided with a crank, G . This lower roller is supported by its journals resting upon arms $h h$, extending into the slots $x x$ from a cross-bar, H , from which a bar, I , projects vertically downward. The cross-bar H also serves as a support for the drip-pan P .

J represents a lever, hung upon a bail, K , below the table, and one end of said lever supporting the lower end of the bar I . The other end of the lever J is, by a strap, k , connected to a lever, L , which is pivoted to one of the rear legs C , and provided with a projection, m , to engage with a ratchet, n , on the other leg C .

It will thus be seen that the tension is upon the lower roller, and by means of the double leverage, as described, we obtain more purchase than can be obtained in wringers where the tension is applied on the upper roller.

In place of the pressure-bar H , with its arms $h h$, we may simply form the rod or bar I with a fork, having its two prongs extending into the slots $x x$ and supporting the lower roller-journals f .

A treadle, M , may be connected to the lever L , and thus the lower roller F made to rise and fall to suit the different thicknesses of clothes. By means of the ratchet, as described, the upper roller is held steady.

To the front sides of the legs B is hinged a rack, N , supported by a leg, O , for holding a basket or other receptacle to receive the clothes after they pass through the wringer. The tub, with the clothes, is to be placed on the table A .

P is a spout, attached to the standards $D D$, for conducting the water back into the tub. $m' m'$ are guards, attached to the standards, for preventing the clothes from getting in at the ends of the rollers.

We are fully aware that wringing-machines in which the tension is applied to the lower roller is not new, and we do not broadly claim such as our invention.

What we claim as new, and desire to secure by Letters Patent, is—

1. The cross-bar H , provided with arms $h h$, extending into slots $x x$ of the frame, and pendent bar I or its equivalent, in combina-

tion with the suspended lever J and lower roller F, substantially as and for the purpose explained.

2. The combination, with a pair of wringing-rollers, of the lever J, hung upon bail K, attached to frame A with strap *k*, connected to the lever L, having projection *m*, and the leg C, with ratchet *n*, as described.

In testimony that we claim the above we have hereunto subscribed our names in the presence of two witnesses.

CHARLES BARTON CAMP.
NATHANIEL GARDNER.

Witnesses:

BION N. GARDNER,
GEO. G. DE PUY.