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A. PAINE.

Improvement in Wringing and Mangling Machines.

No. 122,735.

Patented Jan. 16, 1872.

Fig. 1.

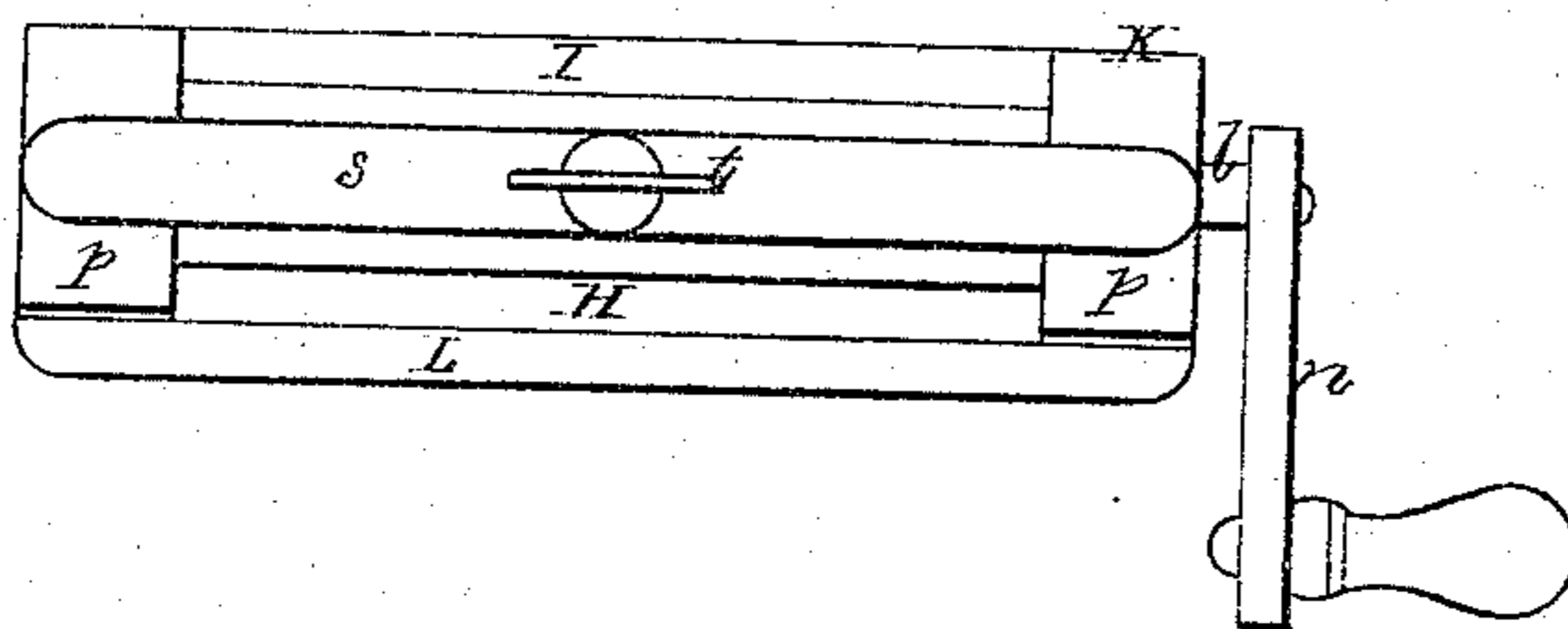


Fig. 2.

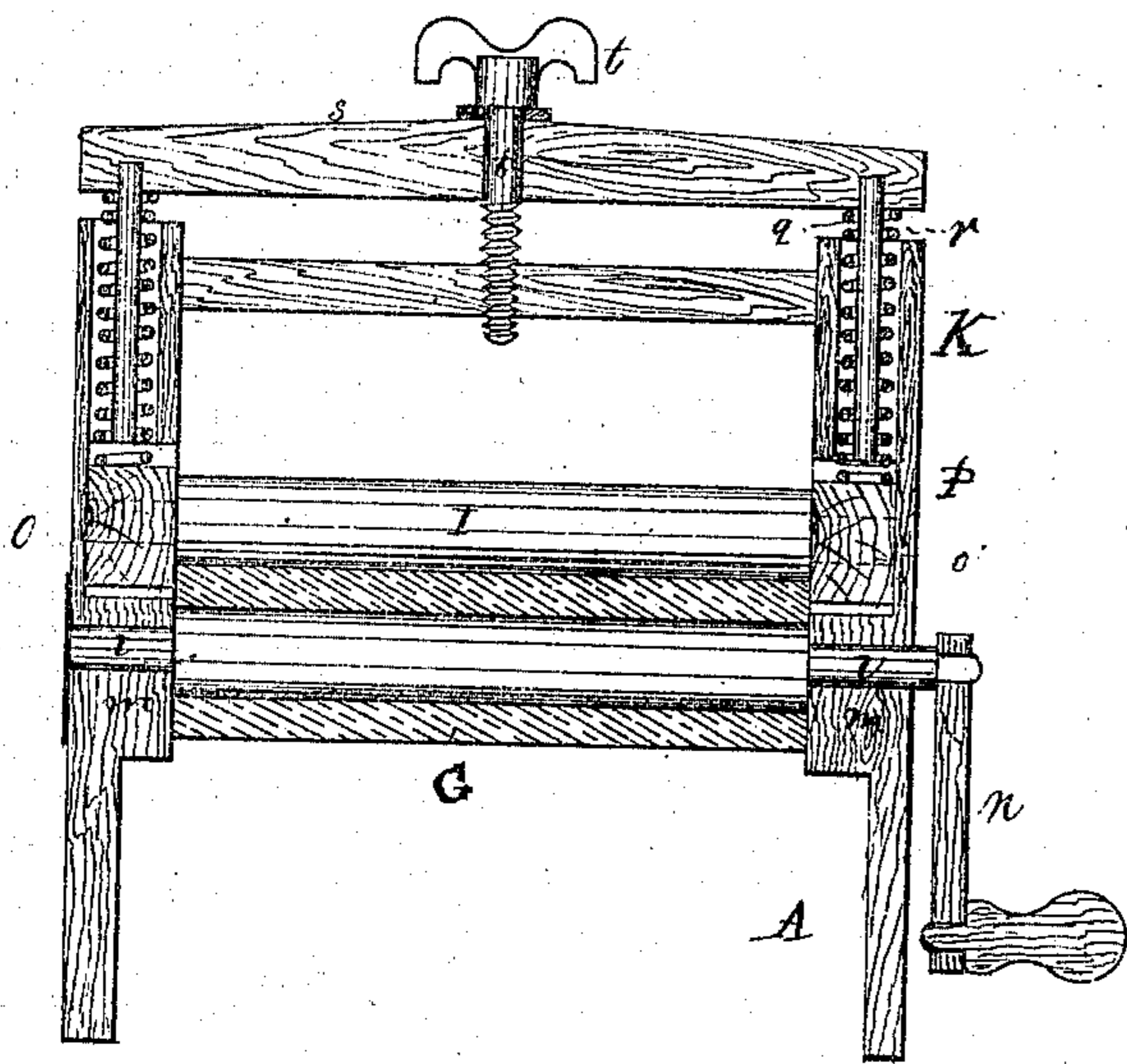
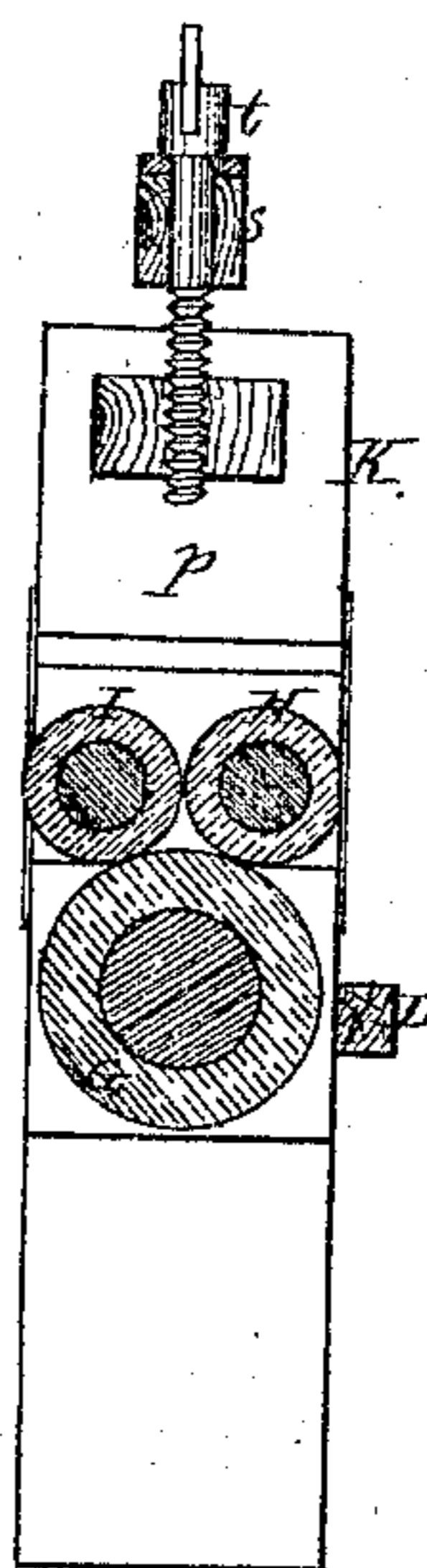


Fig. 3.



Witnesses.

S. N. Piper

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by his attorney.

R. H. Lindy

UNITED STATES PATENT OFFICE.

ARA PAINE, OF BURRILLVILLE, RHODE ISLAND.

IMPROVEMENT IN WRINGING AND MANGLING MACHINES.

Specification forming part of Letters Patent No. 122,735, dated January 16, 1872.

To all persons to whom these presents may come:

Be it known that I, ARA PAINE, of Burrillville, of the county of Providence, of the State of Rhode Island, have invented a new and useful Machine for Wringing and Mangling Clothes; and do hereby declare the same to be fully described in the following specification and represented in the accompanying drawing, of which—

Figure 1 is a top view. Fig. 2 is a longitudinal section, and Fig. 3 a transverse section of it.

The purpose of my invention is to effect the wringing or squeezing of water from an article of clothing or otherwise after being washed, and also to mangle or smooth it, my apparatus, like a common wringer or squeezer, being for use generally with a wash-tub or machine. The nature of my invention consists in three elastic rollers, arranged and combined together, and with their boxes, carrying-frame, and pressure mechanism, and a support-bar, all substantially as hereinafter described.

In the said drawing there is shown the wringing or squeezing and mangling rollers G H I, each of which is what is termed an India-rubber roller, formed of a tube of rubber, fixed on a shaft, they being of the character of the roller of ordinary "wringing-machines" or "wringers." The lower or largest roller G has its shaft *l* supported on bearings *m m* and provided with a crank, *u*, all being as shown. Both of the other rollers have their journals supported in boxes *o o*, movable vertically within the posts *p p* of a frame, K, which, when the machine is in use, may be erected on a wash-tub or the tub of a washing-machine, or may be otherwise properly arranged to receive the clothes or articles to be deprived of water and mangled or smoothed. To their boxes pressure-springs *q q* are applied, they being arranged on the frame K and upon rods *r r* projecting down from a cross-bar, *s*, provided with a regulating-screw, *t*, adapted to the frame K in manner as the screw *h* is to the bar *k*. In rear of the roller G, and close to it, is a horizontal cross-bar, L, the purpose

of it being to support the clothes and facilitate their introduction between the squeeze-rollers, as well as to prevent them from being carried underneath the roller G while it may be in the act of being turned backward.

After an article may have been washed, and while it may be in a wet state, it is to be raised upon the bar L and introduced between the roller G and the rearmost of the two rollers H I. The crank of the shaft of the roller G being revolved forward will cause the article to be drawn between the rollers G and the roller H, (the rearmost of the two rollers H I,) whereby, by the conjoint action of such rollers, the liquid in the cloth or article will be expressed from it and will fall into the tub. The cloth or article on leaving the bite of the rollers G and H will pass into that of the rollers G and I, and after going between such rollers will be delivered from the machine.

The roller I is the "mangling" or smoothing roller. As it operates on the cloth or article with a pressure corresponding to that which such article may have had from the roller H, it will be seen that it can have little or no material effect in depriving the cloth or article of liquid, but performs the office of smoothing it. In case of a wrinkle appearing in the cloth as it may pass from the mangling-roller, we have only to turn back the crank so as to force back the cloth from between the rollers. The wrinkle may next be removed by hand. Generally speaking, it will only be necessary to force the cloth back a short distance, as the roller H, by its operation with the roller G, will take out the wrinkle.

In the above-described machine, I claim as my invention as follows:

The three elastic rollers G H I, arranged and combined together and with their boxes *o o*, carrying-frame K, and pressure mechanism, and support-bar L, all substantially as described.

ARA PAINE.

Witnesses:

R. H. EDDY,
J. R. SNOW.

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