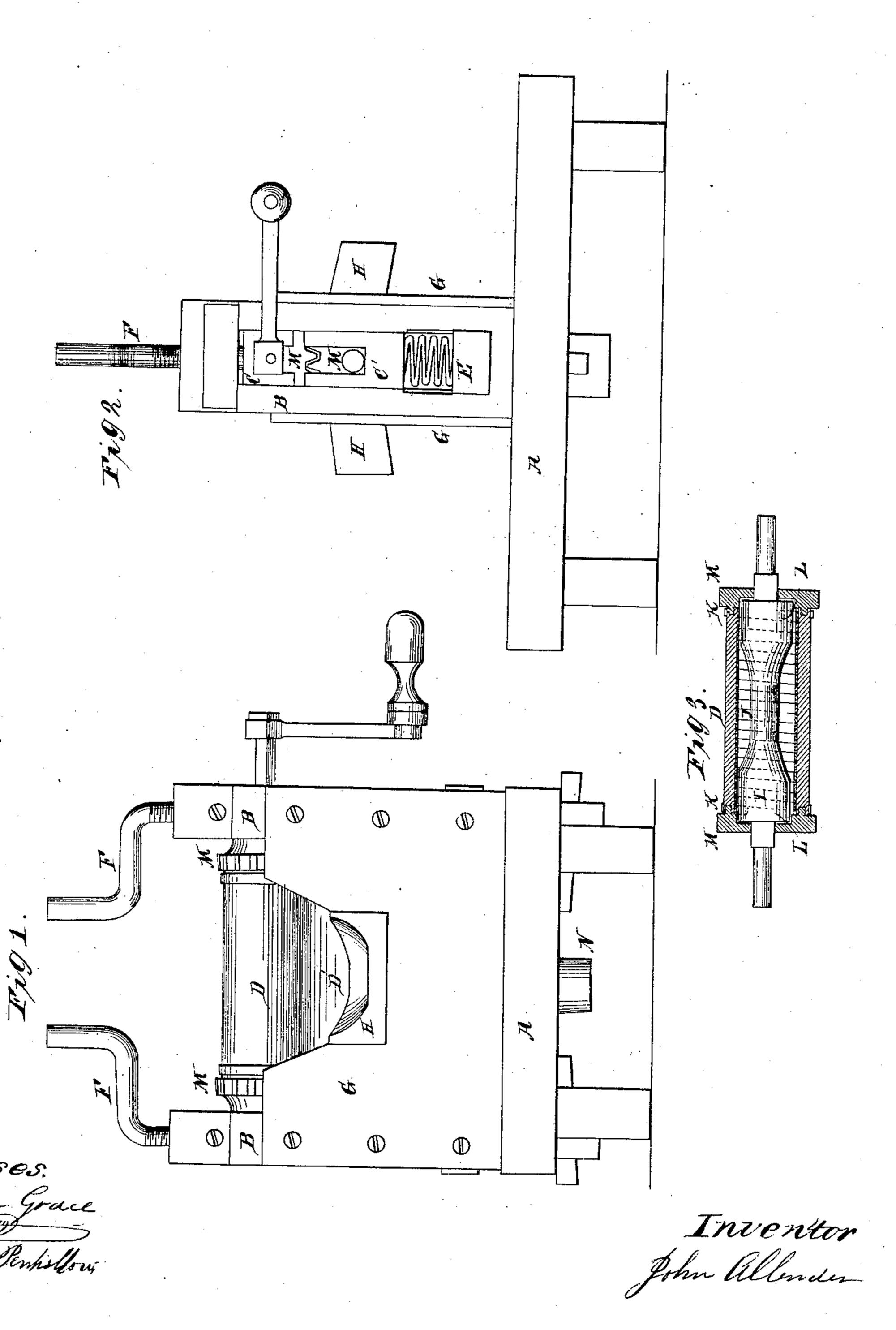
J. Allender, Wringer. Patented Jan.11. 1859.

Nº22,539.



N PETERS, PHOTO-LITHOGRAPHER, WASHINGTON, D. C.

## UNITED STATES PATENT OFFICE.

JOHN ALLENDER, OF NEW LONDON, CONNECTICUT.

ROLLER FOR EXPRESSING WATER FROM CLOTHES.

Specification forming part of Letters Patent No. 22,539, dated January 11, 1859; Reissued February 9, 1875, in two Divisions, Nos. 6,288 and 6,289.

To all whom it may concern:

Be it known that I, John Allender, of the city and county of New London and State of Connecticut, have invented a new 5 and useful Roller for Squeezing the Water, Dyeing Liquor, &c., from Cloth, Clothes, etc.; and I do hereby declare that the same is described and represented in the following specification and drawings.

To enable others skilled in the art to make and use my invention I will proceed to describe its construction and use, referring to the drawings in which the same letters indicate like parts in each of the figures.

Figure 1, is a front elevation of a pair of squeezers with my new rollers. Fig. 2, is a side elevation of the same. Fig. 3, a section of my new roller.

The nature of my invention consists in a roller made of a spirally coiled spring, arranged on a shaft or roller made smallest in the middle, to allow the spring to yield, which spring is covered with india rubber, or some flexible material, that will yield or bend readily to the cloth, clothes or other articles being squeezed by the rollers.

In the accompanying drawing A, is the base of the frame of the squeezing rollers, to which the standards B, B, are fastened. In <sup>30</sup> each of these standards there is a long slot, in which the boxes C, of the top roller D, and the boxes C', of the bottom roller D', are fitted to traverse; the boxes C', being pressed upward by the spiral springs E placed be-35 tween the bottom of the slot and the box as shown in Fig. 2. The screws F, F, act against the top boxes C, to press the rollers together and press them down and press the boxes C' against the springs E, to produce 40 the required pressure between the rollers for the cloth or clothes to be squeezed. The standards B, B, are boarded up on each side of the rollers as shown in Fig. 1, at G, and a guide H, is fastened to the boarding G, to 45 guide the cloth or clothes between the rollers.

The rollers D, D', consist of a shaft or

central roller I, made smaller in the middle as shown in Fig. 3. This shaft is surrounded by a flat metal spring coiled spirally, so as to form a cylinder J, of a uni- 50 form diameter from end to end around the roller or shaft I, and fitting it at each end as shown in section Fig. 3. Around this spring cylinder J, there is a cylindrical covering D, made of india rubber or some flexible ma- 55 terial that will yield or bend readily as the spring cylinder inside of it yields to the pressure of the cloth or clothes passing between the rollers. This india rubber covering is surrounded with a thin hoop K, at 60 each end, and is pierced by several spurs L, L, on the gears M, M, which are firmly fastened to the shaft I, to make both the rollers turn together as the cloth or clothes being squeezed pass between them; and the 65 water squeezed from the cloth runs from the under roller between the boards G, G, onto the base A, and through the spout N, away from the machine. The central roller I, being made smaller in the middle allows the 70 coiled spring cylinder to yield, to the varying thicknesses of cloth or clothes passing between the rollers.

I believe I have described and represented the yielding roller which I have invented so 75 as to enable any person skilled in the art to make and use it. I will now state what I desire to secure by Letters Patent, to wit:

I claim—

A roller consisting of a spirally coiled so spring, arranged on a shaft or roller made smallest in the middle (to allow the spring to yield), covered with india rubber or some flexible material, that will yield or bend readily, as the spring yields to the cloth, 85 clothes or other article being squeezed by the rollers.

JOHN ALLENDER.

Witnesses:

John Grace, John R. Penhallow.

[First Printed 1911.]