

W. B. LEACHMAN.  
HYDRAULIC CLOTH-PRESSER.

No. 185,765.

Patented Dec. 26, 1876.

Fig. 1.

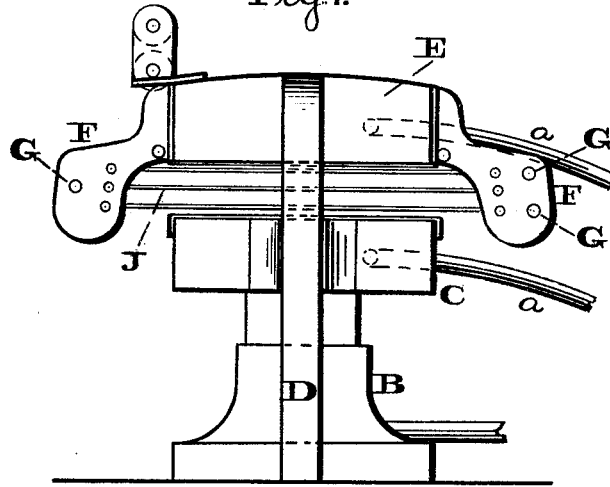


Fig. 2.

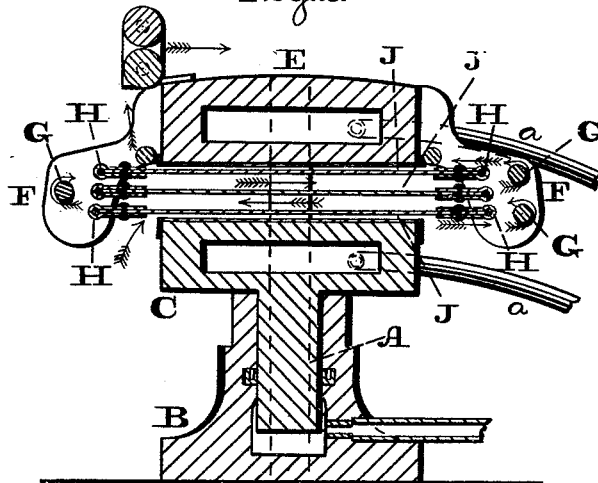
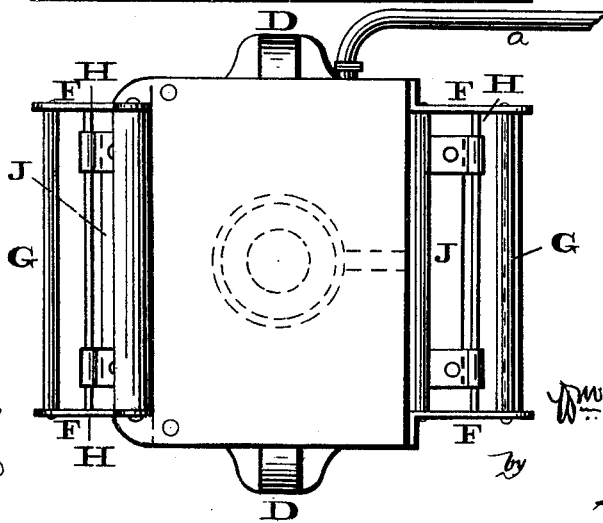


Fig. 3.



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# UNITED STATES PATENT OFFICE

WILLIAM B. LEACHMAN, OF LEEDS, ENGLAND.

## IMPROVEMENT IN HYDRAULIC CLOTH-PRESSERS.

Specification forming part of Letters Patent No. **185,765**, dated December 26, 1876; application filed July 10, 1876.

*To all whom it may concern:*

Be it known that I, WILLIAM B. LEACHMAN, of Leeds, in the county of Yorkshire, England, have invented a new and useful Improvement in Hydraulic Cloth-Pressers; and I do hereby declare the following to be a clear and exact description of the nature thereof, sufficient to enable others skilled in the art to which my invention appertains to fully understand, make, and use the same, reference being had to the accompanying drawings, making part of this specification, in which—

Figure 1 is a side view of the presser embodying my invention. Fig. 2 is a central longitudinal vertical section thereof. Fig. 3 is a top or plan view thereof.

Similar letters of reference indicate corresponding parts in the several figures.

My invention consists of a platen operated by a hydraulic ram and a stationary platen, between which platens are interposed one or more pieces of paper or other suitable sheet material, whereby the cloth passed between the sheets will receive a smooth surface, is only partly deprived of its natural moisture, and preserves a large proportion of the weight it possesses in its unfinished state, and it may be re-pressed.

It also consists of elastic cords for supporting the sheet or sheets between the platens, whereby said sheet or sheets will be permitted to yield to conform to the thickness of the cloth or the motion thereof due to the ascent of the lower platen.

Referring to the drawings, A represents a ram, which is fitted in a base, B, to which water will be admitted in any well-known or proper manner, so as to elevate the ram.

To the upper end of the ram there is secured a hollow platen, C, and from the base of the apparatus or other suitable place there rise uprights D, whose upper ends support a hollow platen, E, which is located above the platen C.

Steam will be admitted to one or both of the two platens for purposes of heating the same by means of pipes *a* or other suitable devices.

To the sides of the stationary platen E

there are secured brackets F, to which are journaled transversely-extending rollers G, and adjacent to said rollers there are secured transversely-extending elastic cords H, which have connected to them sheets or pieces J, of paper or other strong material, which sheets are arranged horizontally between the platens C E, and separated from each other and from the platen, so that cloth may be passed between them, the rollers G being located relatively to the sheets and corresponding in number thereto.

The working-faces of the platens C E will be covered with material of a nature similar to the sheets J.

The cloth is passed between the lower platen and the bottom sheet; then around a roller, and between the first and second sheets from the bottom; then around the roller on the opposite side, and through the next sheets, and so on throughout the apparatus. Water is now admitted to the base B, so as to elevate the ram A and platen C, and the cloth will be pressed.

It will be seen that the sheets will impart a smooth surface to the cloth without depriving the latter entirely of its natural moisture, whereby the cloth preserves a large proportion of the weight it possessed prior to pressing or in its unfinished state.

It will also be seen that the elastic cords H yield to permit the sheets to conform to thickness of the cloth or the upward motion thereof due to the elevation of the lower platen.

For finishing linens, prints, and some other goods, the sheets J will be made of tin, zinc, or other non-corrosive metal.

For pressing stuffs, Italian cloth, silks, and similar fabrics or goods, the lower platen only will be heated and the upper platen will be cool, and it is employed as a finisher, since such fabrics or goods required both hot and cold pressing.

It will also be seen that the length of cloth may be passed along between the platens and sheet or sheets, so as to be re-pressed, and also remove creases previously formed in pressing.

Having thus described my invention, what

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

1. The hollow platens C E, in combination with the sheet piece or pieces J and rollers G, substantially as and for the purpose set forth.

2. The platens C E, in combination with

the piece or pieces J and the elastic supports H, substantially as and for the purpose set forth.

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