

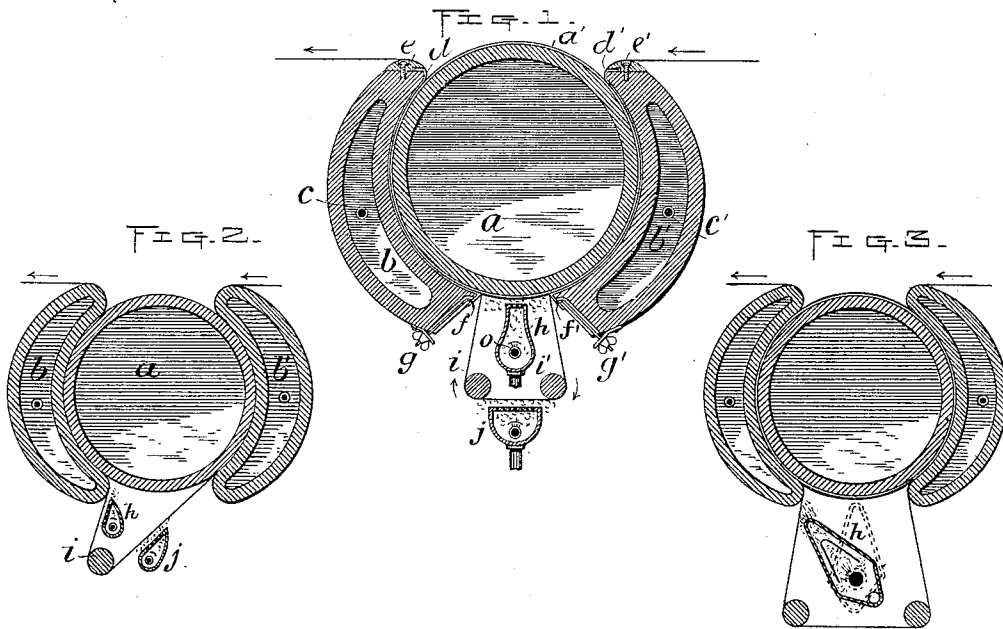
(No Model.)

D. GESSNER.

MACHINE FOR PRESSING CLOTH.

No. 388,127.

Patented Aug. 21, 1888.



Witnesses;  
*Geo. Wadman*  
*Fred Kemper*

Inventor;  
*Dana Gessner.*  
By *Lifford & Brown* Attys.

# UNITED STATES PATENT OFFICE.

DAVID GESSNER, OF WORCESTER, MASSACHUSETTS.

## MACHINE FOR PRESSING CLOTH.

SPECIFICATION forming part of Letters Patent No. 388,127, dated August 21, 1888.

Application filed June 9, 1888. Serial No. 276,653. (No model.)

*To all whom it may concern:*

Be it known that I, DAVID GESSNER, of Worcester, in the State of Massachusetts, have invented a new and useful Improvement in  
5 Machines for Pressing Cloth, of which the following is a specification.

In the drawings, Figure 1 represents a cross-section of the cylinder, bed-plates, and steamer of a cloth-pressing machine illustrating my invention. Figs. 2 and 3 show the same parts  
10 with certain modifications.

In each of the figures, *a* is the cylinder. This cylinder is to be preferably covered with a woven felted jacket, *a'*, of ordinary construction. The cylinder is hollow, as shown, so  
15 as to be heated internally by steam.

I shall now describe with reference to each of the figures separately the arrangement of parts to be used in connection with this cylinder.  
20 der.

In Fig. 1, *b b'* are two bed-plates, which are hollow, so that steam may be introduced within them for heating through pipes connected with the openings *c c'*. Each of these bed-plates is  
25 furnished with a facing of polished sheet metal, *d* and *d'*, respectively, which are at the top held, respectively, by the clamps *e e'*, and at the bottom are held by the hooks *f f'*, which are adjustable by the thumb-nuts *g g'*, so that by  
30 tightening these thumb-nuts the hooks can be made to draw the sheet-metal facing snugly down onto the face of the bed-plate.

*h* is a steamer of any ordinary construction, which is so arranged as to throw steam upon  
35 the felt jacket upon the cylinder between the two bed-plates.

*i i'* are two rollers, which are arranged so as to carry the cloth around the steamer *h*, and from one bed-plate to the other.

*j* is a steamer, of any ordinary construction, which is arranged so as to throw steam upon the cloth as it is passing from one bed-plate to the other. In the operation of this construction the cloth enters between the bed-plate *b'*  
40 and the cylinder at the top, thence around the rollers *i i'*, thence between the cylinder and the bed-plate *b*, and thence out of the machine, or to some subsequent operation, if it is desired. As the cloth passes between the cylinder  
45 and the bed-plate *b'* it receives a pressure between the polished-metal facing of the bed-

plate against the back of the cloth, and the felt jacket *a'* upon the cylinder against the face of the cloth, which jacket at this time contains less moisture than when passing before the bed-plate *b*. This pressure sets the fibers of the cloth.  
55 Next, the cloth, in passing from one bed-plate to the other is steamed or moistened preferably on its back by the steamer *j*, and the felt jacket *a'* as it passes from one bed-plate to the other  
60 is steamed by the steamer *h*, so that when the cloth is submitted to pressure by the bed-plate *b* it is in a moist condition. It is subject to the moisture which itself has received from the steamer *j*, and also to the moisture applied  
65 to its face from the moistened jacket *a'*. This, while it is receiving a final pressure, livens up the colors and destroys the high gloss produced by a dry pressure, and on the face softens up the fibers into their natural condition,  
70 so as to improve the feel and appearance of the cloth. The construction just described is especially adapted for the pressing of worsteds, imitation worsteds, and fine grades of cassimeres. In the use of this arrangement for  
75 certain purposes it will sometimes be found desirable to remove the felt jacket *a'* from the cylinder, as seen in Fig. 2, and cut off, so as to render inoperative, the steamer *h*; or sometimes the felt jacket may remain and be employed  
80 without the steamer *h*. Again, sometimes the felt jacket either with or without the steamer *h* may be employed without the steamer *j*, as in Fig. 3. The steamer *h* may also be employed to moisten the face of the  
85 cloth as it passes to the bed-plate *b*. An arrangement embodying this feature is shown in Fig. 2, where the cloth passes directly from the bed-plate *b'* around the roller *i*, and thence upward, being steamed on its face by the  
90 steamer *h*.

In lieu of either of the steamers shown, of course, a moistened roll might be employed, which is a well-known equivalent of a steamer for moistening fabrics. Such a roll is illustrated in my application, numbered 258,998,  
95 filed December 27, 1887.

In order to facilitate the adjustment of the machine to various operations, including that indicated in Fig. 2, as well as in Fig. 1, the  
100 steamer *h* may be, as shown in Fig. 3, pivoted upon its steam-supply pipe *o*, so as to be

swung either into the position shown in full lines in Fig. 3 or the position shown in dotted lines. In the second instance it would throw steam upon the felt jacket of the cylinder, and in the other instance it would throw steam upon the side of the cloth which comes next the cylinder.

The construction shown in Fig. 3 may be used alone, or may, if desired, be used in the same machine with the construction shown in Figs. 1 or 2, being so arranged that the cloth, after being subjected to the operation of the construction shown in Figs. 1 or 2, will be submitted to the operation of the construction shown in Fig. 3. The manner of using the devices shown will be dictated by the results sought and the material operated upon.

I claim—

1. In combination, a cylinder, a jacket enveloping the same, two pressing devices co-operating with the cylinder, a moistening device arranged to moisten the jacket between the pressing devices, devices for guiding the cloth around said moistening device as it passes from one pressing device to the other, and a second moistening device arranged to moisten the cloth as it passes from one pressing device to the other, the last-mentioned moistening device being arranged to moisten the cloth upon the opposite side to that which comes in contact with the jacket.

2. In combination, the cylinder, the two pressing devices co-operating therewith, the jacket enveloping the cylinder, the moistening device for throwing moisture upon the jacket between the two pressing devices, and

means whereby the cloth is guided around the said moistening device, substantially as described.

3. In combination, the cylinder, the two pressing devices co-operating therewith, means whereby the cloth is guided away from the cylinder as it passes from one pressing device to the other, and a moistener arranged within the loop of the cloth between the two pressing devices, whereby the cloth as it passes from one pressing device to the other is moistened upon the surface which comes next to the cylinder, substantially as described.

4. In combination, the cylinder, its co-operating pressing devices, means whereby the cloth is guided away from the cylinder as it passes from one pressing device to the other, and a moistening device arranged within the loop of the cloth between the pressing devices, substantially as described.

5. In combination, a cylinder, two co-operating pressing devices, means whereby the cloth is guided away from the cylinder as it passes from one pressing device to the other, a moistening device arranged within the loop of the cloth as it passes from one pressing device to the other, and a moistener arranged without said loop, whereby the said cloth as it passes from one pressing device to the other may be moistened upon both sides, substantially as described.

DAVID GESSNER.

Witnesses:

D. H. DRISCOLL,  
LIVINGSTON GIFFORD.