

H. S. GREEN.
Cloth Steaming-Machines.

No. 135,543.

Patented Feb. 4, 1873.

Fig. 1.

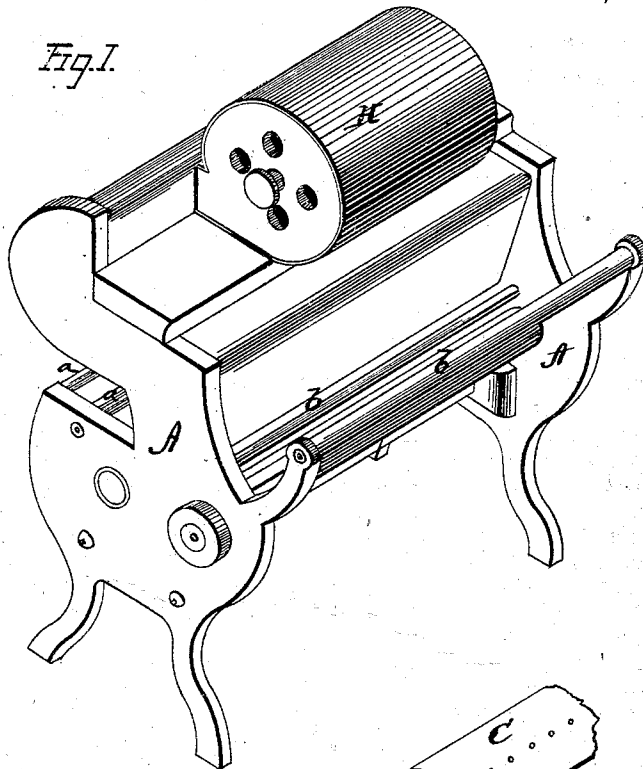
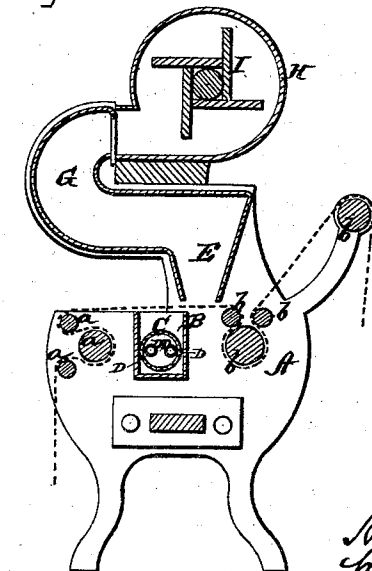


Fig. 2.



Witness:
Jas. C. Hutchinson
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Henry S. Green
per
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UNITED STATES PATENT OFFICE.

HENRY S. GREEN, OF SHERBROOKE, CANADA, ASSIGNOR OF ONE-HALF HIS
RIGHT TO C. H. WESTON, OF LOWELL, MASSACHUSETTS.

IMPROVEMENT IN CLOTH-STEAMING MACHINES.

Specification forming part of Letters Patent No. 135,543, dated February 4, 1873.

To all whom it may concern:

Be it known that I, HENRY S. GREEN, of Sherbrooke, in the county of Compton and in the Province of Quebec, Canada, have invented certain new and useful Improvements in Cloth-Steaming Machine; and do hereby declare that the following is a full, clear, and exact description thereof, reference being had to the accompanying drawing and to the letters of reference marked thereon making a part of this specification.

My invention consists in a cloth-steaming apparatus in which a volume of cold air is blown against the upper side or back of a piece of cloth at the same time that steam is forced against the under or face side of the cloth, by which means the steam is condensed as it meets the cold air from above, effectually rendering the under side perfectly smooth and soft, while the press on the back or upper side is left in the cloth, which is rendered thick and leathery to the feeling; also causing the cloth to leave the machine perfectly cool and ready for folding.

In order to enable others skilled in the art to which my invention appertains to make and use the same, I will now proceed to describe its construction and operation, referring to the annexed drawing, in which—

Figure 1 is a perspective view, and Fig. 2 is a transverse vertical section of my machine.

A represents the frame of my machine, in which is a tank or box, B, containing a copper cylinder, C. The upper surface of this cylinder is about six inches below the upper edges of the tank B, and is perforated its entire length on top. Through this cylinder pass two small perforated steam-pipes, D D, through which the steam enters into the cylinder and passes out through the perforations in the upper surface of the same. This arrangement of the

steam-pipes within the cylinder equalizes the power of the steam. *aa* are rollers over which the cloth passes into the machine; it then passes over the tank B and out on the other side of the machine over and around the other rollers *b b*. E represents an air-chamber, open at the bottom and communicating at the top by a passage, G, with a fan-case, H, at the top, which case contains the fan I. This fan or blower, being driven by any desired power, causes a current of cold air to be forced constantly through the passage G and air-chamber E onto the upper side or back of the cloth, while at the same time the current of steam is being forced against the face or under side through the cylinder C.

I am aware that steam has been used before for rendering the cloth soft; but when this has been done the back has also become soft and the cloth could not at once be folded up.

By the application of a current of cold air in the manner described the press is retained in the back, while the face is rendered perfectly smooth and soft, and the cloth as it comes out of the machine is perfectly cool and ready for folding up.

Having thus fully described my invention, what I claim as new, and desire to secure by Letters Patent, is—

The combination, in a cloth-steaming apparatus, of one or more steam-pipes, constructed and arranged to convey steam to one side of the cloth, with mechanism constructed and arranged to convey a blast of cold air to the opposite side of the cloth, substantially as specified.

In testimony that I claim the foregoing I have hereunto set my hand this 14th day of October, 1872.

Witnesses:

O. CARMANY.

JOHN HARKNESS.

H. S. GREEN.