## E. WOOLLEY. Hat-Finishing Machine.

No. 205,326.

Patented June 25, 1878.

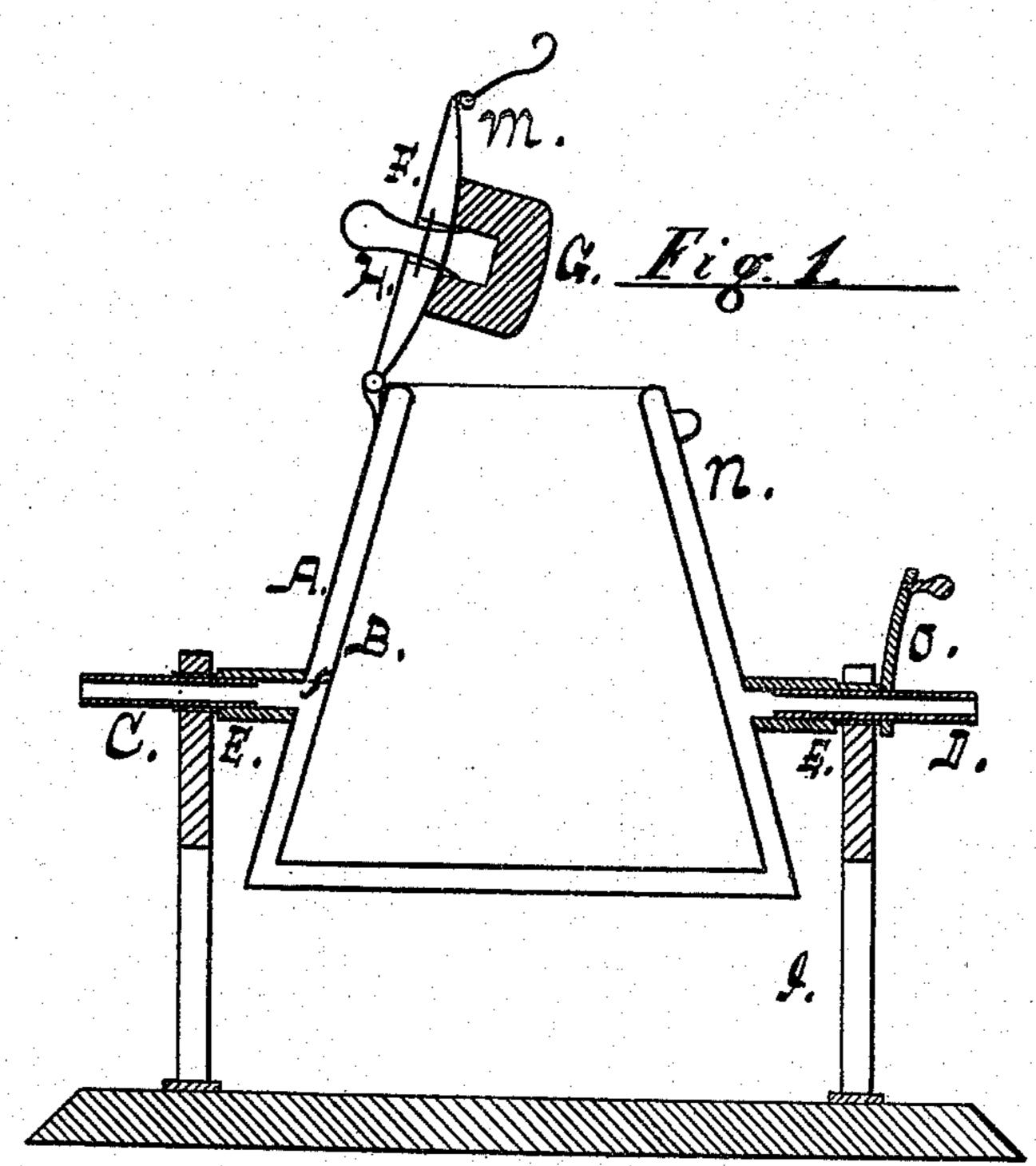
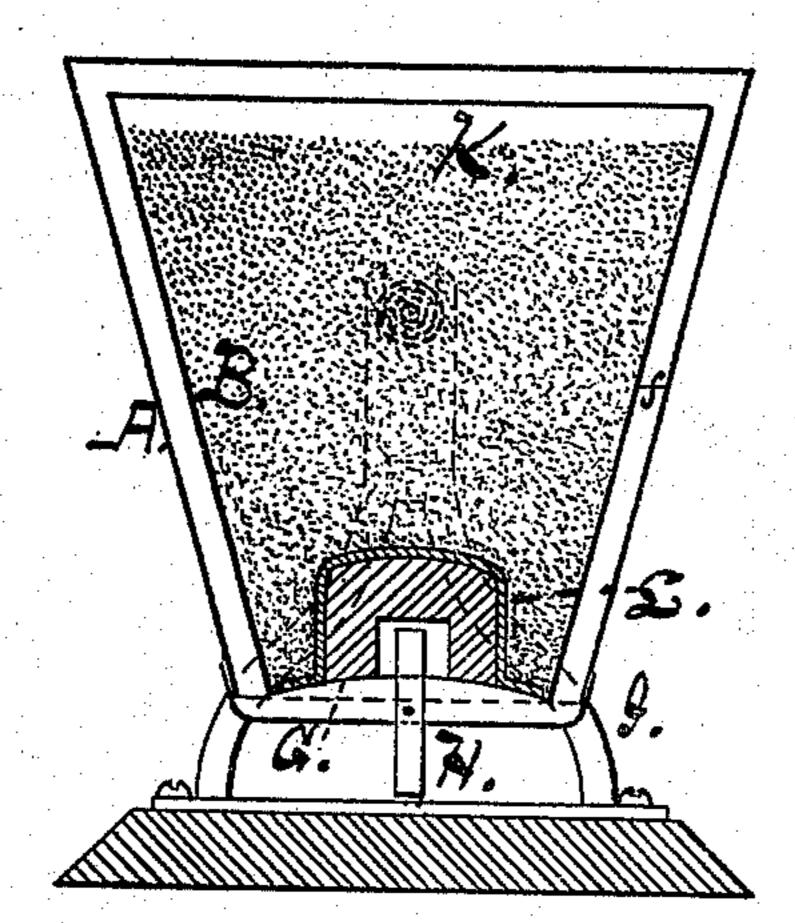


Fig. 2.



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## UNITED STATES PATENT OFFICE.

EDWIN WOOLLEY, OF NEWARK, NEW JERSEY.

## IMPROVEMENT IN HAT-FINISHING MACHINES.

Specification forming part of Letters Patent No. 205,326, dated June 25, 1878; application filed May 31, 1878.

To all whom it may concern:

Be it known that I, EDWIN WOOLLEY, of Newark, in the county of Essex and State of New Jersey, have invented a new and useful Improvement in Hat-Finishing Machines, which improvement is fully set forth in the following specification.

Figure 1 is a sectional elevation of the machine when not in use. Fig. 2 is the same with the machine inverted and turned quarter around, showing the hat in position in the op-

eration of being pressed.

This invention relates to that department of hat-finishing consisting in pressing and drying the hats; and the object is to apply a heated pressure to the whole external surface of the hat, so that the work of finishing shall be simple, inexpensive, and very rapidly performed; and for this purpose I construct a cylindrical case, A, made cone shape, and made with a steam-chamber, f, by putting a lining, B, in the case at the sides and base, leaving a space of an inch, more or less, between them. This chamber will have steam admitted into it by the induction-pipe C, and carried out through the eduction-pipe D. These pipes connect with the hollow journals E.

The top of the case is provided with a cover, F, having a hat-block, G, fitted to be attached to the inside of it by the clamping-spring H, or some other suitable device, allowing it to be removed at pleasure for the change of

blocks.

The case is hung to the frame I, so that, considering the comparative size of the two

ends, it shall nearly balance.

In use, the case is filled nearly full of dry sand K, or some other dry, heavy, granulated material—as salt, for instance. The sand is then well heated by the steam admitted into

the chamber f. The hat L is placed on the block, and the cover closed down and secured by the hasp m hooking on to the catch n on the side of the case, or by some other suitable fixture. The case is then inverted, in the use of the crank o, when the heated sand will settle down upon the outside of the hat and press it into smooth form upon the block, and at the same time absorb all the dampness.

The sand has a direct vertical pressure, and it has also a lateral pressure secured from the inward-sloping sides of the case when in the inverted position; and by this simple means I secure a very rapid pressing and drying of

hats.

I claim—

1. The method of pressing and drying hats, the same consisting of securing the hat-block and hat to be operated upon in the open apex of a double-walled cone-shaped case, mounted on hollow trunnions, and filled with sand, whereby, when the case is inverted in its bearings, the weight of the sand will be evenly distributed on the hat, and press and dry the same, substantially as described and set forth.

2. The cone-shaped case A, having the lining B, forming the steam-chamber f, in combination with the steam-pipes C and D and the frame I, substantially as and for the pur-

pose specified.

3. In combination with the conical heated case A, to contain loose heated sand K, the cover F, having connected therewith the hatblock G and hat L, substantially as and for the purpose set forth.

EDWIN WOOLLEY.

Witnesses:

HORACE HARRIS, A. C. JENKINS.