

E. C. WILSON.

Improvement in Machine for Drying Paper, Wadding, &c.

No. 123,850.

Fig. 1.

Patented Feb. 20, 1872.

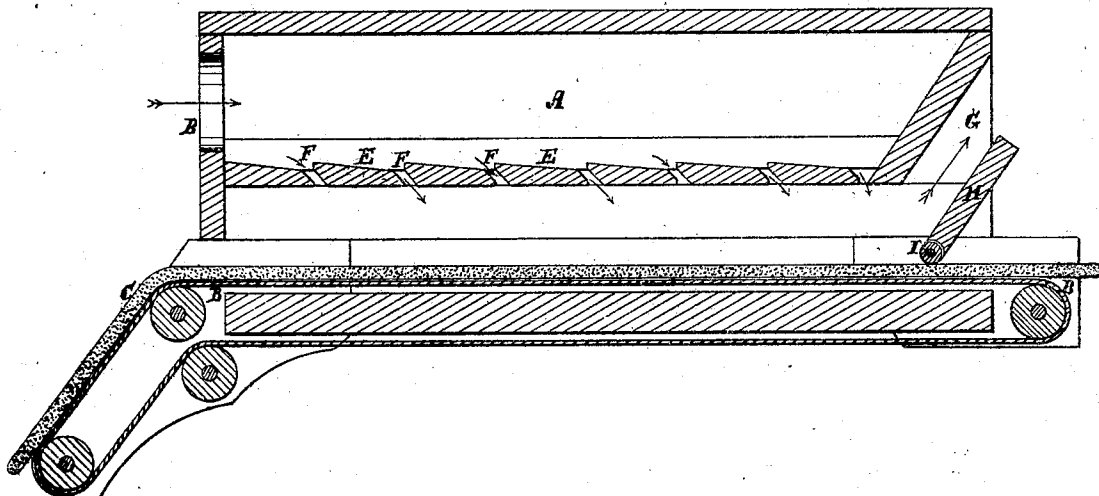
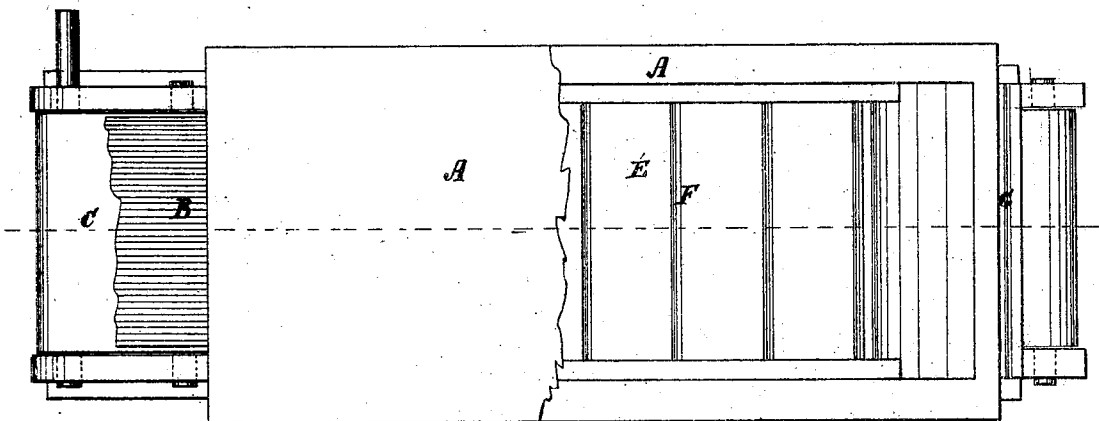


Fig. 2.



Witnesses:

A. B. B. B. B. B.

Francis McArdle.

Inventor:

E. C. Wilson.

PER

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UNITED STATES PATENT OFFICE.

ELIHU C. WILSON, OF MEDWAY, MASSACHUSETTS, ASSIGNOR TO HIMSELF
AND EDWARD EATON, OF SAME PLACE.

IMPROVEMENT IN MACHINES FOR DRYING PAPER, WADDING, &c.

Specification forming part of Letters Patent No. 123,850, dated February 20, 1872.

Specification describing certain Improvements in Machine for Drying Wadding, Paper, &c., invented by ELIHU C. WILSON, of Medway, in the county of Norfolk and State of Massachusetts.

My invention consists in a long closed case, through which the bat is carried by an endless belt near the bottom, and into which air, either hot or cold, is blown above the bat and caused to impinge upon the upper wet surface in an evenly-distributed way, and then escape at the opposite end, carrying off the moisture in an efficient manner.

Figure 1 is a longitudinal sectional elevation of my improved machine, and Fig. 2 is partly a horizontal section and partly a top view.

A is a long rectangular case of wood or any other suitable material, with an endless carrying-belt, B, running through it from end to end, just above the bottom, for carrying the bat of wadding or piece of paper to be dried. D is an opening into the end of the case A for the admission of air from a fan or other blower. E represents a false bottom in the case above the belt and bat to be dried, with numerous oblique transverse openings or slots F, calculated to conduct the air to the top of the bat to be dried in an oblique direction, and in an equal distribution over the whole surface. G is an ascending chute at the end, out of which the bat passes, for conducting the air, (which, when having taken up the moisture of the bat, is heavy and wet,) upward away from the bat as it passes away in a dried condition. The size or paste used for stiffening the bats to adapt them for wad-

dings, and which it is the particular object of this machine to dry, will be applied to the bat just previous to entering the case, the said application being made in any approved way. This plan of drying is much better than by the calender-rollers, for in that case the wet side of the sheet is run upon the roller and the damp air necessarily forced through the bat to the outside. This destroys the crispness of the interiors of the mass, and thereby very greatly injures the quality of the goods.

The improved plan of drying is applicable alike to drying paper, woven cloths, and the like. The wall H of the chute G, which extends down to the surface of the bat, to cause the air to lift upward thereat into the chute, will have a roller, I, at the lower edge to shut off the escape of the air as much as possible, and yet not interfere with the free passage of the bat.

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

The chamber D A, into which air is forced, and which has an obliquely-slotted false bottom, E, combined as described with the endless carrier B and wall H I, to allow air to be forced over the surface-wetted wadding, as and for the purpose described.

The above specification of my invention signed by me this 23d day of September, 1871.

ELIHU C. WILSON.

Witnesses:

GEO. W. MABEE,
T. B. MOSHER.