A. S. DENNISON.

PAPER-BAG MACHINE.

No. 191,943. Patented June 12. 1877.

Fig 1.

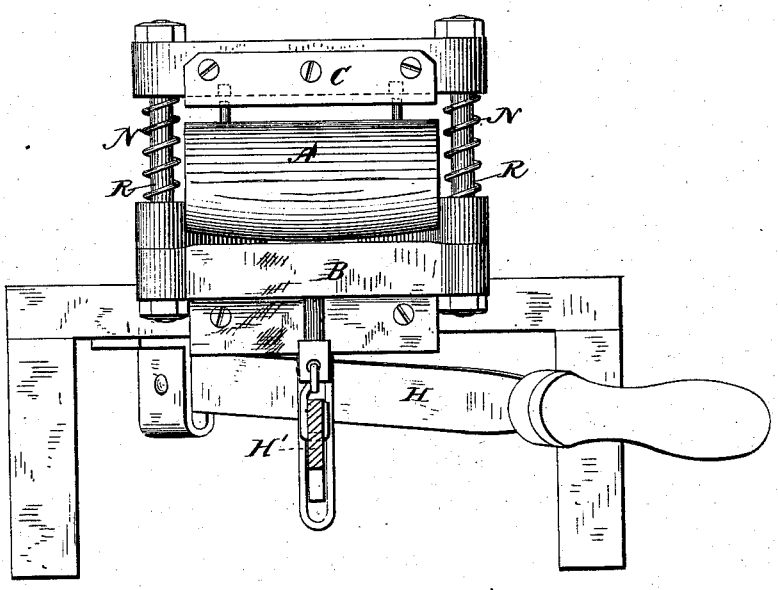
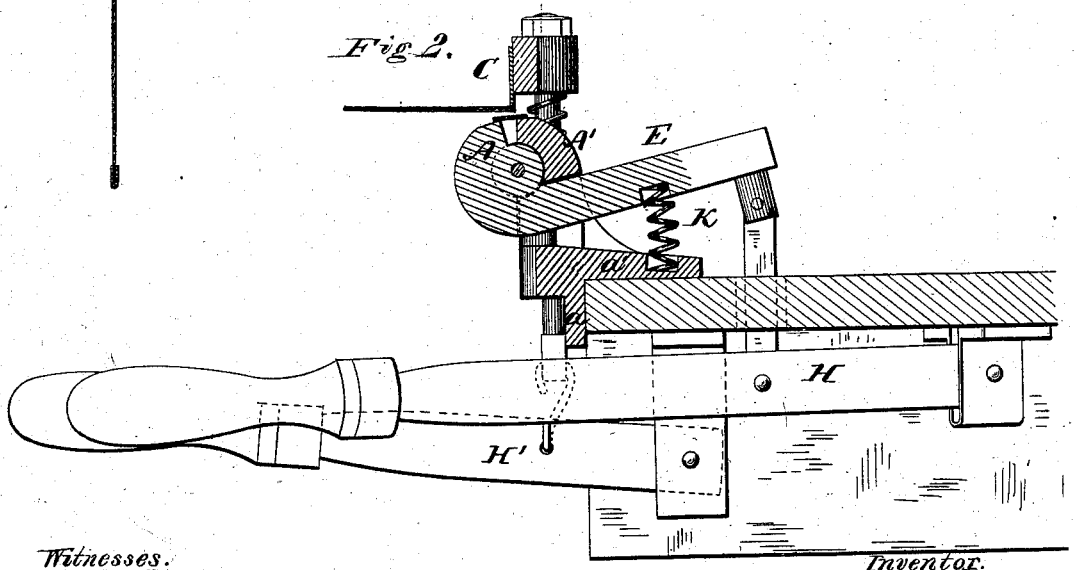


Fig 3

Fig 2.



Witnesses.

Harry King
Dol.
T. McKenny

Inventor.

Albert S. Dennison
By Hill Fellowes
His Atty.

UNITED STATES PATENT OFFICE.

ALBERT S. DENNISON, OF WATERTOWN, NEW YORK.

IMPROVEMENT IN PAPER-BAG MACHINES.

Specification forming part of Letters Patent No. **191,943**, dated June 12, 1877; application filed May 5, 1877.

To all whom it may concern:

Be it known that I, ALBERT S. DENNISON, of Watertown, in the county of Jefferson and State of New York, have invented a new and Improved Paper Bag and Box Machine; and I do hereby declare the following to be a full, clear, and exact description of the same, reference being had to the accompanying drawings, in which—

Figure 1 is a front elevation of the machine; Fig. 2, a sectional elevation of the same; and Fig. 3, a view showing a paper bag with the metallic strip attached.

Similar letters of reference in the accompanying drawings denote the same parts.

My invention relates to the manufacture of paper bags, boxes, &c., the seams of which are held by metallic strips; and it consists of a machine, hereinafter fully described, for folding and pressing such strips upon the ends of the paper tube which is to form the bag or box.

The bag or box to which the strip is applied is formed of a paper tube, cut to the proper length, the bottom of the bag being closed by a folded strip of metal pressed upon the ends, so as to clamp and close it securely.

The machine, which is shown clearly in Figs. 1 and 2, consists, essentially, of a pair of jaws, marked A A′, of a length sufficient to receive the end of the bag and the corresponding strip of metal between them, over which jaws is arranged a blade, marked in the figures C, adapted to fold the said strip of metal into said jaws, in position to be operated upon by them.

The jaws may be conveniently made as shown in the figures. A′ is a fixed jaw, the the lower part of which is provided with flanges *a a′*, as represented in Fig. 2, by which it may be secured to a proper bed or table. The other jaw, A, is hinged to this so as to bring the faces accurately together. An arm, E, extends from the movable jaw, and operates as a lever to clamp the two together. The lever E may be depressed to close the jaws by means of a rod connecting it to a hand-lever, H, and may also be raised to keep the jaws normally open by a spring, K, shown in Fig. 2.

The blade C is arranged centrally over the opening between the jaws, and is mounted on two vertical rods, R R, which pass through guides, by which said rods are kept in exactly vertical position. Said rods are connected by a transverse bar, B, which is suitably connected to a hand-lever, H′, whereby they may be conveniently operated. Springs N are arranged on the vertical rods to keep the blade C in an elevated position.

The operation of the machine is as follows: The metallic strip being laid over the space between the jaws, so that the central line of the strip shall fall directly under the blade, as shown in Fig. 2, the bag is laid over it, as shown. The blade is then brought down, folding the edge of the bag and the strip of metal below the paper. Immediately thereafter the jaws A A′ are brought together, compressing the folded metal strip and clamping it firmly upon the edge of the paper, as represented in Fig. 3.

Although I have represented these operations as being performed by hand, through the levers H and H′, it is evident that they may be easily arranged to be operated by simple connections to some other motive power, leaving to the operator only the manipulation of the paper and metal strip. The operation of folding may follow closely that of compressing, sufficient time only being required before the jaws close to allow the blade to be withdrawn.

I claim as my invention—

1. The combination of the crimping-blade C and griping-jaws A A′, as set forth.

2. The jaws A A′, in combination with the folding-blade, the latter being mounted upon vertical rods, and operating as set forth.

ALBERT S. DENNISON.

Witnesses:

GEORGE W. MOAK,

CHAS. O. UPHAM.