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Patented Nov. 25, 1902.

J. V. MATTESON.
BAG MACHINE.

(Application filed Jan. 13, 1902.)

(No Model.)

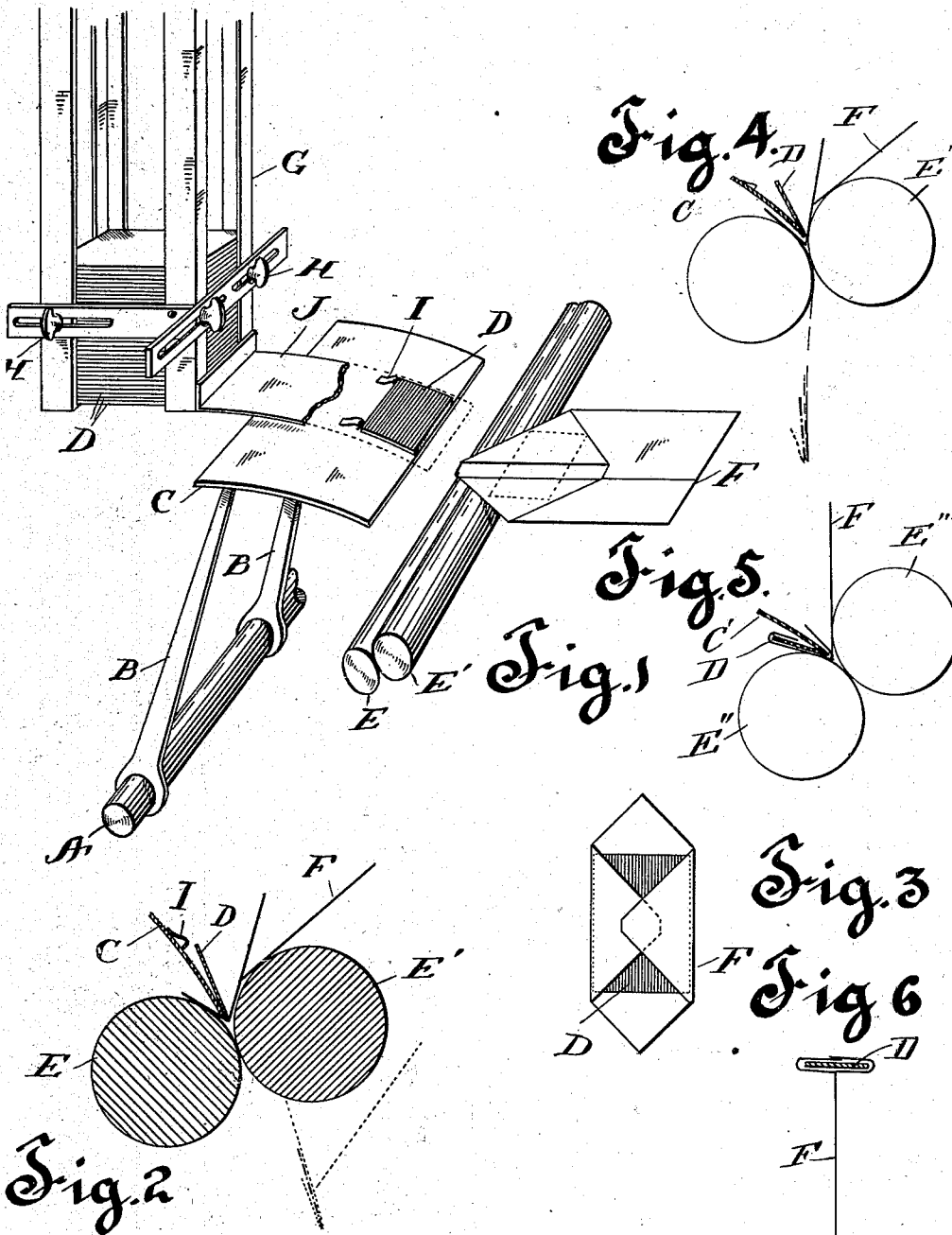


Fig. 2

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JESSE V. MATTESON, OF SAN FRANCISCO, CALIFORNIA.

BAG-MACHINE.

SPECIFICATION forming part of Letters Patent No. 714,386, dated November 25, 1902.

Application filed January 13, 1902. Serial No. 89,625. (No model.)

To all whom it may concern:

Be it known that I, JESSE V. MATTESON, a citizen of the United States, residing at San Francisco, in the county of San Francisco and State of California, have invented certain new and useful Improvements in Bag-Machines; and I do hereby declare the following to be a full, clear, and exact description of the same, such as will enable others skilled in the art to which it appertains to make and use the same.

My present invention, generally speaking, is an improvement in bag-machines; but to be more specific it is a device for automatically reinforcing the bottoms of paper bags during the usual process of gumming and folding.

The device possesses all the requisites of strength and durability and is especially simple in construction and efficient in operation.

To answer the requirements of special lines of trade, it is imperative that a bag of great strength and durability be made, and this is usually accomplished by taking the paper after it leaves the machine in short tubular bottomless sections and inserting by hand a rectangular piece of stiff cardboard and folding and gumming about this piece the flaps of the bag. These hand manipulations of the bag necessarily add greatly to the cost of manufacture or production, and consequently direct attention to seeking cheaper but correspondingly less secure closures.

I have so constructed my invention as to render it capable of being readily attached to and employed in conjunction with the bag-machines now in general use.

I am enabled to accomplish the above results by the means illustrated in the accompanying drawings, in which—

Figure 1 is a perspective view of the device, showing its position relative to certain portions of an ordinary bag-machine. Fig. 2 is a section of the rollers of the machine, showing the manner of feeding the cardboard strips as the bag is being folded. Fig. 3 is a view of the bottom of the finished bag, showing the position of the cardboard piece. Fig. 4 is a view of the bag as it is fed to the first pair of rollers, the relative position of the cardboard strip being shown. Fig. 5 is a

similar view of the bag as it enters the second pair of rollers. Fig. 6 is a side view of the bag after passing the second pair of rollers.

Referring now to the above views by letter, A represents an oscillating shaft of the machine, on which is keyed the twin arms B, the latter bearing the transferring-bed C. The sole function of this bed C in the usual bag-machine is to crease the nose of the bag and force it between the yielding twin parallel rollers E E', as shown in section in Fig. 2. After this operation the bag is taken up and similarly operated upon by succeeding rollers until all the portions of the bag have been folded and gummed in place. Now in order to automatically position a rectangular piece D of cardboard under the flaps of the bottom of the bag F for the purpose above set forth I arrange a vertical gravity-feeder G directly in the path of the bed C. This feeder G is capable of holding a large number of pieces D and is made adjustable by means of the thumb-screws H to hold pieces of various sizes. On the upper surface of this bed C, I arrange spring catches or lugs I, which as the bed passes under the pieces D spring up and against the back edge of the lower cardboard D. Now as the bed again moves forward these lugs carry this bottom piece D until the rollers E E' grip it and carry it through, with the nose of the bag overlapping it. The relative positions of the bag and cardboard both before and after passing through the rollers E E' are shown in solid and dotted lines, respectively, in Fig. 2. The bag and piece D are now passed together through a secondary pair of rollers E'' E''' after being creased by a second blade C' and the remaining flap turned over in the usual manner. Of course the two flaps are gummed to adhere to the strip, while those portions not gummed are permitted to return to their relative positions. (Shown in Fig. 6.)

In order to prevent the cardboard piece D from leaving the bed C as the latter approaches the twin rollers E E', I have provided the guide J, which is secured to the feeder G.

Having thus fully described my invention, the objects and advantages of the same will, it is thought, be readily understood.

I am aware that changes in the form and proportion of parts of the devices herein shown and described as an embodiment of

my invention can be made without departing from the spirit or sacrificing the advantages thereof, and I therefore reserve the right to make such changes and alterations as fairly
5 fall within the scope of my invention.

What I claim, and desire to secure by Letters Patent, is—

1. A device of the class described provided with a bed or blade adapted to force the bag
10 between folding-rollers, and means for automatically feeding reinforcing-pieces to said bed and said bag, for the purpose set forth.

2. A device of the class described provided with a bed or blade adapted to force the bag
15 between folding-rollers, and means for automatically feeding reinforcing-pieces to said

bed, said bed being adapted to carry said pieces to said folding-rollers for the purpose set forth.

3. A device of the class described provided 20 with a blade adapted to force the bag between folding-rollers, means for holding a series of reinforcing-pieces in position relative to said bag, and means for automatically feeding said
pieces to said bag, for the purpose set forth. 25

In testimony whereof I affix my signature in presence of two witnesses.

JESSE V. MATTESON.

Witnesses:

GEORGE PATTISON,
EDWARD S. POWERS.