W. WEBSTER.

Paper-Bag Machine.

No: 161,720. Patented April 6, 1875.

Fig. 1.

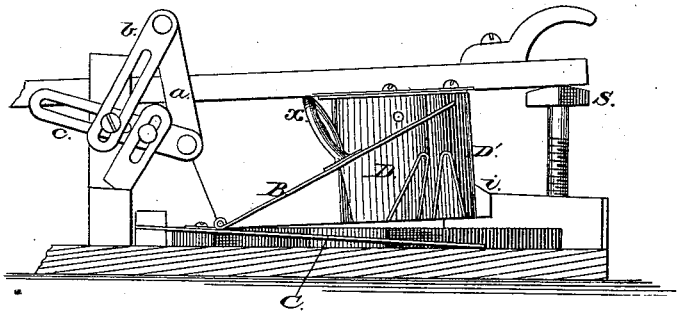
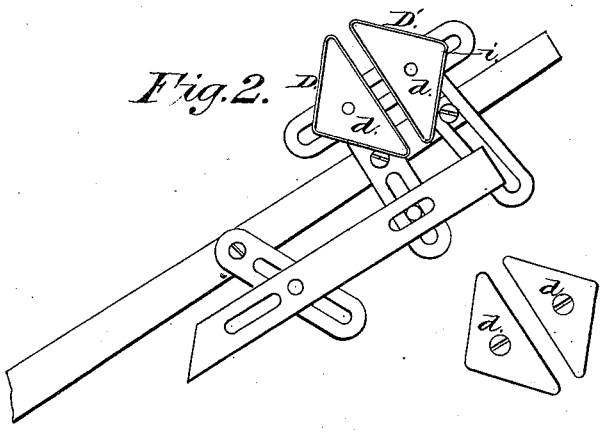


Fig. 2.



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UNITED STATES PATENT OFFICE.

WILLIAM WEBSTER, OF MIDDLETOWN, OHIO.

IMPROVEMENT IN PAPER-BAG MACHINES.

Specification forming part of Letters Patent No. **161,720**, dated April 6, 1875; application filed January 19, 1875.

To all whom it may concern:

Be it known that I, WILLIAM WEBSTER, of Middletown, in the county of Butler and State of Ohio, have invented a new and useful Improvement in Paper-Bag Machines; and I do hereby declare that the following is a full, clear, and exact description thereof, reference being had to the accompanying drawings and to the letters of reference marked thereon.

My present invention relates to certain improvements in the machine for making paper bags patented by me January 13, 1874.

Figure 1 represents a side elevation of so much of the machine as is necessary to exhibit my new improvements. Fig. 2 represents the under side of the paster-frame and paste-carriers.

In my patented machine a removable sheet of tin is used to fold the sheet of paper over, (denoted by the letter C,) and denominated the body-former.

In my present invention I employ a hinged former, B, located or hinged upon the body-former C, and of like dimensions. Both the stationary and the hinged formers are made of tin. The sheets of paper are placed in considerable quantity upon the table under the former C, which is secured to the table only at its rear end, and after the paste is applied to the right-hand margin of the upper sheet of paper it is folded over the former C, as specified in my former patent. At this stage of the operation the hinged former B is turned down by hand, to compress the paste along the body-seam of the bag; then the operator forms the bottom of the bag or sack by folding it in the manner described in my patent before referred to. The hinged auxiliary former B holds the body of the bag down firmly in place while the bottom is being folded, and prevents the side seam of paste at the junction of the body and the bottom of the bag from being opened by the folding operation, which would leave a hole or unpasted portion of the seam at the place where the bottom and body unite.

In the using of my patented apparatus, the workman is required to press the seam of paste along the body of the bag by drawing his hand or a hand-pad over it. Careful manipulation is necessary in folding up the bottom of the bag without the use of the platen or former B, to prevent opening a portion of the side seam near the bottom of the bag. The outer end of the former B, when pressed down upon the pasted seam of the body of the sack, serves as a gage and stay to hold the same, and prevent the side seam from being opened in folding the bottom.

In making different sizes of sacks different sizes of formers B C will be used, and, in order to prevent the hinged former from falling too far back upon its hinge, I have constructed an adjustable rest, secured to the machine in rear of the formers B C, against which the hinged former B will be turned back by the operator after completing each bag. The adjustable rest *a b c* consists of slotted strips of any suitable material secured together with screws, so as to be adjusted to stand at any desired angle and at proper distance in rear of the hinged platen B, to serve as a support for it, whether of greater or less size.

In my machine, patented January 13, 1874, the paste-carriers were allowed to descend into the paste-pans their entire depth, and consequently the quantity of paste applied to a bag depended upon the depth of paste in the pans.

In order to regulate the quantity of paste used, I have devised a graduating-rest, consisting of the broad-headed screw S, upon which the end of the arm of the paster-frame will rest when the paste-carriers are dropped into the paste-pans.

The screw S may be raised or lowered by the operator, so as to determine the depth the paste-carriers may descend into the paste, and by this means the same quantity of paste will be taken at each operation, whether there is a greater or less quantity in the pans.

In order to deposit the proper quantity of paste at the points where it is required to perfectly secure the bottom of the sack, I have improved the construction of the paste-carriers D D′, which consist of triangular tin cups attached to wood blocks *d d*, which are adjustably attached to the paster-frame. The lateral lower corners of these carriers are cut away as unnecessary, and a cross-piece of tin, *i*, is secured at the front corner or angle of the carrier D′, by the aid of which a greater

quantity of paste will be carried and deposited at the desired locality of the bottom of the sack, to more effectually secure the folds of paper which form the bottom of the bag.

The manner of using my improved apparatus is fully described in my former patent, herein referred to, and the use of the new features herein described will be apparent when it is stated that the hinged plate of tin denominated "former" B is provided with a ring, X, to serve as a handle, and that the screws and slots of the rest *a b c* permit it to be adjusted, so as to support the hinged former B, whether of a greater or less size, used for making different sizes of bags.

Having described my invention, I claim as an improvement in my apparatus for making paper bags, patented January 13, 1874—

1. The adjustable rest S, in combination with the paste-carrier frame, for the purpose specified.

2. The hinged plate or former B, in combination with the body-former C, substantially as described.

3. The slotted adjustable rest *a b c*, in combination with the hinged former B, substantially as and for the purpose described.

Witness my hand this 21st day of December, A. D. 1874.

W. WEBSTER.

Witnesses:
H. P. K. PECK,
JOHN M. DAVIDSON.