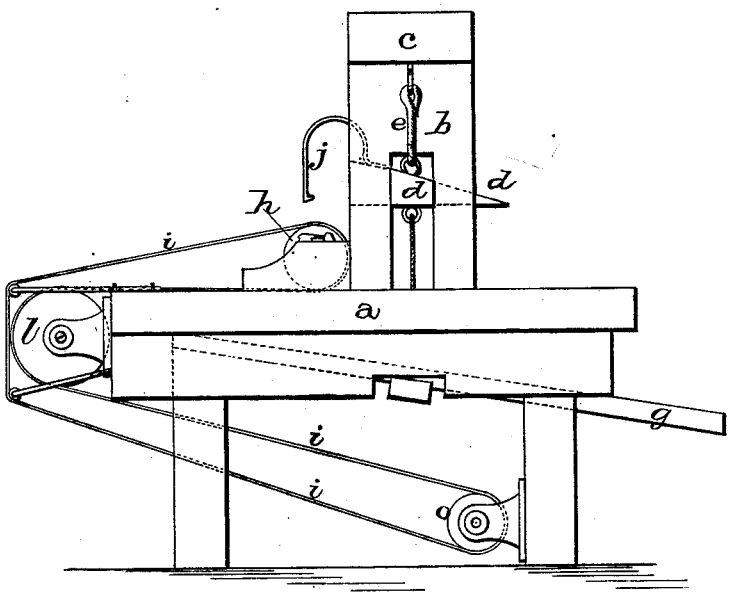
2 Sheets—Sheet 1.

W. P. ARNOLD & G. QUIGLEY.

BAG MACHINE.

No. 190,663. Patented May 15, 1877.

Fig. 1.



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2 Sheets—Sheet 2.

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Fig. 2.

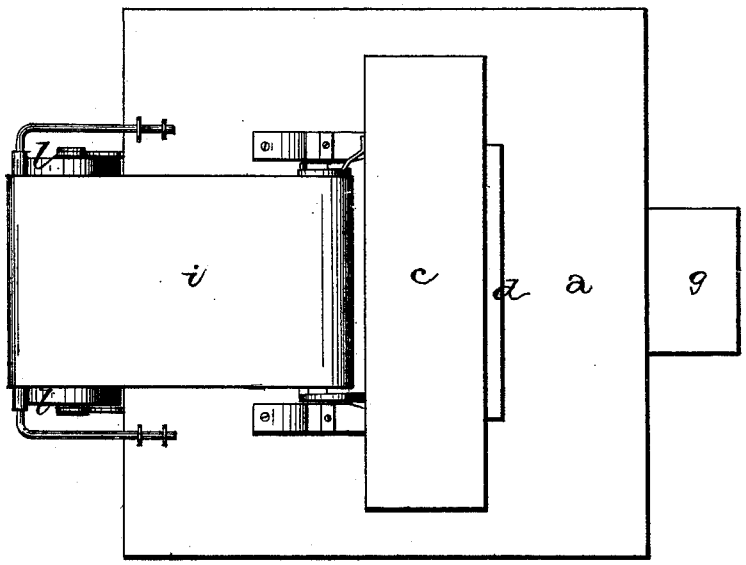
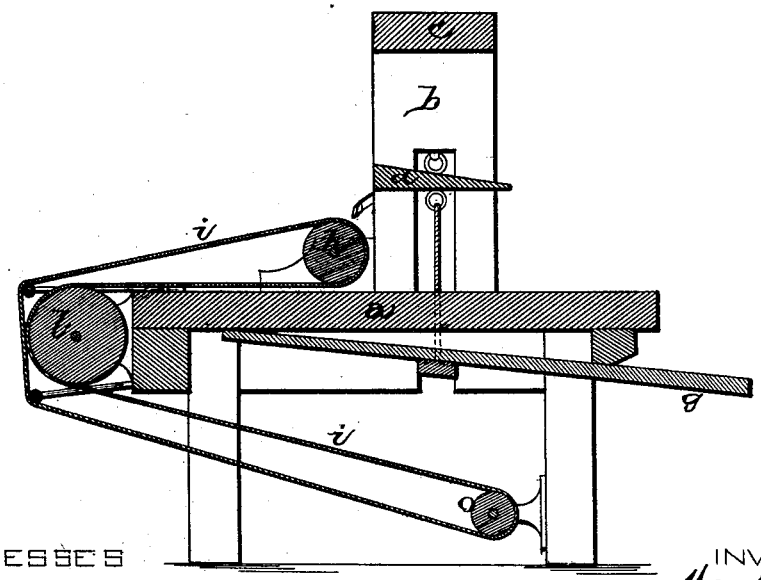


Fig. 3.



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UNITED STATES PATENT OFFICE.

WILLIAM P. ARNOLD AND GEORGE QUIGLEY, OF FREDERICKSBURG, VA.

IMPROVEMENT IN BAG-MACHINES.

Specification forming part of Letters Patent No. **190,663**, dated May 15, 1877; application filed March 14, 1877.

To all whom it may concern:

Be it known that we, WM. P. ARNOLD and GEO. QUIGLEY, of Fredericksburg, in the county of Spottsylvania and State of Virginia, have invented certain new and useful Improvements in Machines for Making Paper Bags; and we do hereby declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it pertains to make and use it, reference being had to the accompanying drawings, which form part of this specification.

Our invention relates to an improvement in machines for making paper bags; and it consists in the arrangement and combination of parts, that will be more fully described hereinafter, whereby the bags can be quickly and easily made, and then carried back out of the way by a suitable mechanism and deposited in a box under the table.

The accompanying drawings represent our invention.

a represents a common table-like frame of suitable size and height, upon the top of which are placed the two slotted guides *b*, which are joined together at their upper ends by the cross-bar *c*. Moving up and down in the slots of the guides is the presser *d*, which is flat on its under side, and beveled from the rear edge down to a sharp edge at its front, so as to allow the bags being formed to be folded freely back over it. The ends of this presser extend through and beyond the guides, and have the rubber or other suitable springs *e* attached to their upper sides, so as to instantly draw the presser upward as soon as the pressure of the foot is raised from the treadle *g*. Just in the rear of the presser is journaled a roller, *h*, which has ratchet-teeth at each end, and around which passes the endless belt or apron *i*. Secured to one end of the presser is a pawl, *j*, which catches in one of the teeth on one end of the roller every time the presser is drawn downward by the treadle, and then, as the presser rises upward, the pawl draws the roller partially around, thereby causing the belt or apron *i* to move backward over the rear edge of the table, and over the roller *l*, secured thereto, and forward over a roller, *o*, placed under the table. If so desired, the belt may be provided with sharp points or projections, so as to insure its carrying the bags backward over the roller *l*, and then forward, and depositing them in a box placed under the front edge of roller *o*.

Any desired number of any sized paper bags that have yet to have their ends pasted shut are placed in a pile on the table, so that the ends which are to be pasted shall project a suitable distance in front of the front edge of the presser. The operator presses down on the treadle, and brings the presser down upon the top bag, so as to hold it firmly while the end is being pasted and folded. While the bag is thus held the fingers are inserted into its end, so as to open it wide, and then the two side edges are folded inward toward each other until they slightly lap, and then the four outside edges are pressed down all around, so as to form the bottom into as perfect a square as possible. The paste-brush is then used, and the two corners immediately in front of the operator are then folded inward toward each other and made to lap. The operator then allows the presser to rise upward, and at once pushes the bag that has just had its end pasted back out of the way, and then brings the presser down, as before, not only on the next bag that is to be finished, but upon the one just moved back out of the way. As each one that is finished is thus held for some time after being pasted, the paste has a chance to take a thorough hold upon the bag, and slightly dry, and in this way the corners and edges never have a chance to become loose, as they always will where this pressure is not applied for some time after the pasting. As one bag after another is thus finished and pushed back the top ones will be gradually moved back from under the presser, and then the belt will take them and deposit them in the box under the table.

The endless belt here shown is but one of a variety of ways of carrying the bags away from the operator as they are finished, as any other suitable one may be used in its stead.

If desired, the springs may be attached to the under side of the presser, so as to keep it constantly pressed downward, in which case the treadle would be used simply to raise the presser upward. The table may also be made

to rise against a fixed presser, instead of the presser descending upon the table.

Having thus described our invention, we claim—

1. The combination of the presser *d*, springs, treadle *g*, and guides *b* with an endless band, *i*, or other equivalent mechanism, for carrying the bags away when finished, substantially as specified.

2. The combination of the presser *d*, springs *e*, treadle *g*, and guides *b*, substantially as set forth.

3. The presser *d*, beveled away at its front edge, so that the paper can be folded back over it while it is holding the bag, substantially as described.

In testimony that we claim the foregoing we have hereunto set our hands this 14th day of March, 1877.

WM. P. ARNOLD.
GEO. QUIGLEY.

Witnesses:
F. A. LEHMANN,
W. S. D. HAINES.