C. F. Annan,

Bag Machine.

No. 111,803. Patented Feb. 14, 1871.

Fig. 1.

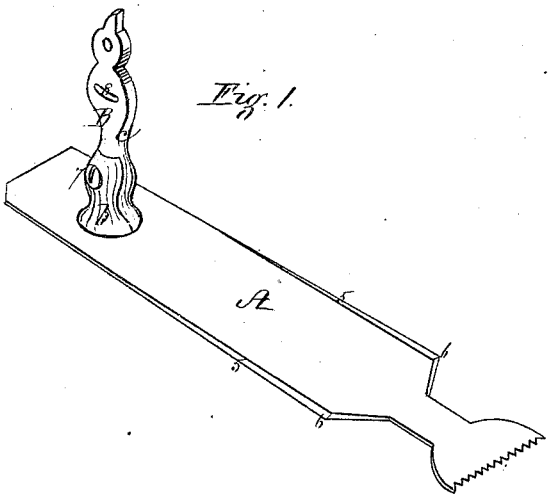

Fig. 2.

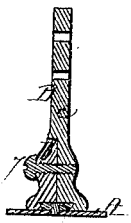

Fig. 3.

Fig. 4.

Witnesses,
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UNITED STATES PATENT OFFICE.

CHARLES F. ANNAN, OF BOSTON, ASSIGNOR TO HIMSELF AND HERBERT S. MERRILL, OF CAMBRIDGE, MASSACHUSETTS.

IMPROVEMENT IN PAPER-BAG MACHINES.

Specification forming part of Letters Patent No. 111,803, *dated February* 14, 1871.

To all whom it may concern:

Be it known that I, CHARLES F. ANNAN, of Boston, in the county of Suffolk and State of Massachusetts, have invented an Improvement in Machines for making Paper Bags, of which the following is a full, clear, and exact description, reference being had to the accompanying drawing, making part of this specification, in which—

Figure 1 is a perspective view of the "former," with my improvement applied thereto. Fig. 2 is a transverse section through the same; Figs. 3 and 4, my improvement shown detached.

My present invention relates to an improved method of adjusting the "former" of a machine for making paper bags in place relative to the severing-knife and feed-rolls; and consists in so pivoting the former to an adjustable arm that the end of the former may be raised or depressed, advanced or withdrawn, and moved laterally to bring its front edge so as to barely touch without pressing against the under side of the upper feed-roll, and being free to be carried by the paper strip into the line of draft or center of the machine.

To enable others skilled in the art to understand and use my invention, I will proceed to describe the manner in which I have carried it out.

In the said drawing, A represents the pattern or former of a paper-bag machine, the width of the former between the points 5 and 6 exactly corresponding to the width of the bag required.

At the center of the former, near its rear end, is secured a projection, *a*, of the form shown in Fig. 2, being that of a horizontal section of an inverted cone, over which are clasped the two portions *b c* of an arm, B, which, when brought snugly together around the projection *a*, serve as a split socket, C, for its reception, the interior of the socket being beveled at an inclination corresponding to the outer edge or side of the tapering projection *a*, so that by turning a screw, 7, passing through one portion, *b*, into that *c*, the former may be suspended loosely by the arm, and be free to swing laterally thereon, it being necessary that it should yield to the pressure of the paper strip and be brought thereby into the center or line of draft of the machine, as were the former rigidly connected to the arm and not truly centered in the line of draft, the paper would be spread out, and the amount or width of the lap or fold would be diminished, and the paste on its outer fold be laid on the interior of the bag, causing it to stick together.

The upper end of the arm B is intended to be pivoted to a block, (not shown,) sliding horizontally, as fully set forth in another application for patent for improvements in paper bag machines, made simultaneously with this, the object of pivoting the arm to the sliding block being to allow the former to be carried back and forth in a horizontal plane to bring the edge of the former slightly in advance of the edge of the knife which severs the bag from the strip.

A short distance below the point where the arm is pivoted to the sliding block, the portion *c* is provided with a slot, 8, for the passage of a screw into the sliding block above referred to, by which means the arm may be swung or swiveled in a vertical plane, so that the former may be raised or depressed till its front edge be brought close to or barely touching the under side of the upper one of the rear pair of feed-rolls of the machine.

It will be seen that by my improved method of adjusting the former, it is free to be raised or depressed, and also to be advanced and withdrawn to leave its front edge slightly in front of the severing-knife, and touching without pressing on the feed-roll.

The former is also free to be swung around laterally by the paper into the line of its draft without wrinkling the paper, and without removing the paste from its edge, and without altering the width of the folds.

Instead of pivoting the former to the arm B by means of a split socket, it may be pivoted in any other convenient manner.

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

The adjustable arm B, with its split socket C, in combination with the former A, provided with a projection, *a*, as and for the purpose described.

Witness my hand this 26th day of November, A. D. 1870.

CHS. F. ANNAN.

Witnesses:

N. W. STEARNS,

W. J. CAMBRIDGE.