

(No Model.)

L. P. BOUVIER.  
Envelope Machine.

No. 243,197.

Patented June 21, 1881.

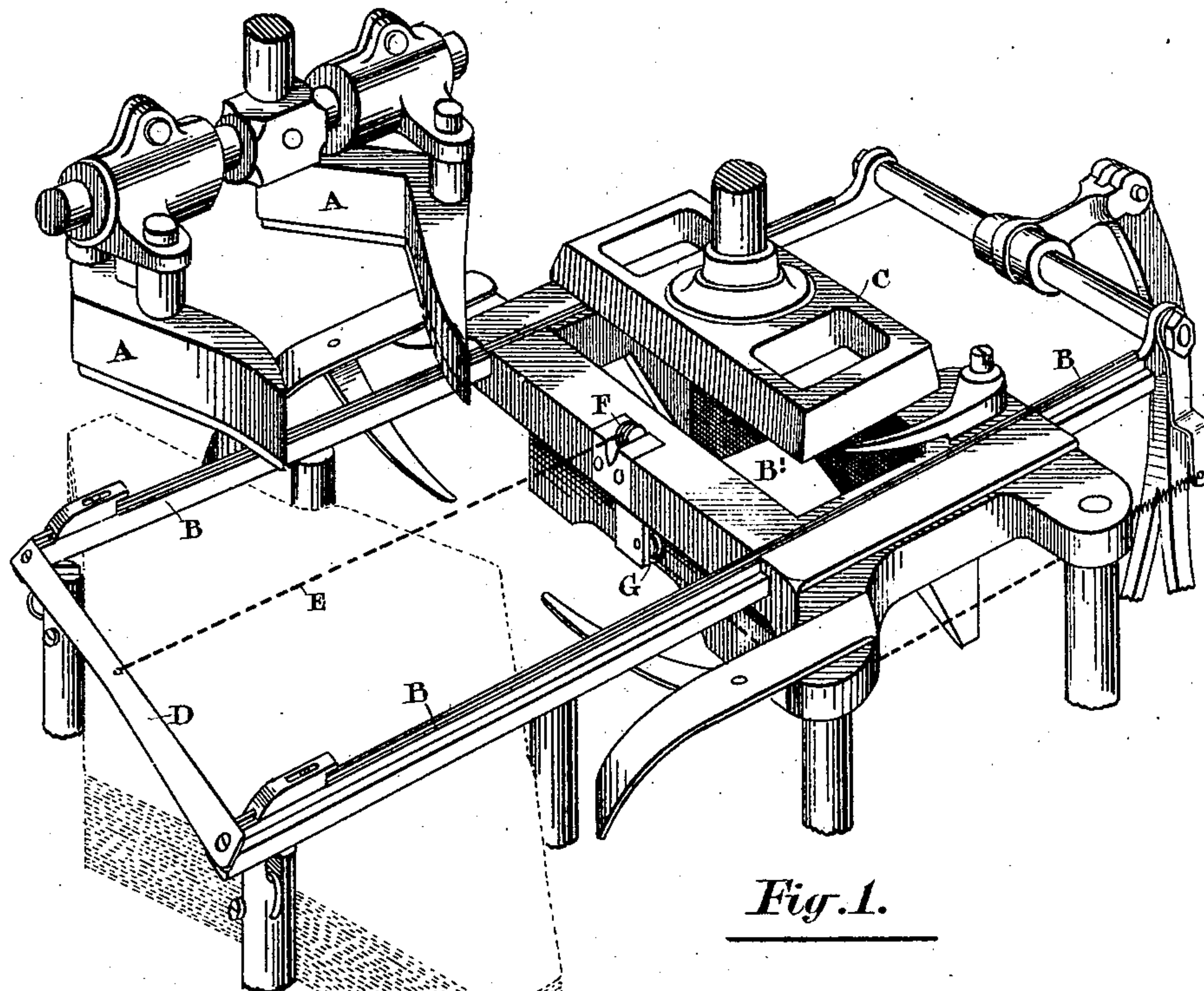


Fig. 1.

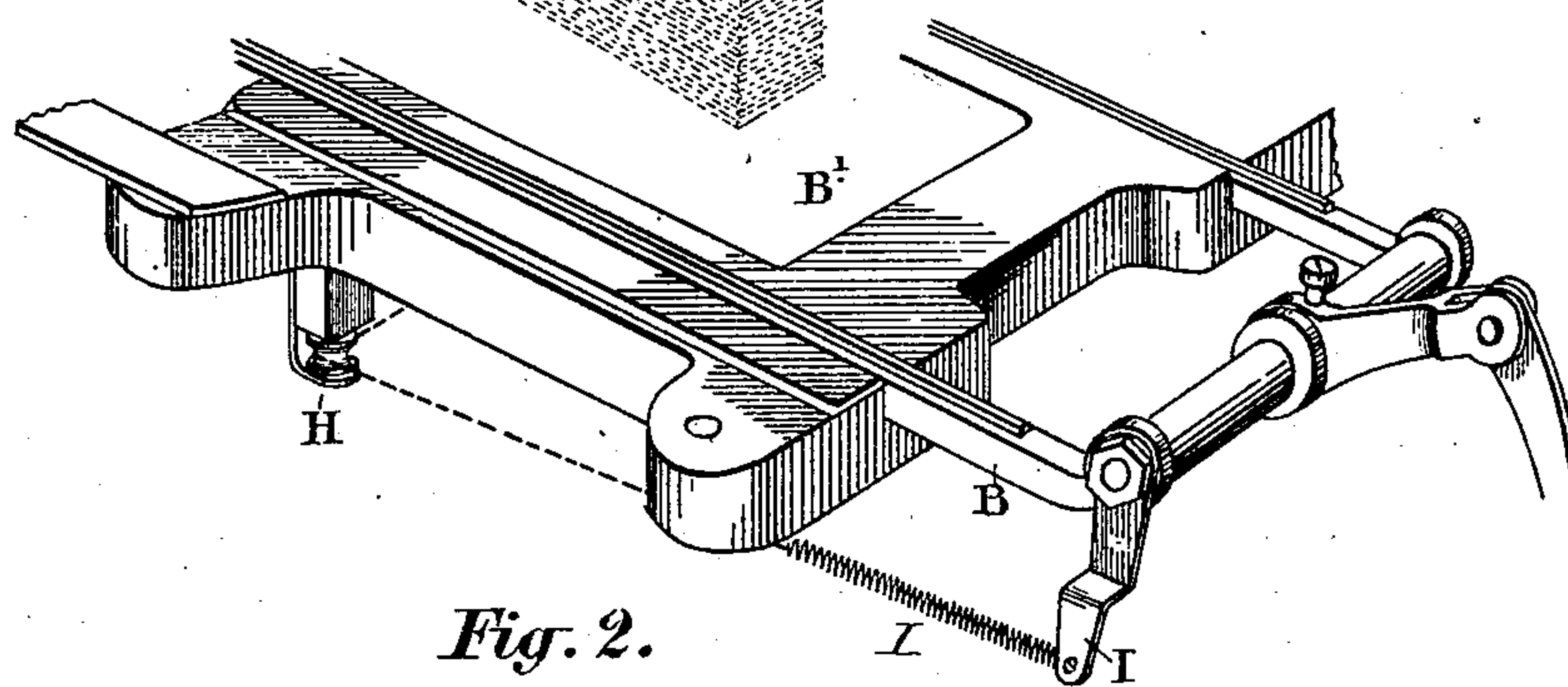


Fig. 2.

Witnesses.

Lewis Tomlinson.

C. W. Baldwin.

Inventor.

L. P. Bouvier  
by  
Ridout Aird  
Atty.



# UNITED STATES PATENT OFFICE.

LOUIS P. BOUVIER, OF TORONTO, ONTARIO, CANADA, ASSIGNOR OF ONE-HALF TO JOHN FITZALLAN ELLIS, OF SAME PLACE.

## ENVELOPE-MACHINE.

SPECIFICATION forming part of Letters Patent No. 243,197, dated June 21, 1881.

Application filed February 25, 1881. (No model.)

*To all whom it may concern:*

Be it known that I, LOUIS PETER BOUVIER, of the city of Toronto, county of York, Province of Ontario, Canada, have invented a certain new and useful Improvement in Machines for Manufacturing Envelopes, of which the following is a specification.

The object of the invention is to prevent the blank sagging as it is carried from the picker to the creasing-box; and it consists, essentially, of a cord attached to the conveyer in such a manner that it will accomplish the desired object without interfering with the movement of the plunger in the creasing-box.

In the drawings, Figure 1 represents a perspective view of the conveyer, creasing-box, and picker. Fig. 2 represents the back end of the conveyer.

As my invention relates only to improvements in the conveyer, it is not necessary nor shall I show any more of the machine or explain its operation further than sufficient to exhibit the operation of the improvement in relation to the rest of the machine.

In Fig. 1 I show in dotted lines the location of a pile of blanks from which the picker A takes one blank at a time and places it on the conveyer. The picker A is not shown in this figure in its exact position, being moved a little on one side in order to show fully the operation of the machine upon which my improvement is made.

B represents the ordinary conveyer, upon which the picker places the blank to be carried to the creasing-box, where it is pushed through by the plunger C and completed by the folding apparatus below.

Heretofore the blank, while carried from the picker to the creasing-box, would frequently sag in the center, and consequently catch on the edge of the creasing-box, thereby checking the movement and destroying the efficiency of the machine. In order to prevent this and accomplish my purpose I place a bridge-piece, D, across the conveyer and connect to it a cord, E, which passes longitudinally in the center of the conveyer till it reaches the creasing-box B', where it passes over a pulley, F, down through the frame of the creasing-box B' to the pulley G, whose axis is set at right angles to that of F. From this pulley it proceeds to

the pulley H, which again changes the direction of the cord, which is finally attached to the arm I on the back end of the conveyer. It will thus be seen that the cord E is connected to both ends of the conveyer, and travels with it, but does not interfere with or pass through the creasing-box.

In order to provide for any sudden strain which, from the movement of the machine, might be directed against the cord E, I attach to the end of the cord a spiral spring, J, which forms the connection between the cord and the arm I.

From this description it will be seen that the cord E forms a central support for the blank from the time it leaves the picker till it reaches the creasing-box, at which point the support ceases, leaving the blank free to be operated upon by the plunger.

What I claim as my invention is—

1. In a machine for making envelopes, a reciprocating conveyer, B, in combination with a support connected to both ends of said conveyer and extending around the creasing-box, substantially as and for the purpose described.

2. In a machine for making envelopes, the reciprocating conveyers B, connected together by the bridge-piece D, in combination with a cord, E, extending from the bridge-piece D to the outside edge of the creasing-box in such a manner that it will always remain taut notwithstanding the movement of the conveyer.

3. In a machine for making envelopes, the conveyers B, connected together by the bridge-piece D, in combination with the cord E, extending from the bridge-piece over the pulleys F, G, and H to the arm I, to which it is attached by the spiral spring J, substantially as and for the purpose specified.

4. In a machine for making envelopes, and in combination with the reciprocating conveyer B thereof, a flexible support fastened at one end to said conveyer, and having its other end passed around a pulley to change the direction of its motion, and secured to a suitable tightening device, substantially as and for the purpose specified.

LOUIS P. BOUVIER.

Witnesses:

C. W. BALDWIN,  
H. H. WARREN.