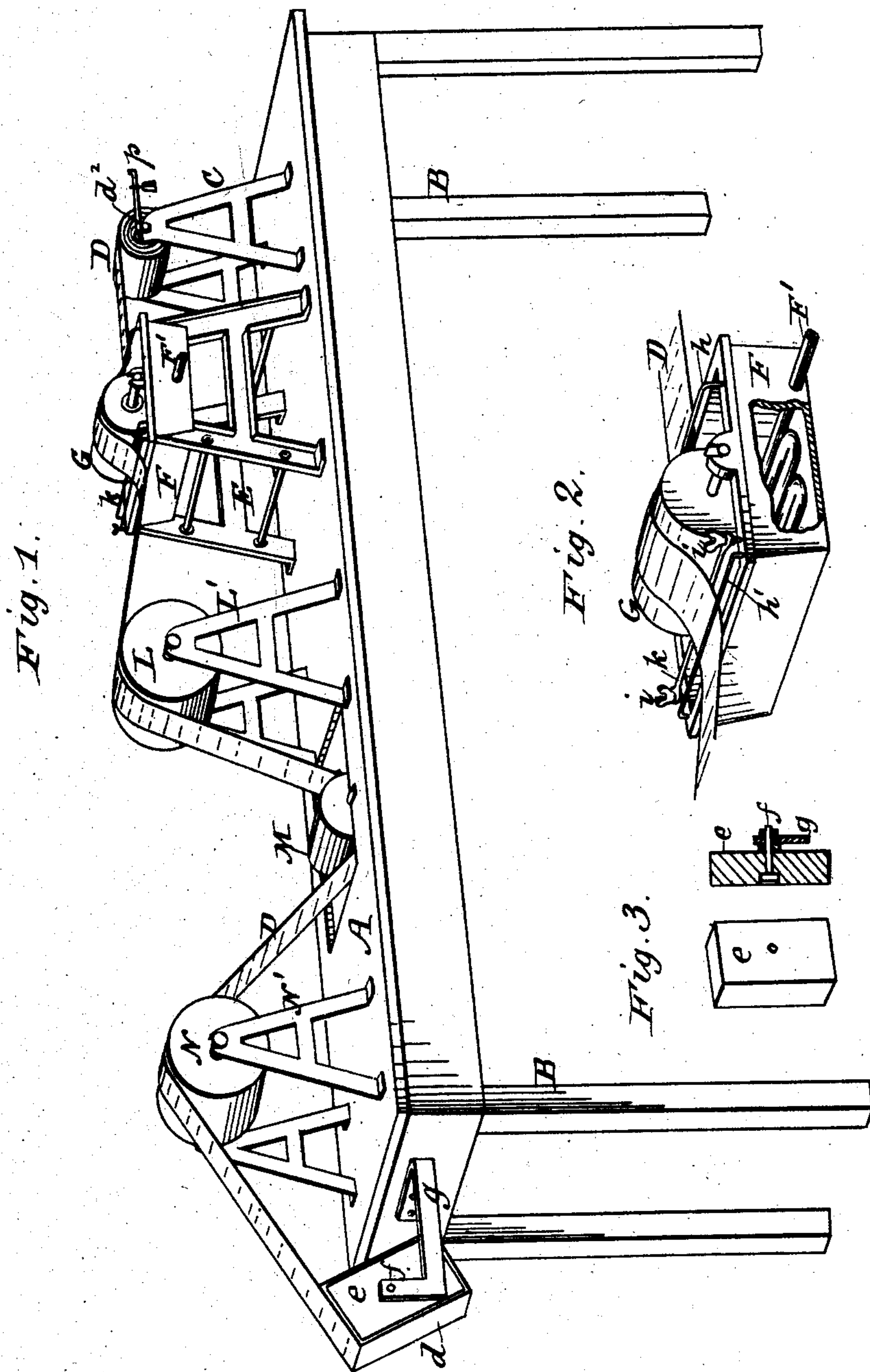


(No Model.)

G. MUNRO.  
BOX MACHINE.

No. 244,919.

Patented July 26, 1881.



*Witnesses:*

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# UNITED STATES PATENT OFFICE.

GORDON MUNRO, OF TROY, NEW YORK.

## BOX-MACHINE.

SPECIFICATION forming part of Letters Patent No. 244,919, dated July 26, 1881.

Application filed May 31, 1881. (No model.)

*To all whom it may concern:*

Be it known that I, GORDON MUNRO, a citizen of the United States, residing at Troy, in the county of Rensselaer and State of New York, have invented certain new and useful Improvements in Machines for Covering Boxes, of which the following is a specification.

My invention relates to improvements in machines for covering pasteboard boxes with paper, in which the paper is taken from a roll or coil and passed over a roller resting in a paste-box and over or under other rollers to and the objects of my improvements are to produce an inexpensive machine in which the amount of paste received on the paper can be regulated, the paste or glue retained in a warm or hot state, and the delivery of the paper from the coil is adjustably accomplished. I attain these objects by the mechanism illustrated in the accompanying drawings, in which—

Figure 1 represents a perspective view of the entire machine. Fig. 2 represents a perspective view of the paste-box on an enlarged scale, and partly broken on the side to show the interior; and Fig. 3 represents, in perspective and section, one of the box-formers used with the machine.

In said drawings, A represents the top of a table, and B the legs thereof. Upon said table is mounted, at one end, on a light frame, C, a roll of paper, D, of suitable width to cover a box, *d*, mounted at the opposite end of the table upon a block or former, *e*, nearly fitting its interior. Through the center of this block *e* passes a bolt, *f*, upon which it can freely revolve, the bolt projecting from the side of a bracket, *g*, secured to the end of the table.

Adjoining the frame carrying the roll of paper is placed upon the table A a frame, E, supporting at a suitable height the paste-box F, the latter containing the paste-roller G, adapted to revolve with the lower portion of its periphery dipping into the paste or glue contained in the box F. Within this box is placed a flat coil or pipe, F', through which hot water or steam can be made to circulate to keep the contents of the box at a suitable temperature to prevent the paste getting into lumps if paste is used, or to keep the glue in a fluid state if glue is used. Upon the edges of the paste-box F are secured two transverse rods, *h* and *h'*, to retain the strip of paper in contact with a large surface of the paste-roll

as said strip passes under said rods and over the roll. To regulate the amount of paste or glue adhering to the paper and remove any excess thereof, there is placed across the path of its pasted surface a scraper, *k*, having each end supported by thumb-nuts *i*, having their screw-tapped lower end secured to the edge of the paste-box, so that by elevating the scraper it will come more forcibly against the paper, remove a portion of the paste, and return it to the mass under it. From the paste-box the strip of paper is conducted over a roller, L, then under a roller, M, set in an opening in the top of the table, or on a level lower than the roller M, and again over a roller, N, set on a frame, N', higher than the roller M, to the box *d*, where it is laid smoothly thereon by the operator with one hand, while with the other hand he revolves the box and block upon which it is mounted against the tension exerted by the friction-strap or adjustable weighted lever *p* resting upon the journals *d*<sup>2</sup> of the paper-roll.

By bending the strip of paper D first in one direction over the roll L, and then in the opposite direction under the roller M, and again over the roller N, the damp paper becomes "tempered," and can be laid very smoothly upon the box under construction. And by keeping the paste heated it will become partly "set" upon that side of the paper to which it is applied and will not affect the face of the paper, and the straw-board of the box will absorb the moisture.

Strips of cloth can be used with this machine as well as strips of paper, and be secured on the boxes with starch, paste, or glue, as may be desired.

Having now fully described my invention, I claim—

1. The combination of the table-top A, paper-roll-supporting frame, paste-box F, and heating-pipe F' with guide-rolls L M N and block *e*, adapted to revolve, substantially as and for the purpose described.

2. The combination of the table-top A, paper-roll-supporting frame, paste-box F, and adjustable scraper *k* with guide-rolls and block *e*, adapted to revolve, substantially as and for the purpose described.

GORDON MUNRO.

Witnesses:

E. SMITH STRAIT,  
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