

No. 646,514.

Patented Apr. 3, 1900.

M. F. WILSON.
PAPER BOX COVERING MACHINE.

(Application filed Dec. 23, 1897.)

(No Model.)

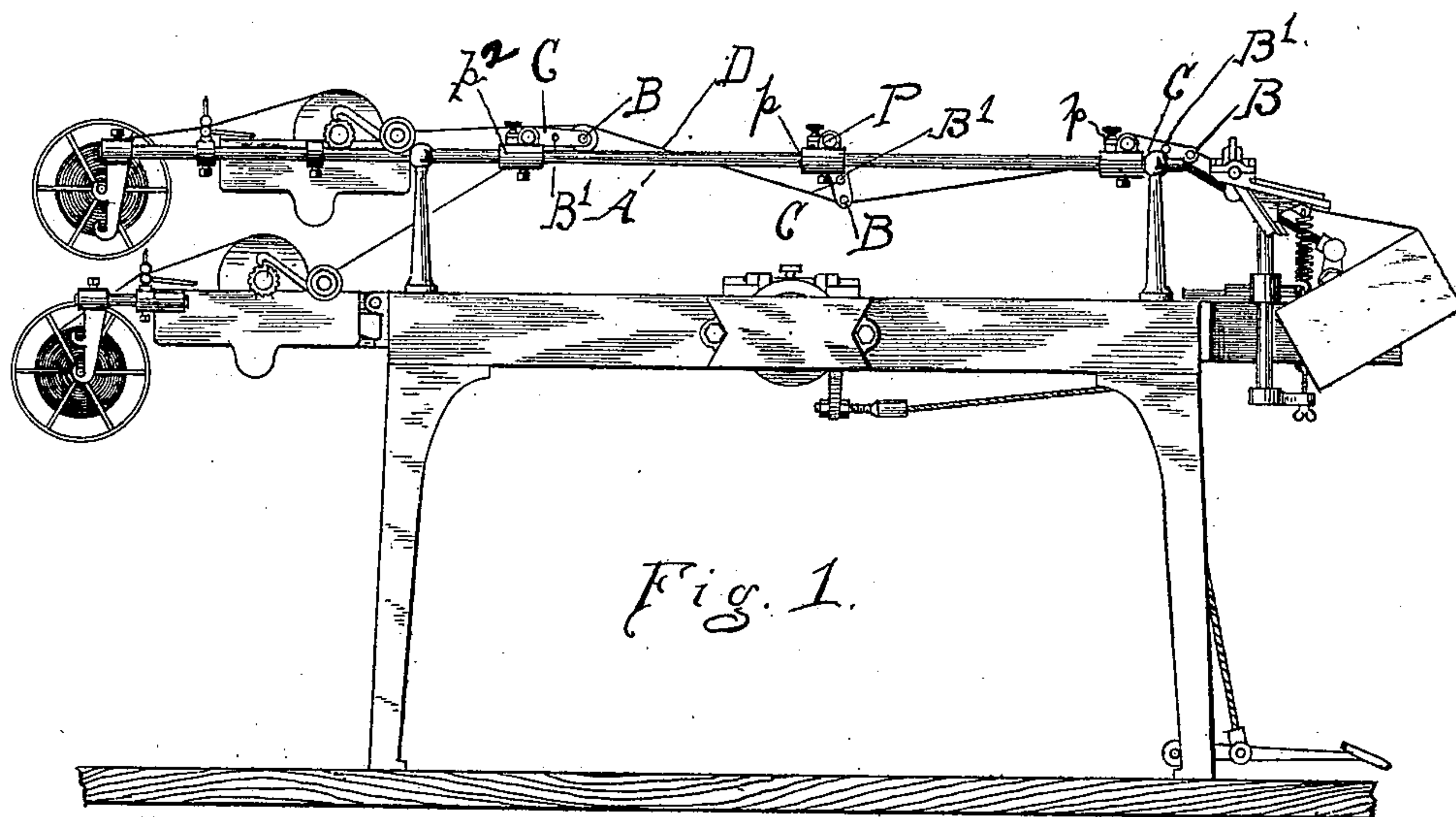


Fig. 1.

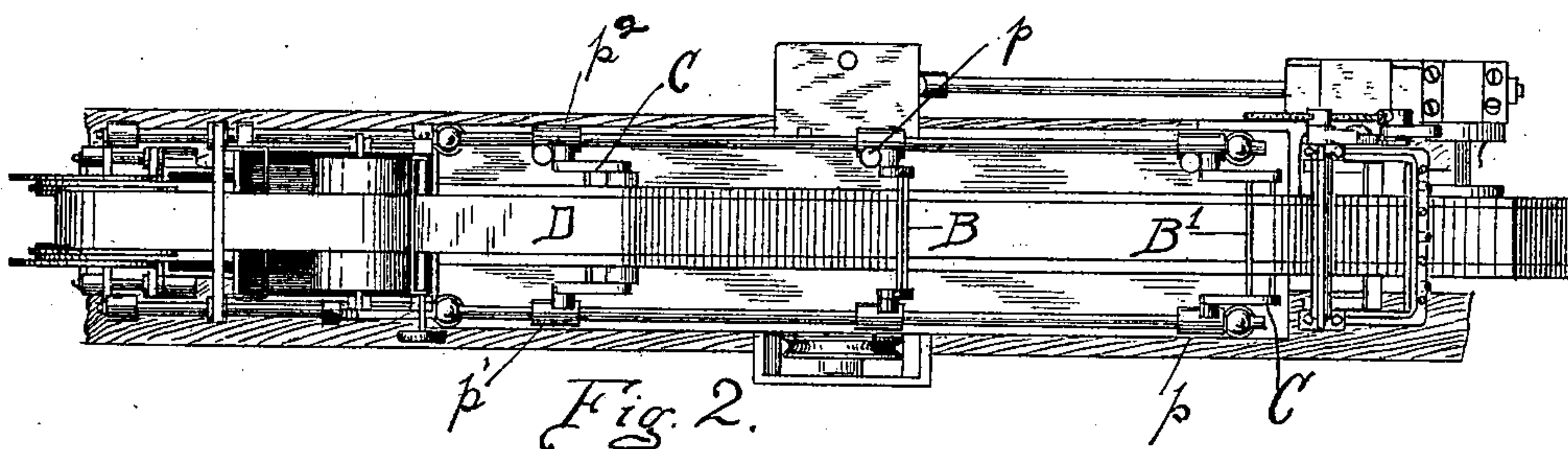


Fig. 2.

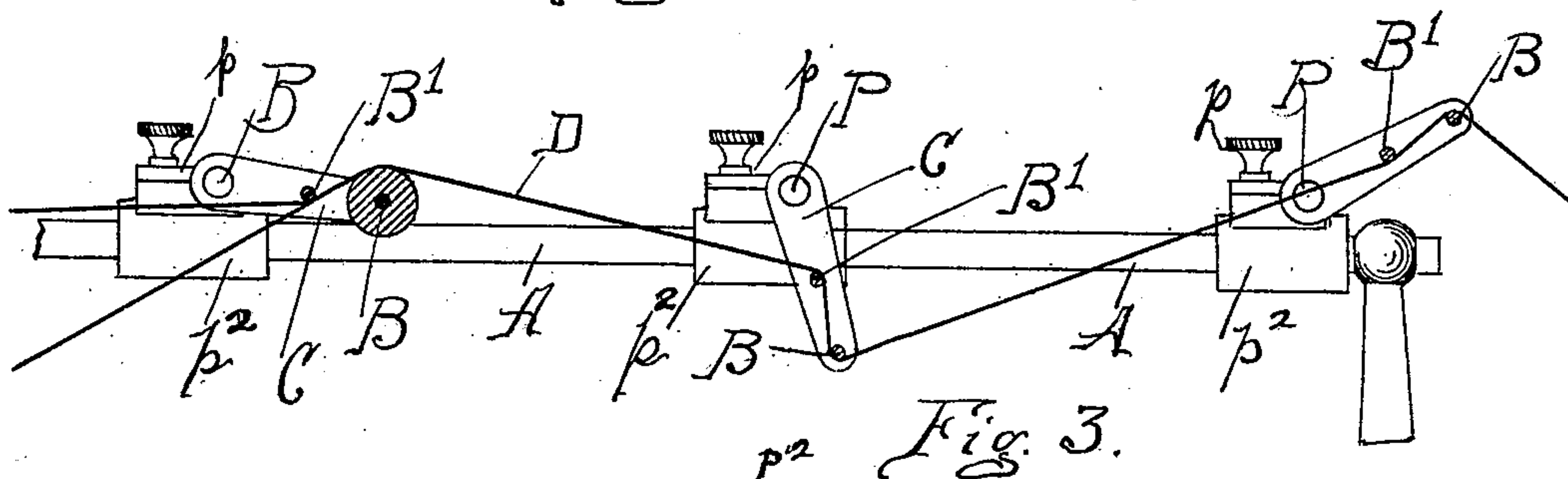


Fig. 3.

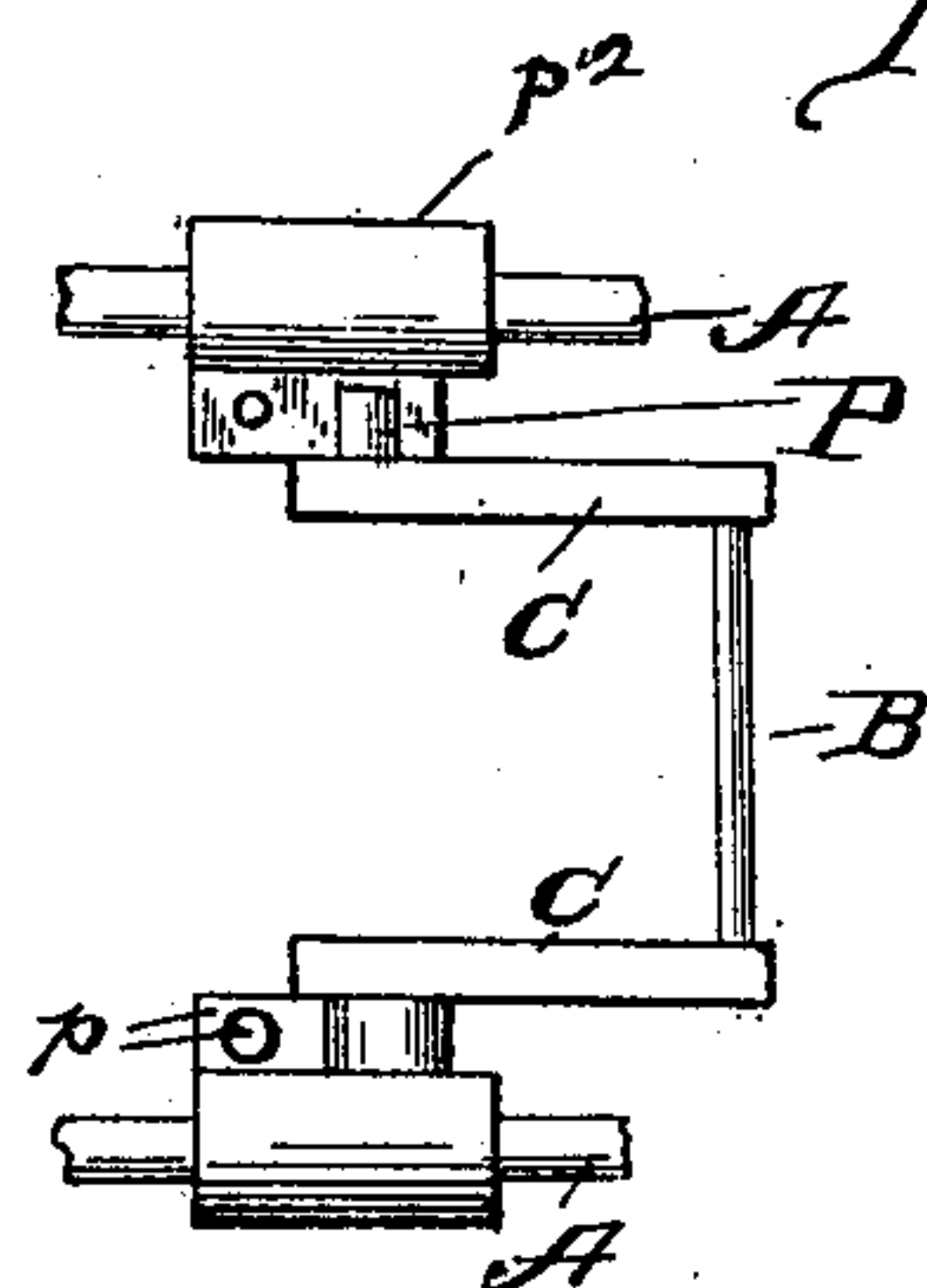


Fig. 4.

WITNESSES.

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MERRICK F. WILSON, OF CHICAGO, ILLINOIS.

PAPER-BOX-COVERING MACHINE.

SPECIFICATION forming part of Letters Patent No. 646,514, dated April 3, 1900.

Application filed December 23, 1897. Serial No. 663,158. (No model.)

To all whom it may concern:

Be it known that I, MERRICK F. WILSON, a citizen of the United States, residing at Chicago, in the county of Cook and State of Illinois, have invented a new and useful Improvement in Paper-Box-Covering Machines, of which the following is a specification.

My invention relates to the guiding and supporting devices intermediate between the paste-applying devices and the box-form; and the invention consists in the novel construction of the parts and the combinations of parts and devices, as set forth in the claims.

Reference will be had to the accompanying drawings, in which—

Figure 1 is a side elevation of the complete machine. Fig. 2 is a plan view. Fig. 3 is a side detail showing modified form. Fig. 4 shows, on a larger scale, details of certain rod-adjusting devices.

In a machine of this class the devices for supporting the paper after it is coated with paste are of varied construction, adapted to support the paper in the air and deflect it to permit the paste to become tempered or tacky and to unite the several strips where more than one strip of paper is used to form one composite strip, and a varied degree of deflection and tension is necessary to accommodate the machine to do different classes of work and for different kinds of paper.

In the drawings, A designates fixed parallel frame-bars extending along opposite sides of the path followed by the paper D, and B a series of transverse rods or rollers lying between the vertical planes of the two bars and supported from the latter by arms C, each having a rigid pivot P working in an ordinary two-part clamping-bearing, which by turning a screw *p* may be made to grip or release its pivot. These bearings are in blocks *p*², adjustively secured to the frame-bars, respectively, at corresponding points, forming pairs of blocks in lines parallel to the rods B. Being thus supported, each rod or roller may swing bodily, like a crank or wrist-pin, in an endless annular path about the common axis of the two pivots from which it is suspended and may be locked at any point in that path by the clamping-screw *p*. Nothing but the rods B lie in the vertical plane of the paper

as it comes from the pasting devices, and by setting the rods of the series at different points in their several paths and by varying the spacing of the rods of the series the tension may be varied, and even the relative tension of different portions of the paper may be varied. These adjustments are far superior to the vertical and horizontal adjustments sometimes provided on machines of this class.

In Fig. 3 I show an additional bar B' in each member, and by training the paper D as shown in this figure I can secure greater tension and a more secure union of the parts of the composite strip. This method of holding and adjusting the rolls or rods permits a wide range of adjustment to suit the operator, and at the same time it is made cheaply and looks neat and makes a more desirable machine.

What I claim is—

1. In a box-covering machine, the combination with a paste-applying device and two frame-bars upon opposite sides, respectively, of the paper's path therefrom, of pairs of blocks arranged along said bars, the blocks of each pair being adjustably fixed to said bars, respectively, at corresponding points, arms pivoted to the blocks, respectively, to swing between the blocks of each pair, and rods mounted, respectively between the free ends of each pair of arms, and means for locking the rotary crank-like structure thus formed at any point in its rotary path.

2. In a box-covering machine, the combination with two arms pivoted in the same axial line upon opposite sides of the paper's path but having no connection in the axial line, of a paper-guiding rod or roller connecting the free ends of said arms, a second analogous rod connecting central points of said arms, and means for locking the pivoted structure thus formed at any point in its path of rotation.

In witness whereof I have hereunto subscribed my name in the presence of two subscribing witnesses.

MERRICK F. WILSON.

Witnesses:

W. E. WILLIAMS,
MARY E. LEETE.