

(No Model.)

I. DREYFUSS.

CHUCK FOR PAPER BOX COVERING MACHINES.

No. 522,338.

Patented July 3, 1894.

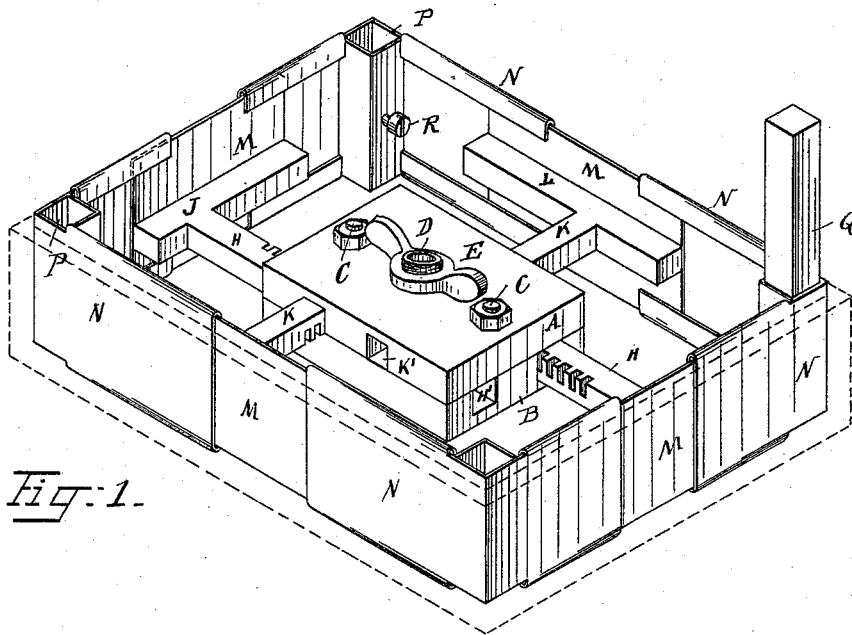


Fig. 1.

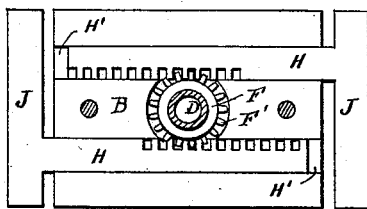


Fig. 2.

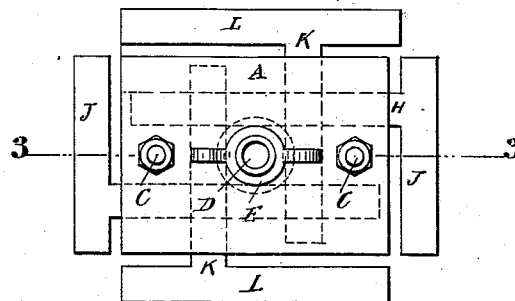


Fig. 3.

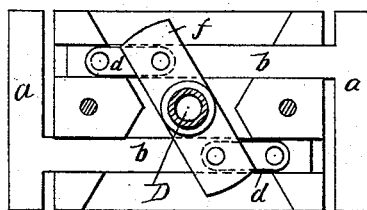


Fig. 5.

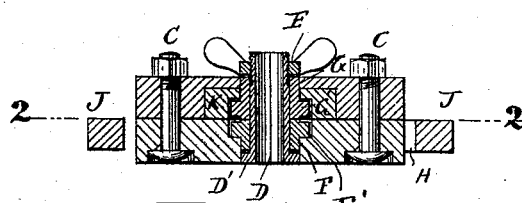


Fig. 4.

WITNESSES:

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CHUCK FOR PAPER-BOX-COVERING MACHINES.

SPECIFICATION forming part of Letters Patent No. 522,338, dated July 3, 1894.

Application filed April 4, 1894. Serial No. 506,296. (No model.)

To all whom it may concern:

Be it known that I, ISIDOR DREYFUSS, a citizen of the United States, residing in the city, county, and State of New York, have invented certain new and useful Improvements in Chucks for Paper-Box-Covering Machines, of which the following is a specification.

This invention relates to improvements in chucks for holding paper boxes while the sides of the same are being covered with paper.

The object of my invention is to provide a chuck of this kind, which can be readily adjusted for boxes of various sizes, and the several parts of which can be readily locked in place after having been so adjusted.

The invention consists in the combination of a central body having a central tube, said body being provided with crossing grooves, cross-pieces at both ends and sides of the body, bars projecting from the cross-pieces through grooves in the body, loose sleeves on the tube provided with means for engaging said bars for permitting the two end-pieces to be moved toward or from the ends of the box simultaneously and for permitting the side-pieces to be moved toward or from the side of the body and means for clamping said sleeves together.

The invention further consists in the combination with the above parts, of plates secured to the cross-pieces and angle or corner-pieces mounted to slide on said plates.

The invention also consists of the construction and combination of parts and details as will be fully described hereinafter and finally pointed out in the claims.

In the accompanying drawings,—Figure 1 is a perspective view of my improved chuck for paper box covering machines. Fig. 2 is a horizontal sectional view of the same on a reduced scale on line 2, 2, of Fig. 4. Fig. 3 is a plan view. Fig. 4 is a longitudinal sectional view on line 3—3 of Fig. 3, parts being omitted. Fig. 5 is a horizontal sectional view of the modified construction.

Similar letters of reference indicate corresponding parts.

Two blocks A and B are placed one above the other and are connected by screw-bolts C passing through them, and provided with suitable nuts.

A tube D is passed through the two blocks,

the upper end of said tube projecting beyond the upper surface of the upper block and having its projecting end screw-threaded externally and on said threaded end the winged-nut E is screwed.

Two sleeves F and G surround the tube D loosely, the lower sleeve F resting on the bottom external flange D' of the tube D, which flange D' is counter-sunk in the under side of the lower block B, the sleeve F extending to the upper surface of the lower block. The sleeve G rests with its lower edge on the upper edge of the sleeve F and said upper sleeve G extends to the upper surface of the upper block A, so that the winged-nut E, when screwed down, bears on the upper end of said upper sleeve G. On the sleeves F and G the pinions F' and G' respectively are formed.

The pinion F' engages two racks H mounted to slide in grooves H' in the upper surface of the lower block, which racks are provided at their outer ends with cross-pieces J, which cross-pieces are at the two ends of the blocks.

The pinion G' engages two racks K arranged to slide in grooves K' formed in the under side of the upper block A, and said racks K are provided at their outer ends with cross-pieces L at the two sides of the blocks.

The grooves H' are arranged at right-angles with the grooves K'. Metal plates M are secured to the outer faces of the cross-pieces J and L and on the same, the angle or corner-plates N are mounted to slide, which angle-plates have their upper and lower edges bent inward and over the edges of said plates M, so as to permit of shifting the angle or corner-plates toward or from each other on the plates M according to the size of the box.

Pockets P are formed on the inner sides of the angle or corner-plates N at the corners, and serve to receive extension-rods Q, which can be locked in place by means of screws R. Said extension-rods Q are used in case the height of the box is greater than the height of the plates M and N.

In the modification shown in Fig. 5, the cross-pieces *a* are formed on the ends of bars *b*, which are connected by links *d* with a cross-piece *f* mounted to turn on the central tube D and other cross-pieces for the two sides are arranged in substantially the same manner, so that when a cross-piece at one end of the

block is pushed in or out, the opposite cross-piece will be moved correspondingly and the cross-pieces at the side can be moved in like manner.

5 The chuck is adjusted and used in the following manner: The winged-nut E is loosened and the cross-pieces at the sides and ends are pulled out until a frame is formed by the plates M and angle or corner-pieces N, of sufficient size to fill the box and then the parts are locked in position by screwing down the winged-nut E. The extension-rods Q are inserted in case of boxes having greater height than the plates M. The chuck having been 10 adjusted to the proper size, is mounted on a spindle or pin, so as to turn with the same, which pin or spindle is rotated by means of any suitable mechanism. The box to be covered is then placed on the chuck, one end of 20 the strip of paper covered with paste or gum is applied on one side of the box and as the box with the chuck continues to rotate, the strip is successively applied on the four sides, the box is removed, another one placed on the chuck, and so on.

The chuck can readily be adjusted in size for boxes that are narrow and long, or square, and to various sizes in the different directions, all that is necessary being to loosen the 30 winged-nut E and then push in or out the sides or ends and then lock the parts in place.

Having thus described my invention, I claim as new and desire to secure by Letters Patent—

35 1. A paper-box holding chuck, composed of a central body having a central tube, cross-pieces on both ends and sides of said body, bars projecting from the cross-pieces through grooves in the body, loose sleeves on the tube 40 provided with means for engaging said bars for permitting the two end-pieces to be moved toward or from the ends of the box simultaneously and also for permitting the side-pieces to be moved toward or from the side of the 45 box simultaneously, and means for clamping said sleeves together, substantially as set forth.

2. The combination, with a central body having two sets of grooves crossing each other 50 at right-angles, a tube at the center of the body and having its upper end threaded, two pinions mounted to turn on said tube, two

sets of bars or racks sliding in grooves in the body, a cross-piece on the outer end of each rack, two of said racks engaging one of the 55 pinions, and two of said racks engaging the other pinion, and a winged-nut screwed on the threaded upper end of the central tube and serving to bear on the pinions and lock them in place, substantially as set forth. 60

3. In a paper box chuck, the combination with a central block, of a sliding-bar projecting from each side and each end, means for causing the sliding bars projecting from the ends to move simultaneously, means for 65 causing the bars projecting from the sides to move simultaneously, crosspieces on the outer ends of said sliding-bars, plates secured to said cross-pieces, and angle or corner pieces mounted to slide on said plates, substantially 70 as set forth.

4. In a paper box chuck, the combination with a central block, of a sliding-bar projecting from each side and each end, means for causing the sliding bars projecting from the 75 ends to move simultaneously, means for causing the sliding-bars projecting from the sides to move simultaneously, cross-pieces on the outer ends of said sliding-bars, plates secured to said cross-pieces, angle or corner pieces 80 mounted to slide on said plates, which angle-plates have their edges bent over the edges of said plates, to form guides, substantially as set forth.

5. In a paper box holding chuck, the combination with a central body, of a sliding-bar 85 projecting from each end and each side, means for moving the sliding-bars projecting from the ends simultaneously, means for moving the bars projecting from the sides simultaneously, cross-pieces on the outer ends of said 90 bars, plates secured to said cross-pieces, corner or angle-pieces mounted to slide on said plates, and pockets formed on the corners of said corner-pieces at the inner sides for receiving extension-pieces, substantially as set 95 forth.

In testimony that I claim the foregoing as my invention I have signed my name in presence of two subscribing witnesses.

ISIDOR DREYFUSS.

Witnesses:

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K. R. BRENNAN.