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PATENTED MAY 29, 1906.

P. FOSS.

AUTOMATIC BLANK FEED FOR CAN BODY MAKING MACHINES.

APPLICATION FILED DEC. 15, 1905.

Fig. 1.

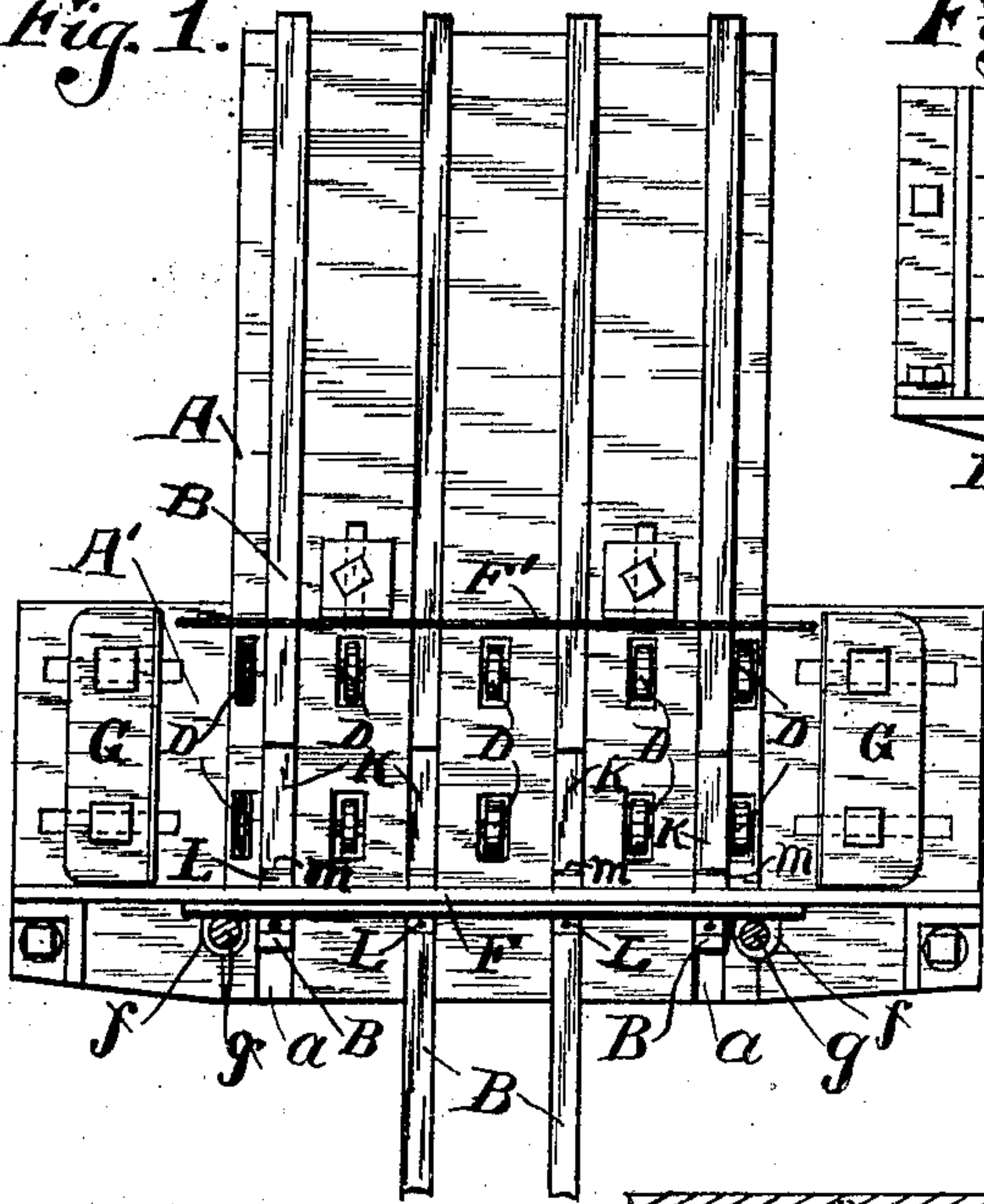


Fig. 2.

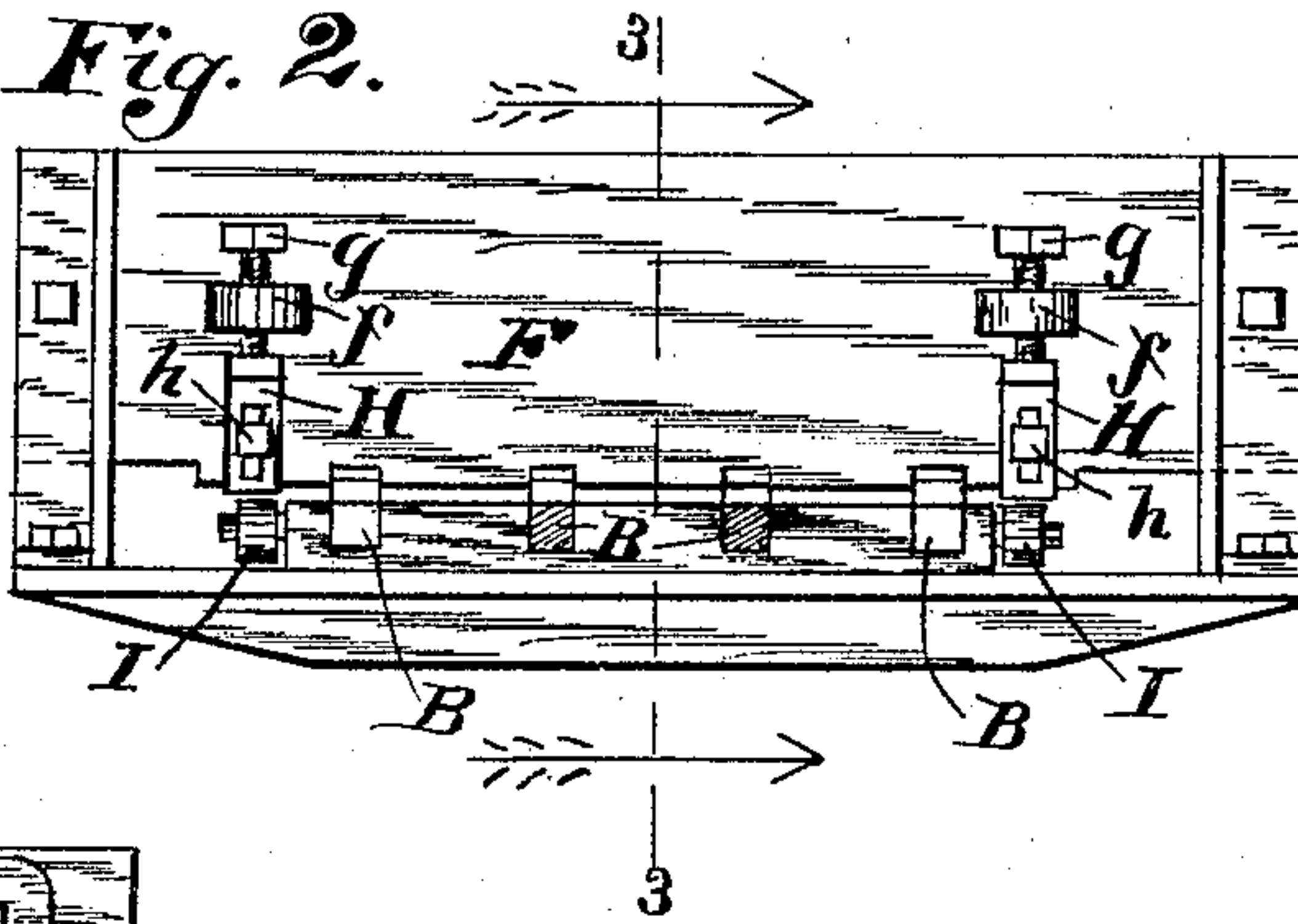


Fig. 3.

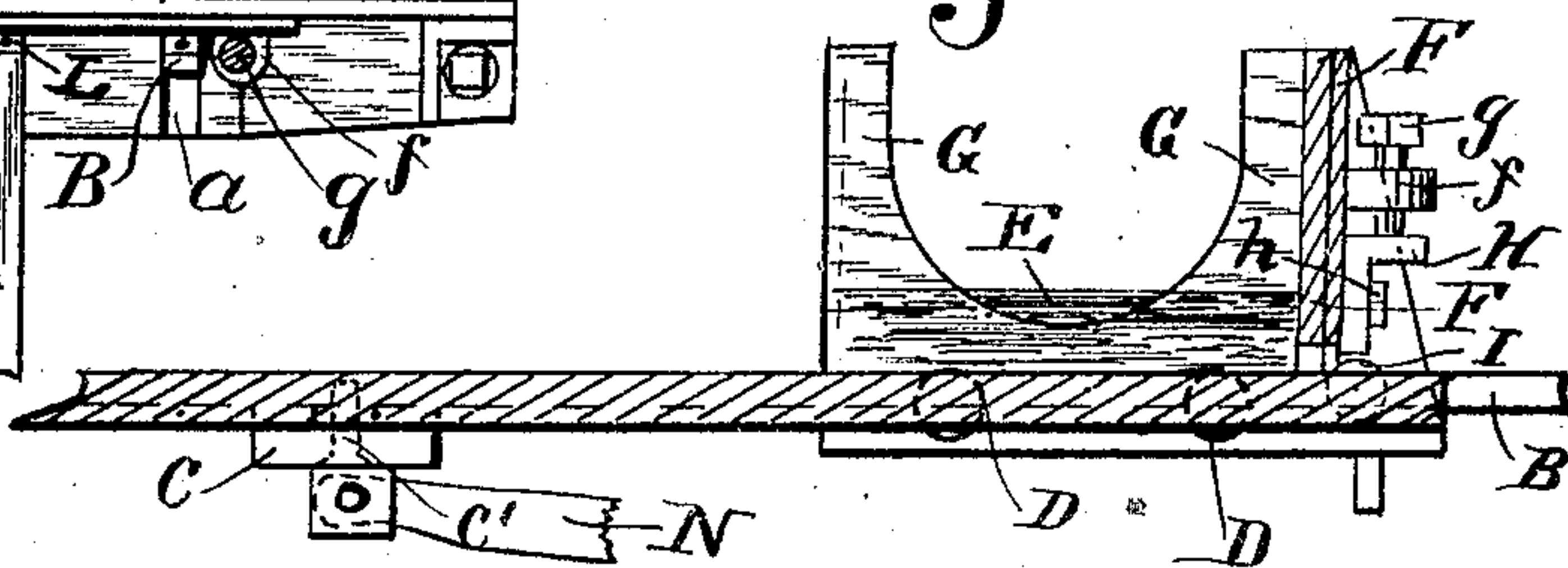


Fig. 4.

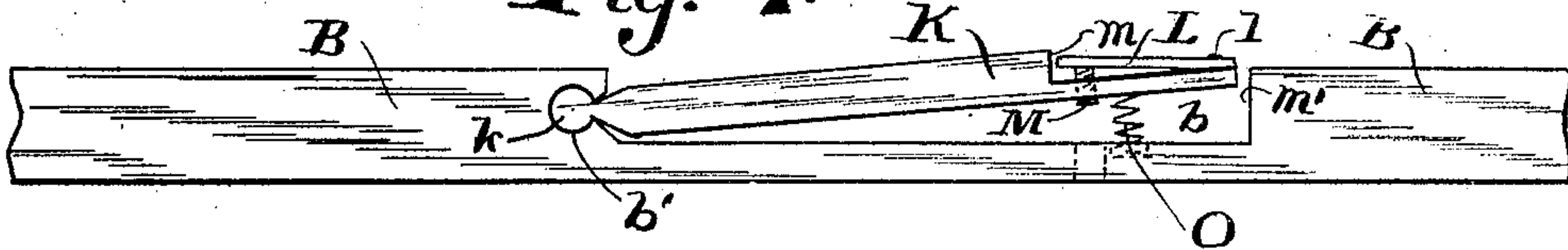
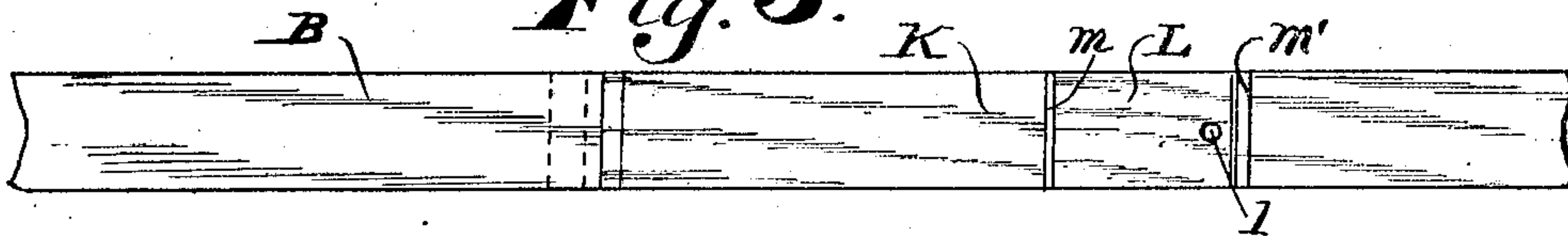


Fig. 5.



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# UNITED STATES PATENT OFFICE.

PAUL FOSS, OF CHICAGO, ILLINOIS.

## AUTOMATIC BLANK-FEED FOR CAN-BODY-MAKING MACHINES.

No. 821,998.

Specification of Letters Patent.

Patented May 29, 1906.

Application filed December 15, 1905. Serial No. 291,847.

*To all whom it may concern:*

Be it known that I, PAUL FOSS, a citizen of the United States, and a resident of Chicago, in the county of Cook and State of Illinois, have invented certain new and useful Improvements in Automatic Blank-Feeds for Can-Body-Making Machines, of which the following, when taken in connection with the drawings accompanying and forming a part hereof, is a full and complete description, sufficient to enable those skilled in the art to which it pertains to understand, make, and use the same.

This invention relates to automatic can-body-making machines; and the object of the invention is to obtain an apparatus by means of which the blanks from which can-bodies are being made on the machine may be automatically fed to such machine from a pile of blanks for can-bodies which are placed in proper position on this apparatus.

A further object of the invention is to obtain an automatic can-body-blank-feeding machine which will be economical in construction and not liable to get out of order.

In the drawings referred to as forming a part of this specification, Figure 1 is a top plan view of an apparatus embodying this invention. Fig. 2 is an end elevation of an apparatus embodying this invention. Fig. 3 is a sectional view on line 3 3 of Fig. 2 viewed in the direction indicated by the arrows. Fig. 4 is a side elevation, on an enlarged scale, of a portion of a longitudinally-movable slide forming an element in the apparatus embodying this invention; and Fig. 5 is a plan view, on an enlarged scale, of a portion of the longitudinally-movable slide shown in Fig. 4.

A reference-letter applied to designate a given part is used to indicate such part throughout the several figures of the drawings wherever the same appears.

A A' constitute the base of the apparatus. *a a* are grooves in base A A', in which grooves the longitudinally-movable bars B B are placed and arranged to slide freely.

C is a bar underneath part A of the base. Bar C is secured, as by the bolt indicated in dotted lines C' in Fig. 3, to bars B B.

D D are pulleys rotatably mounted in base A', so that the periphery thereof extends a slight distance above the upper surface of the base A.

E, Fig. 3, represents can-body blanks resting on the pulleys D D between the guides F F' and G G. Guide F is arranged so that the

bottom one of the blanks E may be pushed thereunder.

*ff* are lugs on the front side of the guide F. H H are adjustable fingers on guide F, respectively adjustable by means of bolts *g g* in lugs *ff* and secured in an adjusted position by bolts *h h*.

I I are pulleys (see Fig. 2) rotatably mounted on base A' underneath the adjustable fingers H H. Fingers H H are adjusted relative to the periphery of the pulleys I I, respectively, so that a single can-body blank may pass between them or be forced between them by the longitudinally-movable bars B B.

The longitudinally-movable bars B B are respectively provided with the recesses *b* therein on the parts thereof which move underneath the pile of can-body blanks between the several guides F F' and G G. In the recess *b* of each one of the bars B B there is pivotally mounted the lever K. There is only slight movement required of the lever K, and I prefer to shape the end thereof at *k* to constitute the pivot on which it turns, such pivot fitting into a corresponding recess *b'* of recess *b*.

L is a spring secured to the forward end of lever K, as by pin *l*, and M is a set-screw by means of which the free end of the spring L is adjusted adjacent to the vertical wall *m* to be the right distance below the upper face of the bar B, so that such vertical wall *m* will engage with one, and one only, of the can-body blanks under which such vertical bar B is longitudinally movable. When thus arranged, the longitudinal movement of the several bars B B will force one, and the lower one, of the can-body blanks from the bottom of the pile of can-body blanks E, and by the continued forward movement of such longitudinally-movable bars such lower or bottom one of the can-body blanks will be forced underneath the adjusted fingers H H, between such fingers and the pulleys I I, and fed to the can-body machine.

The bars B B, or some of them, extend to the can-body-making machine, so that when a can-body blank is forced out from this apparatus in the manner last above described on such bars B B such can-body blank is thereby delivered to the can-body-making machine in substantially the same position can-body blanks are now fed by hand to such machine.

Motion is imparted to the several longitu-



dinally-movable bars by the bar C, which is connected to the can-body-making machine, as by connection N, to move synchronously therewith.

5 A sufficient number of can-body blanks are kept between the guides F F' and G G to hold the bottom one of such can-body blanks down on the movable bars B B, so that the lever K will engage with such can-body blank  
10 as such bars are longitudinally moved underneath the pile in the operation of the machine.

O is a spring holding the lever K up against the pile of can-body blanks.

15 m' is the vertical wall of the forward end of the recess b.

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

20 1. The combination of a base, guides on the base to form a receptacle for a pile of can-body blanks, the lower edge of the guide forming the forward wall of the receptacle raised above the base to permit the bottom  
25 one of the pile of can-body blanks placed in the receptacle to be forced from under such pile and out of the receptacle, adjustable fingers on such forward guide, means to secure the respective fingers in an adjusted position,  
30 rollers rotatably mounted on the base to coact with the adjustable fingers, respectively, with means to force blanks from the receptacle between the fingers and the coacting rollers; substantially as described.

35 2. The combination of a base, guides on the base to form a receptacle for a pile of can-body blanks, the lower edge of the forward guide not extending to contact with the base, an adjustable finger on such forward guide,  
40 means to secure the adjustable finger in an adjusted position relative to the base, longitudinally-movable bars, and levers respectively placed in such longitudinally-movable bars to engage with the bottom one  
45 of the pile of can-body blanks and force the same out from under the pile and underneath the lower edge of the forward guide.

50 3. The combination of a base, guides on the base to form a receptacle for a pile of can-body blanks the lower edge of the forward guide not in contact with the base, an adjustable finger on such forward guide, means to secure the adjustable finger in an adjusted position relative to the base, longi-

55 tudinally-movable bars, provided respectively with a recess therein, levers respectively pivotally mounted in the recess in such longitudinally-movable bars such levers provided with a vertical wall to engage with the  
60 bottom one of the pile of can-body blanks and adjustable mechanism to vary the operative height of the vertical wall and means to actuate the horizontally-movable bars and force a can-body blank out from under  
65 the pile thereof and underneath the lower edge of the forward guide.

4. The combination of a base, guides on the base to form a receptacle for a pile of can-body blanks, the lower edge of the forward  
70 guide not extending to contact with the base, adjustable fingers on such forward guide, means to secure the respective adjustable fingers in an adjusted position relative to the base, rollers rotatably mounted on the base to coact with the adjustable fingers, respectively, longitudinally-movable bars, and levers  
75 respectively placed in such longitudinally-movable bars to engage with the bottom one of the pile of can-body blanks and force the same out from under the pile and  
80 underneath the lower edge of the forward guide.

5. The combination of a base, guides on the base to form a receptacle for a pile of can-body blanks the lower edge of the forward  
85 guide not in contact with the base, adjustable fingers on such forward guide, means to secure the adjustable fingers in an adjusted position relative to the base, rollers rotatably mounted on the base to coact with the ad-  
90 justable fingers, respectively, longitudinally-movable bars provided respectively with a recess therein, levers pivotally mounted in the recess in such longitudinally-movable bars, respectively, such levers provided with  
95 a vertical wall to engage with the bottom one of the pile of can-body blanks and adjustable mechanism to vary the operative height of the vertical wall, and means to actuate the horizontally-movable bars, and  
100 force a can-body out from under the pile thereof and underneath the lower edge of the forward guide.

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Witnesses:

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