

H. BILGRAM.
CIGARETTE PACKING MACHINE.
APPLICATION FILED APR. 21, 1908.

954,917.

Patented Apr. 12, 1910.

Fig. 1.

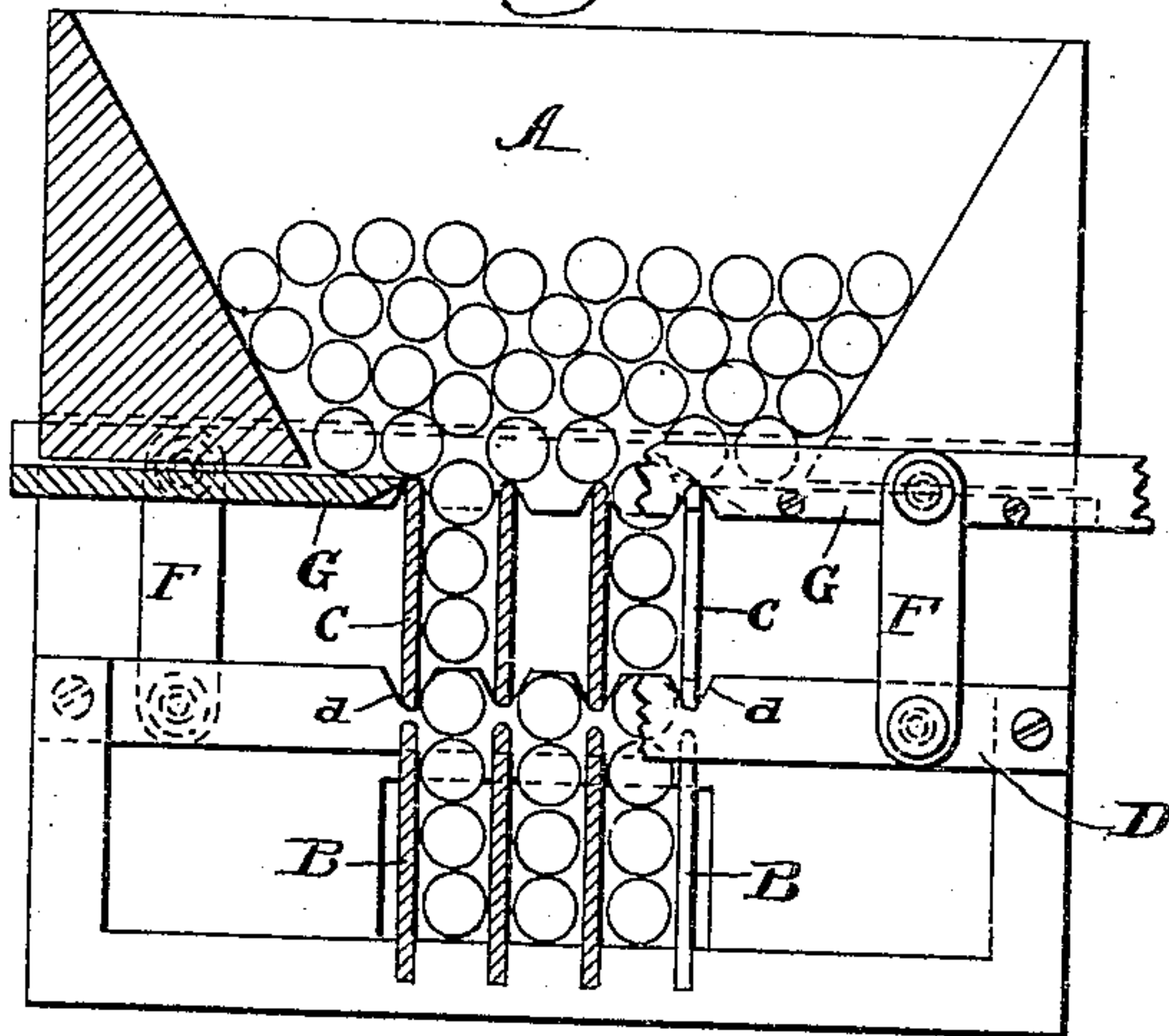


Fig. 2.

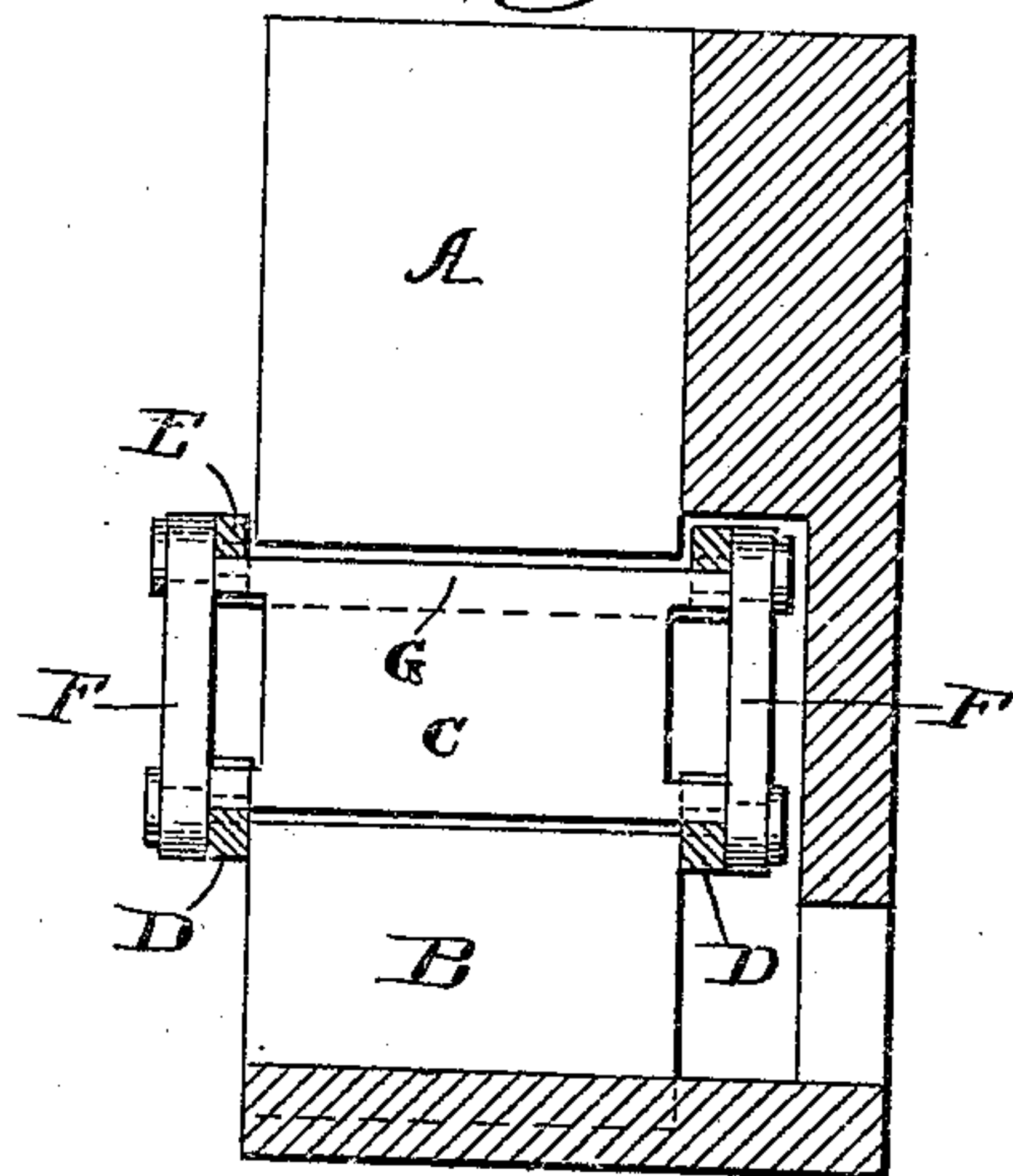


Fig. 3.

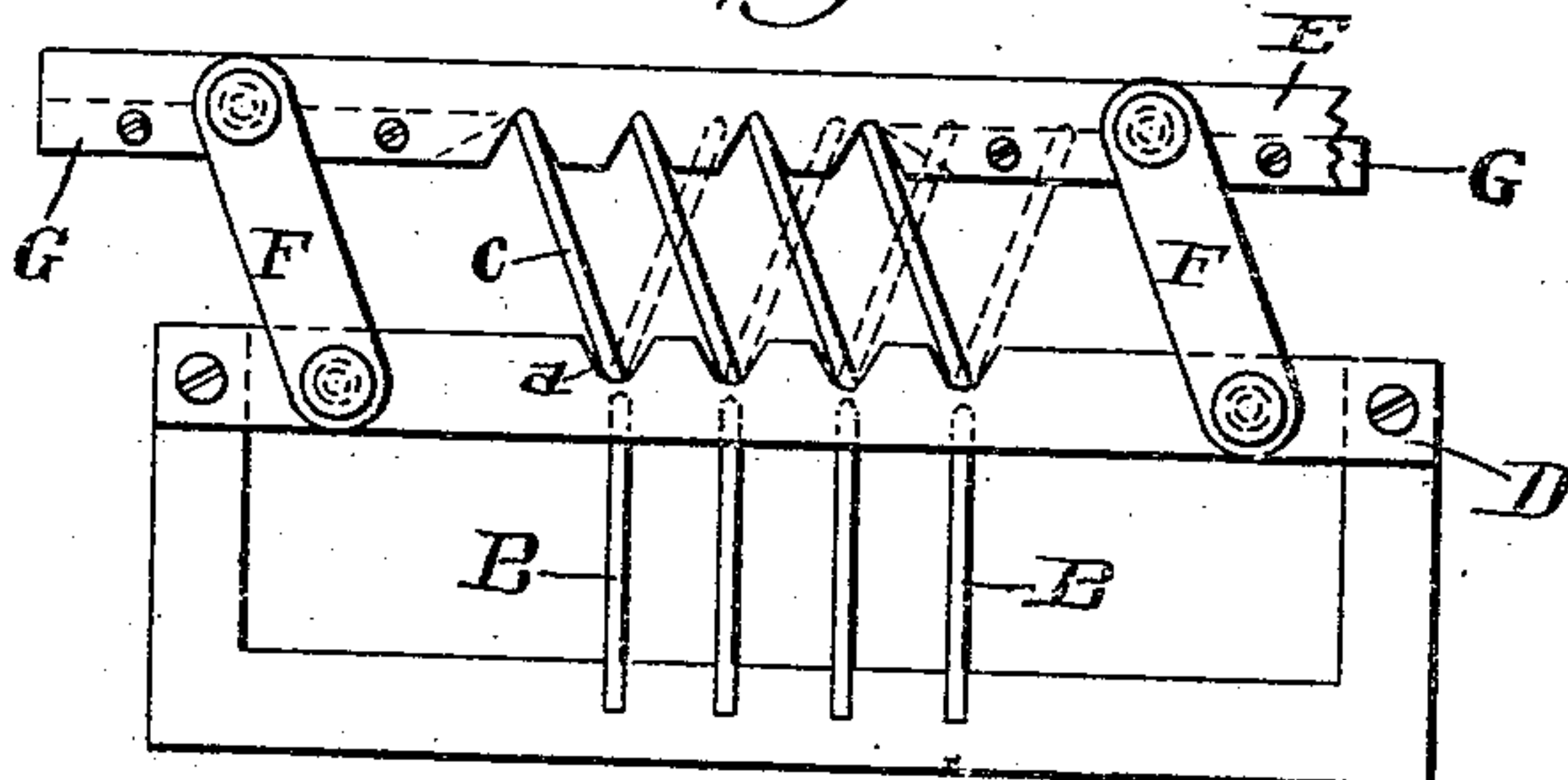


Fig. 4.

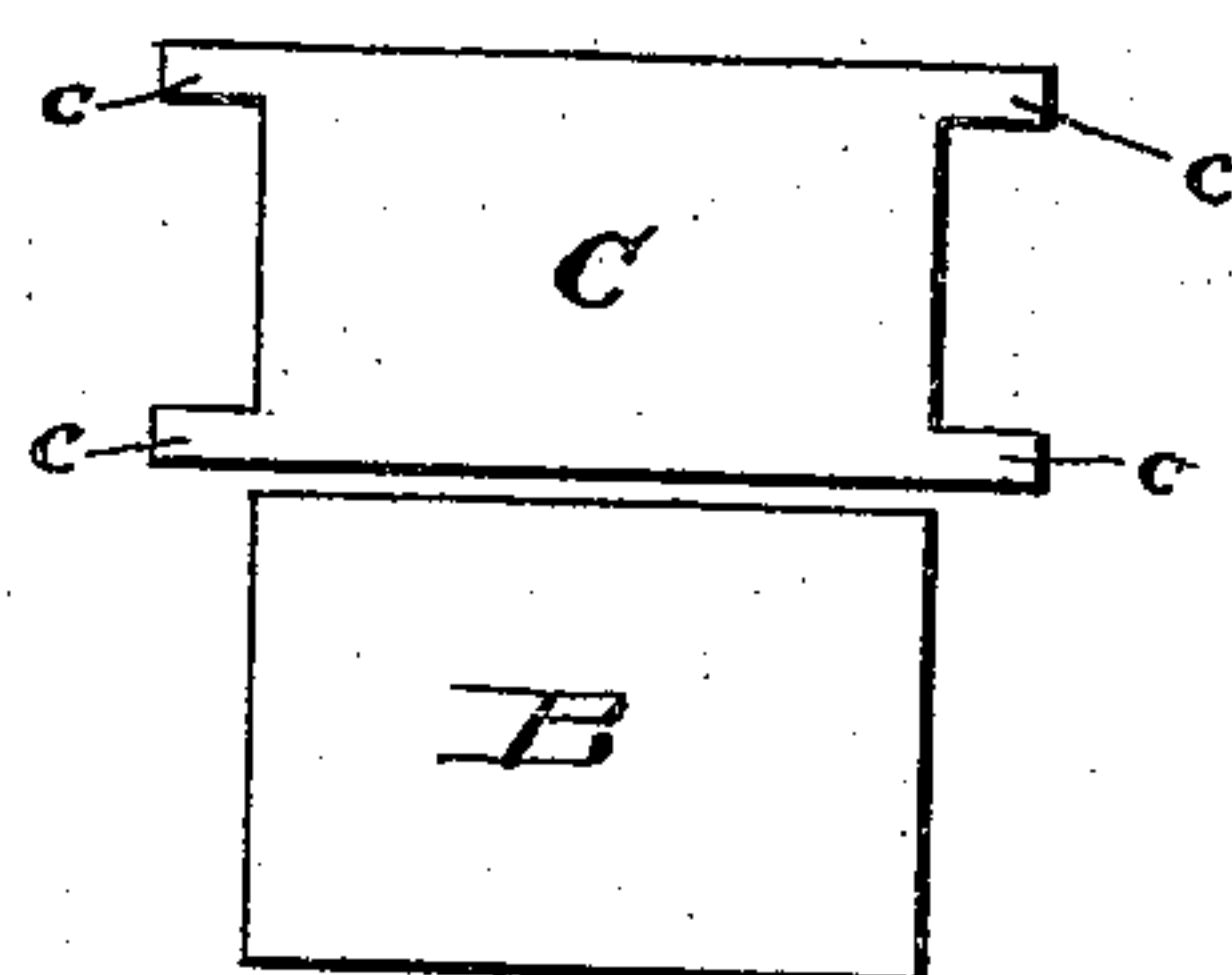


Fig. 5.

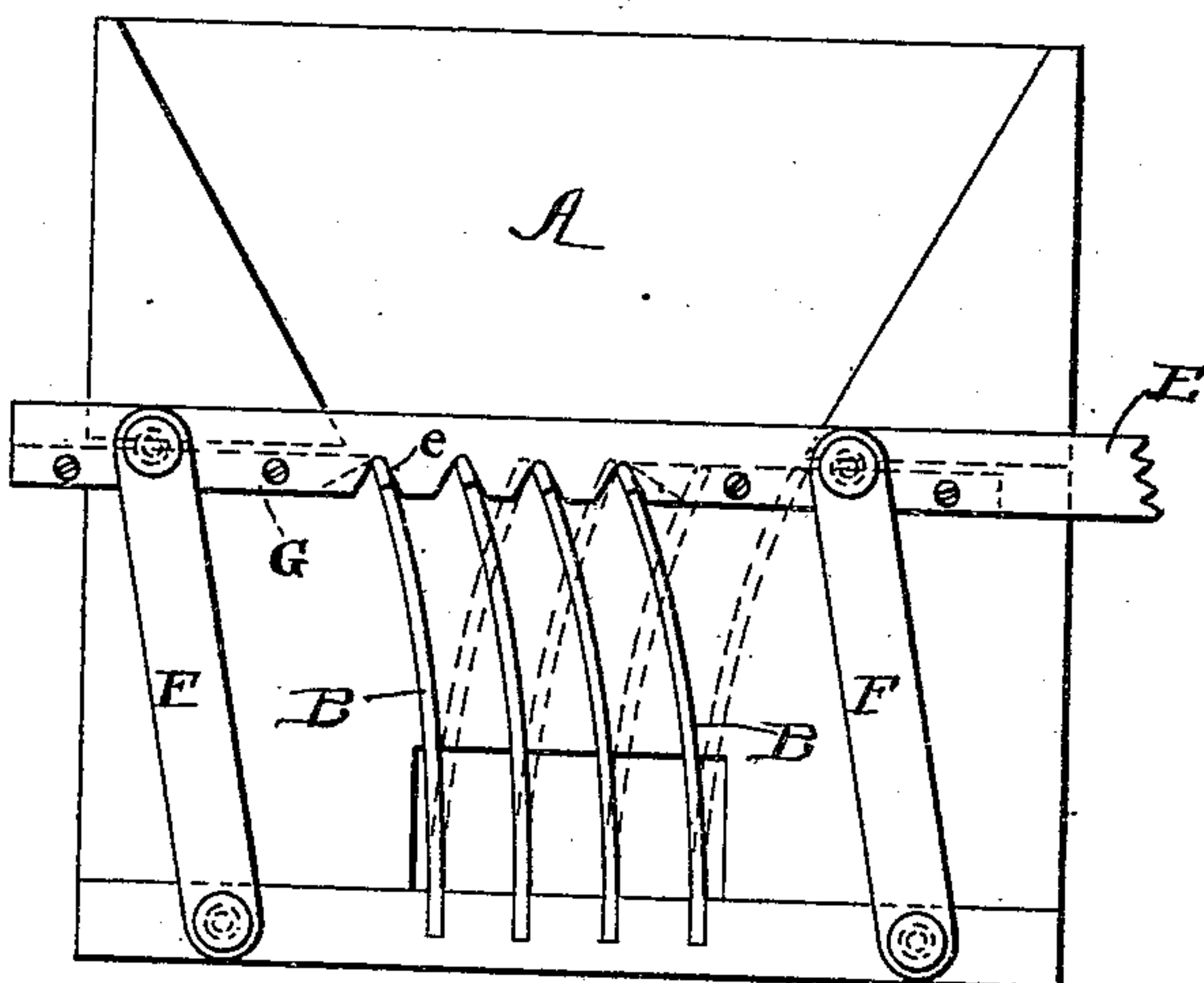
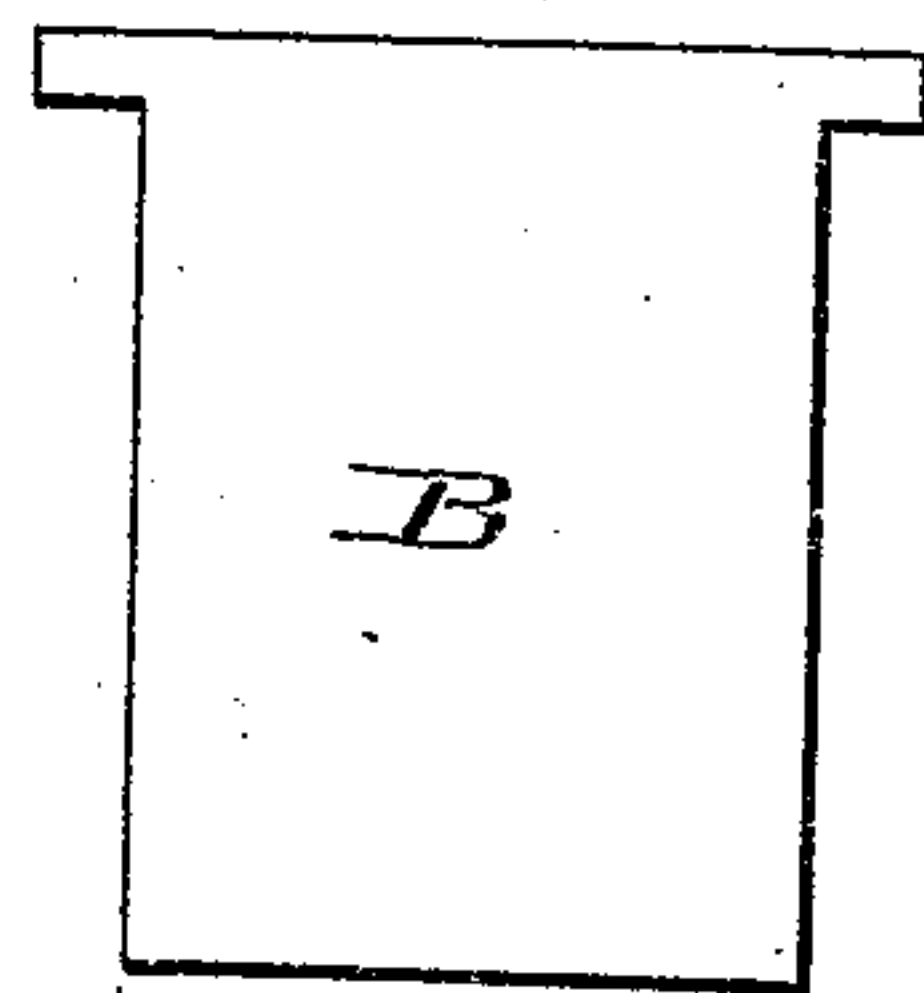


Fig. 6.



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HUGO BILGRAM, OF PHILADELPHIA, PENNSYLVANIA.

CIGARETTE-PACKING MACHINE.

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Specification of Letters Patent.

Patented Apr. 12, 1910.

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To all whom it may concern:

Be it known that I, HUGO BILGRAM, a citizen of the United States, and a resident of the city and county of Philadelphia, State of Pennsylvania, have invented certain new and useful Improvements in Cigarette-Packing Machines, of which the following is a specification.

My invention relates to improvements in machines for packing cigarettes and in particular to that part of such machines by which the cigarettes, fed to the machine in bulk, are automatically put in the order in which they are to be located in the package to be made. To this end the lower portion of the hopper in which the cigarettes are placed by the operator is divided into vertical compartments by partitions and my invention consists particularly in making these partitions flexible and providing a device by which the upper ends of the partitions receive a reciprocating motion while the lower ends remain stationary, so that the partitions, or at least the upper portion of the partitions, assume a pendulum-like motion, changing their angular position to prevent the bridging or arching of the cigarettes and the consequent interruption in their passage from the hopper.

The partitions may be made of elastic material so that the rocking movement takes place within the limits of their resiliency or they may be made of two halves hinged together so that the lower portion partakes of the rocking motion by which the cigarettes are agitated to arrange themselves in the compartments.

In the accompanying drawings, in which similar letters of reference indicate similar parts throughout the several views, Figure 1 is a front view of a hopper with hinged partitions, in part shown in section; Fig. 2, a transverse section of Fig. 1; Fig. 3 shows the partitions in their extreme positions; Fig. 4 represents a front view of the partitions; Figs. 5 and 6 show a modification in which the partitions are made of elastic material.

In Figs. 1 to 4, A is the hopper or receptacle adapted to receive the cigarettes.

B. B are the lower, or stationary, and C C the loose or rocking partitions. These latter

have lugs *c c* on both ends as shown in Fig. 4, which serve as hinges.

The bars D D, Figs. 1 to 3, are rigidly secured to the sides of the hopper and are provided with notches *d d*, in which the partitions C C rest. The bars E E are joined to the bars D D by means of links F F and are provided with notches *e e* which engage the upper lugs of the partitions C C. Between the bars E E are fastened the cross plates G G which form the movable bottom of the hopper, preventing cigarettes placed in the hopper from dropping down outside of the partitions C C. By means not shown in the drawing a reciprocating motion is conveyed to the bars E E whereby the portions C C assume a rocking motion indicated in Fig. 3, by dotted lines.

Figs. 5 and 6 show a modification in which the partitions B, instead of being articulated, are made of elastic material, held firmly by their lower edges and joined to the reciprocating bars E E. The stationary bars D D of Figs. 1 to 3 are not needed in this case. In every other respect the above description applies to this modification.

By a lateral pusher, not shown in the drawing, the lowest cigarettes are pushed out, to be carried to the packing device. When this pusher is withdrawn the partitions will readily fill themselves, as the motion of the upper ends of the partitions is such that an arching of the overlying cigarettes will be prevented and the resulting agitation, while not destructive to the cigarette, is adequate to keep the partitions filled.

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

1. In a machine for packing cigarettes, and in combination with a hopper for holding the same, partitions, the upper ends of which are movable and the lower ends of which are fixed, between which the cigarettes are discharged from the hopper, and means for imparting to the upper ends of said partitions a reciprocating motion.

2. In a machine for packing cigarettes, and in combination with a hopper or receptacle for holding the cigarettes to be packed, a two part partition between which the cigarettes are discharged from the hopper, the

lower part of said partitions being stationary, the lower ends of the upper parts having a hinged connection to the upper ends of the lower part and the upper ends of the
5 upper part being adapted to swing, and means for imparting to the upper ends of the upper sections a reciprocating motion by which the angular position of these sections is alternately changed.

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Witnesses:

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