

J. R. LAYTON.

MATCH SAFE.

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980,293.

Patented Jan. 3, 1911.

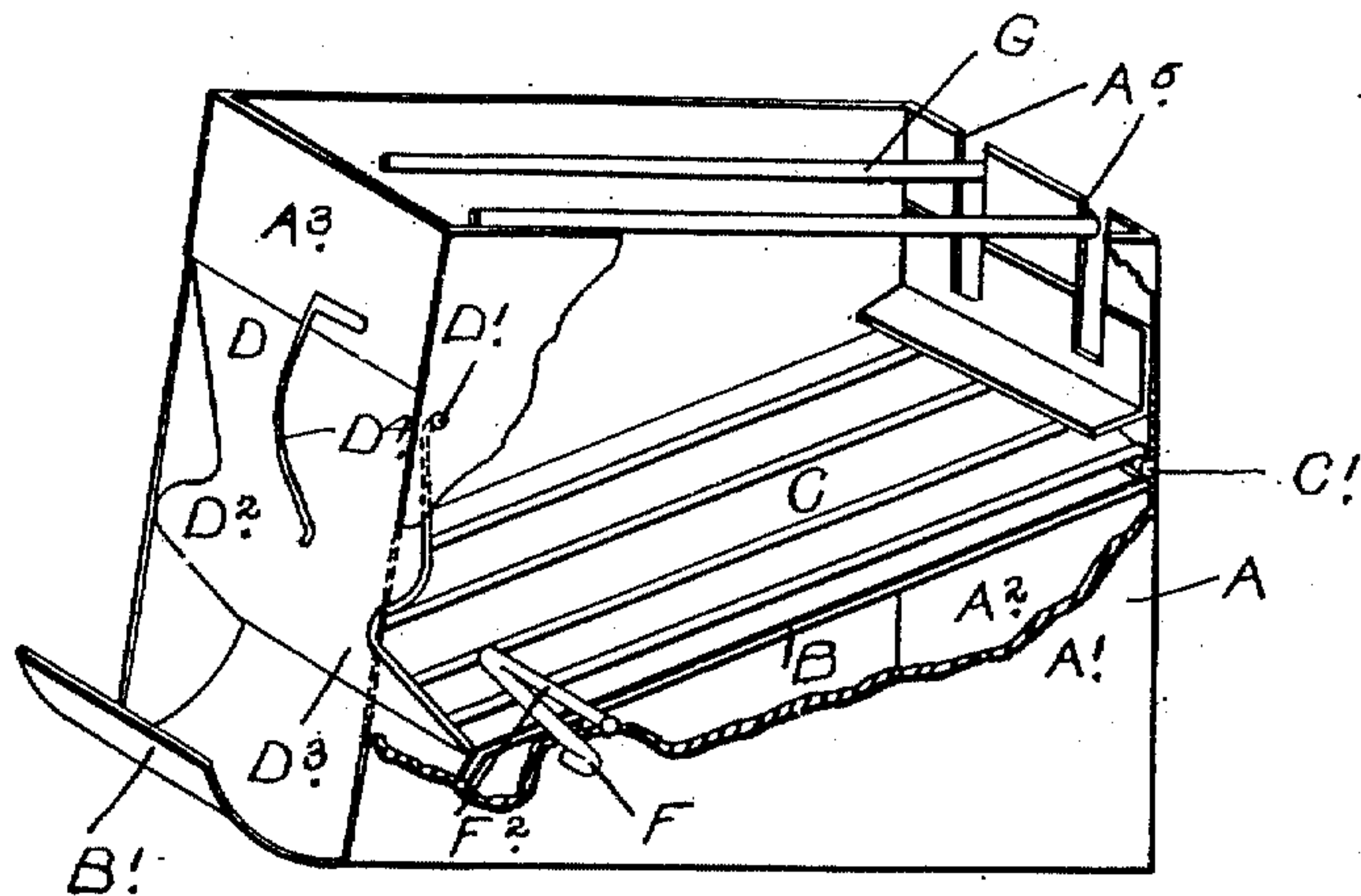


FIG. 1.

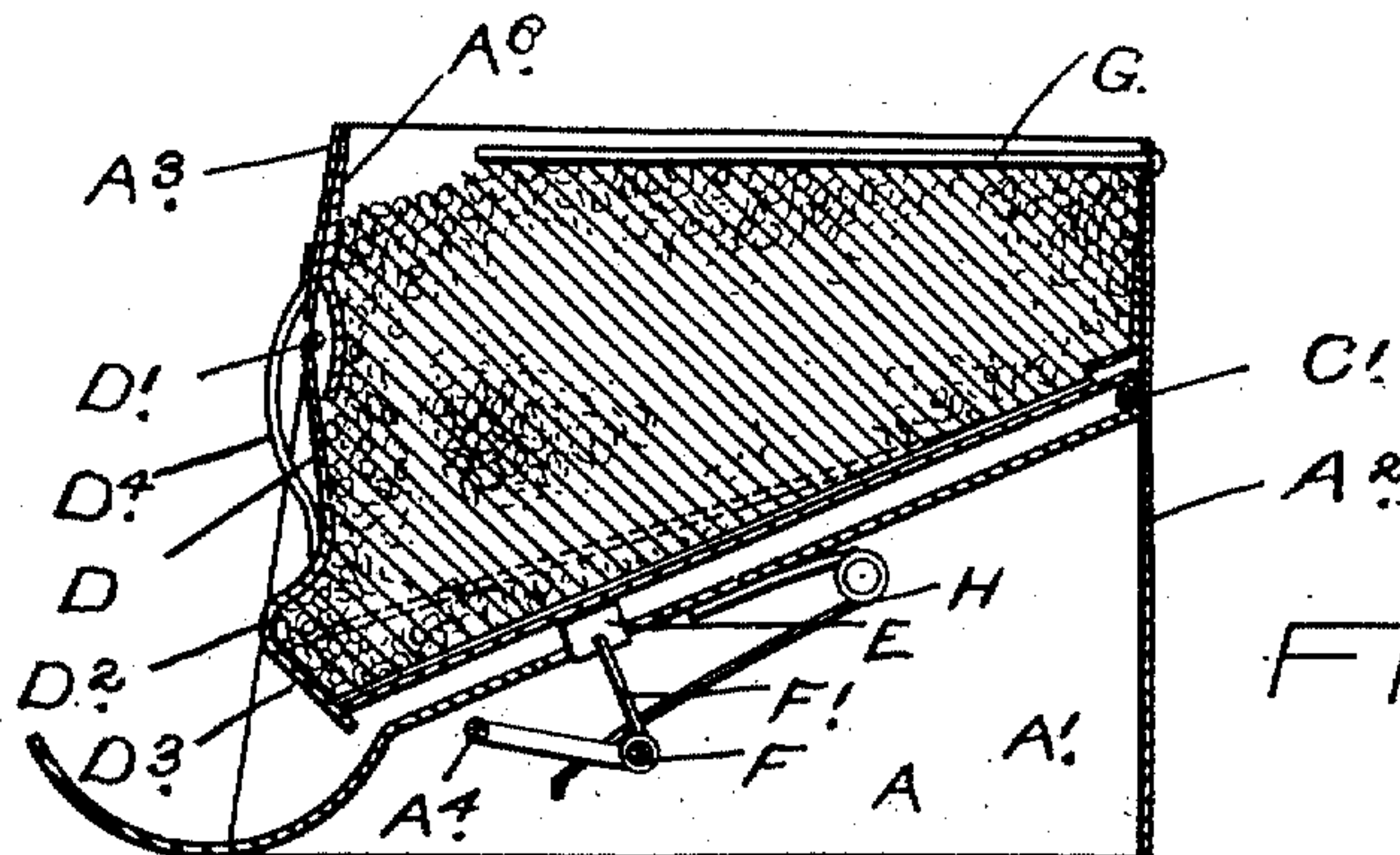


FIG. 2.

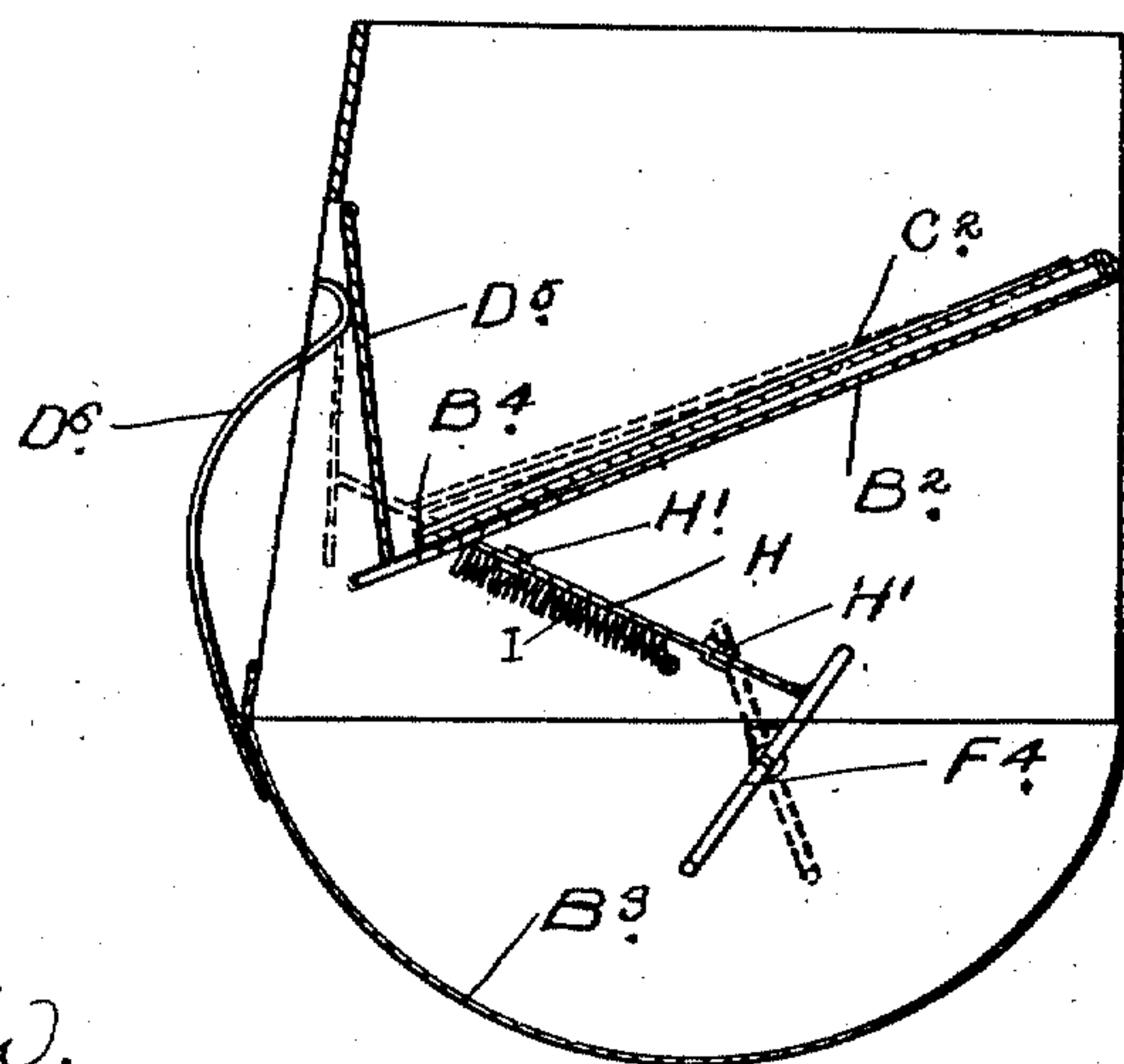


FIG. 3.

Witnesses.
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UNITED STATES PATENT OFFICE.

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MATCH-SAFE.

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Specification of Letters Patent.

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To all whom it may concern:

Be it known that I, JAMES RUFUS LAYTON, of the town of Paris, in the county of Brant, in the Province of Ontario, Canada, have invented certain new and useful Improvements in Match-Safes, of which the following is the specification.

My invention relates to improvements in match safes, and the object of the invention is to devise a simple, cheaply manufactured device of this class, which may be filled in bulk from the ordinary box at one operation and thereby save the tedious manner of filling usually known to such match safes.

A further object is to make the safe of such a construction that only one match will be delivered or ejected at each operation.

A still further object is to provide a means whereby the matches may be always held in proper position for delivery.

My invention consists of a safe having a front delivery chute, an inclined hinged adjustable match holding chute, an inclined support for holding the same in its normal position, a delivery gate hinged in the front above the delivery chute and designed to co-act with the lower end of the holding chute, a crank handle connected to the adjustable chute, wire eveners held above the holding chute and designed to rest upon the matches, the parts being otherwise constructed and arranged in detail as hereinafter more particularly explained.

Figure 1, is a perspective view of my match safe partially broken away to show the parts involved in my invention. Fig. 2, is a longitudinal section through Fig. 1. Fig. 3, is a longitudinal section of a modification.

In the drawings like letters of reference indicate corresponding parts in each figure.

A is the match safe having the side walls A', the back wall A², and the front wall A³.

B is an inclined support, which extends at the front in the form of a curved delivery chute B'.

C is the match holding chute, which is held at C' on the back wall A².

D is a delivery gate, which is hinged at D' beneath the front wall A³ and is provided with a curved lower portion D² and ending in an inclined straight portion D³.

D⁴ is a spring fastened at one end to the front wall A³ and normally exerting a resilient pressure upon the delivery gate D. The

holding chute C normally abuts the inclined portion D³ of the delivery gate D.

E is a lug secured to the bottom of the holding chute C.

F is a crank spindle connected by a link F' to the lug E at the outer end of the crank. The crank spindle F is journaled in the side walls at A⁴ and is provided with the usual crank handle F².

The matches are placed at the top of the holding chute C, such matches being placed from a box in bulk on the holding chute C and a wire follower G of sufficient weight is placed upon the top of the matches as indicated by full lines in Fig. 1. The matches, however, are not shown but the position of the follower is shown. The follower consists of a wire in U-shape form, the looped end passing through slots A⁵ in the back wall A².

A⁶ is an apron forming a guard for the hinge of the holding chute C. The matches all lie straight across the holding chute C and are held from top to bottom in such a position, so as to feed evenly by the weight of the wire G.

By turning the crank handle F² the adjustable hinged chute C is thrown into the position shown in dotted lines in Fig. 2 and a match will pass down between the end thereof and the curvular portion D² of the delivery gate D. By releasing the crank handle the holding chute is restored to the normal position, the spring H acting upon the crank spindle F to this end.

It will thus be seen that the matches are held and delivered practically one at a time into the chute B' and the handling of the matches in the safe avoided and the handling of and the consequent waste of matches as is now commonly done is obviated.

In Fig. 3 I show a straight gate D⁵, which is held against the support B² by a spring D⁶. In this figure I also show a delivery chute B³ of substantially arc-shape form and located at the bottom of the match safe. The matches are intended to be taken out from the side of this form of chute. A hinged holding plate C² is provided and the bottom of the plate B² is provided with a widened notch or opening B⁴ through which extends an inclined plate H held in suitable guide-ways H' on the side of the safe and abutting at the top the plate C². Spiral springs I are connected to the side of the safe at one end and to the plate H at the

opposite end and serve to normally hold the plate in the lowermost position. F^4 is a crank spindle, which is designed to co-act with the plate H. The crank spindle is manipulated by a suitable crank end, so as to hold the crank, the plate H and the delivery gate D^5 into the position shown by dotted lines in this figure when it is desired to deliver a match. The crank and the lowermost match or matches are held on the bottom notched end of the supporting plate B^2 and consequently when the plate H and delivery gate D^5 are thrown into the position indicated in this figure the balance of the matches are cut off and a match is allowed to drop over the notched end of the supporting plate B^2 . This form is not quite as efficient as the form I have hereinbefore described, but shows a modification, which may be adopted without departing from the spirit of my invention. In fact various changes may be made in the form of the operating parts without departing from the spirit of my invention. I wish it to be understood in this specification that I do not wish to limit myself to the exact form shown.

What I claim as my invention is:

1. A match safe comprising the case or box proper, an internal bracing and bearing support, a stationary delivery chute at the bottom end thereof, an inclined hinged hold-

ing chute for the matches located above the support and hinged at the back, a co-acting resilient delivery gate having a bottom forwardly projecting portion and means beneath the tilting bottom and intermediate of the length of the same for raising the bottom of the holding chute up clear of the bottom edge of the forwardly projecting portion of the delivery gate, so as to leave a space between such bottom edge and the forwardly projecting portion specified.

2. A match safe comprising the case or box proper, an internal bracing and bearing support, a stationary delivery chute at the bottom end thereof, an inclined hinged holding chute for the matches located above the support and hinged at the back, a co-acting resilient delivery gate having a bottom arc shape forwardly projecting portion, and means beneath the tilting bottom and intermediate of the length of the same for raising the bottom of the holding chute up clear of the bottom edge of the forwardly projecting portion of the delivery gate, so as to leave a space between such bottom edge and the forwardly projecting portion as specified.

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Witnesses:

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