

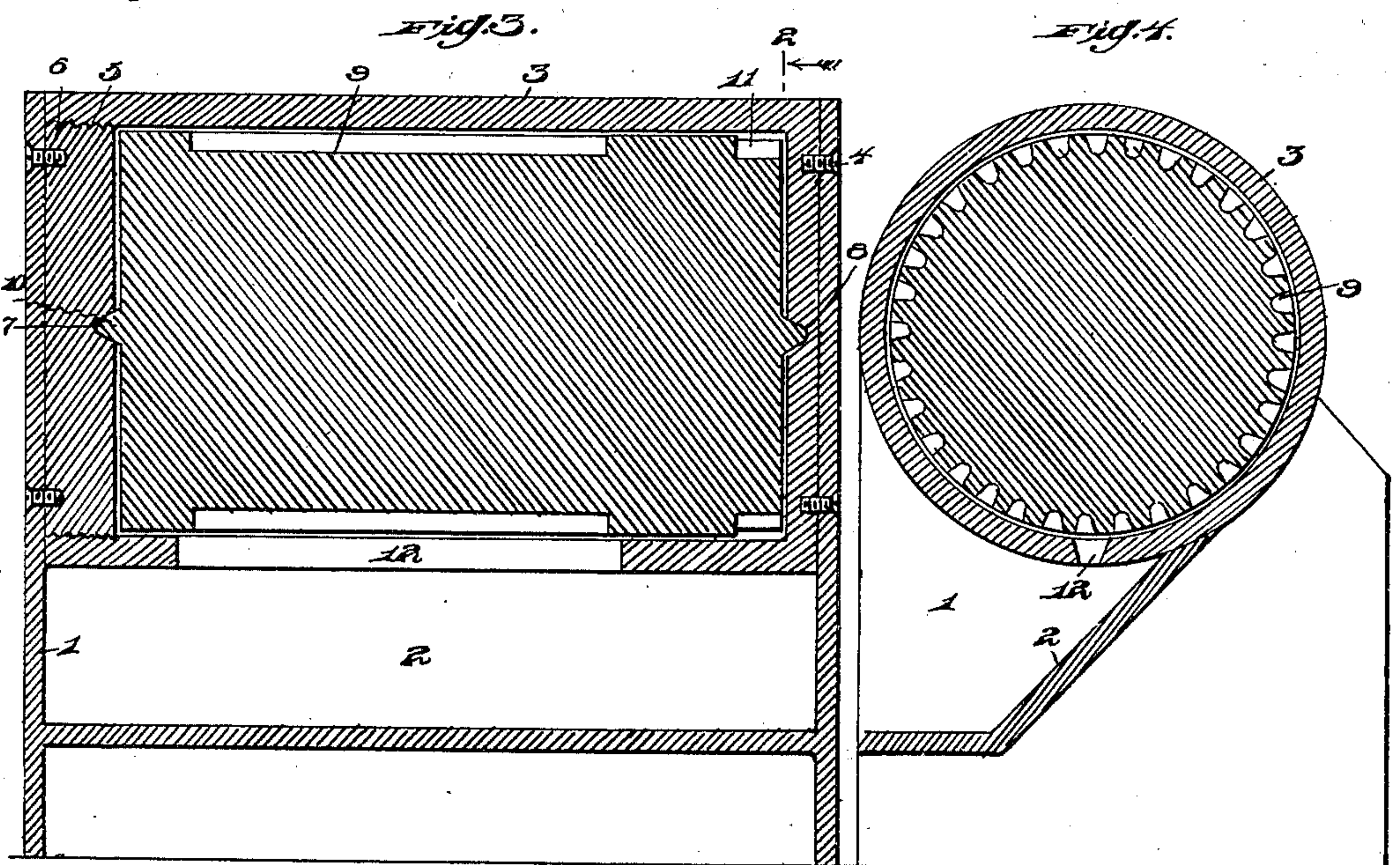
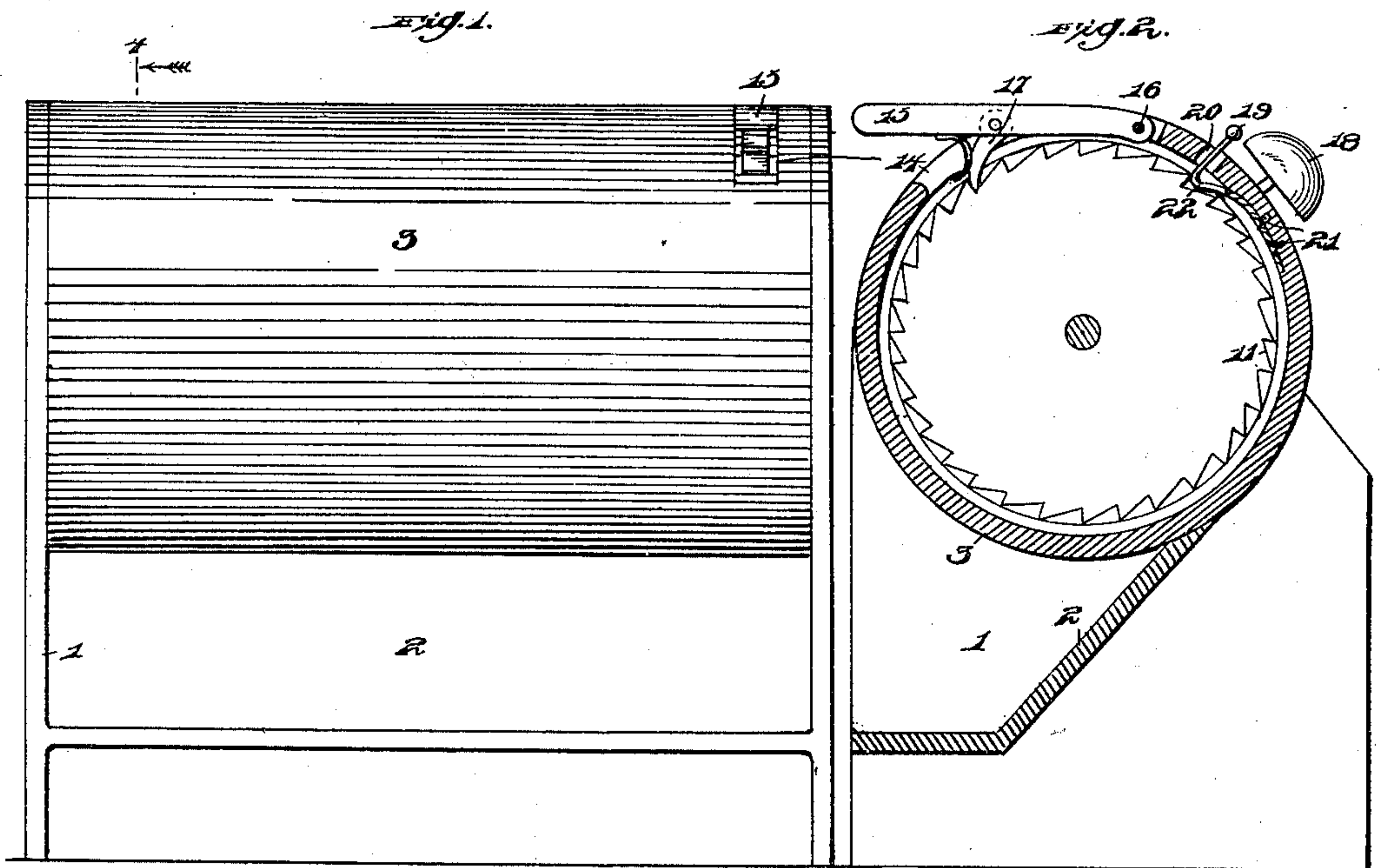
No. 693,723.

Patented Feb. 18, 1902.

**G. LAW.
MATCH BOX.**

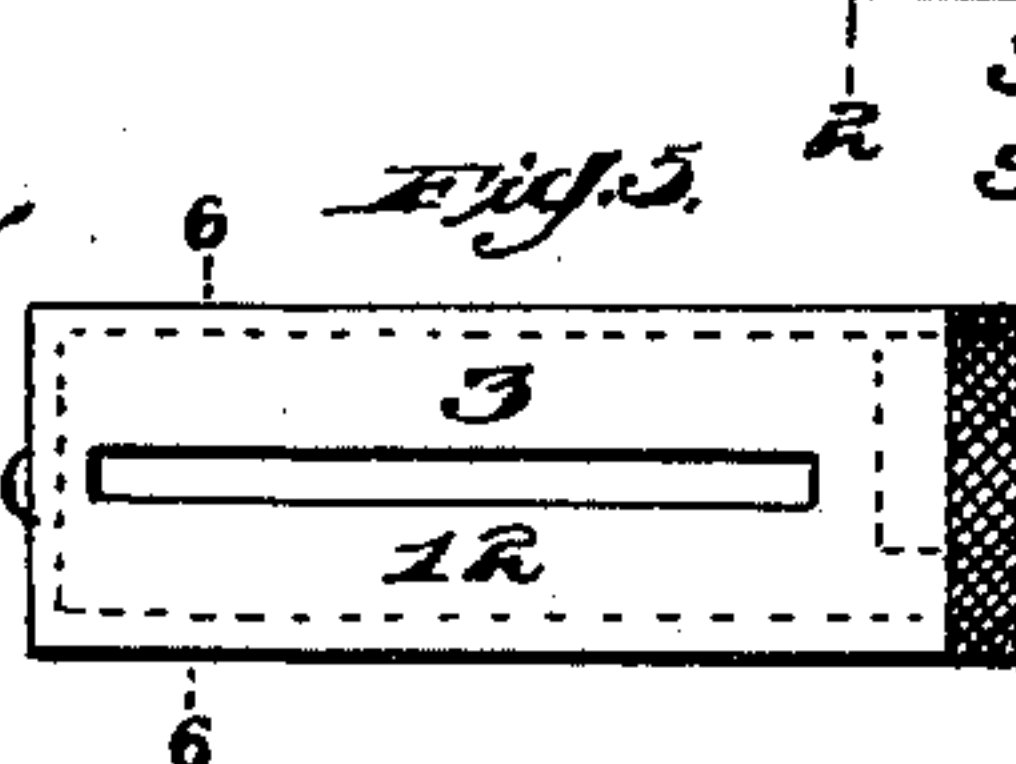
(Application filed Sept. 24, 1901.)

(No Model.)



WITNESSES:

WITNESSES:
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E. C. Potter.



INVENTOR

Grant Law.

RY

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UNITED STATES PATENT OFFICE.

GRANT LAW, OF CENTERPOINT, WEST VIRGINIA.

MATCH-BOX.

SPECIFICATION forming part of Letters Patent No. 693,723, dated February 18, 1902.

Application filed September 24, 1901. Serial No. 76,372. (No model.)

To all whom it may concern:

Be it known that I, GRANT LAW, a citizen of the United States of America, residing at Centerpoint, in the county of Doddridge and State of West Virginia, have invented certain new and useful Improvements in Match-Boxes, of which the following is a specification, reference being had therein to the accompanying drawings.

10 This invention relates to certain new and useful improvements in match-boxes, and has for its object the provision of novel means whereby one match may be delivered at a time.

15 The invention has for its further object to construct a match-box of the above-described character that may be easily loaded with matches, but must be discharged in a manner that will allow only one match to be delivered at a time.

20 The invention also contemplates to provide a match-box with a gong that will sound at the discharge of a match and will be automatically operated with the same mechanism operating the match-box.

25 The invention still further aims to construct a match-box of the above-described class that will be extremely simple in construction, strong, durable, comparatively inexpensive to manufacture, and highly efficient in its use.

30 With the above and other objects in view, the invention consists in the novel combination and arrangement of parts to be herein after more fully described, and specifically pointed out in the claims.

35 In describing the invention in detail, reference is had to the accompanying drawings, forming a part of this specification, wherein like numerals of reference indicate corresponding parts throughout the several views, and in which—

40 Figure 1 is a side elevation of my improved match-box. Fig. 2 is a vertical sectional view, taken on the line 2 2 of Fig. 3, looking in the direction of the arrow. Fig. 3 is a longitudinal sectional view. Fig. 4 is a transverse vertical sectional view, taken on the line 4 4 of Fig. 1, looking in the direction of the arrow. Fig. 5 is a modified form of match-box for pocket use. Fig. 6 is a vertical sec-

tional view taken on the line 6 6 of Fig. 5. Fig. 7 is an end elevation of the ratch-wheel.

In the drawings, the reference-numeral 1 indicates the frame of the machine and 2 the discharge-chute.

The reference-numeral 3 indicates the cylindrical casing which is attached to the frame of the machine by means of screws 4, the end of the cylindrical casing being screw-threaded, as shown at 5, to receive the screw-threaded head 6, in which is formed the central bearing 7, the opposite bearing 8 being formed in the inner wall of the cylindrical casing.

65 The reference-numeral 9 indicates a fluted wheel carrying projections 10 on each end, which are seated in the bearings 7 and 8. Said fluted wheel 9 also has formed on its ends ratchet-teeth 11.

70 The reference-numeral 12 indicates a discharge-slot formed in the cylindrical casing 3, and 14 indicates an opening formed in the upper portion of the cylindrical casing, in which is secured an operating-lever 15, the latter being pivotally secured at 16 and carries on its under side a spring-pressed pawl 17, said pawl engaging the ratchet-teeth 11 of the fluted wheel.

75 The reference-numeral 18 represents a gong rigidly secured to the outer face of the cylindrical casing, and 19 represents a spring-pressed tapper extending through the slot 20 and secured at 21 to the inner face of the cylindrical casing. This tapper has formed therein a shoulder 22, engaging the ratchet-teeth 11.

80 The match-box is loaded by removing the entire cylindrical casing from the frame and then by removing the head 5 from the said casing. The wheel is then partially removed—that is, it is withdrawn to such an extent as to permit a portion of the flutes to remain within the cylindrical casing, so that the matches when inserted in the projecting portion of the flutes will be securely held by engagement in the flutes and with the casing. This operation is more conveniently performed by placing the closed end of the casing on a support and then partially withdrawing the fluted wheel, when the matches may be readily dropped into the flutes.

85 By operating the handle 15 the spring-

pressed pawl will rotate the wheel to the extent of one tooth, which will be the distance between the flutes in the wheel, allowing a match to be precipitated through the discharge-slot 12, as will be readily understood. Simultaneously with this operation the gong will be sounded by means of the tapper riding upon the ratchet-tooth.

In Fig. 5 of the drawings I have shown a modification of my invention which may be used for the pocket, the operation and construction being identical with the exception of the frame 1, the gong connection, and providing a roughened surface at the end of the outer casing for igniting the matches.

The many advantages obtained by the use of my improved device will be readily apparent from the foregoing description, taken in connection with the accompanying drawings.

It will be noted that various changes may be made in the details of construction without departing from the general spirit of my invention.

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

1. In a match-box, a cylindrical casing having a discharge-slot formed therein, a removable head in one end of said casing, said head and the opposite end of the casing having bearings formed therein, a fluted wheel rota-

tably secured in said bearings, ratchet-teeth carried by said wheel, a lever pivotally mounted in a slot provided therefor in said casing and having its free end extending beyond the casing, a spring-pressed pawl secured to the under side of said lever and engaging said ratchet-teeth, substantially as described.

2. In a match-box, a cylindrical casing having a discharge-slot formed therein, a head in one end of said casing, a frame connected to the ends of the casing, a fluted wheel rotatably mounted in said casing, ratchet-teeth carried by one end of said wheel, a lever pivotally mounted in a slot provided therefor in said casing, the free end of the lever extending beyond the casing and carrying a spring-pressed pawl, a gong mounted upon the periphery of said casing, the casing having a slot formed therein adjacent to said gong, and a spring-pressed tapper one end of which is secured to the inner face of the casing, said tapper having a shoulder engaging the ratchet-teeth, and having its other end extending through said slot, substantially as described.

In testimony whereof I affix my signature in the presence of two witnesses.

GRANT LAW.

Witnesses:

JOHN NOLAND,
E. E. POTTER.