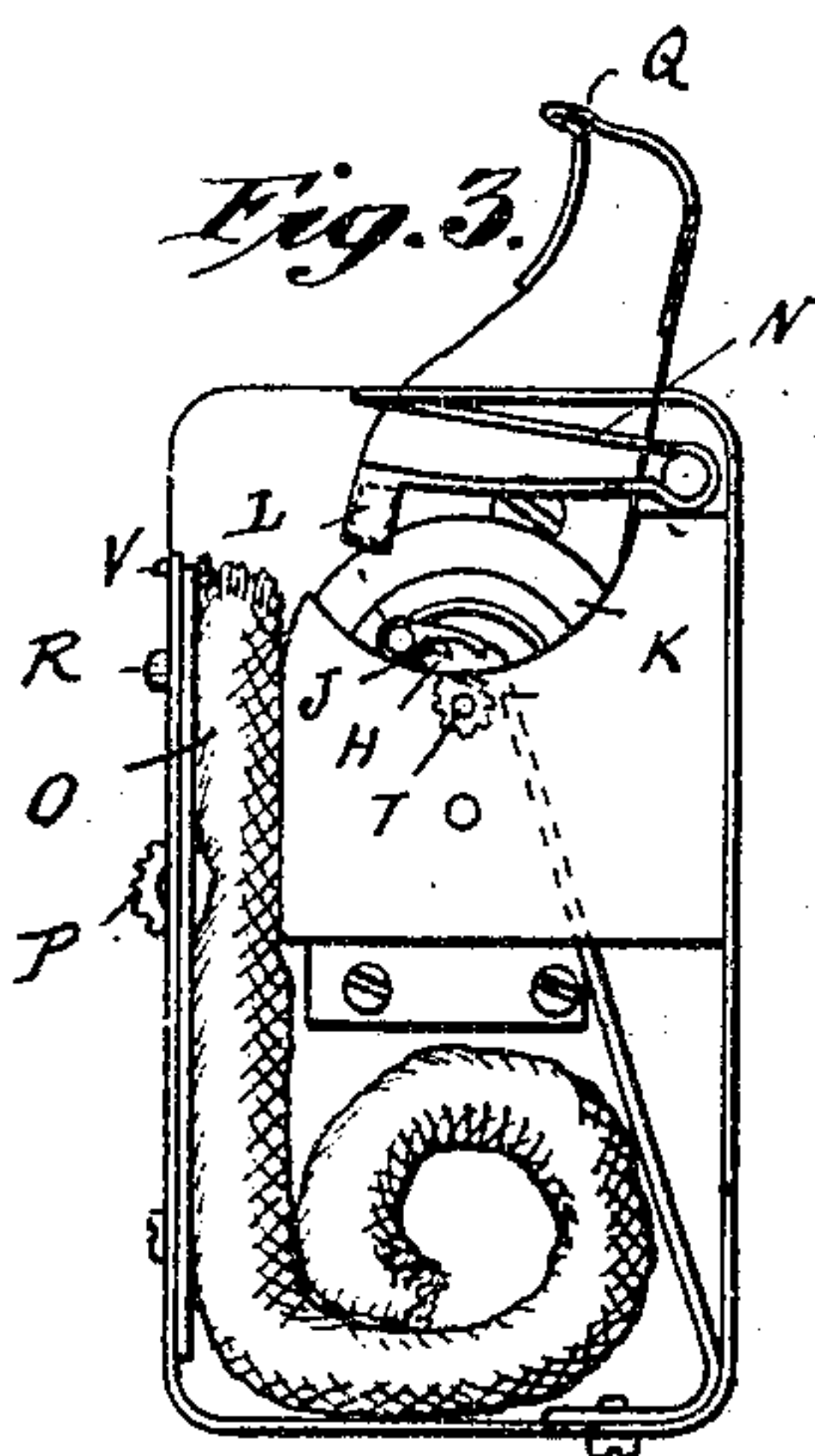
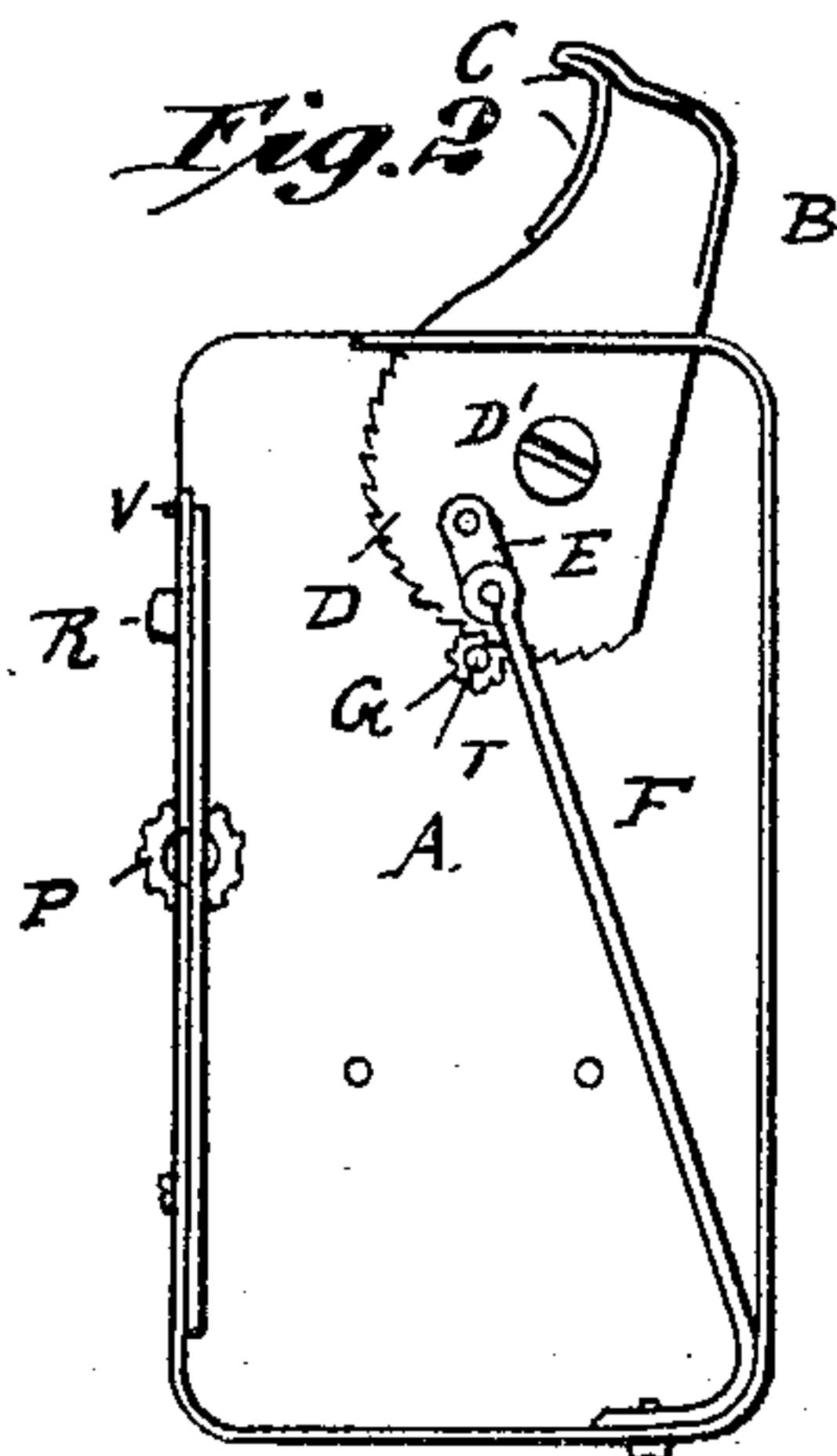
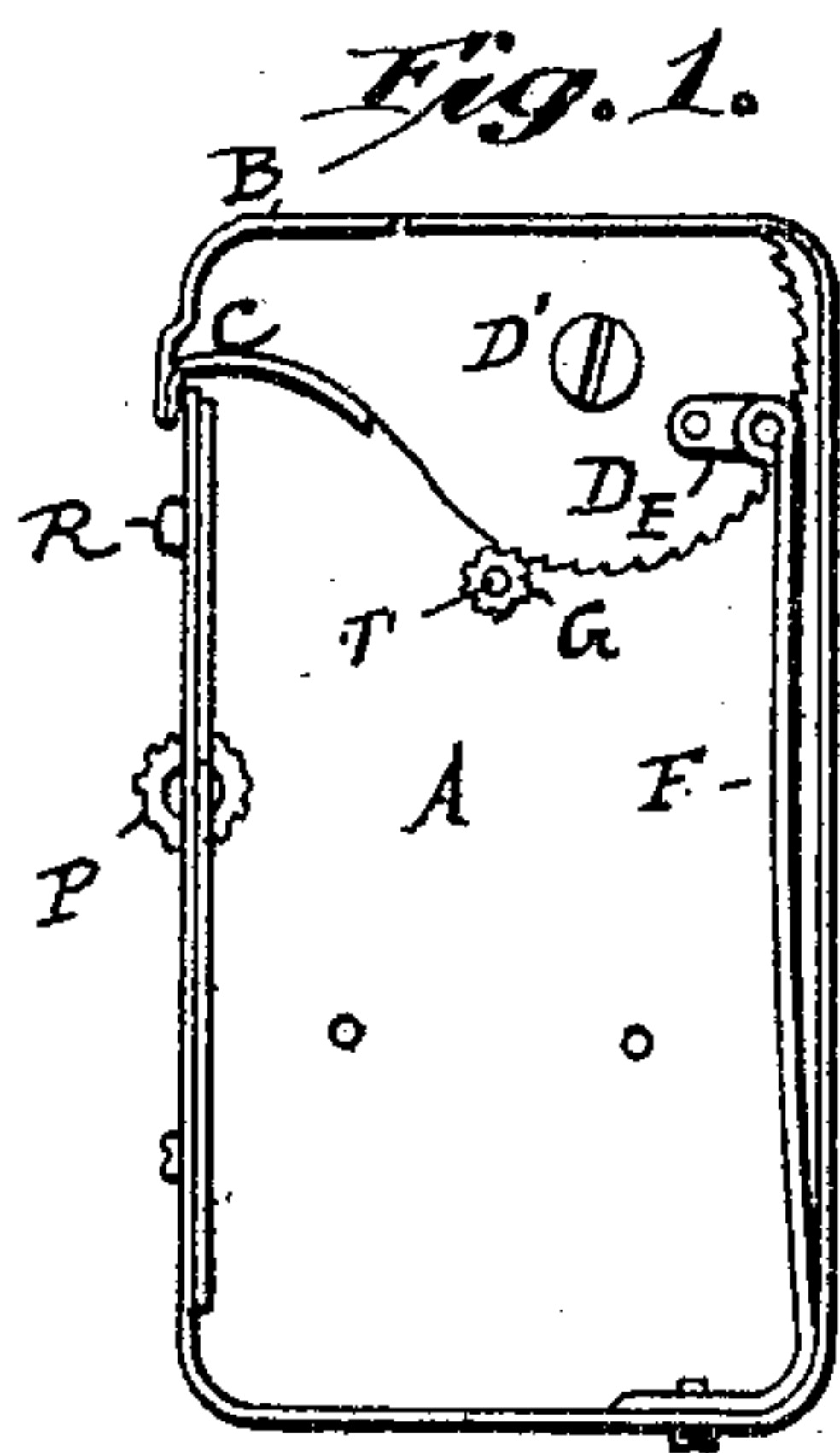


No. 808,128.

PATENTED DEC. 26, 1905.

A. R. WEISZ.  
AUTOMATIC LIGHTER.  
APPLICATION FILED APR. 13, 1905.



Attest:

*C. Mitchell*  
Notary Public.

Inventor:

*A. R. Weisz*  
by *Charles F. Gung* his Atty.

# UNITED STATES PATENT OFFICE.

ALBERT R. WEISZ, OF BROOKLYN, NEW YORK, ASSIGNOR, BY MESNE ASSIGNMENTS, TO AMELIE WEISZ, OF BROOKLYN, NEW YORK.

## AUTOMATIC LIGHTER.

No. 808,128.

Specification of Letters Patent.

Patented Dec. 26, 1905.

Application filed April 13, 1905. Serial No. 255,463.

*To all whom it may concern:*

Be it known that I, ALBERT R. WEISZ, a citizen of the United States, residing at Brooklyn, county of Kings, State of New York, have  
5 invented certain new and useful Improvements in Automatic Lighters, of which the following is a specification.

The object of this invention is to provide a new and improved automatic lighter which is  
10 simple in construction, easily manipulated by one hand, is reliable in action, and by a pressure by the thumb on a button causes the igniting of tinder and opening of the top of the lighter.

15 In the accompanying drawings, in which like letters of reference indicate like parts in all the figures, Figures 1 and 2 are views of the interior of the lighter, with parts in different positions and others removed. Fig. 3 is  
20 a view of the mechanism of the lighter, one covering side plate being removed.

The lighter is constructed with a flat casing A preferably rectangular in shape and having a cover B provided at the free end on its under  
25 side with a projection C. A disk D, having its lower edge toothed, is pivoted at D' and carries the cover B and is connected eccentrically by a pivoted link E with the upper free end of a spring F, secured in the casing  
30 A. The toothed edge of the disk D engages a pinion G on the same short shaft T with a ratchet-wheel H, engaged by a spring-pawl J, secured on a friction-disk K, mounted loosely on the shaft T of the pinion G and ratchet-  
35 wheel H, which disk is preferably made of steel.

A small piece of flint L is held in a pocket M of a spring-finger N, which latter presses the flint on the rim of the friction-disk K. A  
40 tinder wick O can be fed up and down by a toothed wheel P.

The cover B has an aperture Q at its free end, into which a spring-catch V can snap, which catch carries a button R, and when the  
45 cover is closed the catch V holds the cover closed.

When the cover is closed, the spring F is in greater tension, and as soon as the button R is pressed inward and the cover B released the  
50 spring F is free to expand and in so doing turns the toothed disk D on its pivot D' and throws the cover upward very forcibly and quickly. Thereby the shaft T is rotated, as is also the friction-disk K which produces

sparks from the flint L, and these sparks ignite 55 the tinder O. After the ignited tinder has been used the cover B is swung down, and its lip C comes in contact with the ignited end of the tinder and extinguishes the same. By pressing down the cover the spring J is again  
60 brought in tension; but the friction-disk is not rotated, as the teeth of the ratchet-wheel H slide under the spring-pawl without engaging. When the cover is closed, it is automatically engaged by its spring-button R, and thus  
65 locked in closed position, and the apparatus can now again be used for igniting in the manner described.

The spring F and the disk D are so connected with each other that when the cover is  
70 opened, as shown in Fig. 2, the link and the spring are in line and the spring is not in tension, so that the spring serves to check the momentum of the cover and disk D, thus preventing the cover from forcibly striking the  
75 casing and breaking parts, or, in other words, when the spring is released it moves under its high tension from the position shown in Fig. 1 to the position shown in Fig. 2; but the momentum of the cover would tend to move  
80 the latter still farther to the right, and such movement is checked because such farther movement to the right of the upper part of the cover would cause a movement to the left of the upper end of the spring beyond the posi-  
85 tion shown in Fig. 2, and this would bring the spring into a tension, and this tension is sufficient to stop the cover.

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

1. In an automatic lighter, the combination with a casing of a friction-disk, a spring for rotating the friction-disk, a piece of hard substance held in contact with the friction-disk, 95 and means for locking and releasing said spring, substantially as set forth.

2. In an automatic lighter, the combination with a casing, of a cover on the same, a toothed disk mounted to turn on the same center with  
100 the cover, a spring connected with the toothed disk, a friction-disk and means for turning the same from the toothed disk, means for locking the cover in closed position and releasing the same, and a piece of hard substance in  
105 contact with the friction-disk, substantially as set forth.

3. In an automatic lighter, the combination



with a pivoted toothed disk, of a spring for rotating it, a friction-disk rotatable from said toothed disk, a piece of hard substance held in contact with the friction-disk, and means  
5 for locking and releasing said spring, substantially as set forth.

4. In an automatic lighter, the combination with a casing, of a pivoted disk, a spring secured in the casing, and an intermediate member  
10 connecting the free end of the spring with said disk, a friction-disk operated from the

above-mentioned spring-operated disk, and a hard substance in contact with the friction-disk, substantially as set forth.

In testimony whereof I have signed my name 15 to this specification, in the presence of two subscribing witnesses, this 4th day of April, 1905.

ALBERT R. WEISZ.

Witnesses:

OSCAR F. GUNZ,

SOPHIA W. BAEDER.