C. DINGER.

CIGAR LIGHTER.

APPLICATION FILED MAY 26, 1909.

955,058.

Patented Apr. 12, 1910.

2 SHEETS—SHEET 1.

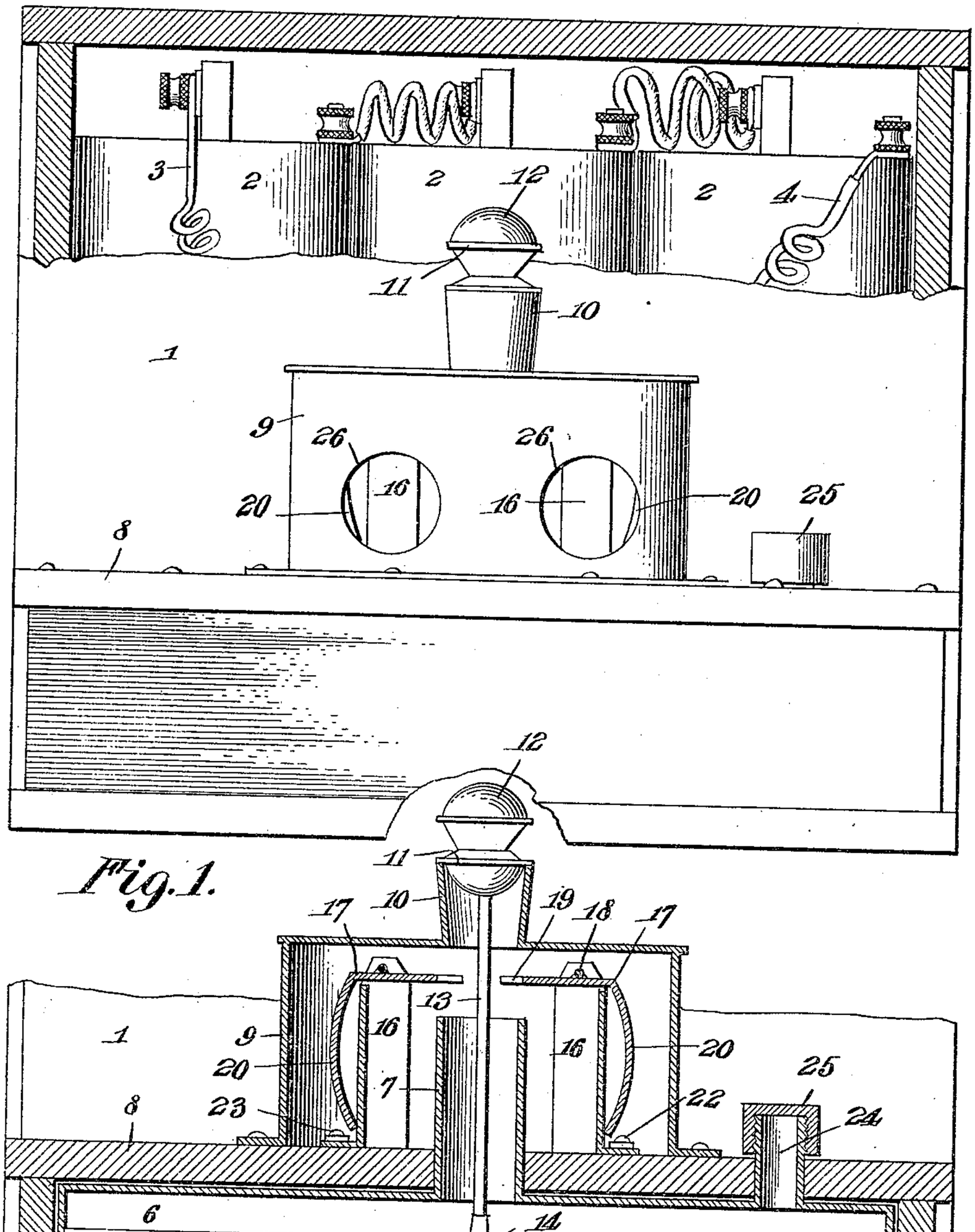

Fig. 1.

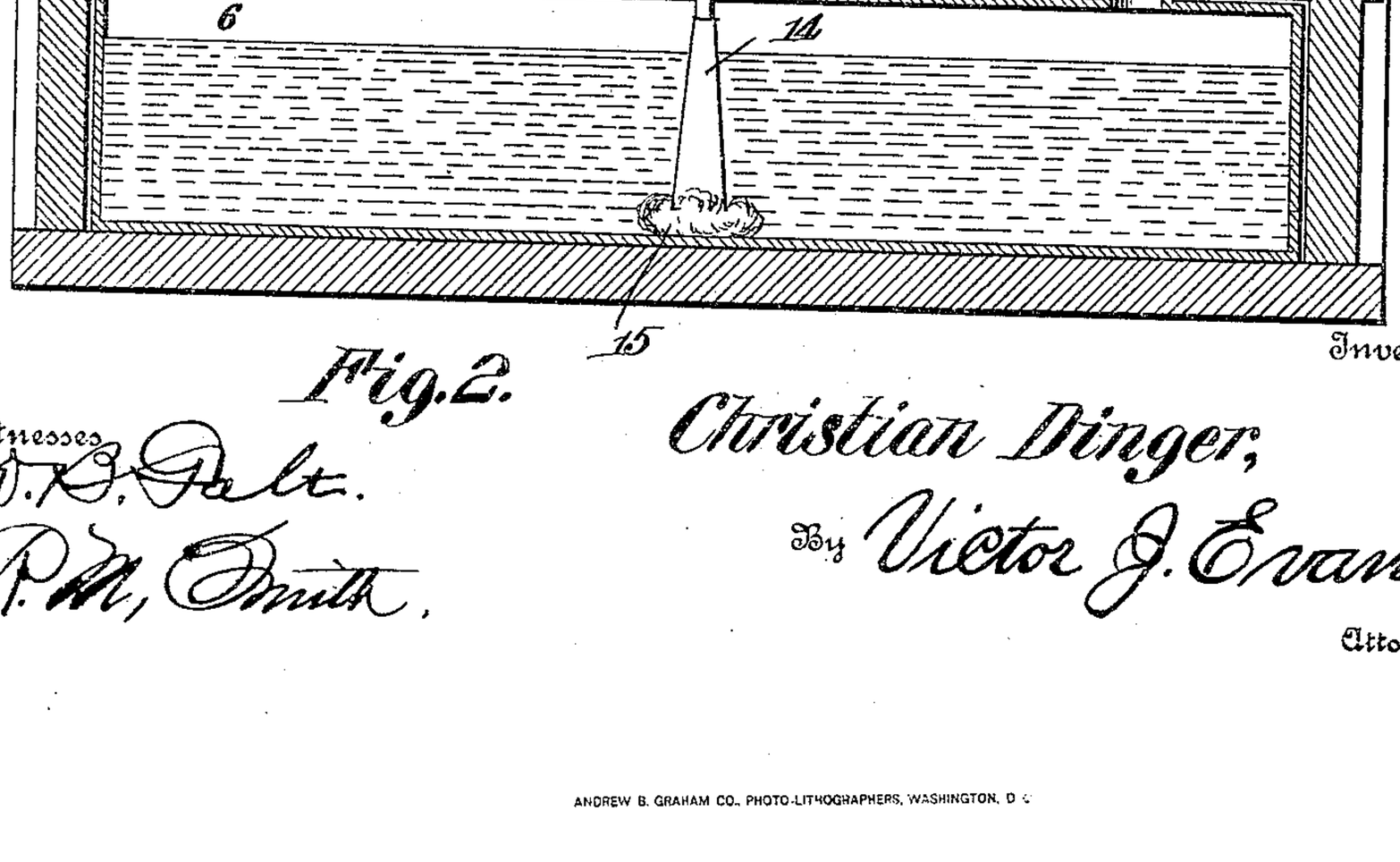

Fig. 2.

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Fig. 3.

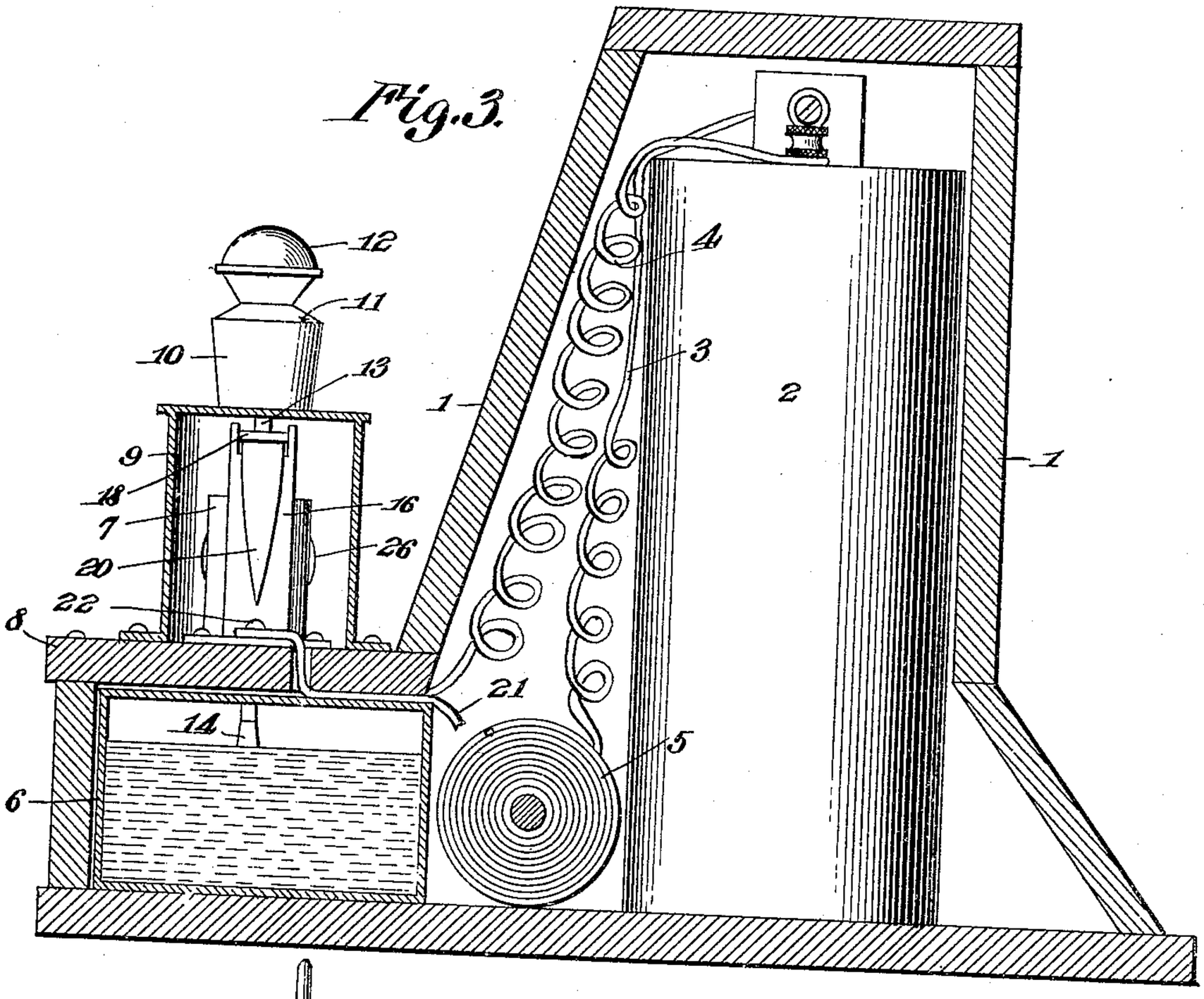


Fig. 4.

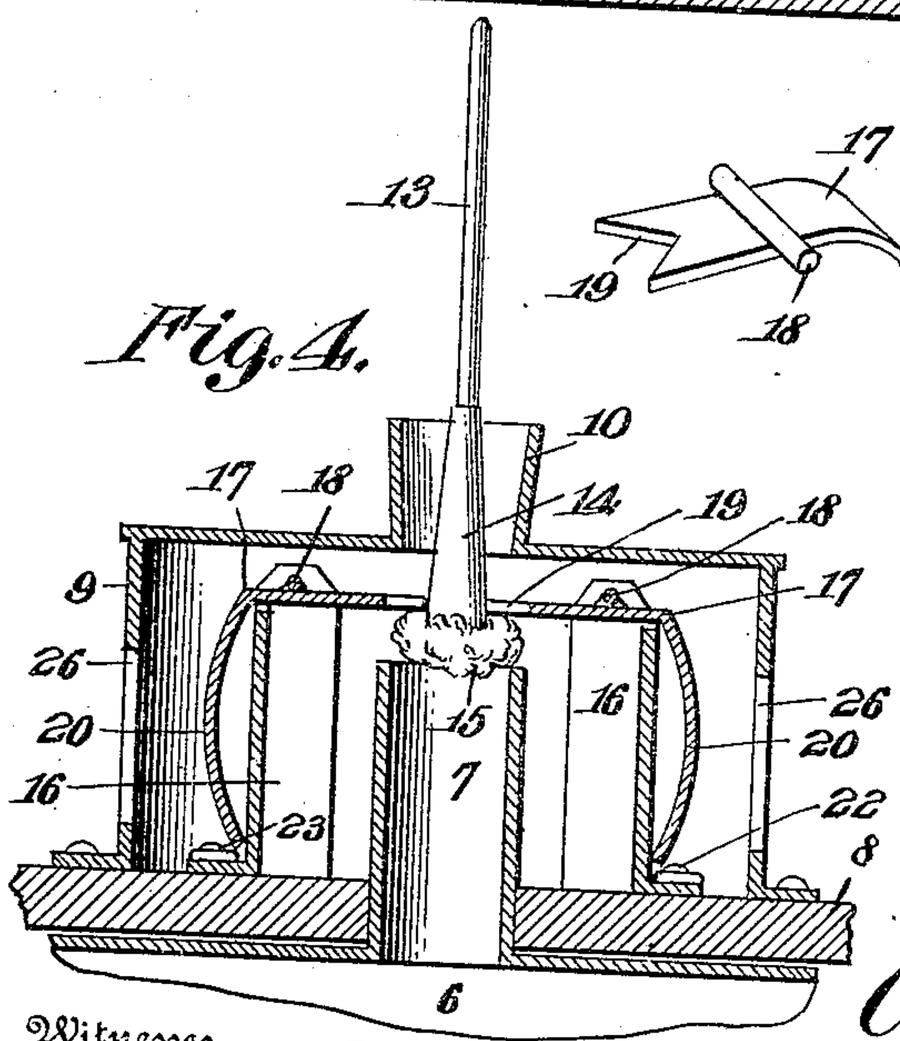
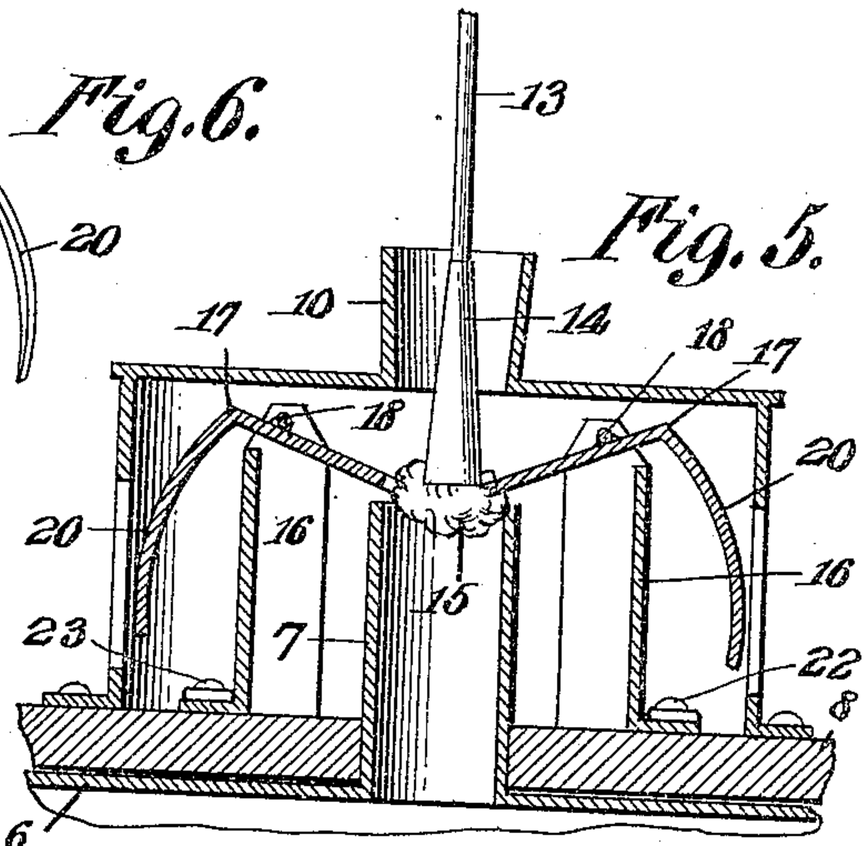


Fig. 6.

Fig. 5.



Witnesses

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UNITED STATES PATENT OFFICE.

CHRISTIAN DINGER, OF SPARTA, WISCONSIN.

CIGAR-LIGHTER.

955,058. Specification of Letters Patent. Patented Apr. 12, 1910.

Application filed May 26, 1909. Serial No. 498,517.

To all whom it may concern:

Be it known that I, CHRISTIAN DINGER, citizen of the United States, residing at Sparta, in the county of Monroe and State of Wisconsin, have invented new and useful Improvements in Cigar-Lighters, of which the following is a specification.

This invention relates to electric cigar lighters, the object of the invention being to provide simple and effective apparatus for electrically igniting a torch, the device, as a whole, being especially adapted for lighting cigars, cigarettes and the like and being also useful in other connections which will suggest themselves.

With the above and other objects in view, the invention consists in the novel construction, combination and arrangement of parts as herein fully described, illustrated and claimed.

In the accompanying drawings:—Figure 1 is a front elevation partly in section, of a cigar lighter embodying the present invention. Fig. 2 is a vertical section through the front portion of the device, showing a part of the ignition apparatus. Fig. 3 is a vertical transverse section through the same. Fig. 4 is a detail vertical section through the ignition chamber and the parts included therein, including also a portion of the gasolene tank. Fig. 5 is a similar section, showing the manner in which the contact points are depressed when the torch is inserted. Fig. 6 is a detail perspective view of one of the pivoted contact points.

The device comprises a suitable casing 1 of a size and shape adapted to contain the several elements hereinafter particularly described.

Within the casing 1 is mounted one or more battery cells 2 connected up in series as shown in Fig. 1 and having the positive and negative wires 3 and 4 respectively leading from the poles thereof, the positive wire 3 leading to a spark coil 5 which may be arranged in the bottom of the casing adjacent to the cells 2, as shown in Fig. 3. In the front portion of the casing is arranged a gasolene tank 6 which, as best shown in Fig. 1, is provided with an upstanding neck 7 which projects through the top wall 8 of the front of the casing up into an ignition chamber 9. The ignition chamber 9 is provided with an upwardly flaring and projecting mouth piece 10 which is normally closed by a stopper 11 above which is a nib or handle 12. Connected to the stopper 11 is a stem 13 long enough to extend downward into the gasolene tank where it is provided with a tapering or conical head 14 to the end of which is secured an absorbent pad 15 of wicking or like material adapted to be saturated with gasolene contained in the tank 6.

Within the ignition chamber 9 are fulcrum posts 10 located at opposite sides of the upstanding neck 7 and mounted upon the top of said posts are oppositely arranged contact pieces 17 one of which is illustrated in detail in Fig. 6 wherein it will be observed that each of said contact pieces 17 is provided with a shaft or oppositely projecting pintles 18 which are received in suitable bearings in the fulcrum posts 16, whereby said contact pieces are adapted to rock back and forth. The inner extremities of the contact pieces overhang the upper end of the neck 7 as shown in Figs. 1, 4 and 5, and are notched as shown at 19 to provide good contact for the tapering head 14 as the latter is drawn upward between the contact pieces, each of which is also provided with a tail piece 20 pointed at its lower end and normally resting in contact with the adjacent fulcrum post 16 as shown in Figs. 1 and 4. A wire 21 leads from the opposite end of the coil 5 to a binding post 22 on one of the fulcrum posts 16 while the negative wire 4 leads to a binding post 23 on the other fulcrum post 16. The gasolene tank 6 is also provided with a filling nozzle 24 provided with a cap 25.

In introducing the torch into the tank, the contact points are easily depressed and caused to rock as shown in Fig. 5. After the torch is saturated with gasolene, in the act of withdrawing said torch, the tapering head 14 thereof scrapes past the notched ends of the contact pieces which overhang the upstanding neck of the gasolene tank, carrying said contact pieces to the horizontal position shown in Fig. 4, in which position the points of the tail pieces 20 lie in contact with the fulcrum posts 16. As the metal head 14 passes out of contact with the pieces 17, an arc is formed across which the electric current jumps, thereby producing a spark which instantly ignites the torch just as it is withdrawn from the ignition chamber through the mouth piece 10. This is repeated as often as the torch is inserted and withdrawn from the casing.

The ignition chamber 9 is provided with

a suitable number of air inlet ports 26 to insure the ignition of the torch in the manner above described.

I claim:—

An electric lighter of the class described comprising a casing, a battery, a coil, an ignition chamber having air inlet ports, a gasolene tank provided with an upstanding neck projecting into the ignition chamber, fulcrum posts at opposite sides of said neck, binding posts on the fulcrum posts rocking contact pieces fulcrumed on said posts and provided with notched ends overlying the said neck and also provided with tail pieces movable into and out of contact with the fulcrum posts, a torch embodying a handle, an absorbent wick, and a tapering metal head which acts in the withdrawal movement of the torch to spread apart the contact points, and an electric circuit including said battery, coil, fulcrum posts and contact points, substantially as described.

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

CHRISTIAN DINGER.

Witnesses:

THORWALD P. ABEL,

Z. S. RICE.