

(No Model.)

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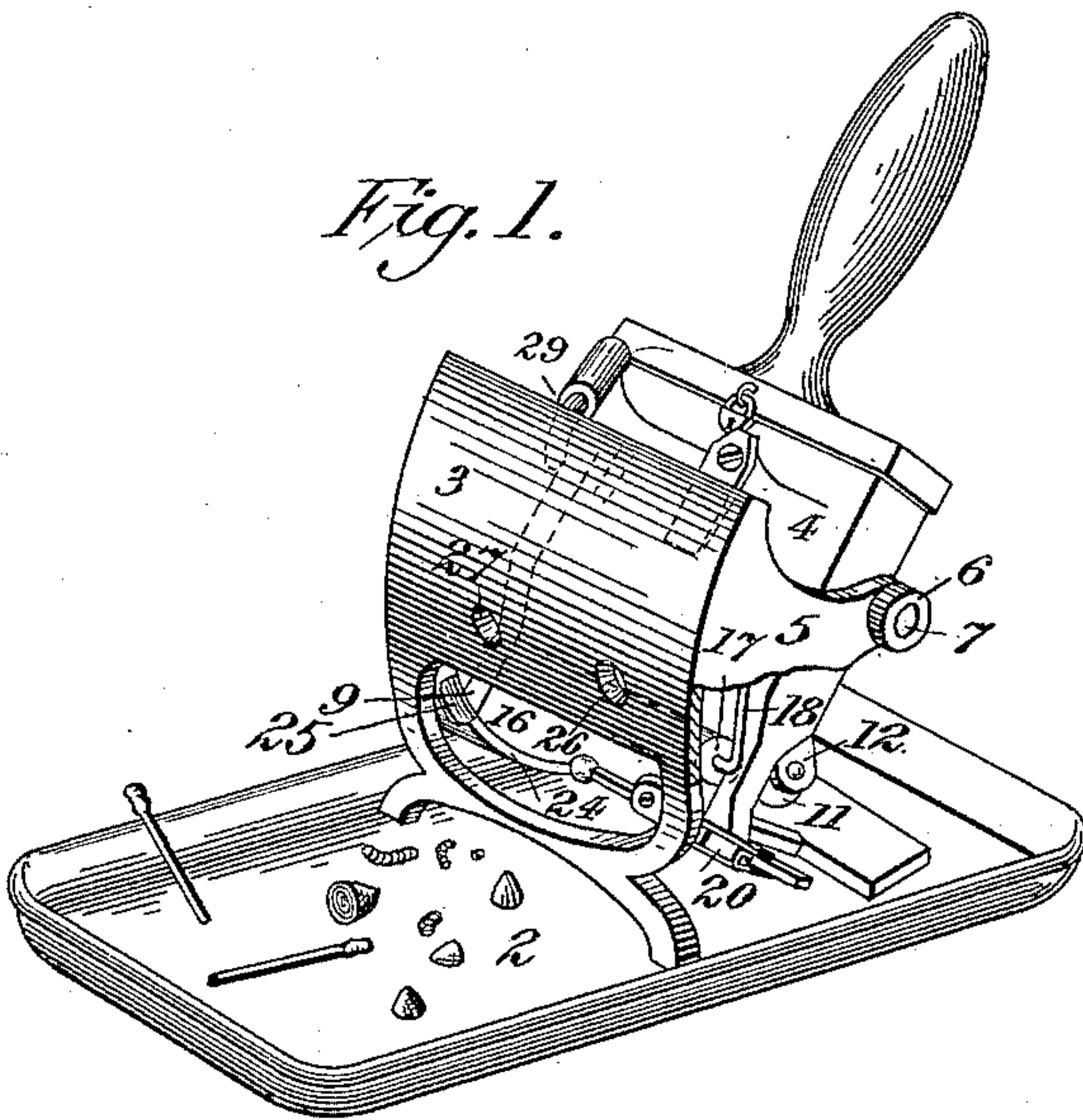
T. E. KEAVY.

COMBINED CIGAR CUTTER AND MATCH HOLDER AND IGNITER.

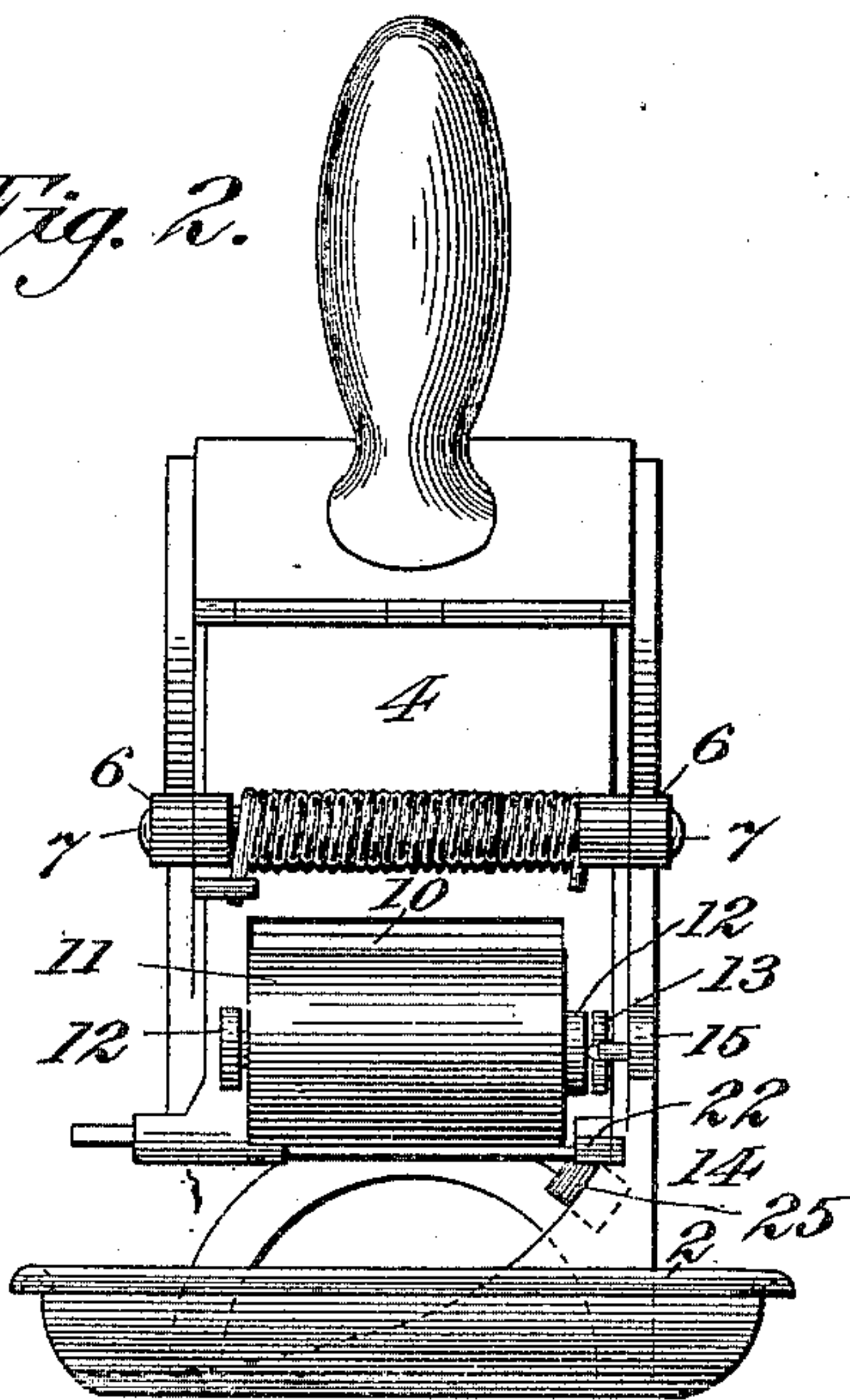
No. 424,307.

Patented Mar. 25, 1890.

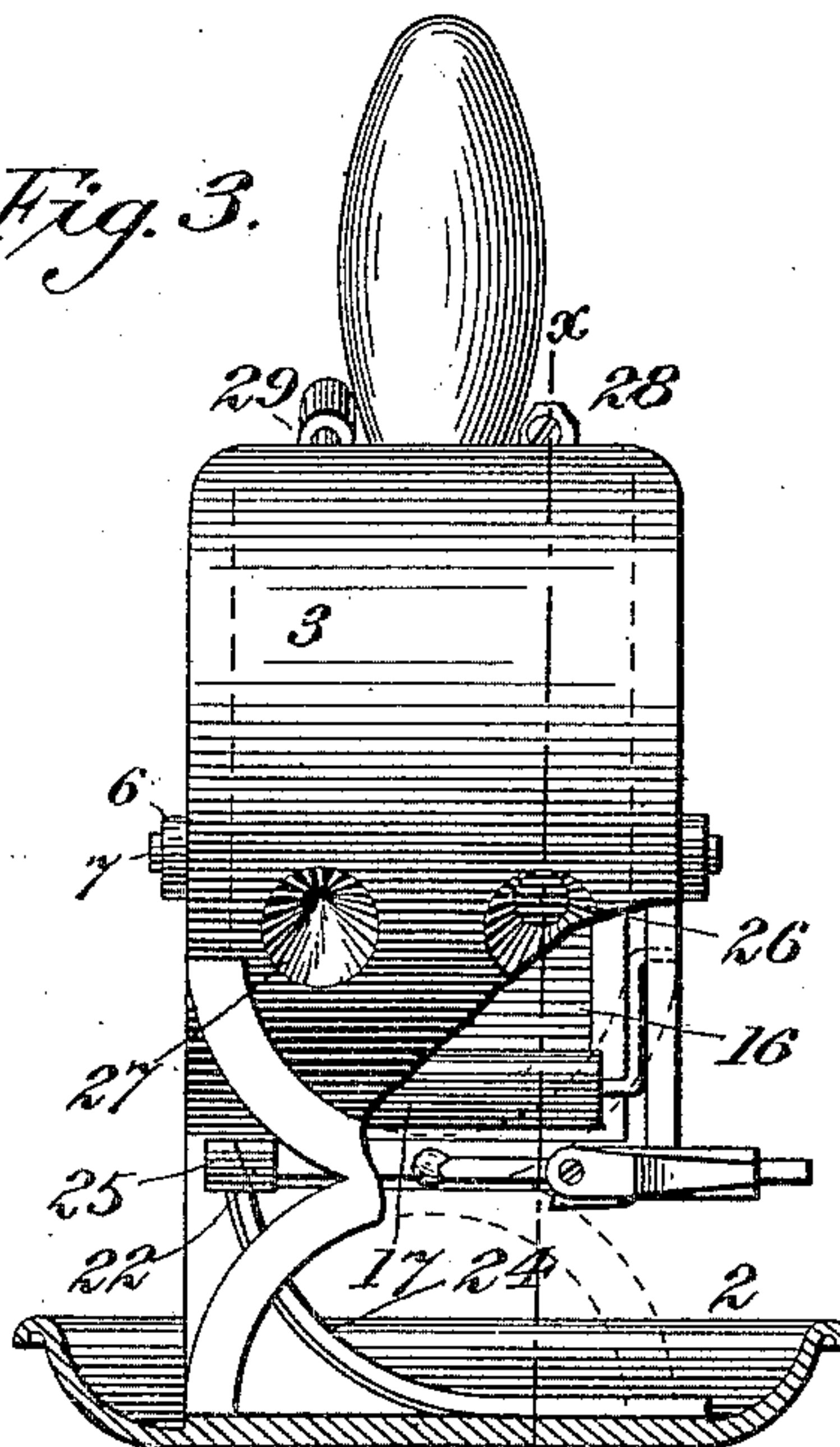
*Fig. 1.*



*Fig. 2.*



*Fig. 3.*



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(No Model.)

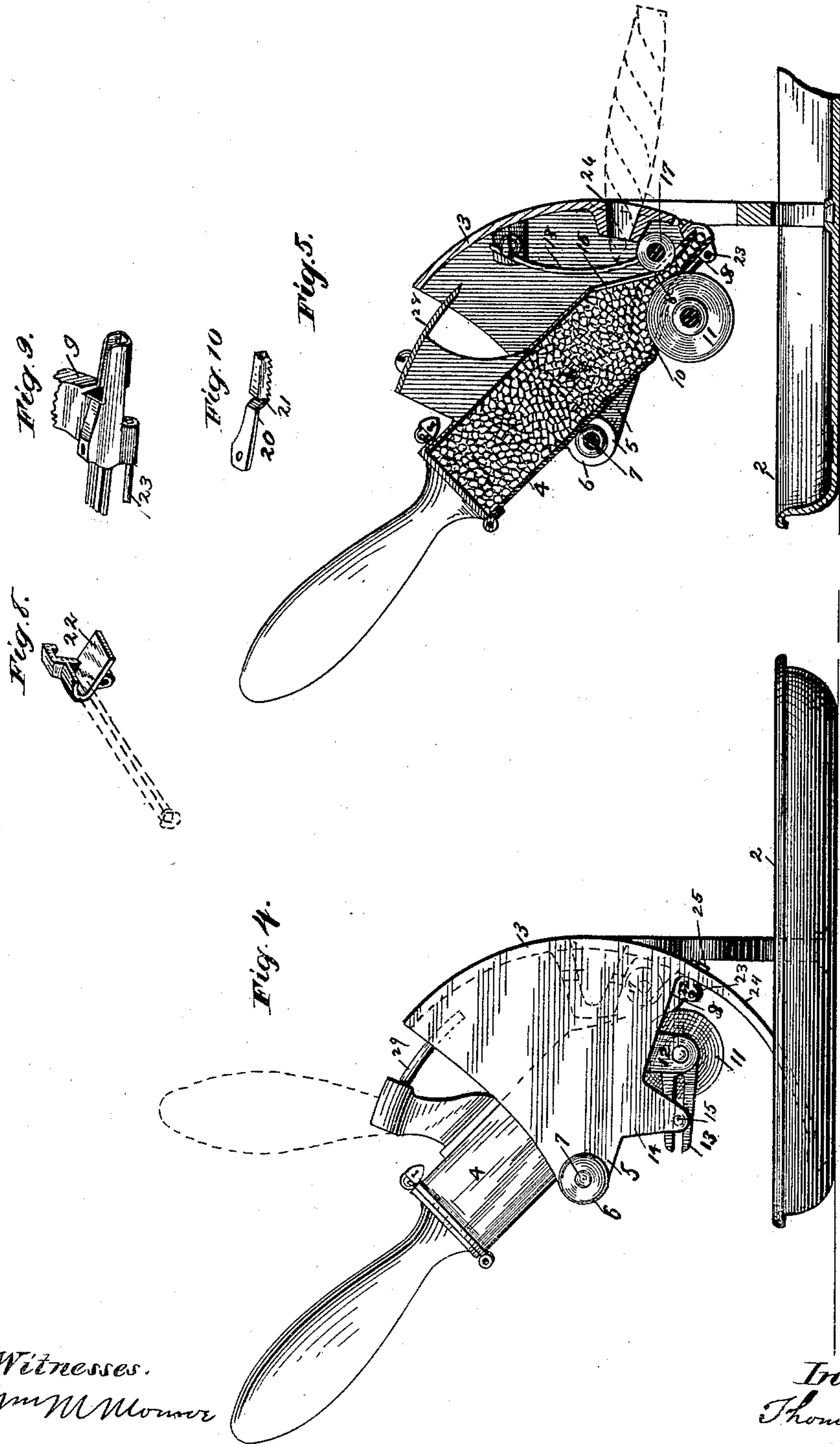
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(No Model.)

3 Sheets—Sheet 3.

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Fig. 6.

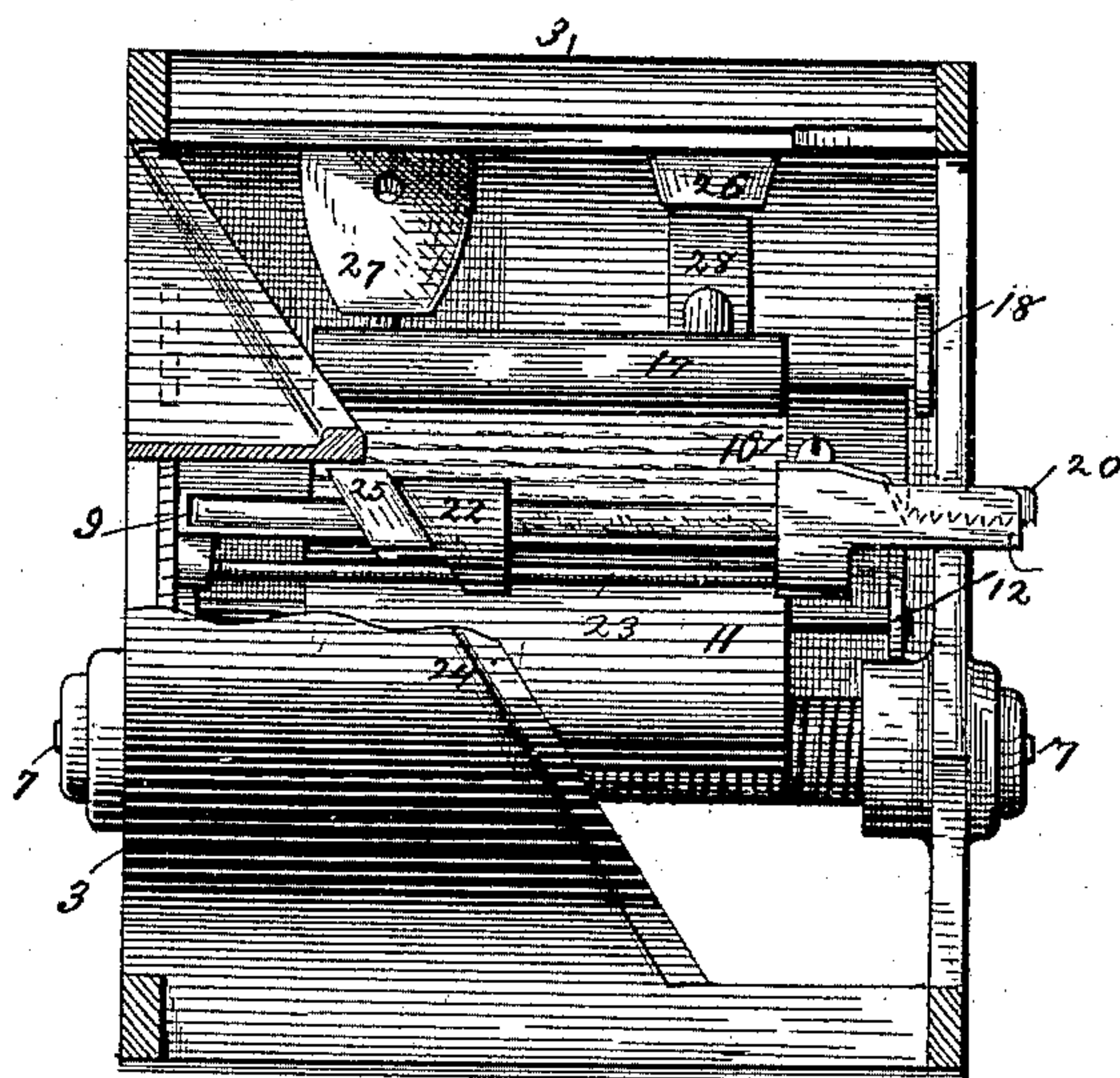
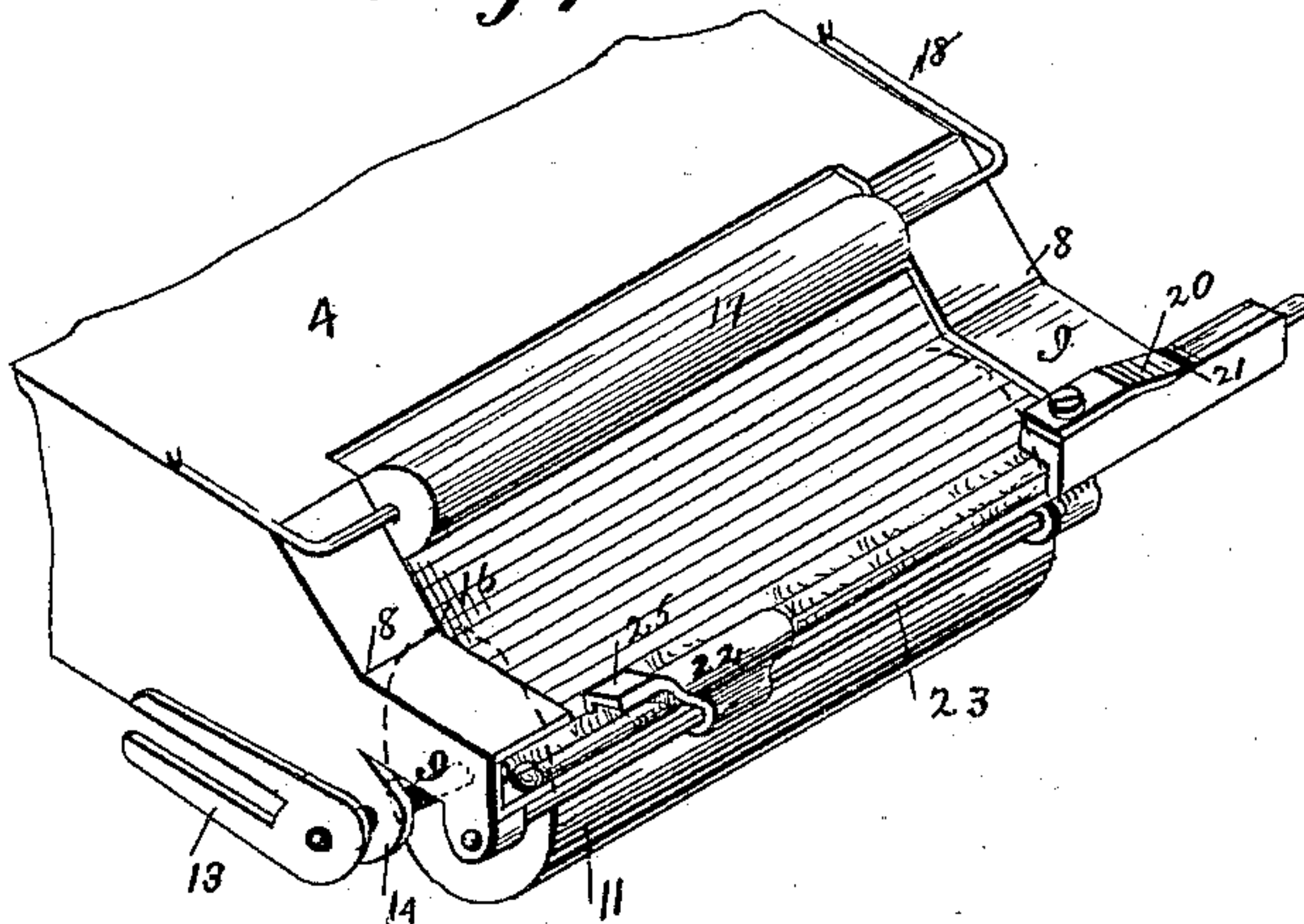


Fig. 7.



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# UNITED STATES PATENT OFFICE.

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## COMBINED CIGAR-CUTTER AND MATCH HOLDER AND IGNITOR.

SPECIFICATION forming part of Letters Patent No. 424,307, dated March 25, 1890.

Application filed November 2, 1888. Serial No. 289,796. (No model.)

*To all whom it may concern:*

Be it known that I, THOMAS E. KEAVY, a citizen of the United States, residing at Cleveland, in the county of Cuyahoga and State of Ohio, have invented certain new and useful Improvements in Combined Cigar-Cutter and Match Holder and Ignitor; and I do hereby declare that the following is a full, clear, and exact description of the invention, which will enable others skilled in the art to which it appertains to make and use the same.

My invention relates to a combined cigar-cutter and match holder and igniter.

The object of the invention is to provide a device by which the points of cigars may be either cut or perforated, as may be preferred, and a match is projected and exposed by the same movement in such position that it can be separately withdrawn and ignited at the same time. This construction combines convenience with economy. Ordinarily a cigar-stand is not provided with matches for regularly lighting cigars, for the reason that it entails too great expense. This is true not because the prime cost of the matches or the number actually used is too great, but because men will fill their pockets and carry away many times more than are consumed in lighting at the stand. It is to guard against this waste as well as to provide a convenient light at the cigar-stand that this part of my invention is devised.

To this and other ends the invention consists in the construction and combination of parts, as hereinafter more fully described, and particularly pointed out in the claims.

Referring to the drawings, Figure 1 is a perspective view of my improved device. Fig. 2 is a rear elevation. Fig. 3 is a front elevation with a part broken away. Fig. 4 is a side elevation. Fig. 5 is a central vertical section. Fig. 6 is a bottom view of the machine. Fig. 7 is a perspective of the lower portion of the match-holder and attached parts. Fig. 8 is a perspective of the match-head receiver. Fig. 9 is a perspective of the igniting mechanism, and Fig. 10 is a detail of the ignitor.

The device, as here shown, consists in a base

2 of any preferred form, a frame 3, supported rigidly in the base, and a swinging match-receptacle 4, pivoted on the outer extremities of arms 5 of the frame 3. This frame may have the shape and style here shown or may be varied to suit taste, the form not being really material. It may be completely inclosed at the sides and back, so as to conceal the inner mechanism or be skeletonized, and thereby lightened.

The match-receptacle 4, as stated, is pivoted to swing within fixed limits on the extremities of arms 5, having perforated ears 6, through which and said arms a pivot-shaft 7 passes and holds said parts together. On the bolt 7 is a coiled retraction-spring, which serves to carry the receptacle back to its normal position, as seen in the several figures, after it has been used, as hereinafter described. The object of this receptacle is threefold: First, it is a holder for the matches, and, second, a feeder for the matches. As a mere holder it has depth and width, say, sufficient to carry the contents of an ordinary match-box. Then to feed these matches one by one the receptacle is contracted at its lower end by converging its sides in straight lines down to the contracted neck 8, which is just wide enough for a single match to pass at a time around the roller working at this point. From this neck there is an extension 9 of the same width and deep enough to hold, say, half a dozen matches, one above the other; but it is obvious that matches thus situated would not automatically feed themselves, and for this reason I have cut an opening 10 in the rear side of the receptacle above and about the neck, said opening leaving a small amount of material at either side to confine the matches at the ends, and in the opening I project the roller 11. The roller 11 is essentially an agitator designed to stir and move the matches sufficiently to prevent clogging and to enable them to work or gravitate one by one to the space below as room is made by withdrawal of matches from the extreme bottom. Only a slight turn of roller 11 is required for this purpose, and to this end said roller is supported in ears 12 on the back of the receptacle



and is caused to rotate by a slotted arm 13, fixed rigidly on the roller-shaft. The main frame has a projection 14, Fig. 4, with a pin 15, which works in the slot of arm 13. It will be seen that shaft 7 is the center of rotation for the receptacle, and as the ear 12 with its pivot-pin, is fixed it follows when the receptacle is swung round to do work that there will be a partial rotation of the roller caused by the rigid arm 13. A similar opening to 10 is formed in the front side of the receptacle, as seen at 16, and a small roller 17, supported by spring-arms 18 on the inside of the upright frame, serves to agitate the matches about and below the neck, the two rollers on opposite sides of course working in unison. In this manner as rapidly as matches are withdrawn others are worked down in position to be removed, and the operation is automatic and unfailing. Of course the special construction of the agitators and their supporting and connected mechanism here shown need not be closely followed, as obviously there might be considerable difference wrought in the arrangement and the same result attained. The essential features in this part of the machine are the agitators, which have a rotary movement, so as to work the matches down by turning or rotating them horizontally, and the invention is as broad as this idea without regard to the precise form of the agitators or the method of operating them.

The bottom of the match box or holder is open, except as it is closed by two attached parts. First, there is the ignitor-box. (Shown detached in Fig. 9.) The tail end of the match is arranged for this end of the receptacle and rests in this box when down in proper position to be withdrawn. The box has a longitudinal opening large enough to pass the match freely, and upon one side has an ignitor or scratcher 20, Fig. 10, provided with a spring-shank, so as to yield somewhat, if necessary, while at the same time it bears sufficiently on the match to light it when the match is pulled through the box. In order that the stem of the match shall not ride on the teeth or roughened surface of the ignitor, I form a heel 21 on the spring-shank, which takes the regular wear and keeps the stem of the match out of contact with the teeth.

At the other end of the bottom of the receptacle is the match-head receiver 22, arranged on a cross-rod 23, at the side of the bottom of the receptacle and adapted to slide thereon to carry the matches forward through the igniting-box. The match drops down into this receiver, as seen in dotted lines, Fig. 8, the receiver being just large enough to accommodate one match at a time. Then in order to carry the receiver across on the rod 23, to force the match out at the opposite end of the machine, I provide a spiral cam 24 on the main or upright frame, which is concentric with the axis of the match-receptacle, and the head-receiver has a lip 25, engaging a rib on the cam and serv-

ing to hold the receiver in contact with the cam at all times, so that it will be carried back or forth, according as the match-receptacle is swung down or back to its normal position. When the head-receiver goes forward with a match, the inner surface of the plate 24 about the cam serves to support the matches at that end if there is any tendency to drop down. It will be observed that a forward movement of the receptacle on its hinges to the limit of its throw will carry the head-receiver over to the igniting-box, and thus project the lower match out of the box, say, two-thirds of its length. Then, letting go of the handle of the receptacle, it automatically returns to position, and the match remains then to be withdrawn by the hand of the user. Until it is withdrawn no other matches will drop down to be engaged by the head-receiver, so that the match-receptacle may be moved to and fro at pleasure for other purposes, and the matches will remain unaffected thereby; but immediately when the projected match is withdrawn and a forward movement of the receptacle occurs the next match will be brought into position, and so on. The match receiver or carrier 22 having a lip which always engages a lip on the spiral cam 24, and being adapted to travel back and forth transversely of the machine on a guide-rod 23, it will be seen that the receiver 22 is automatically and positively controlled by the said cam, so that when the receptacle is moved down to cut a cigar the receiver is carried forward, and when it springs back to its normal position the receiver is carried back, and so on with each repeated action.

The upright frame is provided on its face with opening 26 and socket 27 for inserting the tips of cigars, the opening 26 being made for cutting off the tip and the socket 27 for perforating it, and a cutter 28 and perforator 29 are fixed on the front of the match-receptacle to do this work. Socket 27 has a vertical perforation for the passage of the perforator 29, and either method of treating the cigar may be employed, according to the fancy of the smoker. It will be seen that a cigar may be cut or perforated and a match brought into convenient position for lighting by the same movement of the machine, and as only one match is fed at a time, and this one ignited when withdrawn, there is evident economy in matches as well as great convenience in operation.

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

1. A match-receptacle provided with a contracted bottom having an opening at its side, in combination with a device to convey the matches forward longitudinally and a rotary agitator for the matches at the side of the said bottom working in the opening therein, substantially as set forth.

2. A match-receptacle supported on pivots and having a contracted lower extremity with



an opening at the side, an agitator working in said opening, a match-head receiver to travel along the lower end of the receptacle and carry the matches forward, and a stationary guide for said receiver, substantially as set forth.

3. A match-receptacle pivoted to swing on bearings, a match-head receiver at the bottom of the receptacle, and a stationary guide on which the receiver works to carry the receiver back and forth, substantially as set forth.

4. A pivoted match-receptacle having converging sides and a match-head receiver and ignitor at the bottom of the receptacle, in combination with a stationary frame supporting the receptacle and having a guide to carry the said receiver back and forth, substantially as set forth.

5. A pivoted match-receptacle provided with an open bottom, and rotary agitators at the sides of the receptacle near the bottom, and a match-carrier connected with said bottom, in combination with a support for the receptacle having a spirally-arranged guide for the match-head receiver, substantially as set forth.

6. A pivoted match-receptacle provided with a contracted lower extremity with openings at the sides, agitators working in said openings, a match-head receiver, a cam to guide the receiver back and forth, and a spring to carry back the receptacle to its normal position, substantially as set forth.

7. A match-receptacle having a contracted lower extremity with longitudinal openings therein at the sides, in combination with rotary agitators working in said openings, substantially as set forth.

8. A match-receptacle having converging sides and contracted at its lower extremity to the thickness of a single match, agitators working through the sides of the contracted part, and a carrier operated by a cam to convey the matches forward one at a time, substantially as set forth.

9. A match-receptacle with an open contracted bottom, agitators for the matches, an ignitor, a head-receiver to carry the matches forward, and a spiral cam to move the head-receiver, substantially as set forth.

10. A pivoted match-receptacle with an

open bottom, a match-ignitor box at one end of said bottom open longitudinally for the passage of a match, a match-ignitor connected with said box, and a head-receiver to convey the match through said box, in combination with a fixed frame on which the receptacle is pivoted, substantially as set forth.

11. A supporting-frame, a receptacle pivoted on said frame, a retracting-spring for the receptacle, agitators for the matches, secured, respectively, to the said receptacle and the supporting-frame therefor, and a match-carrier at the bottom of said receptacle, substantially as set forth.

12. A supporting-frame provided with a curved portion with openings to introduce tips of cigars to cut or perforate the same, and a match-receptacle having cutters or perforators attached thereto and pivoted to rotate concentrically with said curved portion, substantially as set forth.

13. A match-receptacle having a contracted extremity with openings at its sides, in combination with rotary agitators working through said openings and spring-supports for one of said agitators, substantially as set forth.

14. A pivoted match-receptacle having an agitator attached thereto and working through one side thereof near its bottom, in combination with a fixed frame supporting the receptacle and carrying an agitator at the opposite side near the bottom of the receptacle, substantially as set forth.

15. A match-receptacle consisting of a supporting-frame provided with arms at either side, in combination with a match-receptacle pivoted on said arms between the same and agitators for the matches at the bottom of the receptacle, substantially as set forth.

16. In match-receptacles, a supporting-frame having a base and an upright portion with projecting sides, in combination with a receptacle pivoted on said sides, a carrier at the bottom of the receptacle to project the matches endwise therefrom, and a device on the supporting-frame to move said carrier back and forth, substantially as set forth.

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