W. J. CROWLEY.
CIGAR CUTTER AND LIGHTER.
APPLICATION FILED AUG. 14, 1908.

914,928. Patented Mar. 9, 1909.
2 SHEETS—SHEET 1.

Fig. 1.

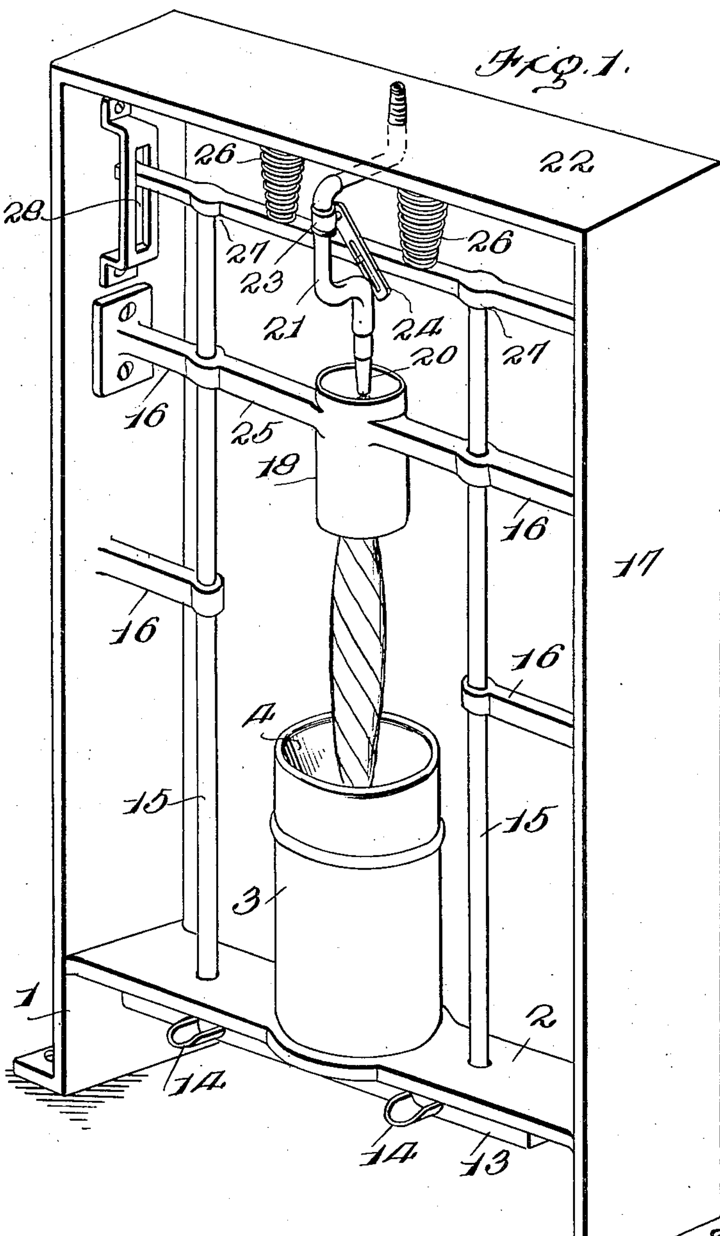


Fig. 3.

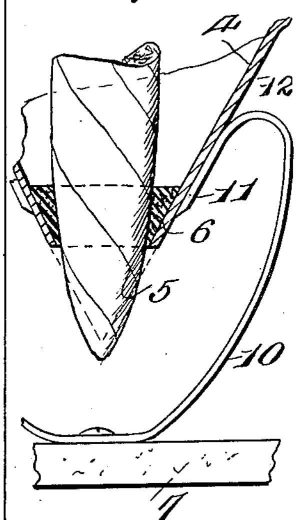
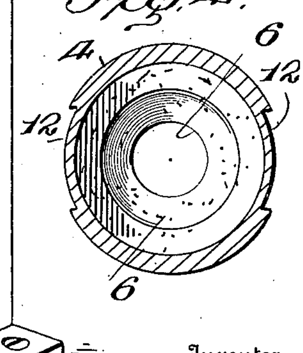


Fig. 4.



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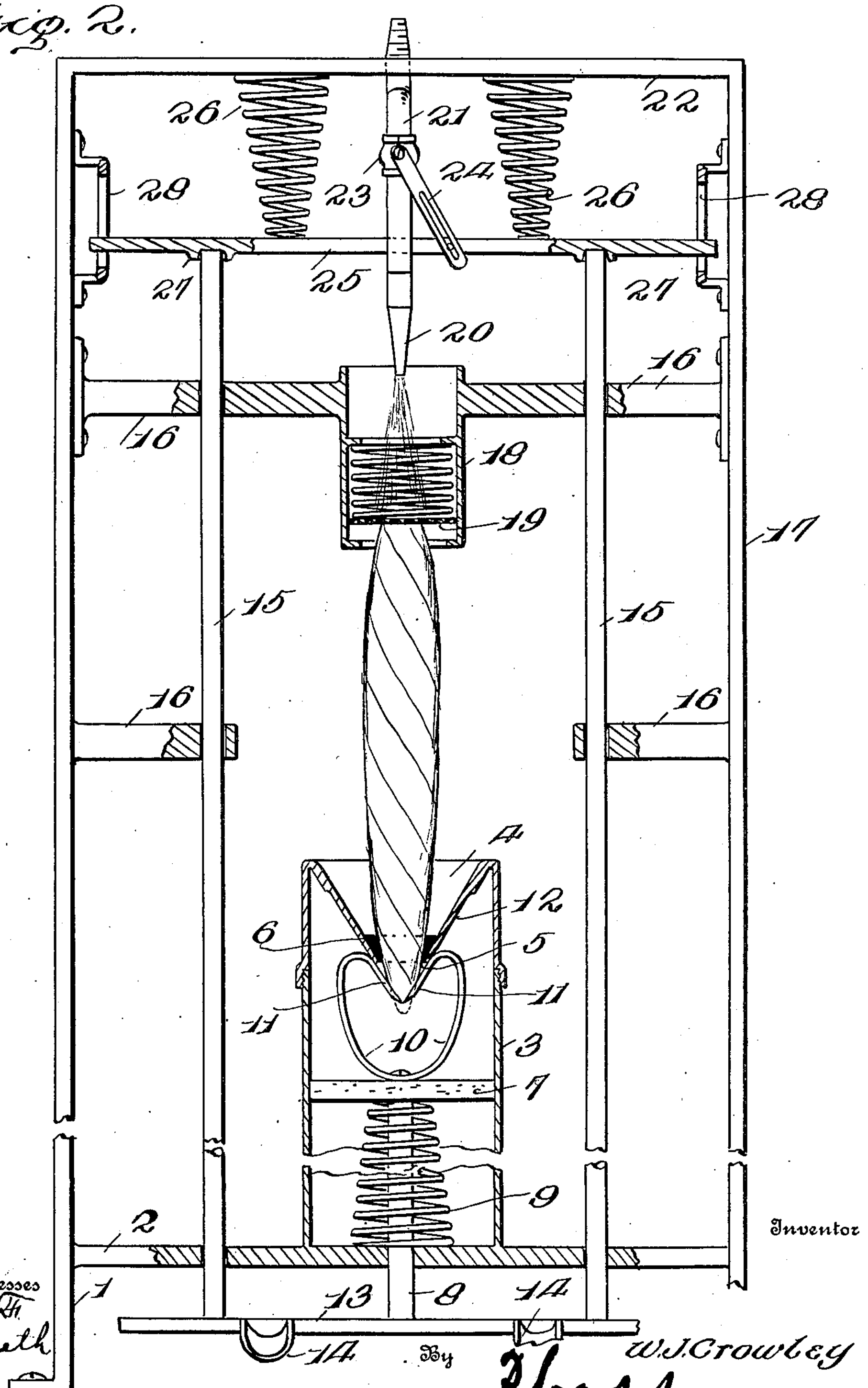
2 SHEETS—SHEET 2.

Fig. 2.



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UNITED STATES PATENT OFFICE.

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CIGAR CUTTER AND LIGHTER.

No. 914,928. Specification of Letters Patent. Patented March 9, 1909.

Application filed August 14, 1908. Serial No. 448,610.

To all whom it may concern:

Be it known that I, WILLIAM J. CROWLEY, a citizen of Great Britain, residing at Newburyport, in the county of Essex and State of Massachusetts, have invented certain new and useful Improvements in Cigar Cutters and Lighters, of which the following is a specification.

This invention comprehends certain new and useful improvements in smokers' appliances, relating more particularly to a device for use in retail cigar stores or similar places, and the object of the invention is an improved device which may be conveniently operated to remove the tip of a cigar and is also arranged to automatically and positively effect the lighting of the same so that when the smoker removes the cigar from the device, the same is ready for immediate use, said device being susceptible of use with cigars of different sizes and requiring no particular effort or experience for operation.

With this and other objects in view as will appear more fully as the description proceeds, the invention consists in certain constructions, combinations and arrangements of the parts that will be hereinafter described and claimed.

For a full understanding of the invention, reference is to be had to the following description and accompanying drawings, in which:

Figure 1 is a perspective view of a smoker's appliance constructed in accordance with my invention. Fig. 2 is a vertical section thereof, showing the parts in an operative position. Fig. 3 is a detail view on an enlarged scale, illustrating the means for removing the tip of the cigar. Fig. 4 is a horizontal section through the lower portion of the mouth-piece.

Corresponding and like parts are referred to in the following description and indicated in all the views of the drawings by the same reference characters.

A smoker's appliance embodying the improvements of my invention, preferably consists of a suitable stand 1 upon the bar 2 of which is secured a vertically disposed air cylinder 3 that is provided at its upper end with a downwardly and inwardly tapering or obconic mouth-piece 4 designed for the reception of the pointed end of a cigar. This mouth piece is formed at its apex with an opening 5 extending therethrough to establish communication with the interior of the air cylinder, said opening being of sufficient size to permit the tip of the cigar that is to be removed, to protrude into the cylinder, and the lower portion of the mouth piece being preferably provided with an annular packing strip 6 to form a tight joint for the cigar and permit air to be admitted to the cylinder through the cigar only.

7 designates a vertically reciprocating piston which is mounted within the cylinder and is suitably packed therein and which is supported upon the upper end of a piston rod 8 that projects downwardly through the lower end of the cylinder and through the bar 2 of the stand, said piston being normally supported near the upper end of the cylinder in close proximity to the mouth piece, by any suitable means, such as a spiral spring 9 encircling the piston rod and interposed between the piston and the lower end of the cylinder, as shown.

As one means for removing the inwardly projecting tip of the cigar, I provide two resilient cutter bars 10 which are secured at one end to the piston near the middle point thereof and which extend upwardly therefrom in divergent relation with their other ends returned upon themselves in convergent relation, and constituting the cutting blades 11. The last named ends of the cutter bars are designed to be received in grooves 12 formed in the inner surface of the mouth piece and are spread apart by the latter so as to be held in an inoperative position with their cutting edges normally in spaced relation on opposite sides of the tip of the cigar, as shown.

To the lower end of the piston rod 8 is rigidly secured a horizontally disposed presser bar 13 which is arranged beneath the bar of the stand and which is preferably provided with one or more finger pieces 14, rods 15 being rigidly secured to the presser bar near the opposite ends thereof and extending upwardly through the bar of the stand and passing through vertically alining guide-brackets 16 which are carried by a supporting framework 17 with which the device is preferably provided. These rods 15 are designed to act in conjunction with and control a lighting device in a manner to be hereinafter disclosed.

Two of the guide-brackets 16 are secured to an ignition cylinder 18 so as to support the

same above and in vertical alinement with the air cylinder 3, said ignition cylinder preferably having its ends open and the lower portion of the cylinder being designed for the reception of the larger end of a cigar which is retained in position therein by means of a downwardly spring-pressed screen 19. Into the upper end of this ignition cylinder is introduced any suitable lighting agent that in the present instance is in the form of a continually burning gas jet 20, a pipe 21 of which is secured to and suspended from the upper cross bar 22 of the supporting framework and is arranged for connection with any suitable source of supply, not shown. This jet is designed to be decreased when the device is not in use and be increased during the operation of the same, and any suitable means may be employed for this purpose, although in the present instance it is accomplished by providing the pipe 21 at an intermediate point with a rotatable valve 23. This valve is formed with an outstanding crank arm 24 which has an operative connection with a horizontally disposed vertically movable cut-off bar 25, expansion springs 26 being interposed between the latter and an adjacent cross bar of the supporting framework and normally exerting a tension upon the cut-off bar to cause the same to tend to assume a position to open the cut-off valve and increase the jet. It is obvious, however, that when the device is not in use it is necessary for the sake of economy to prevent the valve 23 from being opened as above described, and for this purpose the cut-off bar 25 is formed at requisite intermediate points with contact buttons 27 that are arranged to abut against the upper extremities of the rods 15 so as to be sustained by the latter in raised position against the tension of the springs 26, the ends of this cut-off bar being slidingly mounted in vertically disposed guideways 28 carried by the supporting framework and being preferably square in cross section to prevent the possible turning of the cut-off bar and the movement of the contact buttons 27 out of operative relation to the rods 15.

Before describing the practical operation of my improved device, it is to be assumed that the parts are in their normal positions as just described, and that a cigar is applied to the device with its lower end received in the mouth-piece and its tip protruding into the air cylinder, while the upper end of the cigar is introduced in the lower portion of the ignition cylinder and sustained in position by the wire screen. The user of the device places his hand upon the presser bar 13 or the finger-pieces 14 thereof and imparts to the former a quick downward movement which obviously causes the piston 7 to move downwardly in the air cylinder against the tension of the spiral spring 9, and such downward movement of the piston causes a similar movement of the cutter bars 10. As these cutter bars move downwardly, they are obviously permitted to move together by their spring action so as to cause the cutting blades 11 to come into contact and sever the tip of the cigar which projects into the air cylinder. As the piston continues to move downwardly in the air cylinder, a vacuum is created in the upper portion thereof so that when the tip of the cigar is removed a suction is applied to the same, since, as before described, air can only enter the cylinder through the cigar, when the latter is in position in the device. The downward movement of the pressure bar also slides the rods 15 downwardly and permits the cut-off bar 25 to be moved by the expansion springs 26 to assume a position to open the valve 23 and increase the gas jet, whereupon the cigar is instantaneously lighted by means of the suction which is applied to the smaller end thereof by the air cylinder.

When the pressure bar is released it will be evident that the parts will be returned to their normal position by means of the spiral spring 9 that is arranged in the lower portion of the air cylinder.

Upon the repeated operation of the device it will be seen that the tips of the cigars will accumulate in the upper portion of the air cylinder, and unless these are removed there is a liability of the same clogging the parts and preventing the operation thereof. In order to render possible the convenient removal of the tips, the upper portion 29 of the air cylinder is preferably formed separate from the rest of the same and detachably secured thereto in any suitable manner, as by means of screw threads or the like.

In the preferred construction of the machine the pipe 21 is constructed in two sections that are secured together at their joining ends by any suitable flexible coupling or joint so that the gas jet may be readily removed from the ignition cylinder and employed to light cigarettes or the like when desired and then returned to position.

Having thus described the invention, what is claimed as new is:

1. In a smoker's appliance, the combination of an air cylinder provided at its upper end with a downwardly and inwardly tapering mouth piece having an opening extending therethrough to permit the tip at one end of a cigar to project into the cylinder, a piston reciprocating in the cylinder and normally supported in proximity to the mouth piece, spring cutter bars secured to the piston and adapted to engage the tip of the cigar to sever the same upon the downward movement of the piston, said cutter bars being normally disposed on opposite sides of the mouth piece and being wedged apart thereby so as to be sustained in an

inoperative position, and a lighting agent arranged in proximity to the other end of the cigar.

2. In a smoker's appliance, the combination of an air cylinder through the upper end of which the tip of a cigar is designed to project, a piston reciprocating in said cylinder and normally supported in proximity to said end thereof, means carried by the piston for engaging the tip to sever the same upon the downward movement of the piston, an ignition cylinder supported above and in vertical alinement with the air cylinder and into the lower portion of which the other end of the cigar is introduced, a downwardly spring pressed screen adapted to bear against said last named end of the cigar to sustain the same in position, and a lighting agent introduced in the upper portion of the ignition cylinder.

3. In a smoker's appliance, the combination of a cylinder provided with a tapering mouthpiece for the reception of the tip end of a cigar, a piston reciprocating in the cylinder, tip-cutting means carried by the piston and engaging the mouthpiece and normally maintained in an inoperative position thereby, a lighting agent, and an operative connection between the piston and the lighting agent.

4. In a smoker's appliance, the combination of an ignition cylinder having a netting partition or screen extending transversely thereof, the portion of the cylinder upon one side of the screen being arranged for the reception of one end of a cigar, and a lighting agent disposed within the ignition cylinder on the opposite side of the screen.

5. In a smoker's appliance, the combination of an ignition cylinder, a wire netting partition or screen arranged within the ignition cylinder and spring-pressed toward one end thereof, said end of the ignition cylinder being designed for the reception of an end of a cigar, and a lighting agent disposed within the other end of the ignition cylinder.

6. In a smoker's appliance, the combination of an air cylinder through one end of which the tip of a cigar is designed to project, a piston reciprocating in said cylinder, means carried by the piston for engaging the tip to sever the same by and upon the reciprocation of the piston, a piston rod at one end of which the piston is secured, a pressure bar secured to the other end of the piston, a rod secured to the pressure bar, a cut-off bar spring pressed against the rod, and a lighting jet arranged in proximity to the other end of the cigar and provided with a controlling valve having a crank arm operatively connected with the cut-off bar, as and for the purpose specified.

7. In a smoker's appliance, the combination of a cylinder provided with a mouthpiece for the reception of the tip end of a cigar, a piston reciprocating in the cylinder and adapted upon reciprocation to sever the tip of the cigar, means for operating the piston, a valve lighting jet disposed in proximity to the other end of the cigar, a spring-pressed cut-off bar operatively connected to the valve of the jet, and a rod movable with said operating means and controlling the movement of the cut-off bar.

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

WILLIAM J. CROWLEY. [L. S.]

Witnesses:
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