No. 826,299.

PATENTED JULY 17, 1906.

H. M. WILLIS.

CIGAR PERFORATOR.

APPLICATION FILED NOV. 14, 1905.

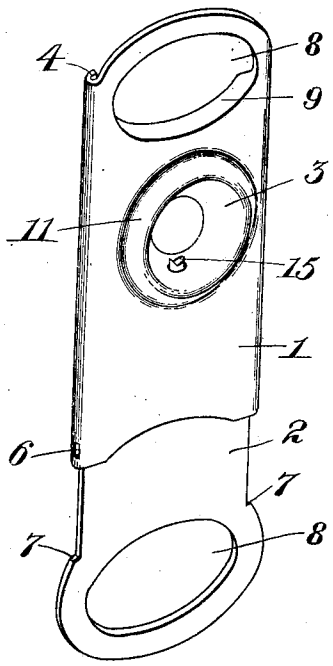


Fig. 1.

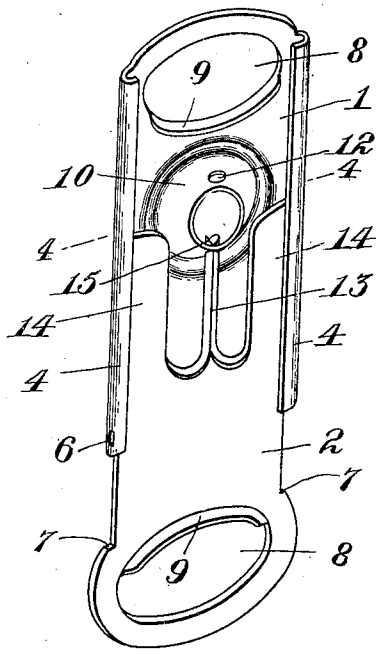


Fig. 2.

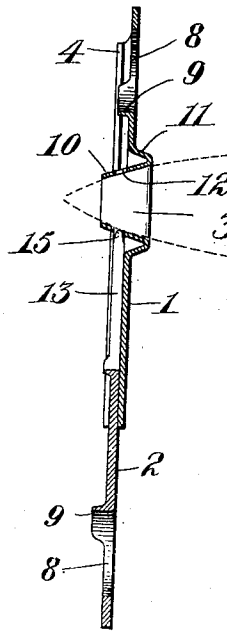
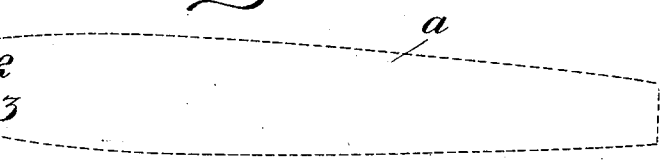


Fig. 3.



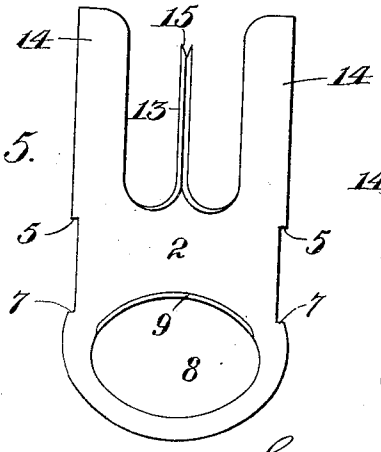
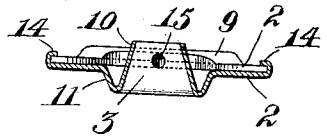


Fig. 5.

Fig. 4.



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UNITED STATES PATENT OFFICE.

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CIGAR-PERFORATOR.

No. 826,299. Specification of Letters Patent. Patented July 17, 1906.

Application filed November 14, 1905. Serial No. 287,243.

To all whom it may concern:

Be it known that I, HENRY M. WILLIS, a citizen of the United States, residing in East Williston, Nassau county, and State of New York, have invented a new and useful Improvement in Cigar-Perforators, of which the following is a description.

This invention relates to the class of devices known as "cigar-perforators," and particularly to a type of such devices which may be conveniently carried upon the person without bulging the pockets and without being in any manner an obstruction or burdensome.

Among the objects of this invention may be noted the following: to provide a simple device which can be carried in the pocket without notice or bulging the same; to provide a device of the character noted which will be simple in construction, perfect in operation, and effective; to provide a device of the character noted by which the tip end of a cigar may be perforated by forming therein a clean-cut hole from side to side by pushing the material of the cigar completely out, thus by forming the perforation or hole removing the substance of the cigar to provide a clear passage and without plugging or packing the device, as is common; to provide a cigar-perforator which requires little or no effort to operate the same and which in operation produces no pressure upon the cigar tending to crush or break the same, and to provide novel features of construction tending to the easy manipulation of the device, rendering it cheap to manufacture, and producing a perfectly operating and effective medium for the purposes stated.

With the above objects in view and others, which will be detailed hereinafter, the invention consists in the parts, features, and combinations of elements hereinafter described and claimed.

In the drawings forming part of this specification, Figure 1 is a perspective view of a cigar-perforating device embodying the features of my invention, the direction of sight being upon the face of the article. Fig. 2 is a perspective view showing the parts in the same position as in Fig. 1, the direction of sight being upon the back of the article. Fig. 3 is a longitudinal vertical section of the device of Fig. 1, showing the details of construction and illustrating in dotted lines a cigar in position to be operated upon. Fig. 4 is a transverse section of the device of Fig. 2, taken substantially on the line 4 4 of the latter; and Fig. 5 is a bottom plan of the punch-slide, showing the details of its construction.

In the drawings the numeral 1 designates what I have chosen to term the "carrier-slide," because it carries the punch-slide 2 and contains the chamber 3 for the reception of the tip end of the cigar. The slide 1 has its longitudinal edges 4 overturned or grooved to receive and hold the punch-slide 2, which latter is provided along its longitudinal edges with cut-out portions or recesses providing shoulders 5, which coöperate with a lug, pin, or similar device 6, carried by the carrier-slide 1 at one end thereof, said lug acting as a stop to prevent the withdrawal of the slide 2 beyond a certain point. Shoulders 7 are also provided on the slide 2, which coöperate with the ends of the overturned portions 4 of slide 1 to limit the inward movement of the punch-slide. In each of the slides digital apertures 8 are provided, said apertures being reinforced around a portion of their circumference by the upturned flanges 9, thus providing enlarged pressure-surfaces whereby to manipulate the device with the fingers, thus avoiding injuring the fingers or hurting them in performing the necessary operation of perforating the cigar. The carrier-slide, as previously stated, is provided with the chamber 3 for the tip end of the cigar, the same being formed by a conical nipple or projection 10, extending transversely of the carrier-slide and projecting through the latter from side to side and extending somewhat beyond its surfaces. The nipple 10 is truncated at one end, as clearly shown, and is connected with the carrier-slide by the flange 11 and is provided near its truncated end with two apertures 12 in diametric alinement for the reception of the punch 13, carried by the slide 2, said punch extending longitudinally of the slide and in such position that it accurately registers with, so as to pass freely through, said apertures 12. The punch 13 is located centrally of the slide 2 and is separated from the body of the latter, as clearly shown in the drawings, thus leaving the parallel slide-bars 14 on opposite sides of said punch and in continuity of the body of the punch-slide 2.

As clearly shown in the drawings, the parts are so combined that in the normal open condition of the device the punch 13 will be in operative position with its cutting end just

within one of the apertures in the nipple 10, thus being in position such that as the end of the cigar is centered in the chamber of the nipple 10 said punch can be forced through the cigar to make the necessary perforation, said punch passing entirely through the end of the cigar from side to side, thus pushing the material of the cigar in advance of the punch completely out and through the opposite aperture, where it will drop away from the device and will thus be incapable of clogging the same or impeding its proper operation.

As clearly shown, the operating end of the punch may be notched, as at 15, so as to provide two penetrating points and cutting edges, thus facilitating the entry and passage of the punch through the cigar without breaking, splitting, or otherwise injuring the wrapper or cover of the latter.

Regarding the production of the device shown in the drawings, my construction is such as to facilitate and cheapen the manufacture of the same and simplify the mechanical features thereof, as clearly indicated in the drawings. In other words, the entire device is or may be made of sheet metal stamped or blocked into proper shape and simultaneously punched or otherwise cut to produce the several physical structural features required for performing the functions and securing the coöperation heretofore described. The overturned portions or guides 4 are obviously extensions of the body part 1, and the nipple 10 is also struck up from the said body portion 1, as will be clearly understood and as is illustrated by the thickness of the metal. The finger-rests 9 of both the carrier-plate 1 and slide-plate 2 are likewise struck up from the body portion of the respective plates simultaneously with the production of the other physical and structural features, and the same is also true of the punch 13, which is produced by cutting out the material of the slide-plate 2, leaving the guide-bars 14 and a similar portion which is bent or coiled into the tubular or substantially solid form shown in the several figures. The lug or projection 6 may be readily produced by depressing the material of the overturned portion 4, and one or more of such lugs may be produced, as by providing the opposite overturned portion 4 with a lug of the same character.

The manner of assembling the several parts is obvious and clear without further description, and it will be understood that it requires only the pressure of the fingers to slide the punch-carrier 2 along and over the carrier-plate 1 in order to perform the function, the manipulation being secured by means of the first finger and thumb.

Among the advantages of this invention may be noted the following: The construction of the device is such as to enable it to be quickly and cheaply made from sheet metal. The provision of the device with a punch which perforates the cigar and pushes the material thereof out of the cigar and also out of the device produces an aperture in the cigar which affords a perfect draft-hole and prevents the cylindrical portion pushed out from the cigar from clogging the device. By striking up the material of the respective plates about the digital apertures, as shown at 9, extensive pressure-surfaces are provided, which avoid injury to the fingers and prevent the operation of the device from hurting the same. By providing the chamber for the reception of the tip end of the cigar in a nipple which extends transversely of the device the whole structure can be made substantially flat and of very little transverse thickness, thus permitting the device to be carried in the trousers or vest pocket without bulging the same or being otherwise objectionable to the user. By providing the ways in the carrier-plate 1 for guiding and retaining the punch-plate 2 a simple means is provided for performing the functions of maintaining the parts in proper operative position and accurately guiding one part upon the other and making a structure which is not likely to be easily put out of order or shape or otherwise injured so as to affect its proper operation, and by producing the guides 4 by overturning the edges of the blank additional strength is produced and the structure is cheapened in that a separate operation is not necessary for soldering or otherwise fastening the guides upon the plate 1.

Obviously the device may be made from any kind of metal found suitable for the purpose and if made of the baser metals can be nickeled, silver or gold plated, enameled, or otherwise ornamented, or it can be made of aluminium or any of the precious metals cheaply and readily at a low cost of manufacture, as will be understood.

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

1. A cigar-perforator comprising a flat plate forming a carrier-slide having longitudinal guides, and a flat plate forming a punch-slide having longitudinal slide bars operating in said guides, said carrier-slide having a transversely-disposed nipple provided with a chamber for the reception and support of the cigar-tip and oppositely-disposed apertures in the walls of said chamber, and said punch-slide having a punch extending parallel with said slide-bars and at an angle to said nipple and located so as to pass through said apertures, and each of said slides having means whereby they may be slid upon each other.

2. A cigar-perforator consisting of two parts relatively slidable, one of the parts being provided with a nipple, struck up from the material thereof, having a chamber for the cigar-tip the walls of which are perforated,

and the other of the parts being provided with a punch, struck up from the material thereof, the said punch being arranged parallel with its carrying part and at an angle to the nipple, and coöperating with the apertures in the walls of said chamber.

3. A cigar-perforator consisting of two flat slides, one of which has means for guiding the other, and one of said slides being provided with a transverse aperture for the reception and support of the end of a cigar, and the other of said slides being provided with a punch formed by striking up and rolling the body material thereof, said punch extending lengthwise of its slide and coöperating with the said chamber.

4. A cigar-perforator comprising a body portion formed of a single piece of metal, said body portion having a nipple struck up from the material thereof and extending transversely of said body portion and affording a chamber for the reception and support of the end of a cigar, and said body portion also having formed therein a digital recess with an extensive pressure portion struck from the material thereof and extending partially around the circumference of said recess, in combination with a punch-slide carrying a punch operating transversely of the chamber for perforating a cigar.

5. A cigar-perforator comprising two flat slides having means for guiding and supporting each other, one of said slides being provided with a punch and the other of said slides being provided with a nipple, and said nipple being provided with diametric perforations through which the said punch operates to cut from the body of a cigar a cylindrical portion, said punch and nipple being formed integral with the respective slides and struck up from the material thereof.

In testimony whereof I have hereunto signed my name in the presence of two subscribing witnesses.

HENRY M. WILLIS.

Witnesses:

CHAS. McC. CHAPMAN,

GRACE L. HEASLEY.