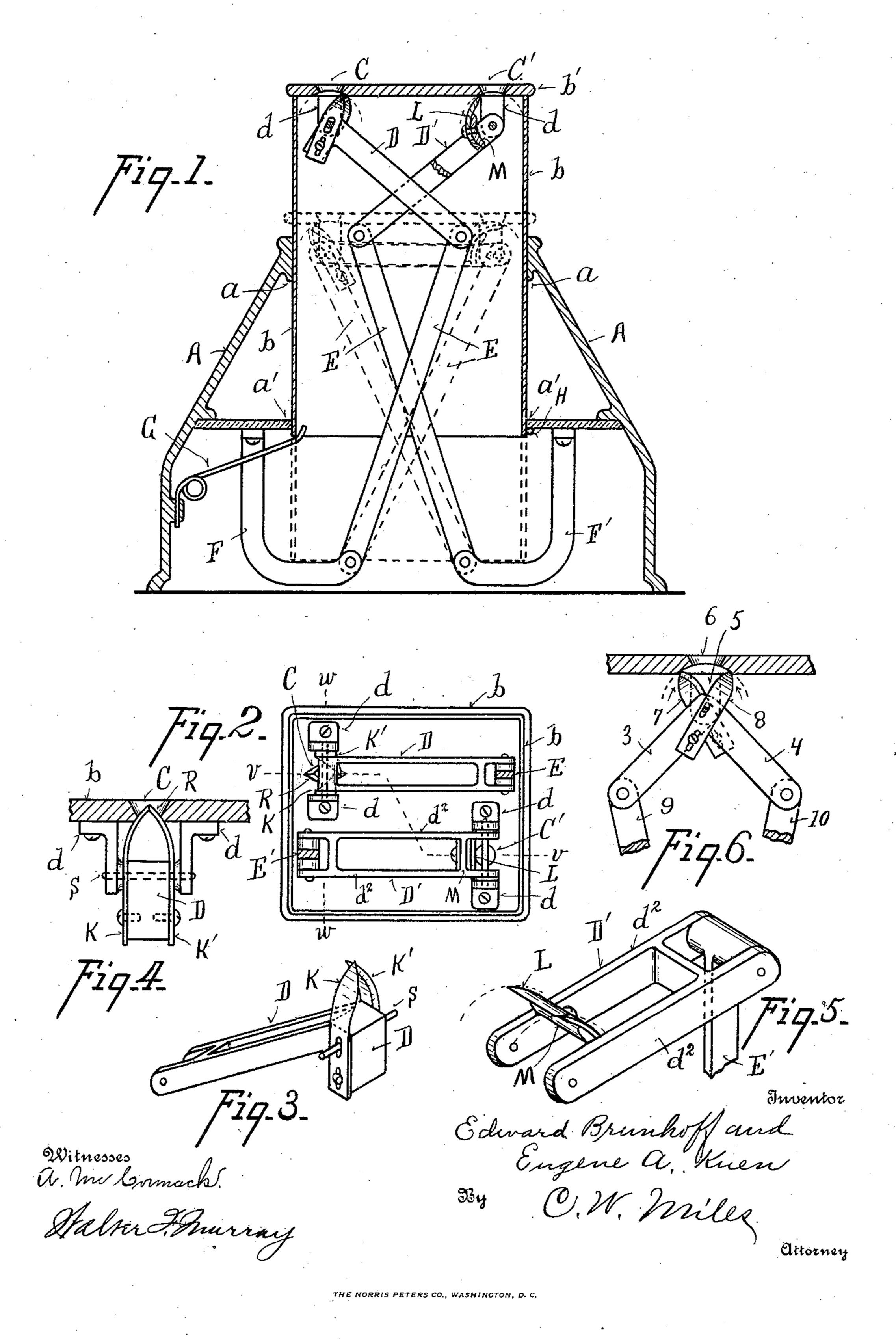
E. BRUNHOFF & E. A. KUEN. CIGAR TIP CUTTER. APPLICATION FILED JAN. 18, 1906.



UNITED STATES PATENT OFFICE.

EDWARD BRUNHOFF AND EUGENE A. KUEN, OF CINCINNATI, OHIO, ASSIGNORS TO THE BRUNHOFF MANUFACTURING COMPANY, OF CINCINNATI, OHIO, A CORPORATION OF OHIO.

CIGAR-TIP CUTTER.

No. 862,386.

Specification of Letters Patent.

Patented Aug. 6, 1907.

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To all whom it may concern:

Be it known that we, Edward Brunhoff and Eu-GENE A. KUEN, residing at Cincinnati, in the county of Hamilton and State of Ohio, have invented certain 5 new and useful Improvements in Cigar-Tip Cutters, of which the following is a specification.

Our invention relates to improvements in cigar cutters. One of its objects is to provide improved simple and reliable eigar tip cutting mechanism operated by 10 a vertically depressible cutter head.

Another object is to provide improved arrangement of knives for making a V-shaped cut in the cigar tip.

It further consists in certain detaits of form, combination and arrangement, all of which will be more 15 fully set forth in the description of the accompanying drawings, in which;

Figure 1 is a vertical section through my improved cutter taken on line v v of Fig. 2. Fig. 2 is a bottom ptan view of the cutter head detached. Fig. 3 is a per-20 spective view of the knives employed to make a Vshaped cut, and their supporting lever. Fig. 4 is an end view of the same, being a section on line w w of Fig. 2. Fig. 5 is a similar view of the knife and mechanism employed to make a straight cut. Fig. 6 is a 25 section similar to Fig. 1 of a modification of the knives employed to make a V-shaped cut.

In the accompanying drawings, A represents the base or supporting frame.

B represents the cutter head, which is preferably 30 composed of a tubular shell b and a top plate b' provided with one or more tip holes C C'. The shell b is supported relative to the base by guides, a a', the guide a' preferably being composed of a plate detachably connected to the base and having a central opening for 35 the passage of the lower end of the shell b.

Knife carrying levers D D' are pivoted by ears d to the under side of the plate b' beneath the tip holes. The extended ends of these arms are connected by links E E' with brackets F F' rigidly supported rela-40 tive to the base. By placing the brackets on the same side of the frame as the knife which it is to operate we secure a maximum amount of leverage throughout the cutting operation, thereby reducing the force required to depress the head to a minimum.

45 G represents one or more springs attached to the base and adapted to normally hold the cutter-head in the elevated position, and to return it thereto after it has been depressed.

H represents stops to limit the upward movement of 50 the cutter-head.

In Fig. 3 we have shown our improved arrangement of knives for effecting a V-shaped cut in the cigar tip. Two knives K K' being mounted on opposite sides of the knife arm or lever D, said knives being set so that 55 one travels slightly in advance of the other, said knives

being curved or bent toward each other so that their respective paths of travel will intersect and cause a V-shaped piece to be cut from the cigar tip. These knives are preferably secured to the arm D by screws passing through slotted openings to permit the knives 60 to be adjusted to position. The pivot on which the arm D journals is also preferably passed through a slotted opening in the knife. A V-shaped groove R is provided on the underside of plate b', beneath tip-hole, C, for knives K K' to travel in. Where it is desired to 65 make a straight cut across the tip, we preferably employ a curved knife L attached to a cross-bar M, which serves to connect the side bars d^2 of the arm D'.

In the modification Fig. 6, two levers, 3 and 4, are pivoted to ears, 5, beneath tip-hole, 6, corresponding 70 to tip-hole C. Levers 3 and 4, are provided with independent knives, 7 and 8, which by means of links, 9 and 10, are caused to travel in opposite directions through paths of travel which intersect so as to cut a V-shaped piece from the cigar tip. We are thus en- 75 abled to provide a cigar cutter which is simple, reliable, and easily operated without liability of breaking the cigar wrapper in operation. The arrangement of the knives for making a V-shaped cut provides for the knives being readily resharpened, and also reduces 80 the amount of force required to effect a cut of this shape as compared with knives heretofore in use for this purpose.

The mechanism herein shown is capable of considerable modification without departing from the principle 85 of our invention.

Having described our invention, what we claim is— 1. In a mechanism of the character indicated, a base provided with guides to direct the movements of the cutter head, a depressible cutter head provided with a tip hole, 90 and having a sliding movement relative to the base, a knife carrying lever pivoted to said cutter head beneath the tip hole, a knife carried by said lever adapted to pass across the under side of said tip hole to sever the tip when said lever is turned on its pivot, a link connected at one end to 95 the extended end of said lever and at the opposite end to a support carried rigidly relative to the base, so that the depressing of the cutter head causes the lever and knife to move on their pivot relative to the cutter head to sever the cigar tip, and means for normally holding said cutter head 100 in the raised position.

2. In a mechanism of the character indicated, a base provided with a plurality of guides to direct the movements of the cutter head, a depressible cutter head engaging said guides and adapted to slide vertically relative thereto, and $105\,$ provided with a tip hole, a knife carrying lever pivoted to said cutter head beneath the tip hole, a knife carried by said lever adapted to pass across the under side of said tip hole when said lever is turned on its pivot, a link connected at one end to the extended end of said lever, and at the op- 110 posite end to a support carried rigidly relative to and located near the bottom of said base, whereby the sliding of said cutter head relative to the base operates the knife to sever the cigar tip, and means for holding the cutter head normally in the raised position.

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- 3. In a mechanism of the character indicated, a base provided with guides to direct the movements of the cutter head, a cutter head composed of a tubular section adapted to engage and slide relative to said guides, and a top plate provided with a tip hole, a lever having an extended arm pivoted within the cutter head beneath the tip hole, a knife carried by said lever adapted to pass across said tip hole by the movement of said lever, a link pivotally connected to the extended end of said lever and also pivotally connected to the extended end of said lever and also pivotally connected to a support carried rigidly relative to said base, and means for normally holding the cutter head in the raised position.
- 4. In a mechanism of the character indicated, a base provided with guides to direct the movements of the cutter head, a cutter head composed of a polygonal tubular section adapted to engage and slide relative to said guides, and a top plate provided with a tip hole, a lever having an extended arm pivoted within the cutter head beneath the tip hole, a knife carried by said lever adapted to pass across said tip hole by the movement of said lever, a link pivotally connected to the extended end of said lever and also pivotally connected to a support carried rigidly relative to said base, and means for normally holding the cutter head in the raised position.
- 25 5. In a mechanism of the character indicated, a base, a depressible cutter head provided with a tip hole and having

- a V-shaped groove in the under face thereof, a knife carrying lever, a two part knife carried by said lever, the separate sections of the knife being set one in advance of the other and curved in opposite directions so that their respective paths of travel intersect each other to cut a V-shaped section from the cigar tip, and means for operating said lever when the cutter head is depressed.
- 6. In a cigar cutter, in combination with a plate having a tip hole and a V-shaped groove in its upper face crossing 35 said hole, a two part knife the opposite sections of which are set one in advance of the other, and whose paths of travel intersect each other at an angle so as to cut a V-shaped section from the cigar tip.
- 7. In a cigar cutter a plate having a tip hole and a 40 groove in its under face crossing said hole, a plurality of knives whose paths of travel intersect each other so as to sever the tip and cut a groove in the severed end of the cigar, and means for operating said knives.
- In testimony whereof we have affixed our signatures in 45 presence of two witnesses.

EDWARD BRUNHOFF. EUGENE A. KUEN.

Witnesses:

JULIUS TRITSCH,

C. W. MILES.

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