

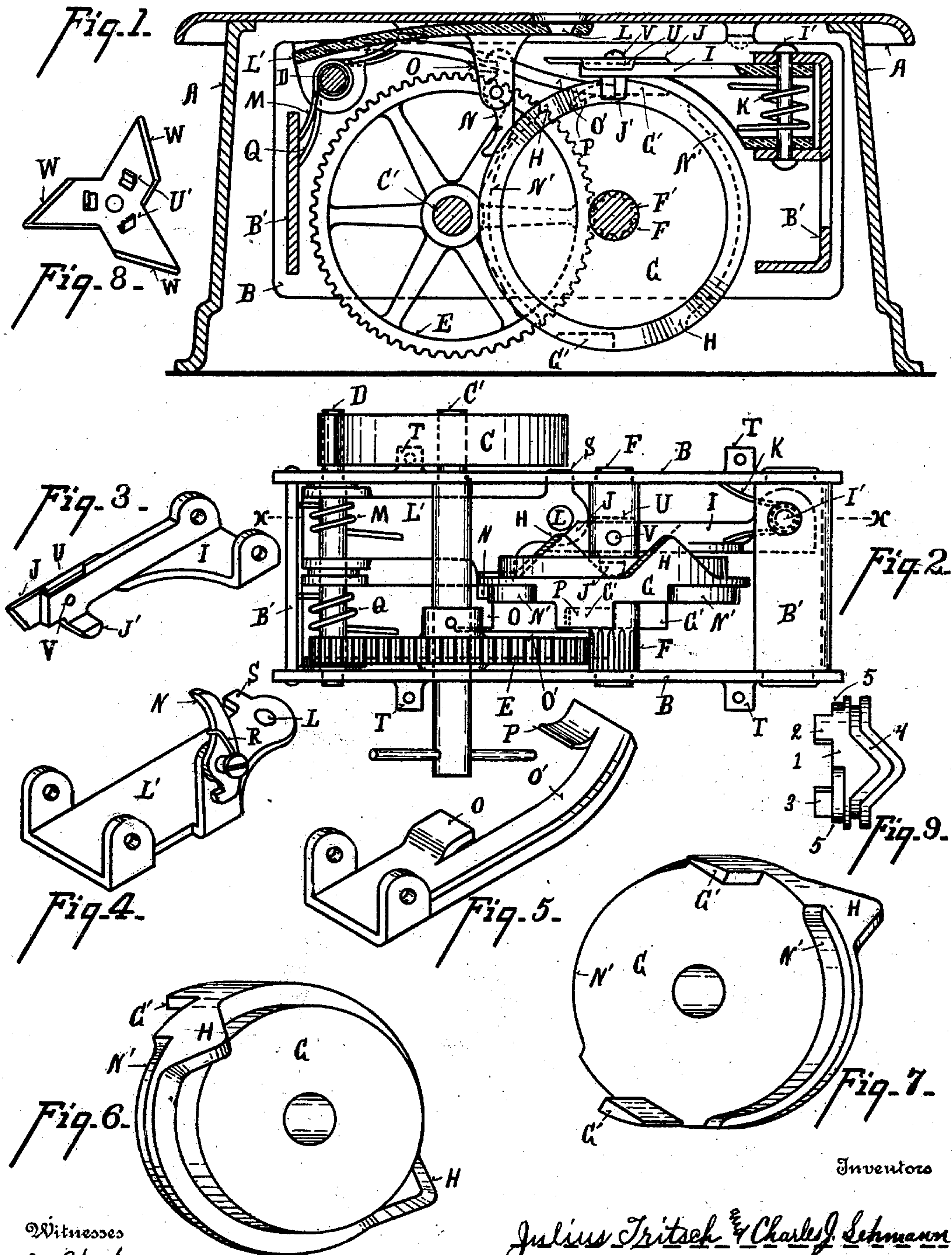
No. 666,074.

Patented Jan. 15, 1901.

J. TRITSCH & C. J. LEHMANN.
AUTOMATIC CIGAR TIP CUTTER.

(Application filed Aug. 25, 1900.)

(No Model.)



Inventors

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UNITED STATES PATENT OFFICE.

JULIUS TRITSCH AND CHARLES J. LEHMANN, OF HAMILTON, OHIO, ASSIGN-
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AUTOMATIC CIGAR-TIP CUTTER.

SPECIFICATION forming part of Letters Patent No. 666,074, dated January 15, 1901.

Application filed August 25, 1900. Serial No. 28,003. (No model.)

To all whom it may concern:

Be it known that we, JULIUS TRITSCH and CHARLES J. LEHMANN, citizens of the United States, residing at Hamilton, in the county of Butler and State of Ohio, have invented certain new and useful Improvements in Automatic Cigar-Tip Cutters; and we do hereby declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same.

Our invention relates to improvements in automatic cigar-tip cutters.

One of the objects is to provide a simple and reliable automatic mechanism for cutting off cigar-tips.

Another object is to provide a mechanism in which the knife has a draw cut.

Another object is to provide a knife having a plurality of sharpened edges and which can be adjusted to use said several sharpened edges consecutively.

Another object is to provide a mechanism in which the knife is mounted upon an oscillating arm instead of upon the cutter-wheel, being thereby less likely to injure those who have to handle it.

Another object is to provide improved releasing and stop mechanism.

Another object is to provide an improved framework for the cutter.

It also consists in certain details of form and combination, all of which will be more fully set forth in the description of the accompanying drawings, in which—

Figure 1 is a section on line xx of Fig. 2, showing the mechanism partly in side elevation. Fig. 2 is a bottom plan view of the mechanism removed from the casing. Fig. 3 is a perspective view of the knife-frame and knife. Fig. 4 is a perspective view of the releasing-lever. Fig. 5 is a perspective view of the stop-lever. Fig. 6 is a perspective view of the knife-actuating cam-block. Fig. 7 is a perspective view of the opposite face of said cam-block. Fig. 8 is a perspective view of a modification of the knife. Fig. 9 shows a modification in side elevation of the cam-block.

A represents the casing. The framework in which the mechanism is mounted consists

of the side frames B and the cross-plates B', the ends of which pass through slots stamped in the side plates and are headed over to lock the parts together, both the plates B and B' being stamped and punched to accurately register and be interchangeable one with another.

C represents the main driving-spring, which is coiled about the shaft C' and with its outer end looped over the end of the stud or pivot-pin D. The shaft C is provided with a spur-gear E, which drives the shaft F through a pinion F', cut thereon. Mounted upon the shaft F is a cam-block G, having two ears or stops G' and two cam-faces H on the opposite face thereof.

I represents the knife-frame, which is pivoted upon a pin I' and supported on the cross-bar B'. The outer end of the knife-frame carries a knife J and is provided with a lug or stud J', preferably stamped integral with the knife-frame, which is held in contact with the face of the cam-block by means of a spring K, coiled around the pin I'. The knife is arranged with two or more sharpened faces, so that it can be detached and reset to bring a fresh sharpened edge into action whenever it becomes dulled.

U represents lugs on the knife, embracing the knife-frame, to assist the screw V in holding the knife in place. The cutting edge of the knife is also preferably arranged at an angle, so as to have a draw cut across the tip-hole.

The tip-hole is formed in the outer end of the releasing-lever L', which is pivoted on the pin D and normally held in a raised position against the under face of the casing by means of a spring M.

N represents a catch pivoted to the releasing-lever. One end of this catch rests against the cam-face N' of the cam-block G, while the other end normally projects beneath the lug O of the stop-lever O', so as to be ready to depress the same out of the path of the stops G' to release the cam-block G and permit it to revolve.

R represents a spring holding the catch in contact with the cam N'.

Q represents a spring for returning the stop-lever into the path of the stops G' as soon as it has been released from the catch N, which

occurs as soon as the raised portion of the cam N' passes under the outer end of the catch.

S represents an ear on the releasing-lever, which when the lever is depressed engages the side plate B and limits the downward movement of the releasing-lever. The stop P is curved at its rear end, so as to permit the stop G' to pass it in the reverse direction when the spring is being wound.

The operation is as follows: A cigar is pressed into the tip-hole, which depresses the releasing-lever, which through the catch N carries down with it the stop-lever O', thereby releasing the cam-block, which revolves under the action of the spring C. The cam N' acts on the catch N to release the stop-lever, which springs back into position to engage the next stop G', after which the cam-face H engages the stud J', oscillating the knife across the tip-hole, immediately after which the cam-block is stopped by its engagement with the stop-lever. By this arrangement we avoid mounting the knives upon a revolving wheel, which has been found very dangerous to the workmen and others handling the cutter, and are able to provide a simple and reliable movement having all the advantages heretofore mentioned.

In the modification Fig. 8 is shown a knife having three cutting edges W and three ears U' stamped up from the knife-plate, which ears are adapted to engage one or more slots or notches on the knife-frame and which, in connection with the screw passing through the central opening in the knife, serve to lock the knife firmly in place and at the same time permit it to be adjusted to bring a fresh cutting edge into use. If desired, the ears may be located on the knife-frame and the slots or notches on the knife without departing from the principle of my invention. T represents ears on the frame-pieces B for attaching the same to the casing.

In the modification Fig. 9 we have shown a cam-block having a cam-groove 4, in which the stud J' seats, whereby the spring K may be dispensed with, as the cam not only moves the knife across the tip-hole, but returns it to its original position again. In this modification, 5 corresponds to the cams N' of Figs. 6 and 7, 1 corresponds to G, and 2 to the stops G'.

What we claim is—

1. In an automatic cigar-tip cutter an oscillating knife; a power-driven cam-block carrying a knife-actuating cam, a stop-releasing cam, and a stop-lug; and means for releasing and stopping the cam-block by the introduction of the cigar-tip.

2. In an automatic cigar-tip cutter, an oscillating knife-frame; means for automatically driving said knife-frame; and a knife having a plurality of sharpened edges, and

adapted to be adjusted upon the knife-frame so as to bring said several cutting edges successively into use.

3. In an automatic cigar-tip cutter, an oscillating knife; a power-driven cam-block adapted to engage and oscillate the knife; a releasing-lever having a tip-hole and adapted to be depressed by the introduction of the cigar, so as to register with the knife; a catch carried by the releasing-lever; a stop-lever adapted to be released by said catch to stop the cam-block; and a cam for disconnecting the catch from the stop-lever, substantially as specified.

4. In an automatic cigar-tip cutter, an oscillating knife-frame provided with a stud engaging the face of a power-driven cam-block; and adapted to be oscillated thereby; a knife having a plurality of cutting edges and adapted to be adjusted to bring said several cutting edges successively into use; and means substantially as specified for releasing and stopping said cam-block by the introduction of the cigar into the tip-hole.

5. In an automatic cigar-tip cutter in combination with a power-driven knife and automatic releasing and stop mechanism, a frame adapted to support said operative parts composed of stamped sheet-metal side plates having recesses supported relative to each other by broad sheet-metal cross-plates having stamped interengaging lugs adapted to project through said recesses and to be riveted to hold the plates together, and having stamped lugs adapted to secure the frame to the casing, substantially as specified.

6. In an automatic cigar-tip cutter, in combination with a frame provided with a tip-hole; a power-driven cutter-frame; a knife having a plurality of sharpened edges and adapted to be adjusted relative to the cutter-frame to bring said several cutting edges successively into use; and releasing and stop mechanism operated by the introduction of the cigar, substantially as specified.

7. In an automatic cigar-tip cutter, in combination with a frame provided with a tip-hole; a power-driven cutter-frame; a knife having a plurality of sharpened edges; interengaging lugs on the cutter-frame and knife, whereby the knife is adapted to be adjusted relative to the cutter-frame to bring said several cutting edges successively into use; and releasing and stop mechanism operated by the introduction of the cigar, substantially as specified.

In testimony whereof we have affixed our signatures in presence of two witnesses.

JULIUS TRITSCH.
CHAS. J. LEHMANN.

Witnesses:

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