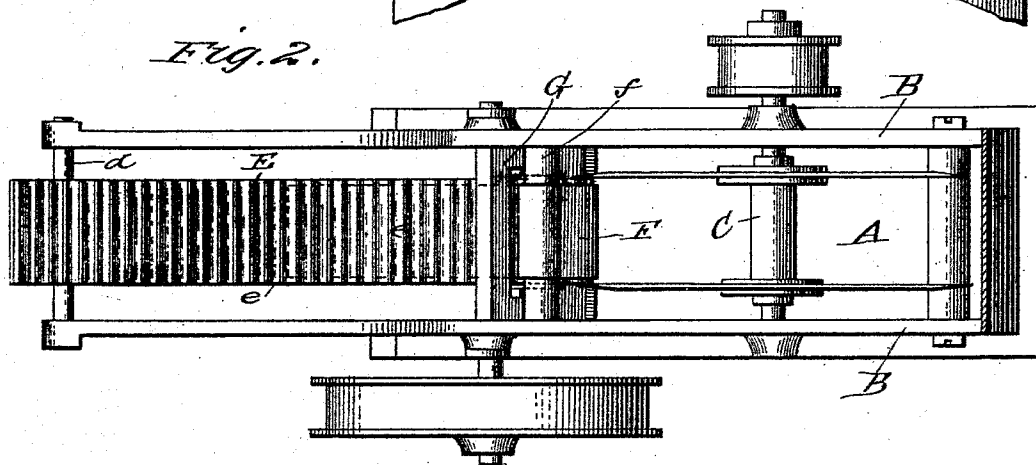
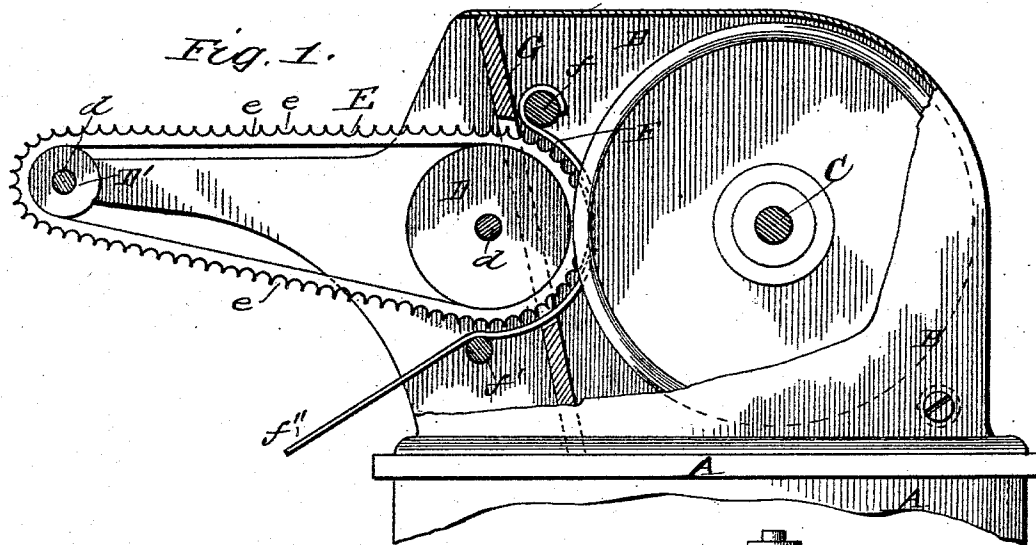


(No Model.)

G. F. CARLIE.
CIGARETTE CUTTING MACHINE.

No. 515,730.

Patented Feb. 27, 1894.



Witnesses
Chas. D. Muzzy.
H. Harvey Muzzy.

Inventor
Geo. Frank Carlie
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UNITED STATES PATENT OFFICE.

GEORGE F. CARLIE, OF NEW YORK, N. Y., ASSIGNOR OF ONE-HALF TO DAVID BUCKNER, OF SAME PLACE.

CIGARETTE-CUTTING MACHINE.

SPECIFICATION forming part of Letters Patent No. 515,730, dated February 27, 1894.

Application filed May 2, 1893. Serial No. 472,666. (No model.)

To all whom it may concern:

Be it known that I, GEORGE FRANK CARLIE, a citizen of the United States, residing at New York, in the county of New York and State of New York, have invented certain new and useful Improvements in Machines for Cutting Cigarettes, Cheroots, &c., of which the following is a specification, reference being had therein to the accompanying drawings, in which—

Figure 1 is a vertical sectional view of my improved machine; Fig. 2 a plan view thereof, and Fig. 3 a detail view of portions of the conveyer.

This invention has for its object the provision of an improved and simple machine for rapidly and accurately cutting or trimming off the loose surplus ends of cigarettes, especially that class rolled entirely of tobacco and having their ends open. For the want of a practical, reliable and accurate machine these cigarettes have heretofore been generally trimmed by hand, which method is very slow and consequently expensive.

The nature of the invention fully appears in the course of this specification.

In the drawings, A designates the stand or support of the machine, which is hollow and is adapted to receive the trimmed ends of the cigarettes; B the sides of the machine frame, suitably formed and connected; C the cutter-shaft journaled in the frame and carrying two circular cutters, spaced a distance apart equal to the length of the cut cigarette; D D' pulleys secured on shafts *d* journaled in the frame in front of and parallel to the cutter-shaft, the periphery of the pulley D coming quite close to the edges of the cutters and the other being located on the extreme forward end of the frame; and E is an endless chain conveyer mounted on the pulleys D D' and adapted to convey the cigarettes to the cutters and hold them while being cut and then convey them away and deposit them in a suitable receptacle arranged near the machine. This conveyer is of a width equal to the length of the cut cigarette and is constructed of a series of links pivoted together, each of the links having a transverse U-

shaped groove *e* formed in it to receive and retain one cigarette. The edges of the conveyer are square and smooth so that as it passes over pulley D it will fit properly between the edges of the rotary cutters and permit the cigarettes to be nicely trimmed. The grooves confine and support the cigarettes during the cutting operation and thereby prevent injury to their wrappers. To confine the cigarettes in the grooves of the conveyer as they pass around the pulley D, a curved plate F is employed, which is secured at its upper end to a transverse bolt *f* above the pulley, from which point the plate curves around behind and under the pulley, close to the conveyer. The lower part of the guard plate F rests on a transverse bolt *f'* under the pulley and from thence extends downwardly and forwardly a suitable distance, as at *f''*, to carry the trimmed cigarettes away. To separate the ends cut off from the finished cigarettes, an inclined plate or board G is employed, this board extending across the machine between the cutters and the shaft of pulley D and provided with an opening large enough for the chain and guard-plate and the rear portion of the roller to pass through.

In operation, the conveyer carries the cigarettes into the machine and as they pass around the pulley the rapidly revolving cutters simultaneously cut off both ends of the cigarettes without injuring the same in the least. The cut ends drop into the receptacle A below the machine, while the finished cigarettes are conveyed out again through the opening in the division board and allowed to slide down the inclined part *f''* of the guard-plate.

By this machine the cigarettes are very rapidly trimmed without the slightest injury to their wrappers, and the cut ends are prevented from commingling with the cigarettes.

I do not desire to be confined to the exact construction shown and described as the same may be varied without departing from the invention.

Having thus fully described my invention, what I claim is—

The combination of a frame, a shaft car-

rying a pair of separated rotary cutters, a
grooved conveyer adapted to work nicely be-
tween the forward edges of the cutters, a
curved guard-plate F supported between the
5 cutters and extending down close to and un-
der the conveyer, and a division-board G se-
cured in the frame in front of the cutters,
said board having an opening for the pas-

sage of the guard-plate and conveyer, substan-
tially as and for the purpose described. 10

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

GEORGE F. CARLIE.

Witnesses:

SAMUEL LAZARUS,
MICHAEL DICANDIA.