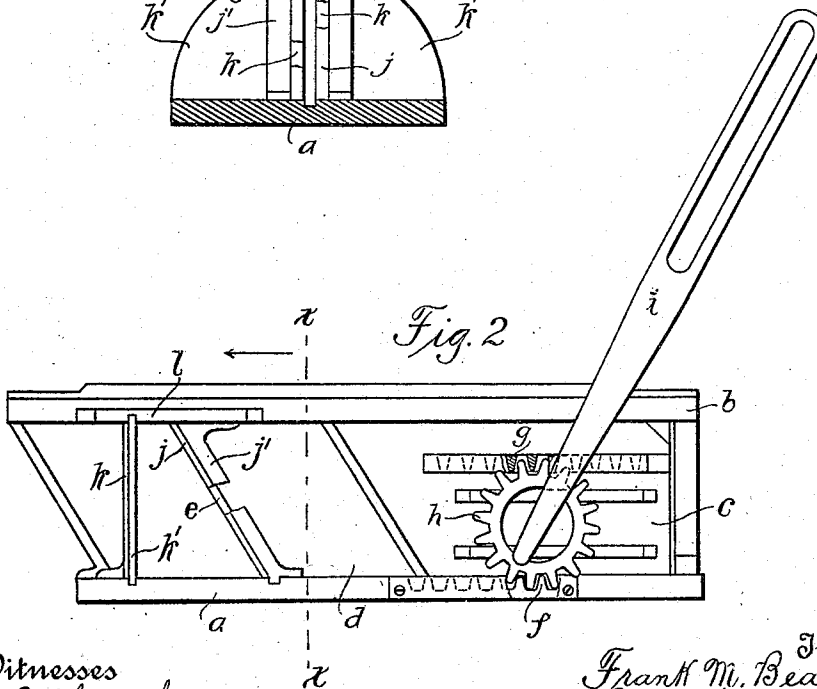
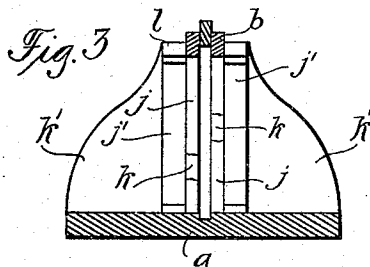
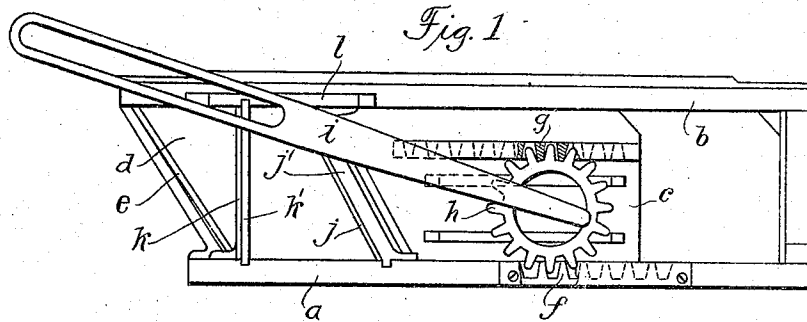


F. M. BEALL & P. A. PARKER.
TOBACCO CUTTING MACHINE.
APPLICATION FILED NOV. 2, 1908.

942,372.

Patented Dec. 7, 1909.



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FRANK M. BEALL AND PEARL A. PARKER, OF ANADARKO, OKLAHOMA.

TOBACCO-CUTTING MACHINE.

942,372.

Specification of Letters Patent.

Patented Dec. 7, 1909.

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To all whom it may concern:

Be it known that we, FRANK M. BEALL and PEARL A. PARKER, citizens of the United States, residing at Anadarko, in the county of Caddo and State of Oklahoma, have invented a new and useful Tobacco-Cutting Machine, of which the following is a specification.

Our invention relates to improvements in a tobacco-cutting machine in which a sliding knife is operated by means of a lever, wheel and cogs, and the objects of our improvement are, first, to provide a sliding knife, the edge of the blade of which being diagonal from top to bottom, which blade cuts the tobacco by first penetrating the same at the top and gradually cutting the same by a steady pressure; second, to provide for a self-cleaning blade by reason of four cleaners, two on each side of said blade attached to the frame of the machine and which come in contact with said blade at said four points in such a way as to automatically clean said blade when the same passes by and against said cleaners. The cleaners are attached to the frame of said machine by adjustable set screws by which said cleaners can be readily adjusted; third, to reduce the amount of pressure necessary to cut the tobacco. We attain these objects by the mechanism illustrated in the accompanying drawings in which—

Figure 1 is a side view of the entire machine with the blade closed; Fig. 2 represents the same with the blade open; Fig. 3 represents a vertical cross-section on line $x-x$ of Fig. 2.

As shown by the accompanying figures, the principal parts of said machine, commencing with Fig. 1, are as below set forth.

Upon a base a of suitable contour, there is erected a frame b extending lengthwise of the base a . The frame serves to support in a vertical position a sliding knife-carrying plate c , to which is secured a knife d . The frame b acts also as a guide for the plate c and the attached knife d in their joint excursions back and forth in the operation of this invention. The cutting edge e of the knife is inclined as shown, and will be again mentioned in this direction.

The base a is provided with a sunken rack f , and a corresponding sunken rack g is also constructed in the lower surface of a shelf or overhanging bar g' that is carried by and projects from the sliding plate c and knife

d . The two sunken racks f and g are suitably arranged to be both engaged at the same time by a toothed annulus h . An operating lever i is formed integrally with the annulus h or the two parts may be secured one to the other in any convenient manner.

The remaining elements of this invention are best described in connection with the explanation of the mode of its operation.

It is believed to be apparent from an inspection of the drawings in view of the above description, that if the lever i be worked back and forth, by reason of the engagement of the toothed annulus h with the stationary sunken rack f of the base a , and the sunken rack g borne by the movable knife and carrier plate, the knife will be correspondingly moved. The knife moves through less distance than the free end of the lever, but with consequently augmented power. The top of the cutting edge e is in advance and the edge inclines downwardly and rearwardly. In passing forward the knife moves between inclined cleaners j , which are attached to inclined braces or supports j' . One of the cleaners j is illustrated, and the other is of the same construction and arrangement upon the opposite side of the knife. In addition to the inclined cleaners j , there are vertical cleaners k attached to vertical supports k' , and it will be noted that the tobacco to be cut is placed against the inner surface of the supports k' , which form in fact a plate of suitable height and extent for the purpose. The cleaners and their braces or supports are joined at the top by a bridge piece l .

It is now believed to have been made clear that the edge of the knife is cleaned first before it reaches the tobacco by passing through the cleaners j on its forward movement. The upper corner of the knife first encounters the tobacco and makes a substantially slicing cut from the top down. The edge of the knife, and the portion near the edge then passes forward and back between the cleaners k , and, again between the cleaners j . That is to say, the knife is given four passages through the cleaners during each operation. This procedure has the effect of keeping the knife particularly free from clinging particles of tobacco, and the pieces or "plugs" of tobacco are detached with clear cut edges. It will be understood that the plug of tobacco to be cut is placed flatwise against the vertical supports or side boards k' , k' , the form of which is best shown in Fig. 3.

Having now described this invention and explained the manner of its operation, what we claim is:—

- 5 1. In a tobacco cutting machine, the combination with a knife, of means for supporting and guiding the knife, and means for moving the knife back and forth comprising a sunken stationary rack and a rack connected with and movable by the said knife, and a toothed annulus engaging both racks at the same time and having an operating lever.
- 10 2. In a tobacco cutting machine, the com-

15 bination with a knife, of means for supporting and guiding the knife, and means for moving the knife back and forth comprising a sunken stationary rack and a sunken rack connected with and movable by the said knife, and a toothed annulus engaging both racks at the same time and having an operating lever. 20

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