March 18, 1924. 1,487,018

F. V. LINDSEY

CIGARETTE MAKING MACHINE

Filed Aug. 1, 1922

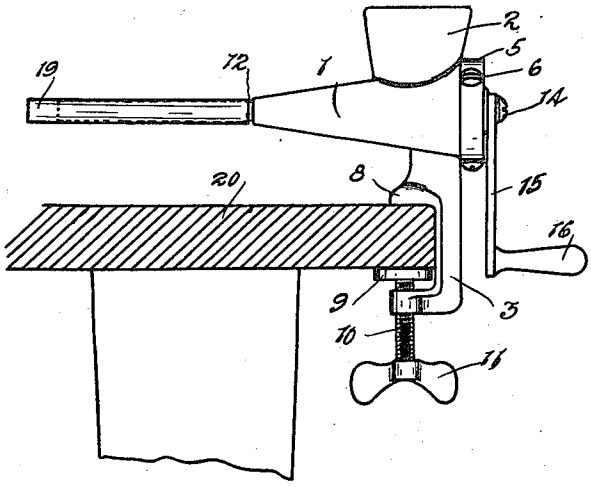


Fig 1

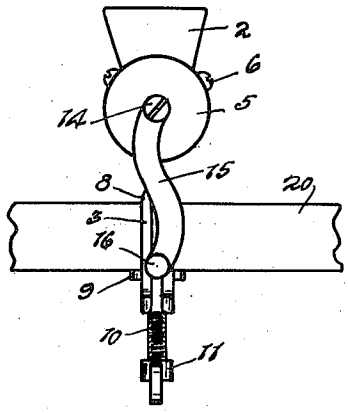


Fig 2

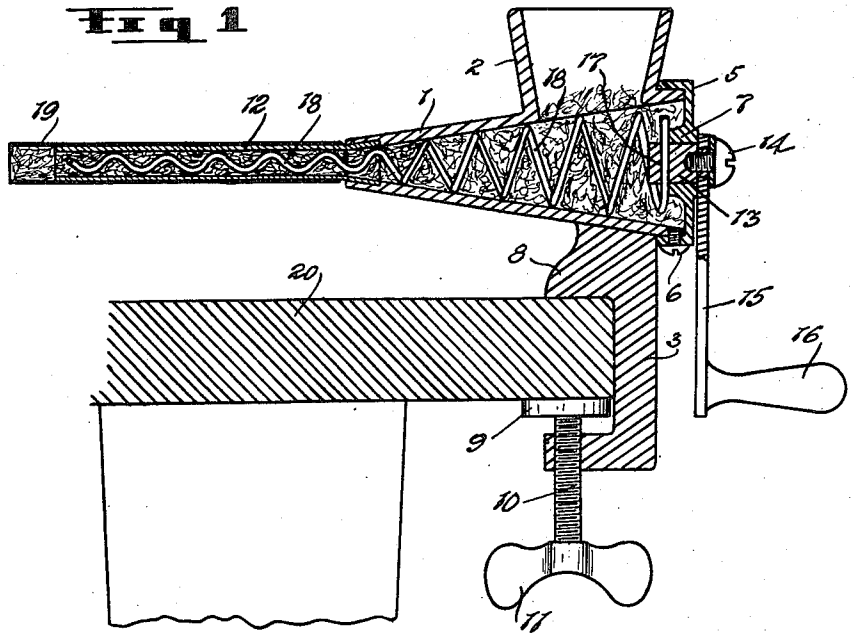


Fig 3

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Patented Mar. 18, 1924. 1,487,018

UNITED STATES PATENT OFFICE.

FLORIAN V. LINDSEY, OF WINNIPEG, MANITOBA, CANADA.

CIGARETTE-MAKING MACHINE.

Application filed August 1, 1922. Serial No. 578,964.

To all whom it may concern:

Be it known that I, FLORIAN V. LINDSEY, of the city of Winnipeg, in the Province of Manitoba, Canada, have invented certain new and useful Improvements in Cigarette-Making Machines, of which the following is the specification.

The invention relates to improvements in cigarette making machines and an object of the invention is to provide a machine particularly adapted for home or office use and whereby one can make his own cigarettes with facility and dispatch and cheaply, and which is constructed such that the cigarette made will have a neat appearance and have the tobacco properly packed therein.

A further object of the invention is to construct the machine in a simple, durable and inexpensive manner and such that it can be readily attached to a desk or other supporting structure.

A further object is to improve the general structure of the machine for which I have previously made application for Letters Patent, said application being filed under No. 509584, on the 22nd day of October, 1921.

With the above more important objects in view the invention consists essentially in the arrangement and construction of parts hereinafter more particularly described and later pointed out in the appended claims, reference being had to the accompanying drawings in which:

Fig. 1 is a side view of the complete machine.

Fig. 2 is an end view thereof.

Fig. 3 is an enlarged detailed longitudinal sectional view centrally through the machine.

In the drawings like characters of reference indicate corresponding parts in the several figures.

The present machine is for the greater part constructed much the same as my former machine, but I have found that by improving the structure of the worm employed I can make much better cigarettes, as the new type of worm gives me no trouble in feeding the tobacco or forming the cigarette.

The body of the machine is preferably cast from metal in a single piece and presents a cone shaped casing 1, a feed hopper 2 communicating with the large end of the casing, and a fastening or supporting foot piece 2.

The small end of the casing is open and the large end is closed by a removable cap piece 5 attached by screws 6 to the casing and fitted with a centrally disposed sleeve like bearing 7.

The foot piece is supplied with a permanent jaw 8 and a movable jaw 9 carried at the upper end of an adjusting screw 10 fitted with a wing head 11.

To the small end of the casing I permanently secure in any suitable way a seamless forming tube 12 of an external diameter substantially equal to the internal diameter of a cigarette.

The bearing sleeve 7 carries rotatably a comparatively short shaft 13 to the outer end of which I attach by a jam screw 14 the head of a crank or operating handle 15, the handle being supplied with a hand grip 16. The head of the handle is sufficiently large to prevent the shaft pulling inwardly and the inner end of the shaft is supplied with a cross opening 17 through which I pass one end of a wire coil 18, such arrangement preventing the shaft pulling out of the sleeve.

It will be observed that the coil is contained within both the casing and the forming tube and that that part of the coil within the casing tapers to conform to the shape of the casing and that the part within the tube is regularly conforming to the cylindrical shaft of the tube.

When the machine is to be used it is clamped to the edge of a table or desk 20 in the manner best shown in Figure 3 and one wraps the cigarette paper around the tube, sticking the lapping ends together in the usual way. The tobacco is fed into the casing through the hopper and the operator turns the handle, which action causes the tobacco to be fed by the coil out of the casing and into the forming tube. It is preferable for the operator to place a finger or thumb on the end of the paper to resist the tobacco, such giving a back pressure to pack the tobacco within the paper.

With a little practice one can pack the tobacco to his satisfaction, as by varying the back pressure, exerted by the finger, he can effect the tight or comparatively loose filling of the tobacco of the cigarette.

By actual experiment I have found that this form of coil effectively feeds the tobacco and gives it no chance to clog within the forming tube, and that a neat properly packed cigarette can be expeditiously made.

The structural arrangement also allows the parts to be very readily manufactured and assembled.

Obviously the shaft with the attached handle would be first placed in position, then the coil attached to the shaft by passing the end thereof through the opening 17 and subsequently the cap attached to the casing by inserting the worm in place and then tightening up the screws 6. Once inserted the shaft cannot pull out as the large end of the worm is in contact with the casing so that the end thereof cannot pull out of the opening 17.

Owing to the stationary position which the forming tube has one might find it awkward to mount the cigarette paper thereon. If desired a separate forming tube could be used and then the former paper could be slipped bodily off the separate forming tube onto the forming tube 12. This is such an obvious arrangement that it has not been considered necessary to show the separate forming tube.

When the cigarette has been formed the cigarette paper has been forced fully off the free end of the tube and is filled with properly packed tobacco.

As cigarette tobacco is usually in comparatively long shreds it is advisable to cut the tobacco at the end of the tube with a knife or pair of scissors.

What I claim as my invention is:

1. In a cigarette making machine, the combination with a cone shaped casing, having a filling opening therein and a cylindrical forming tube secured to and continuous with the small end of the casing, of a cap closing the large end of the casing and provided centrally with a bearing, a short shaft rotatably mounted in the bearing, an operating handle attached to the outer end of the shaft, and a feeder in the form of a wire coil, said feeder being contained within the casing and extending into the tube and having the coils thereof conforming to the shape of the casing and the tube and having one end thereof attached to the shaft.

2. In a cigarette making machine, the combination with a cone shaped casing, having a filling opening therein and a cylindrical forming tube secured to and continuous with the small end of the casing, of a cap demountably secured to the large end of the casing and provided centrally with a bearing sleeve, a short shaft rotatably mounted on the sleeve, a handle detachably secured to the outer end of the shaft, and a wire feeding coil contained within the casing and extending into the tube and having the end next the shaft passing through a cross opening provided in the shaft.

Signed at Winnipeg, this 25th day of July, 1922.

FLORIAN V. LINDSEY.

In the presence of—
GERALD S. ROXBURGH,
E. L. ARTHUR.