W. T. MUGGLI.

MACHINE FOR THREADING TOBACCO LEAVES.

APPLICATION FILED MAY 20, 1907.

918,075.

Patented Apr. 13, 1909.

2 SHEETS—SHEET 1.

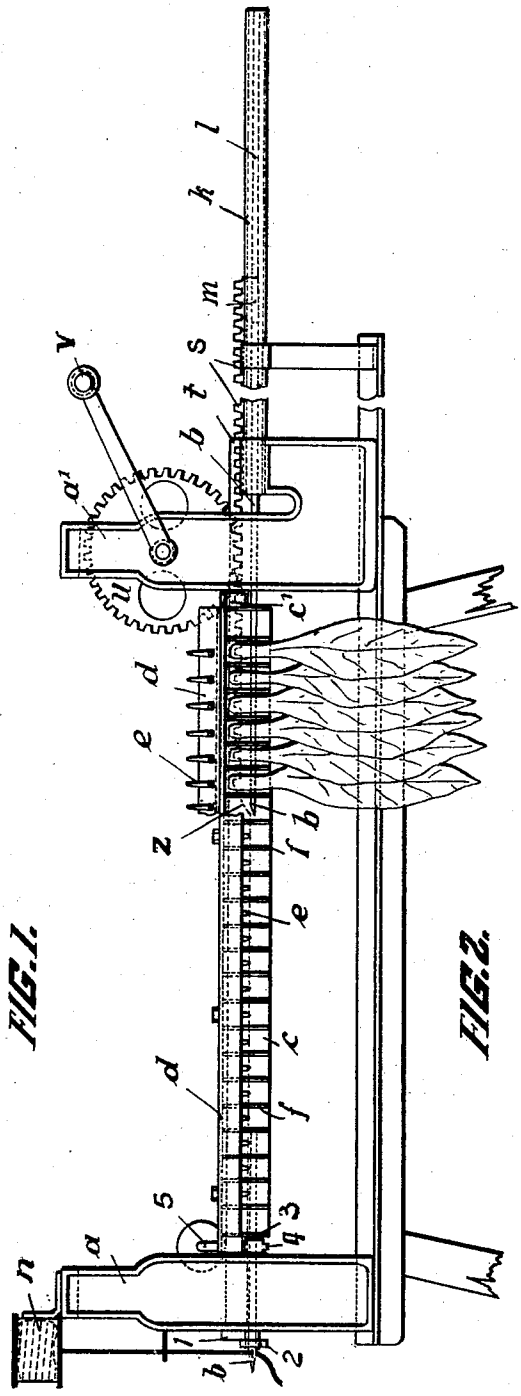


FIG. 1.

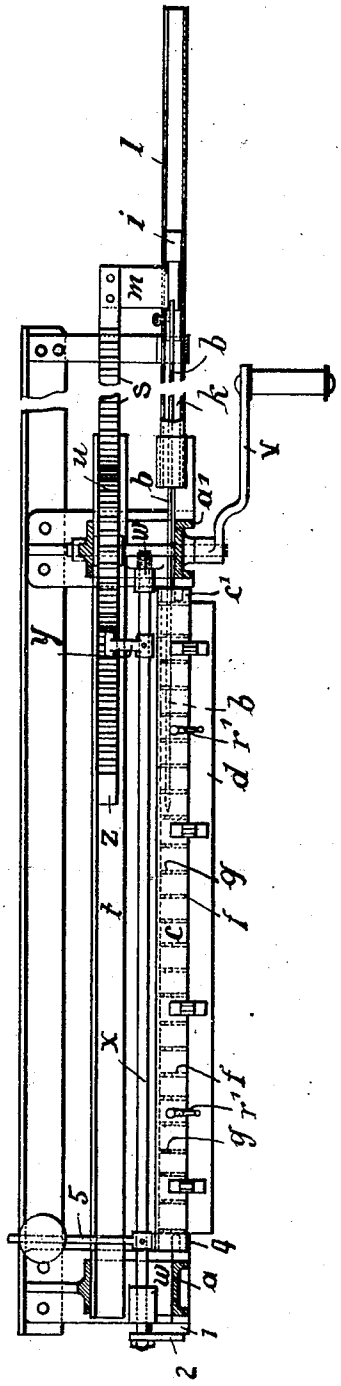


FIG. 2.

Witnesses:

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2 SHEETS—SHEET 2.

FIG. 3.

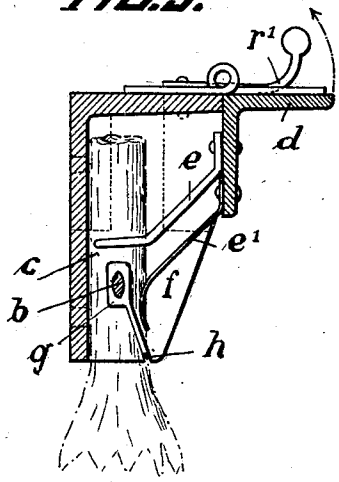


FIG. 3a.

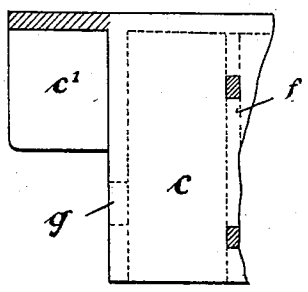


FIG. 4.

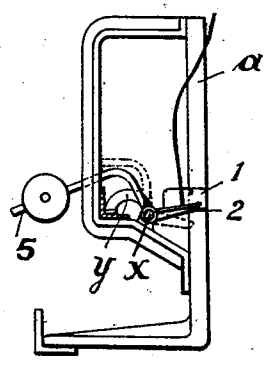


FIG. 5.

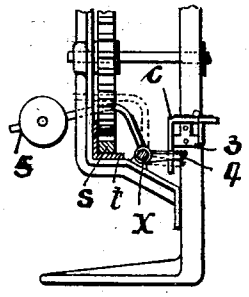
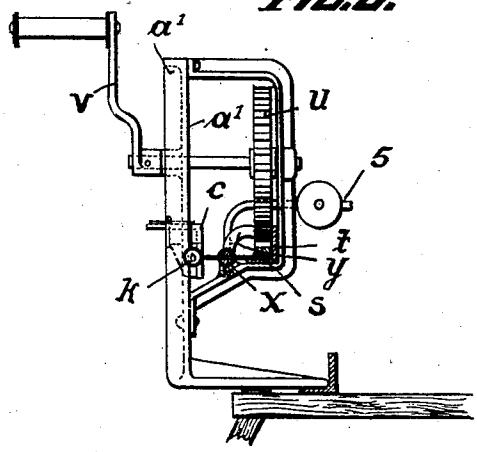


FIG. 6.



Witnesses:

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UNITED STATES PATENT OFFICE.

WILHELM THEODOR MUGGLI, OF HASSLOCH, GERMANY.

MACHINE FOR THREADING TOBACCO-LEAVES.

No. 918,075. Specification of Letters Patent. Patented April 13, 1909.

Application filed May 20, 1907. Serial No. 374,781.

To all whom it may concern:

Be it known that I, WILHELM THEODOR MUGGLI, a subject of the German Emperor, and resident of Hassloch, Rheinpfalz, Germany, have invented certain new and useful Improvements in Machines for Threading Tobacco-Leaves, of which the following is a specification.

This invention relates to a machine for threading tobacco leaves, by means of which the latter are, in series, strung side by side upon a cord with the aid of a needle.

The novelty consists in that the chamber-rod for the reception of the leaves to be threaded, is exchangeably placed in the machine in order to be quickly taken out and replaced by a similar fresh rod; while the machine is provided with a cord cutting and clamping device which are actuated by the needle shifting device so that, after insertion of a rod filled with leaves, it is simply necessary to operate the needle shifting device from a crank or the like in order to have first the leaves threaded, then the cord cut off and finally clamped.

The accompanying drawing shows the machine embodying the invention.

Figure 1 is an elevation, and Fig. 2 a plan, of the same; Fig. 3 is an enlarged sectional side view of Fig. 1; and Fig. 3^a a fragmentary side view of Fig. 3; Fig. 4 is a side view of the crank and its accessories; and Figs. 5 and 6 show respectively a side view of the clamping and the cutting device.

On pins of the brackets a, a^1 the supporting bar c is loosely mounted with corresponding projections c^1. In the chambers of this supporting bar c the tobacco leaves are fixed with their stem. The needle b is inserted in a slide-piece i which is guided in a pipe k fixed to the bracket a^1. The slide-piece i projects beyond the pipe k through a lateral slot l in the latter, with its arm m which is attached to a toothed rack s guided in the angle-iron t and adapted to be shifted to and fro through the medium of a pinion u by turning the crank v keyed to the axle of the latter.

The supporting bar c, for the exchange of which a second similar bar c must always be kept ready, is for inserting the leaves therein taken out of the machine and preferably placed on a table situated in proximity to the machine.

The chambers receiving the stems of the leaves, are formed by partitions f which are each provided with a passage-way g for the needle and with a channel h for the cord drawn through the leaves.

To securely hold the leaves on the bar c an angle-piece d is hingedly attached to the bar and provided for each chamber with holding tongues e, e^1. After insertion of the tobacco leaves, the angle-piece d is with its tongues pressed upon the stems of the leaves and secured in its holding position by means of several locking bolts r^1.

The cord for threading the leaves is stored in a container n and is passed through the eye of the needle after the latter is pushed through the stems of the leaves from the right to the left. When pulling the needle back the cord is drawn through the stems of the leaves and, after this, automatically cut off and its cut-off end clamped so that, after the needle being further pulled back, the cord is drawn out of the needle eye. After turning the angle-piece d on its hinges the series of leaves are taken out of the machine, the connecting cord of the latter being then allowed to pass through the channels h.

During the above-described operation, the other rod c is filled with leaves and, after the first one is taken out of the machine, inserted in the latter, so that the working of the machine can be kept up without any interruption.

The automatic device for cutting off, and clamping, the cord, is actuated by means of the spindle x which is mounted in bearings w, w and adapted to be turned, with the aid of an arm y which is integral with the spindle x, by the rack s for which purpose the latter is at its free end z cut aslant.

When the leaves are threaded the rack moves to the left whereby the arm y travels up the incline z and turns the spindle x in such a manner that the scissors 1, 2 (Fig. 6) and the cord clamping device 3, 4 (Fig. 5) are opened thus allowing the free passage of the needle b. After the cord is passed through the needle eye and the needle is pulled back the arm y which is constantly pressed upon the rack s by the weight-lever 5 which is also integral with the spindle x, travels eventually again down the incline z whereby the cord is first cut off by the scissors 1, 2 and then clamped by the clamping device 3, 4.

By adjusting the arm y on the spindle x, different lengths of the rows of leaves may be obtained.

Having fully described my invention, what I claim and desire to secure by Letters Patent is:—

In a machine for threading tobacco leaves as above described, the combination with an exchangeably mounted supporting bar (*c*) for the reception of said tobacco leaves, of a holding device (*d*, *e*, e^1) for fixing said tobacco leaves in said bar, means for holding the cord for threading said tobbacco leaves, a needle (*b*) for drawing said cord through said tobacco leaves, driving mechanism (*s*, *u*) for moving said needle to and fro through said tobacco leaves, means for securely guiding said needle, a device for cutting said cord off (1, 2) and for clamping the same (3; 4) after the leaves are threaded, said latter devices being actuated by the driving mechanism for said needle, for the purpose set forth.

In testimony whereof I have hereunto set my hand in the presence of two subscribing witnesses.

WILHELM THEODOR MUGGLI.

Witnesses:
LUITGOLD QUELL,
FRIEDRICH MAYER.