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PATENTED SEPT. 1, 1908.

L. APTEKMAN.

TOOL OR APPARATUS FOR USE IN THE MANUFACTURE
OF HAND MADE CIGARETTES.

APPLICATION FILED FEB. 29, 1908.

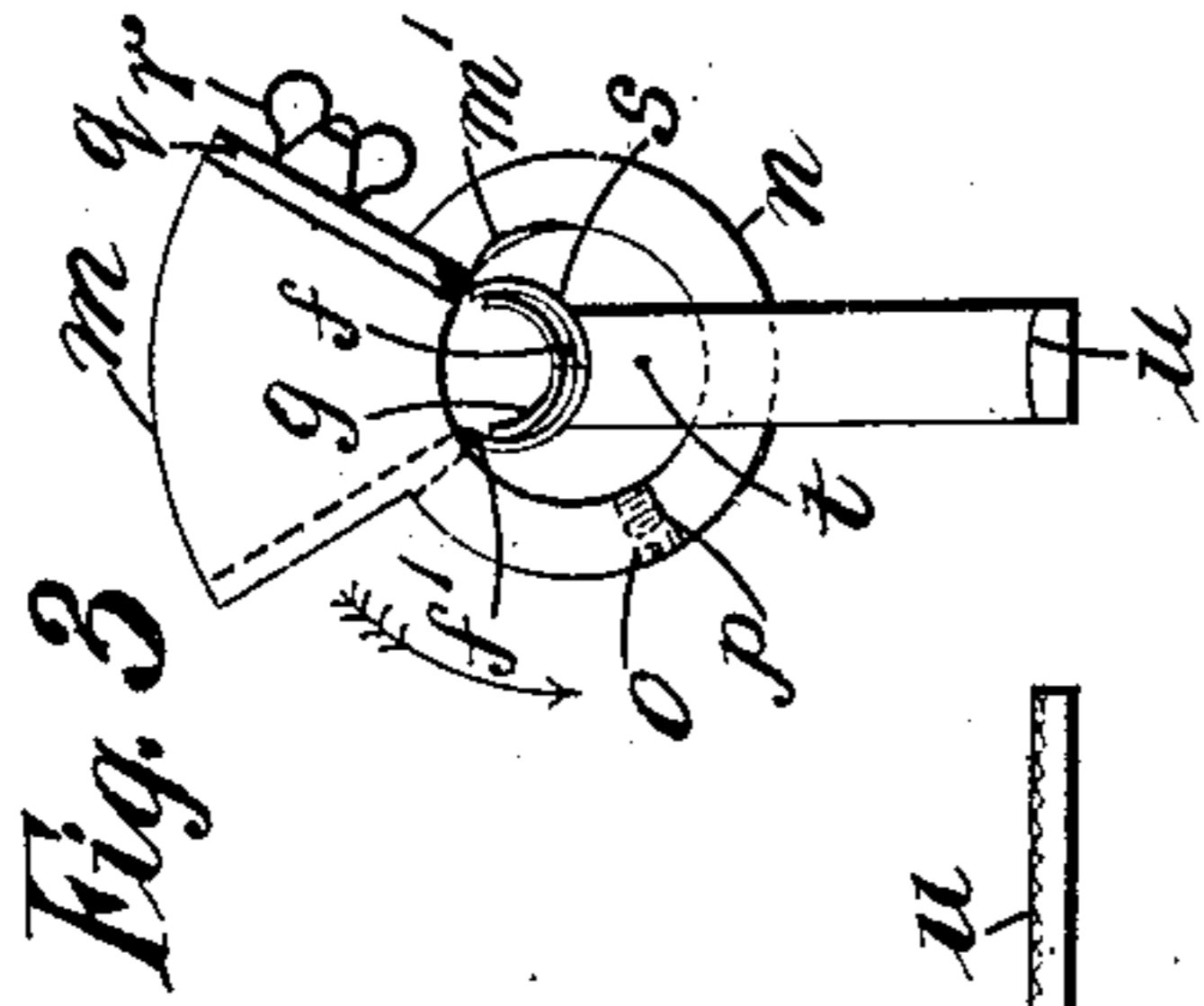


Fig. 3

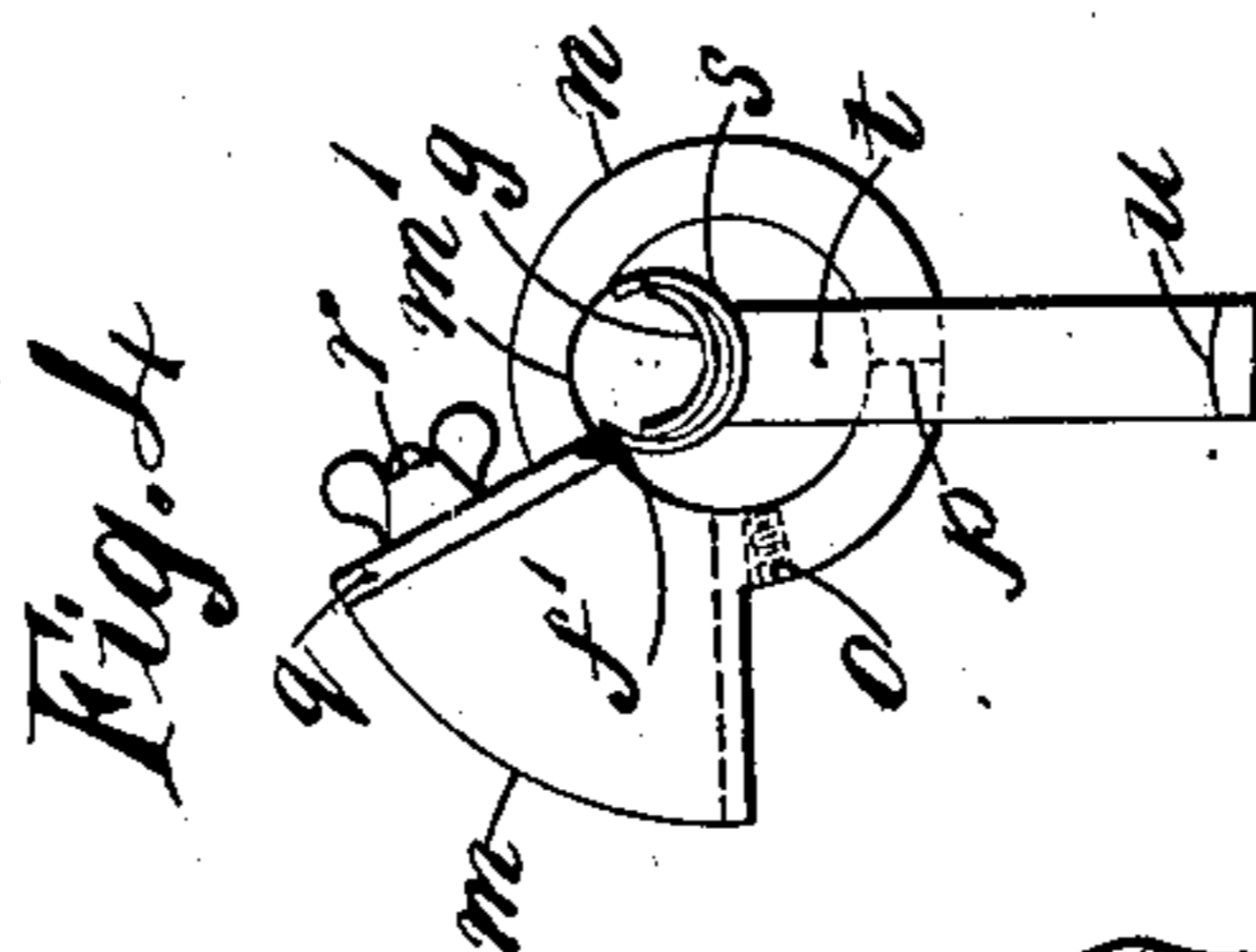


Fig. 4

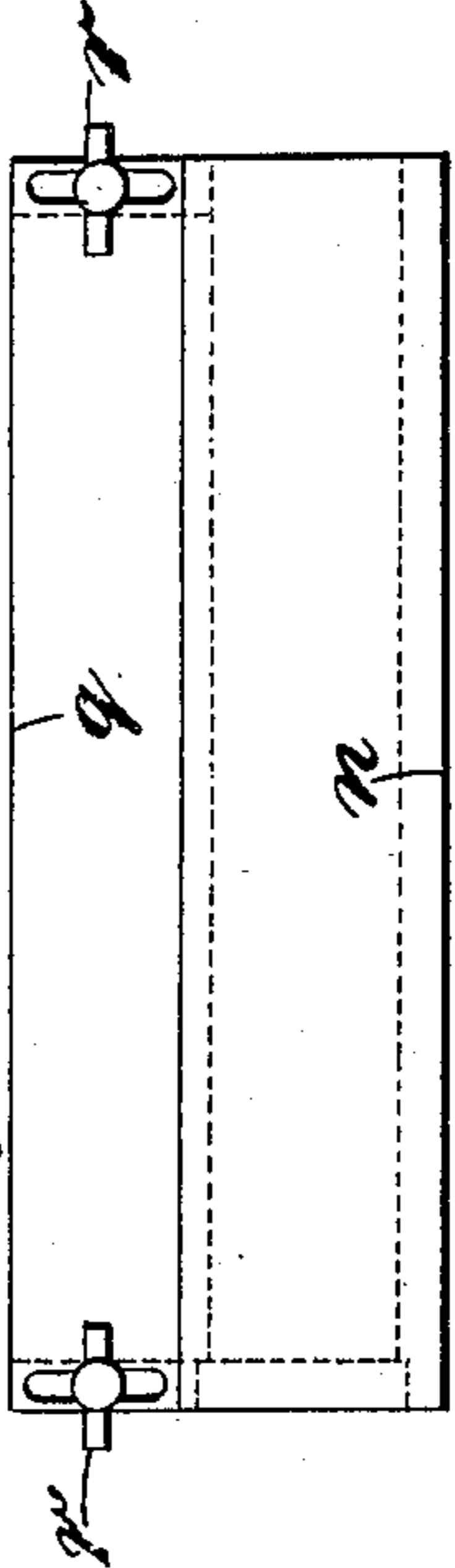


Fig. 5

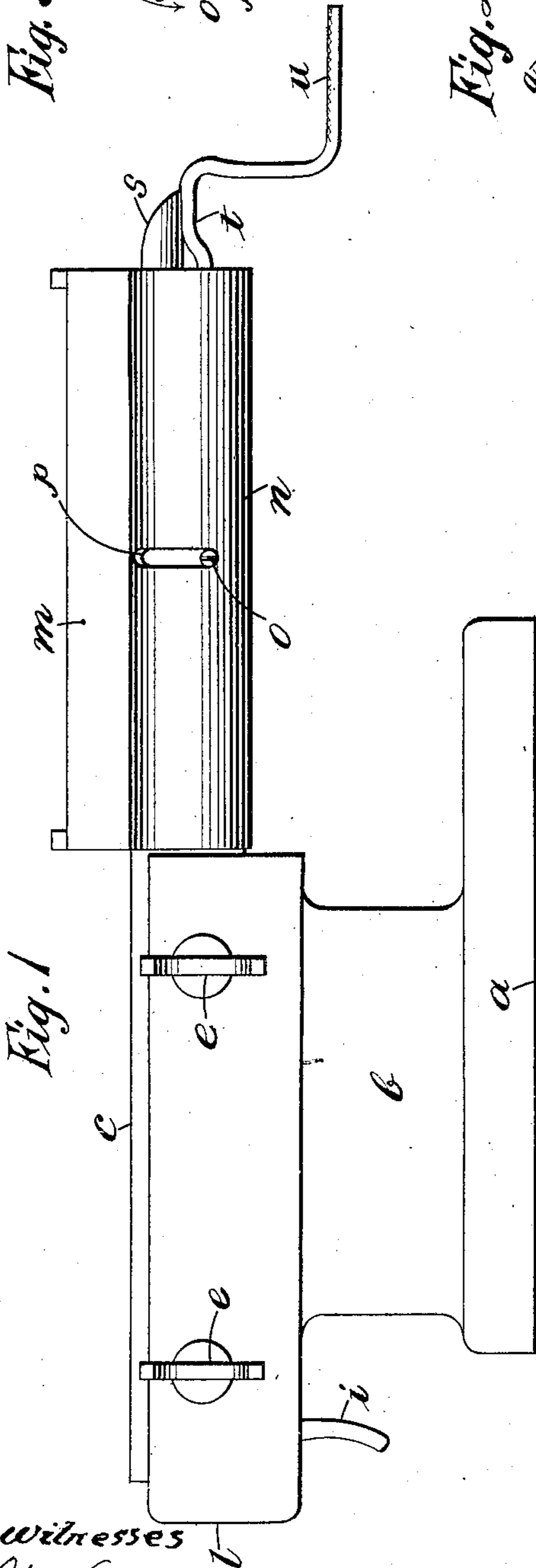
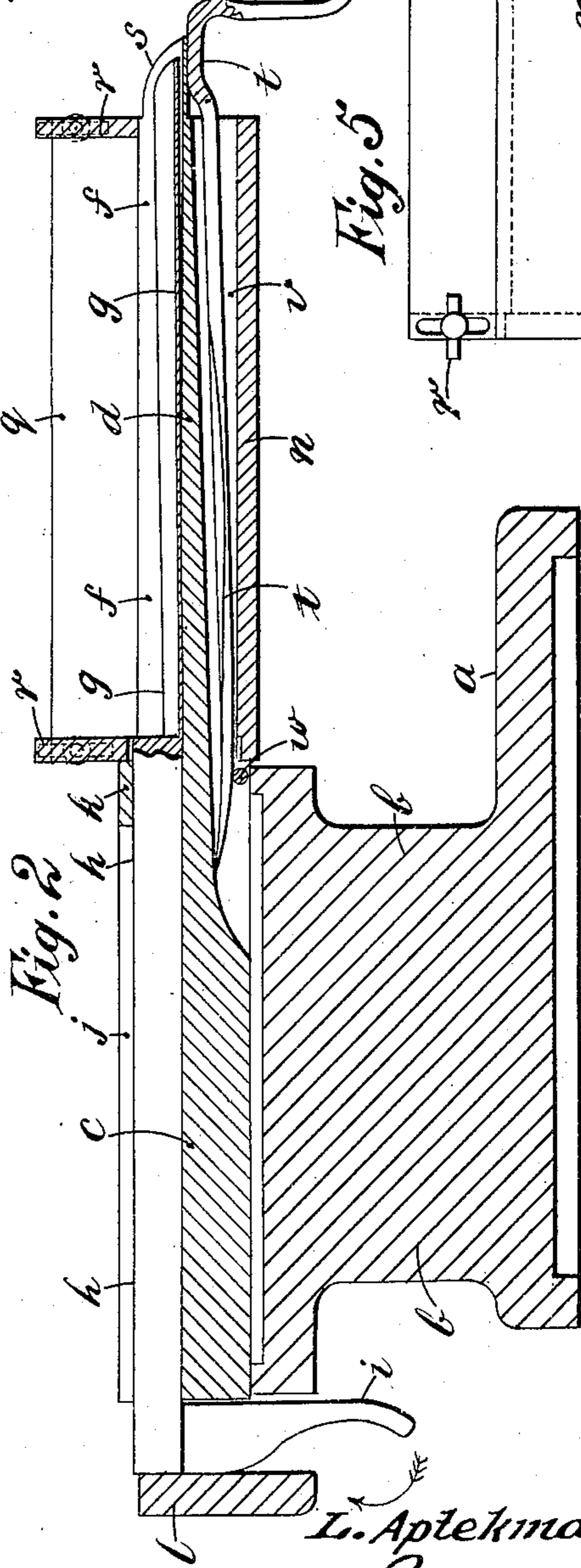


Fig. 1



Witnesses
Alfred H. Bennett.
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L. Aptekman
By *John Miller* Atty.

UNITED STATES PATENT OFFICE.

LAZARIDAS APTEKMAN, OF WESTCLIFF-ON-SEA, ENGLAND.

TOOL OR APPARATUS FOR USE IN THE MANUFACTURE OF HAND-MADE CIGARETTES.

No. 897,699.

Specification of Letters Patent.

Patented Sept. 1, 1908.

Application filed February 29, 1908. Serial No. 418,494.

To all whom it may concern:

Be it known that I, LAZARIDAS APTEKMAN, a subject of the Sultan of Turkey, of 11 Raleigh avenue, Westcliff-on-Sea, in the county of Essex, England, mechanic, have invented a new and useful Improvement in Tools or Apparatus for Use in the Manufacture of Hand-Made Cigarettes, of which the following is a specification.

10 This invention relates to tools or apparatus for use in the manufacture of hand made cigarettes, and it has more particular reference to that class of apparatus such as is described in the specification of my former Letters Patent, Serial No. 381,771.

15 Apparatus of the class referred to comprise vertical standards between which is fixed a cylindrical bar provided at its upper surface with a longitudinal cylindrical recess or groove registering at its ends with corresponding openings in the standards. Upon the cylindrical bar aforesaid is fitted a sleeve, cut away along its longitudinal surface to form a slot, to one edge of which is fixed a radial plate adapted in use to form one wall of the feed hopper and to be passed over the surface of the tobacco to press it into the cylindrical recess, a thin concave filler being used for removing the tobacco from the recess and passing it into the paper tube conveniently held in position by means of a spring controlled catch.

20 In practice I have found one serious disadvantage in connection with the above arrangement of parts, namely, the difficulty in manipulating the concave filler to remove the rope of tobacco from the apparatus into the paper tube consequent upon shreds of tobacco getting jammed between the movable and fixed parts of the hopper.

25 The object of the present invention is to overcome the foregoing disadvantage in an effective manner, while at the same time simplifying the general arrangement of parts and thereby insuring increased efficiency.

30 To this end the invention consists essentially in forming the hopper and movable sleeve in one piece and furnishing at a convenient part of the latter a shallow groove which when moved into register with the longitudinal recess in the cylindrical bar provides a clearance for the manipulation of the concave filler.

35 A further feature consists in furnishing at one side of the hopper a knife edge which is adapted to co-act with one of the edges of the

longitudinal recess and cut away projecting shreds which might impede the easy discharge of the rope of tobacco from the apparatus.

Detail improvements will be more specifically referred to in the annexed description and claims.

The accompanying sheet of drawings is an illustration of one practical form of the invention, like letters of reference designating the same parts in the various figures.

Figure 1 is a side elevation of a machine or apparatus embodying the present improvements and representing the parts in the position ready to receive the tobacco. Fig. 2 is a longitudinal vertical section through the entire apparatus, certain parts being broken away for the sake of clearness. Fig. 3 is an end view of the feed hopper and cylindrical bar shown by the two preceding figures in their initial position. Fig. 4 is a similar view to Fig. 3 but showing the parts in the extreme position after the completion of the rope of tobacco. Fig. 5 is a side elevation of the hopper and bar illustrated in Figs. 3 and 4.

a is the base plate, by means of which the machine or apparatus can be fixed in the requisite position upon a table or counter, and it is provided with an upstanding standard *b* which is slotted or recessed at its upper part to receive a rectangular extension *c* formed integral with the cylindrical bar *d*.

e, e are thumb screws for fixing the cylindrical bar *d*, by means of the extension *c*, in the standard *b*.

f is a longitudinal cylindrical recess or groove formed in the upper surface of the bar *d* and extending right through the extension *c*. In the recess or groove *f* is located the concave filler *g* to which is fixed a rod or bar *h*, furnished at its outer end with a projection or handle *i* which is adapted in use to be turned into the vertical or upright position and passed along a slot or channel *j* made in the upper part of the extension *c* aforesaid.

k is a stop for limiting the forward movement of the handle *i* and *l* is an abutment from the standard *b* for preventing the withdrawal of the filler *g* under ordinary conditions.

m is the feed hopper for guiding the tobacco into the longitudinal recess or groove *f* and it is formed in one piece with the movable sleeve *n*, said sleeve *n* being limited in its movement, about the cylindrical bar *d*, by a stop or screw and taking into a circumfer-

ential slot provided for the purpose in said sleeve *n*.

m' is a shallow groove extending longitudinally of the sleeve *n* which when moved into register with the upper part of the recess *f* is adapted to provide a slight clearance above the filler *g* when it is turned into the reverse position to that shown in the drawing for forcing the tobacco out of the apparatus into the cigarette paper tube.

At one side of the hopper *m*, and preferably arranged to constitute one wall thereof, is adjustably secured a knife blade or cutter *q*, held in position by thumb, or the equivalent, screws *r*, *r*, said cutter *q* being so regulated that, when the sleeve *n* is moved into the position shown by Fig. 4, it is adapted to co-act with the sharp edge *f'* opposed thereto, of the longitudinal recess or groove *f* and cut off any shreds of tobacco which may be projecting from the said recess into the hopper *m*.

s is a short delivery tube or projecting lip at the outer end of the cylindrical bar *d*, upon which the end of a paper cigarette tube to be filled, is fixed and held in position by a spring catch or holder *t* consisting of a long steel strip furnished at its outer end with a handle or projection *u*, by means of which it can be depressed while placing the paper tube in position. This spring catch *t* is held in place in a longitudinal groove or channel *v*, provided for its reception in the underside of the cylindrical bar *d*, and its pressure upon the underside of the lip *s* can be regulated according as it is forced inwards, or drawn outwards over a pin *w* fixed across the channel *v*.

The operation of the improved tool or apparatus is as follows:—The hopper *m* being turned into the position shown by Figs. 2 and 3, and the concave filler *g* placed in the recess *f* as shown, tobacco in the proper quantity is pressed into the said recess *f*. The hopper *m* and movable sleeve *n* are then moved over the cylindrical bar *d* into the position shown in Fig. 4, when any protruding shreds of tobacco are cut off by means of the cutter *q* meeting and being passed over the sharp edge *f'* of the recess *f* as will be clearly understood from the annexed drawing. The end of a paper cigarette tube is then fitted over the projecting lip *s* and the filler *g* turned round upon its axis in the direction indicated by the arrow at the left hand side of Fig. 2 until its concave side is above, instead of below the rope of tobacco in the recess *f* when the said filler *g* is forced into the paper tube, the tobacco being pressed forward by the square end of the rod or bar *h*, the easy manipulation thereof being insured by the longitudinal shallow groove *m'* above referred to which effectively prevents any binding of the moving filler *f* with the sleeve *n* due to the expansion of the tobacco, the half turn

of the filler *g* at the same time dislocating or freeing the rope of tobacco in the recess *f*. The bar *h* and with it the filler *g* is then withdrawn or moved back to the position shown, when the finished cigarette can be removed from the projecting lip *s* and have its ends dressed in the usual well known way. The hopper *m* is then moved, or returned to the position shown in Fig. 3 and the operation repeated, the cigarette tube being very quickly and effectively filled.

The details of construction can be modified to adapt the tool or apparatus for filling paper cigarette tubes of different sizes or cross section and the materials used in the construction of the various parts varied as may be found desirable, but I preferably employ steel for the cylindrical bar, filler, cutter and spring, cast iron for the base plate and standard, and brass for the hopper and movable sleeve.

What I claim as my invention and desire to secure by Letters Patent, is:—

1. In tools or apparatus for use in the manufacture of hand made cigarettes, the combination of a standard furnished with a slotted upper part adapted to support a compound bar, said compound bar having a cylindrical portion and a rectangular extension for fitment in the slotted part of the standard, thumb screws for fixing the cylindrical bar in position, a cylindrical longitudinal groove in the upper part of the bar and extension, a concave filler located in the recess and arranged for movement about its axis through a semi-circle and longitudinally between limiting stops, a hopper formed integral with a longitudinally slotted movable sleeve fitting on the cylindrical bar, a circumferential slot in the sleeve and a pin in the cylindrical bar for limiting the movement of the sleeve, a longitudinal shallow recess in the sleeve which when moved into register with the groove in the cylindrical bar provides a clearance for the longitudinal manipulation of the filler, an adjustable knife blade carried by the aforesaid hopper, and a projecting lip and spring catch for holding a paper tube in line with the cylindrical longitudinal groove, all substantially as set forth.

2. In tools or apparatus for use in the manufacture of hand made cigarettes, the combination of a compound bar with a supporting standard, said compound bar comprising a cylindrical portion and a rectangular extension in the upper part of which is a longitudinal cylindrical groove, a projecting lip at the outer end of the cylindrical portion in register with the groove, a longitudinal groove at the underside of the cylindrical bar in which is located a steel strip furnished at its outer end with a handle, and a pin laterally of the groove whereby the pressure of the strip upon the underside of the projecting lip may be regulated, substantially as described.

3. In tools or apparatus for use in the manufacture of hand made cigarettes, the combination of a compound bar with a movable sleeve formed integral with the feed hopper, 5 said feed hopper being furnished with an adjustable knife blade which is adapted to contact with one of the edges of a longitudinal cylindrical groove in a cylindrical portion of the compound bar, substantially as shown, 10 for the purpose specified.

4. In tools or apparatus for use in the manufacture of hand made cigarettes, the combined hopper and movable sleeve in the lat-

ter of which is a shallow longitudinal recess which when brought into register with a cylindrical groove in a compound bar provides a clearance for the manipulation of the concave filler, substantially as shown, for the purpose specified. 15

In witness whereof I have hereunto set my hand in the presence of two witnesses. 20

LAZARIDAS APTEKMAN

Witnesses:

SIDNEY H. BECKWITH,
R. JOHNSTONE SPIERS.