

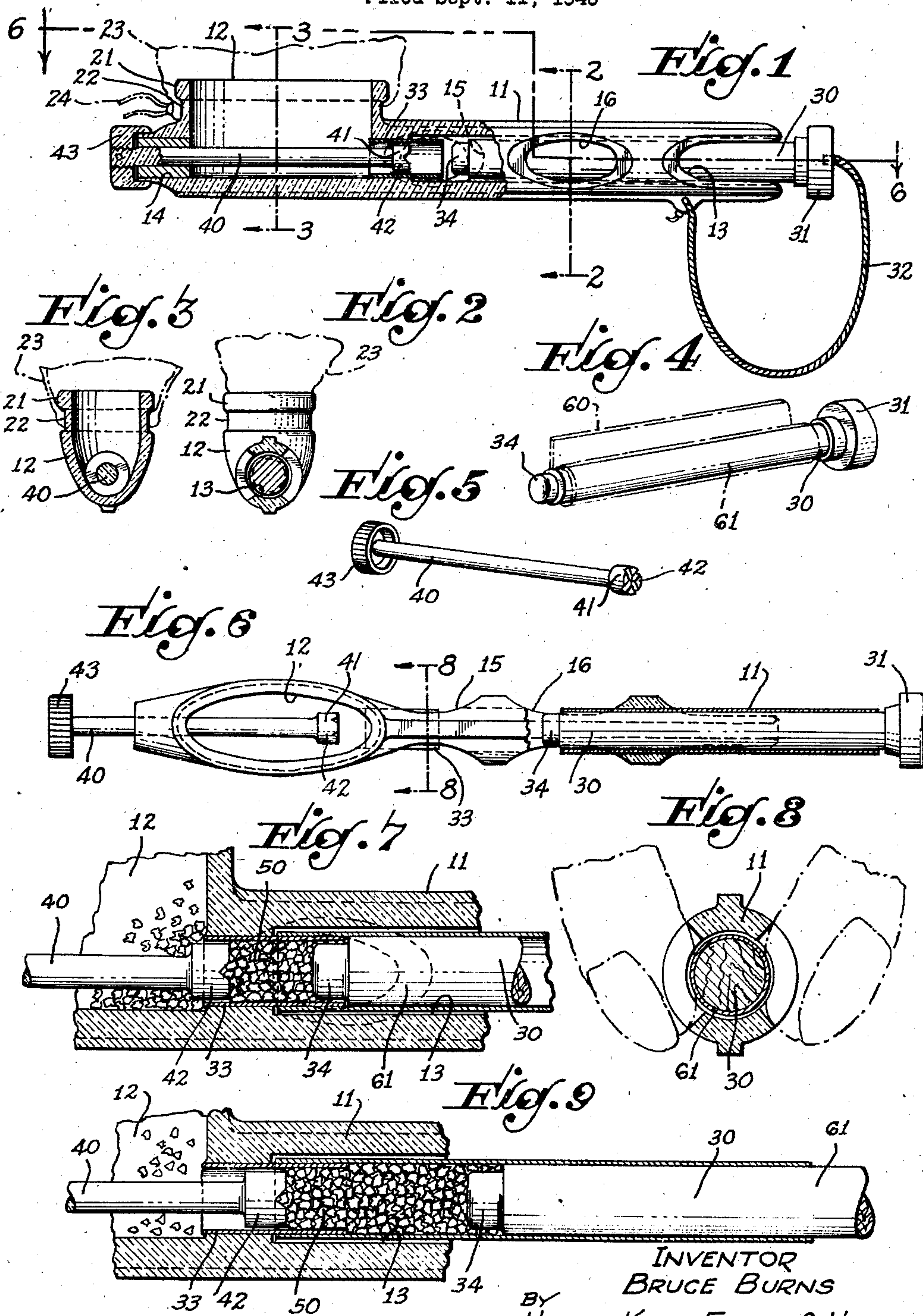
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CIGARETTE MACHINE

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CIGARETTE MACHINE

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3 Claims. (Cl. 131-75)

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This invention relates in general to the manufacture of cigarettes, and is in particular directed to the manufacture of individual cigarettes by means of a portable machine, and to a method for the use thereof.

The invention has as an object to provide a cigarette machine which may be conveniently carried on the operator's person, for convenient and repeated use.

It is another object of the invention to provide a cigarette machine which will make a well-packed, smoothly cylindrical cigarette. It is a further object to provide such a machine to which a conventional sack of cigarette tobacco can be attached and left in place until the tobacco carried therein is entirely used in making cigarettes, the tobacco being protected from loss by leakage until it is so used.

Further objects and advantages will be evident hereinafter, from the following description of one embodiment of the invention and the accompanying drawing corresponding thereto, in which:

Fig. 1 is an elevational view, partly in vertical longitudinal section, of a cigarette machine embodying this invention;

Fig. 2 is an end view of the cigarette machine taken along the axis of 2-2 of Fig. 1;

Fig. 3 is an end view of the cigarette machine, taken along the axis 3-3 of Fig. 1 and showing a container for tobacco;

Fig. 4 is a perspective view of a plunger and terminal cap as hereinafter described;

Fig. 5 is a perspective view of a plug, a rammer, and a terminal cap, as hereinafter described;

Fig. 6 is a top view of the cigarette machine, a portion thereof being in section on a plane defined by the line 6-6 of Fig. 1;

Fig. 7 is a fragmentary and enlarged side view of a portion of the cigarette machine during operation;

Fig. 8 is a sectional view of the cigarette machine taken along the axis 8-8 of Fig. 6, showing in phantom two fingers of an operator holding the paper on the feed tube, as hereinafter described; and

Fig. 9 is a fragmentary and enlarged side view of a portion of the cigarette machine during a phase of operation following the phase illustrated in Fig. 7.

The machine consists of a body 11 having a tobacco-receiving receptacle 12 formed therein. Extending coaxially with each other are a plunger cylinder 13 and a rammer cylinder 14, the term "cylinder" in this connection denoting a cylindrical opening. The plunger cylinder 13 has

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finger openings 15 and 16 in the sides thereof. The tobacco receptacle 12 has a lip 21 with a groove 22 extending therearound, the open mouth of a tobacco sack 23 being secured around this lip 21 by drawing a string 24, provided with this sack, tight in the groove 22 so that tobacco from the sack can readily fill the receptacle 12.

Sliding in the plunger cylinder 13 is a plunger 30, which has a diameter sufficiently smaller than the internal diameter of the cylinder 13 to allow the plunger with cigarette paper wrapped therearound to be inserted in the cylinder, as hereinafter explained. The plunger 30 is equipped at its outer end with a head 31, and the plunger is secured against loss to the body 11 by a cord 32 which is attached at one end to the plunger 30 and at the other end to the body 11, as shown in Fig. 1. Secured in the body 11 between the receptacle 12 and the plunger cylinder 13 is a tube 33 having an external diameter slightly less than the diameter of the plunger 30. The end of the plunger 30 has a portion 34 of reduced diameter which enters the tube 33 when the plunger 30 is inserted in the cylinder 13.

A rammer 40 slides in the rammer cylinder 14 and is provided with a head 41 having a serrated end 42 which is larger in diameter than the rammer. An outer head 43 is attached to the rammer 40 after the rammer is assembled in place in the device. The end 42 fits rather closely but readily slides in the tube 33, as shown in Fig. 7.

The method of operation of the device is as follows:

The sack 23 of tobacco 50 is secured about the lip 21 and remains in place until the tobacco is used up in making cigarettes, being carried in the pocket of the user so attached to the body 11. Tobacco sacks made of fabric commonly sold to users have the draw string 24 supplied therewith. The tobacco 50 readily fills the receptacle 12.

When the user desires to make a cigarette, he removes the plunger 30 from the cylinder 13 and rolls a sheet 60 of cigarette paper around the plunger 30, as shown in Fig. 4, wetting the paper to form a tube 61 of paper the size of the desired cigarette. He then inserts the plunger 30 with the tube 61 therearound into the cylinder 13. He then pushes the end of the tube 61 over the tube 33, which projects into the cylinder 13 far enough to permit this to be done, the tube 61 being so moved by grasping it lightly with the fingers through the openings 15 and 16. After the tube 61 is in place on the tube 33, it is tightly grasped with the fingers of one hand, as shown in Fig. 8,

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the plunger 30 is released from all restraint, and the tube 61 is filled with tobacco, using the rammer 40.

In filling the tube 61 with tobacco 50, the rammer is first pulled outwardly from the body 11, allowing the tobacco 50 to enter the space between the head 41 and the tube 33. When the rammer 40 is then pushed into the body 11, the tobacco 50 is forced through the tube 33 into the paper tube 61, the paper being held by the fingers of the user against axial displacement. The plunger 30 is forced out of the tube 61 by the tobacco 50 as the tobacco is forced into the tube 61, the tobacco being compacted by the plunger 30 to form a flat end for the finished cigarette. The ramming operation above described is repeated until the tube 61 is completely filled with well compacted tobacco, and the plunger 30 is entirely driven out of the tube 61 and the cylinder 13 is left dangling by the cord 32. Using the finger openings 15 and 16, the finished cigarette can be slid axially out of the cylinder 13 and will be found to be smooth, cylindrical, and well packed. The plunger 30 is then replaced in its original position.

I claim as my invention:

1. A cigarette machine comprising: a body having a tobacco receptacle formed therein and having a cylindrical plunger passage with an internal diameter slightly larger than the outside diameter of the desired cigarette adapted to receive a plunger, and having a cylindrical rammer passage adapted to receive a rammer, said passages being coaxial with each other, said rammer passage being in open communication at one end with said receptacle; an eduction tube in said plunger passage, said tube having an outer diameter somewhat smaller than the inside diameter of the paper tube for enclosing the desired cigarette, said eduction tube connecting one end of said plunger passage with said receptacle, and one end of said eduction tube projecting into said plunger passage, there being two primary finger openings in said body at either side of said eduction tube so placed that the paper tube for enclosing the desired cigarette can be held in place over the eduction tube by the fingers of the user; a plunger sliding freely in and out of said plunger passage, said plunger having a diameter slightly smaller than the inside diameter of the paper tube which will enclose the desired cigarette; and a rammer sliding in said rammer passage and of sufficient length to force tobacco out of said receptacle and through said eduction tube into said paper tube.

2. A cigarette machine comprising: a body having a tobacco receptacle formed therein and having a cylindrical plunger passage with an internal diameter slightly larger than the outside diameter of the desired cigarette adapted to receive a plunger, and having a cylindrical rammer passage adapted to receive a rammer, said passages being coaxial with each other, said rammer passage being in open communication at one end with said receptacle; an eduction tube in said plunger passage, said tube having an outer diameter somewhat smaller than the inside diameter of the paper tube for enclosing the desired cigarette, said eduction tube connecting one end of said plunger passage with said receptacle, and

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one end of said eduction tube projecting into said plunger passage, there being two primary finger openings in said body at either side of said eduction tube so placed that the paper tube for enclosing the desired cigarette can be held in place over the eduction tube by the fingers of the user; a plunger sliding freely in and out of said plunger passage, said plunger having a diameter slightly smaller than the inside diameter of the paper tube which will enclose the desired cigarette, there being secondary finger openings in said body so placed that the fingers of the user may grasp said paper tube as it surrounds said plunger and force it over the projecting end of said eduction tube; and a rammer sliding in said rammer passage and of sufficient length to force tobacco out of said receptacle and through said eduction tube into said paper tube.

3. A cigarette machine comprising: a body having a tobacco receptacle formed therein and having a cylindrical plunger passage with an internal diameter slightly larger than the outside diameter of the desired cigarette adapted to receive a plunger, and having a cylindrical rammer passage adapted to receive a rammer, said passages being coaxial with each other, said rammer passage being in open communication at one end with said receptacle, said body having a tobacco supplying opening into said receptacle; a lip surrounding said tobacco supplying opening, said lip being so shaped that the mouth of a standard sack of cigarette tobacco may be secured therearound; an eduction tube in said plunger passage, said tube having an outer diameter somewhat smaller than the inside diameter of the paper tube for enclosing the desired cigarette, said eduction tube connecting one end of said plunger passage with said receptacle, and one end of said eduction tube projecting into said plunger passage, there being two primary finger openings in said body at either side of said eduction tube so placed that the paper tube for enclosing the desired cigarette can be held in place over the eduction tube by the fingers of the user; a plunger sliding freely in and out of said plunger passage, said plunger having a diameter slightly smaller than the inside diameter of the paper tube which will enclose the desired cigarette, there being secondary finger openings in said body so placed that the fingers of the user may grasp said paper tube as it surrounds said plunger and force it over the projecting end of said eduction tube; and a rammer sliding in said rammer passage and of sufficient length to force tobacco out of said receptacle and through said eduction tube into said paper tube.

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