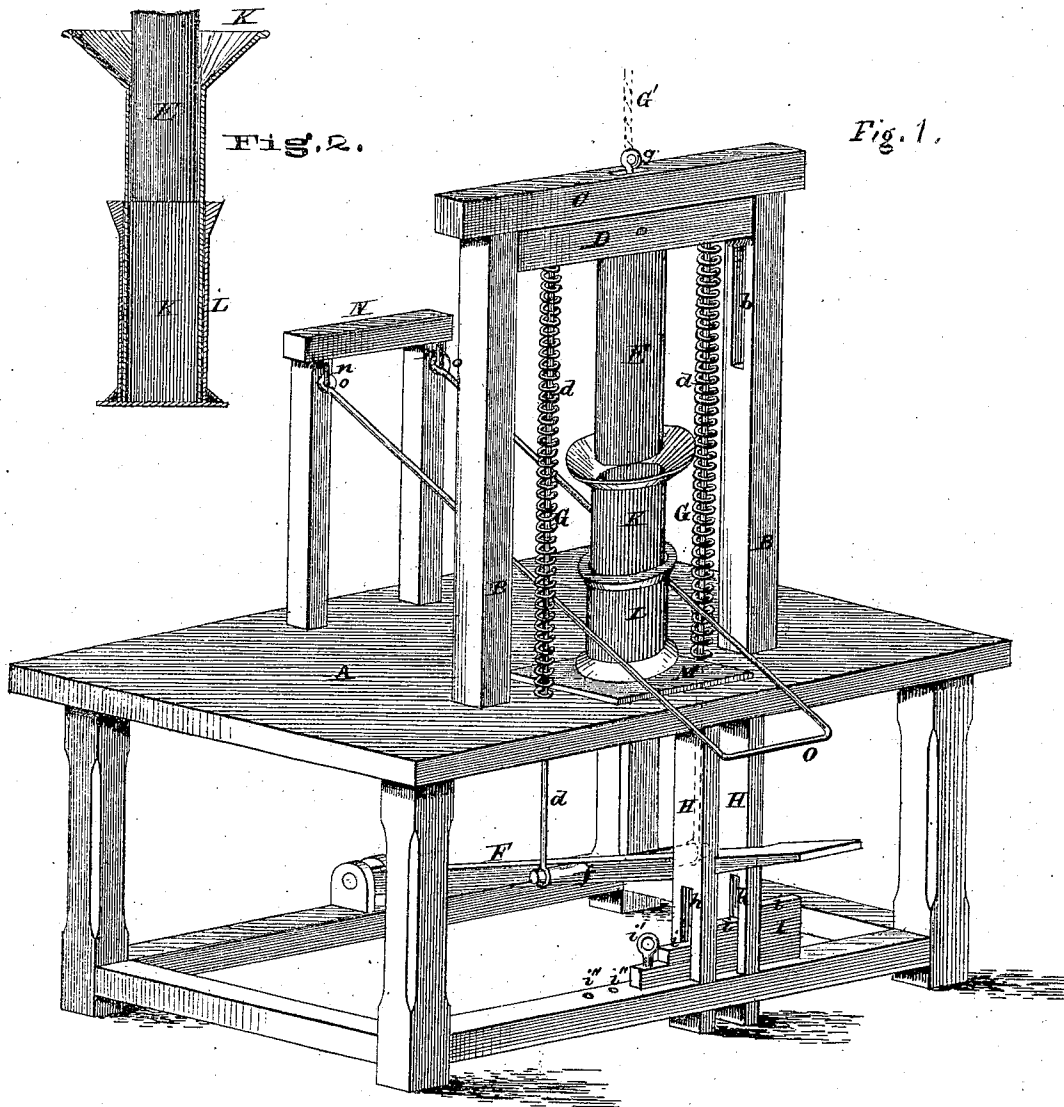


DANIEL EATON.

Improvement in Machines for Packing Tobacco.

No. 127,859.

Patented June 11, 1872.



ATTEST.
Charles Pickles
Walter Allen

Scale of Fig. 2.

INVENTOR,
Daniel Eaton
By Knight Bros
Atty.

UNITED STATES PATENT OFFICE.

DANIEL EATON, OF ST. LOUIS, MISSOURI, ASSIGNOR TO EDWARD E. EATON,
OF SAME PLACE.

IMPROVEMENT IN MACHINES FOR PACKING TOBACCO.

Specification forming part of Letters Patent No. 127,859, dated June 11, 1872.

Specification describing a certain Machine for Putting up Tobacco, invented by DANIEL EATON, of the city and county of St. Louis and State of Missouri.

My invention relates to a machine for filling wrappers or bags with cut tobacco; and consists in a plunger attached to a cross-head, depressed by a treadle and raised by springs or equivalent means. The plunger fits the inside of the filling-funnel, and its descent is regulated by an adjustable block having steps at different elevations, forming stops for the downward movement of the treadle.

Figure 1 is a perspective view of my machine. Fig. 2 is a section through the plunger, funnel, and form.

A is a table that may be made of any desired size, according to the number of operatives required. B are uprights connected by a cross-bar, C, at top. The inner sides of the uprights have vertical grooves or slots *b* that receive guide-tenons at the ends of the cross-head D of the plunger or presser E. *d* are rods extending downward from the ends of the cross-head D to the cross-bar *f* of the treadle F that is hinged to the back rail of the table. G are spiral springs surrounding the rods *d*, and whose ends bear against the table and the cross-head B and raise the plunger when the foot is removed from the treadle.

In place of the spiral springs, and for the same purpose, I have used a cord, G', shown by dotted lines, attached to an eye, *g*, in the cross-head D, the said cord passing over a pulley overhead and having a weight attached to the other end. H H are upright guides of the treadle, having, through mortises H, to receive an adjustable stop-block, I, having a number of steps, *i*, to stop the descent of the treadle at any desired height, and by that means limit the descent of the plunger. *i'* is a pin passing through the stop-block and entering one of a series of holes, *i''*, in the front rail to hold the block to any adjustment. K is the filling-funnel, over whose lower end the wrapper or bag is placed. L is the "form," into which the lower end of the funnel is inserted when using a wrapper, the form not being required when a bag is used. The fun-

nel is similar to that in ordinary use. M is an India-rubber pad fixed to the table to prevent injury to the form in handling, and to avoid noise. N is an upright frame having two hooks, *n*, to receive the eyes *o* on the ends of the lever-frame O, by raising which the funnel is drawn out of the form. This lever-frame may be raised by direct action of the hand, or it may have attached to it a cord that passes over a pulley at the ceiling, and having at the other end a handle, so that, by drawing down the handle, the side bars of the lever O will be raised against the flare of the funnel and draw it upward from the form.

The operation of my machine or apparatus is as follows: (I will describe said operation when a wrapper is used, the process being similar to that with a bag, except in the latter case no "form" is required.) The wrapper is coiled around the end of the funnel, its edge projecting beyond the latter, and this edge is then folded so as to make one end of the package. The enveloped end of the funnel is then inserted in the form and the tobacco filled into the funnel. The funnel and form are then placed beneath the plunger, in the position shown, and the treadle is depressed until it comes in contact with the step of the stop-block. The lower end of the plunger will then be even with the top of the form. Then, while the plunger is held down, the funnel is raised from the form and wrapper and the filled form removed from beneath the plunger, and the ends of the wrapper folded down. The package is then removed from the form.

In making packages of eight ounces weight or less the lever O need not be used, as the funnel can be raised from the form or bag by the direct application of the hand or hands, (and the lever may in this case be removed by unhooking it from the hooks *n*;) but in making larger packages, especially where girls are employed, the strength of the operator is too severely taxed in withdrawing the funnel without the aid of the lever O.

The plunger is removable from the cross-head, and the size of the plunger conforms to that of the package in every case.

The height of the "form" and the point to

which the plunger descends vary according to the height of the package, and said descent is regulated by the stop-block I, as before described.

I claim as my invention—

1. The stop-block I in combination with the treadle F, substantially as described.

2. The lifter O in combination with the funnel, as described.

In testimony of which invention I hereunto set my hand.

Witnesses:

DANIEL EATON.

SAML. KNIGHT,

R. T. BRADLEY.