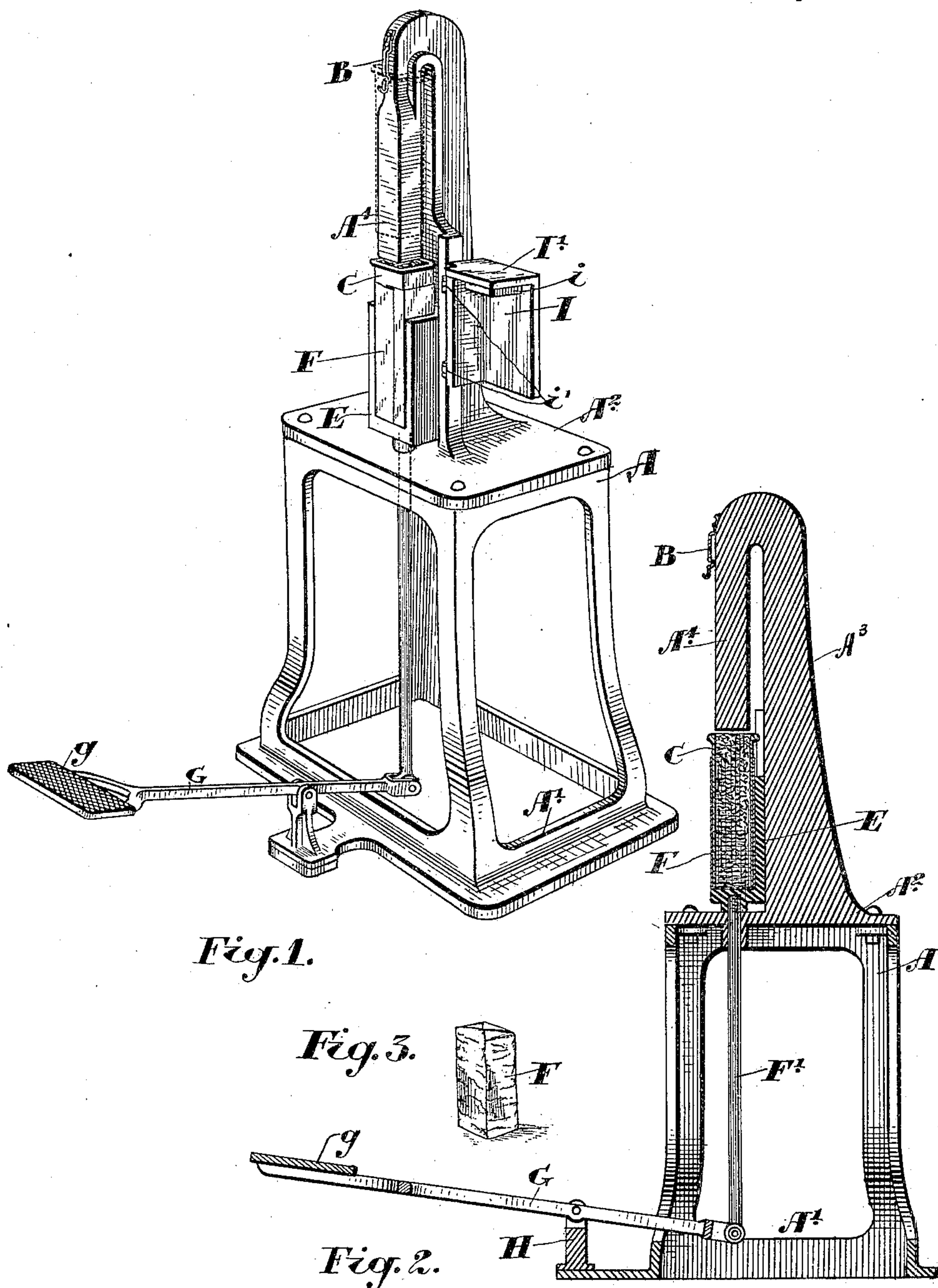


(No Model.)

A. H. CANNING.  
TEA PACKING MACHINE.

No. 604,721.

Patented May 31, 1898.



Witnesses.  
*H. S. B. Young*  
*H. Dennison*

Inventor.  
*A. H. Canning*  
*Hetherington & Co.*  
*Atty*



# UNITED STATES PATENT OFFICE.

ALEXANDER HASTINGS CANNING, OF TORONTO, CANADA.

## TEA-PACKING MACHINE.

SPECIFICATION forming part of Letters Patent No. 604,721, dated May 31, 1898.

Application filed October 12, 1897. Serial No. 654,977. (No model.)

*To all whom it may concern:*

Be it known that I, ALEXANDER HASTINGS CANNING, merchant, of the city of Toronto, in the county of York, in the Province of Ontario, Canada, have invented certain new and useful Improvements in Tea-Packing Machines, of which the following is a specification.

My invention relates to improvements in tea-packing machines; and the object of the invention is to design a simple and cheap machine whereby the tea may be compressed into condensed form and quickly packed into equal-sized packages; and it consists, essentially, of a machine having a stationary plunger secured at the top thereof, a suitable packing-case, a holder for the case operated through the medium of a rod and foot-lever, and an equalizing-gage, all arranged and operating in the manner hereinafter more particularly explained.

Figure 1 is a perspective view of my tea-packing machine. Fig. 2 is a vertical section through the machine. Fig. 3 is a detail of the package when completed.

In the drawings like letters of reference indicate corresponding parts in each figure.

A is the frame of the machine, of which A' is the bottom base-plate and A<sup>2</sup> is the standard base-plate. The standard base-plate A<sup>2</sup> has attached to or forming part of it the standard A<sup>3</sup>, which has a depending plunger A<sup>4</sup> attached to or forming part of same, being connected at its upper end to the main body of the standard, the plunger proper being separated from the standard, as indicated.

B is a spring-catch secured to the top of the plunger.

C is a bottomless case which fits into a holder E, located beneath the plunger A<sup>4</sup>.

F is the package in which the tea is placed, into which is inserted the bottomless case E, the bottom of the package being closed, as indicated in Fig. 2. Both the package and the case are held in the holder, as indicated in this figure.

The bottom of the holder E is provided with a rod F', which is suitably secured in the bottom of the holder E and extends through the standard bed-plate A<sup>2</sup>. The bottom of the

rod F' is pivotally connected to the lever G, fulcrumed on the bracket H and provided with a treadle g.

I is a gage, which is made L-shaped in cross-section and provided with a top I', which has a depending block i centrally located beneath the same. The edge of one side of the gage is secured by hinges i' to the side of the standard-frame. The other side of the gage is designed to be brought around in front of the open side of the holder, and the block i is brought opposite the open top of the holder. The front of the holder is opened as indicated.

The operation of my machine is as follows: The bottomless case C is placed within a package F, the bottom of which is closed and the top open. The case and package are placed in the holder E. The tea is then placed in the case in sufficient quantity, and the treadle is then operated by the attendant so as to throw the holder and case upwardly and cause the plunger to compress the tea into the required size. The case then is removed up onto the plunger and held by the spring B until required again. The tea is then left in the package. The top of the package is then closed, and the gage I is then swung around, so that the depending block i is directly underneath the plunger and above the top opening of the holder, whereupon the lever G is operated by the attendant again and the holder E raised until the upper edge thereof strikes against the top I' of the gage and its further upward movement is arrested. The side of the gage closes the open side of the holder E and supports the side of the package, and the block i receives the pressure of the package as the holder is moved upwardly until finally the upper edge of the holder strikes against the top I', as before described, and the block i fits within the top of the holder. The object of the gage I of course is to insure the packages of tea being turned out the same length. The package may be withdrawn from the machine after final compression and the gage swung out of position, when the machine will be ready for another operation.

Such a machine as I describe is very simple and quick in its operation and the requi-



site power may be applied much more effectually than in machines now at present in use for the same or similar purposes.

Although I show this machine used for the packing of tea, it will of course be understood that it may be with equal facility adapted for the packing of various other commodities.

In the use of my machine I generally use a package preferably made of lead-foil, as when this is compressed it retains the shape and size for which the package is gaged.

In order to limit the amount of throw of the treadle-lever and thus regulate the size of the package, I may employ blocks of different size, which I would place, preferably, underneath the treadle end of the lever.

What I claim as my invention is—

1. In combination, the frame, the plunger, a holder having an open side and top and the means independent thereof for closing said top and side, substantially as described.

2. In combination, the frame, the stationary plunger, the vertically-movable holder having an open side and top with means for operating said holder, and means carried by the frame independent of the holder for clos-

ing said open side and top, substantially as described.

3. In a tea-packing machine, in combination the frame, the standard, the plunger depending from the top thereof a short distance from the main body of the standard, the holder, means for operating same, and a gage comprising two sides and a top and a block depending from the top, hinged to the standard and designed to be swung so that the block enters the open top of the holder and the side closes the open side when the holder is raised as and for the purpose specified.

4. In combination, the frame, the stationary plunger, the vertically-movable holder, means for operating the same, said holder having an open top and side, said holder being adapted to receive a package, and the gage supported independently of said holder and adapted to close said open top and side and having a projection adapted to enter the mouth of the holder, substantially as described.

ALEXANDER HASTINGS CANNING.

Witnesses:

B. BOYD,

H. DENNISON.