

F. M. THOMAS.
 TREE SPRAYER.
 APPLICATION FILED JAN. 18, 1909.

967,266.

Patented Aug. 16, 1910.

Fig. 1.

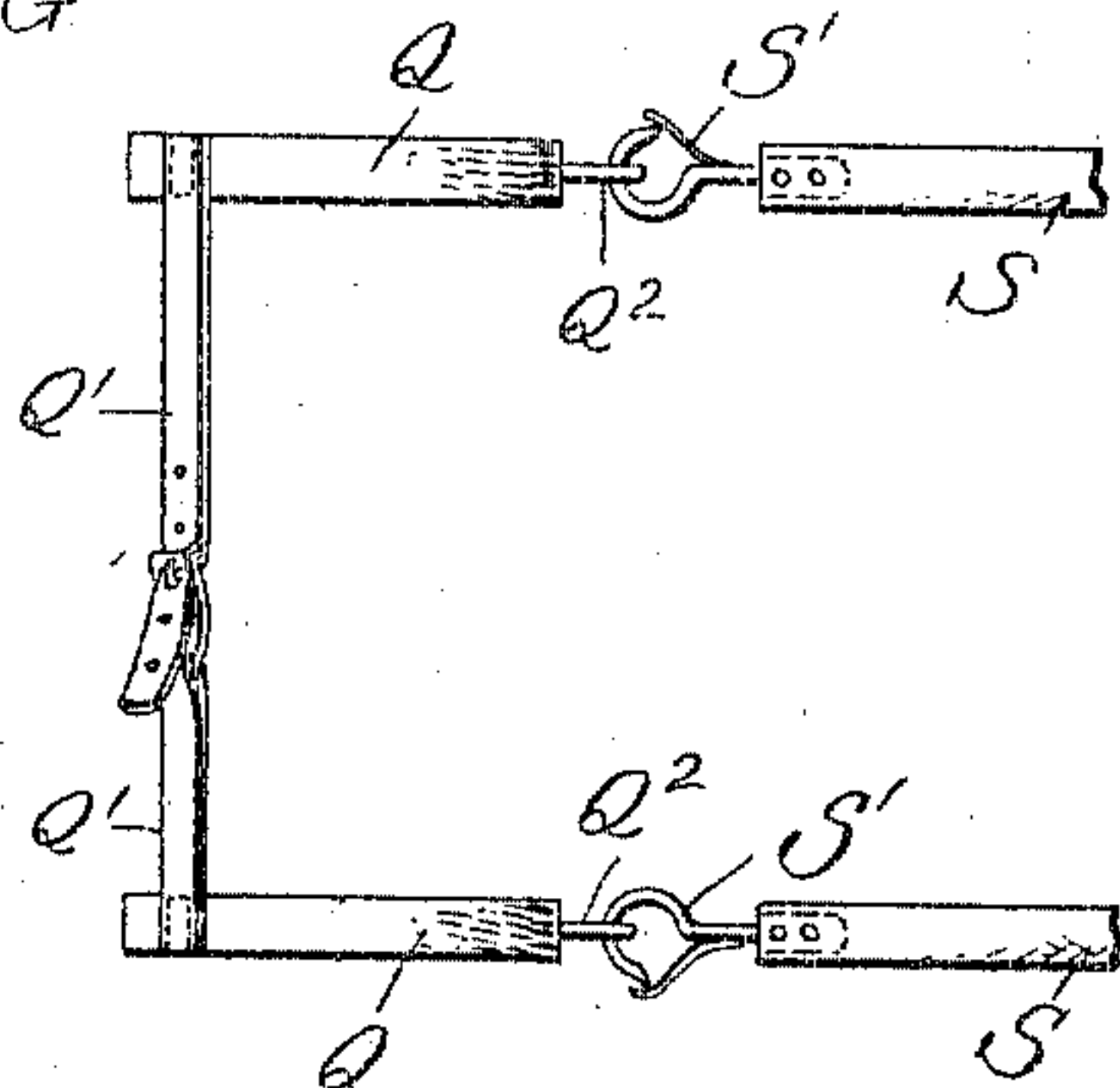
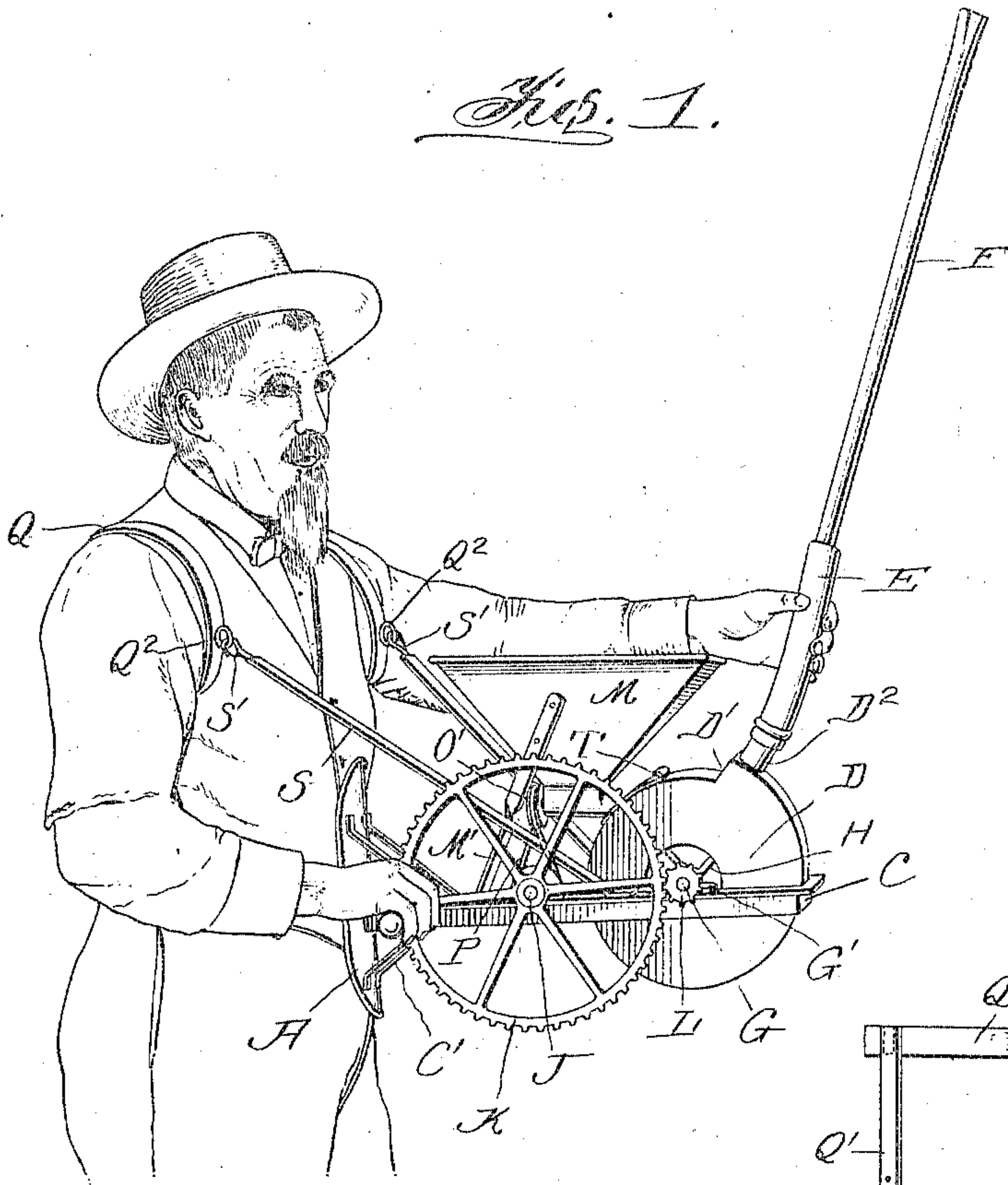
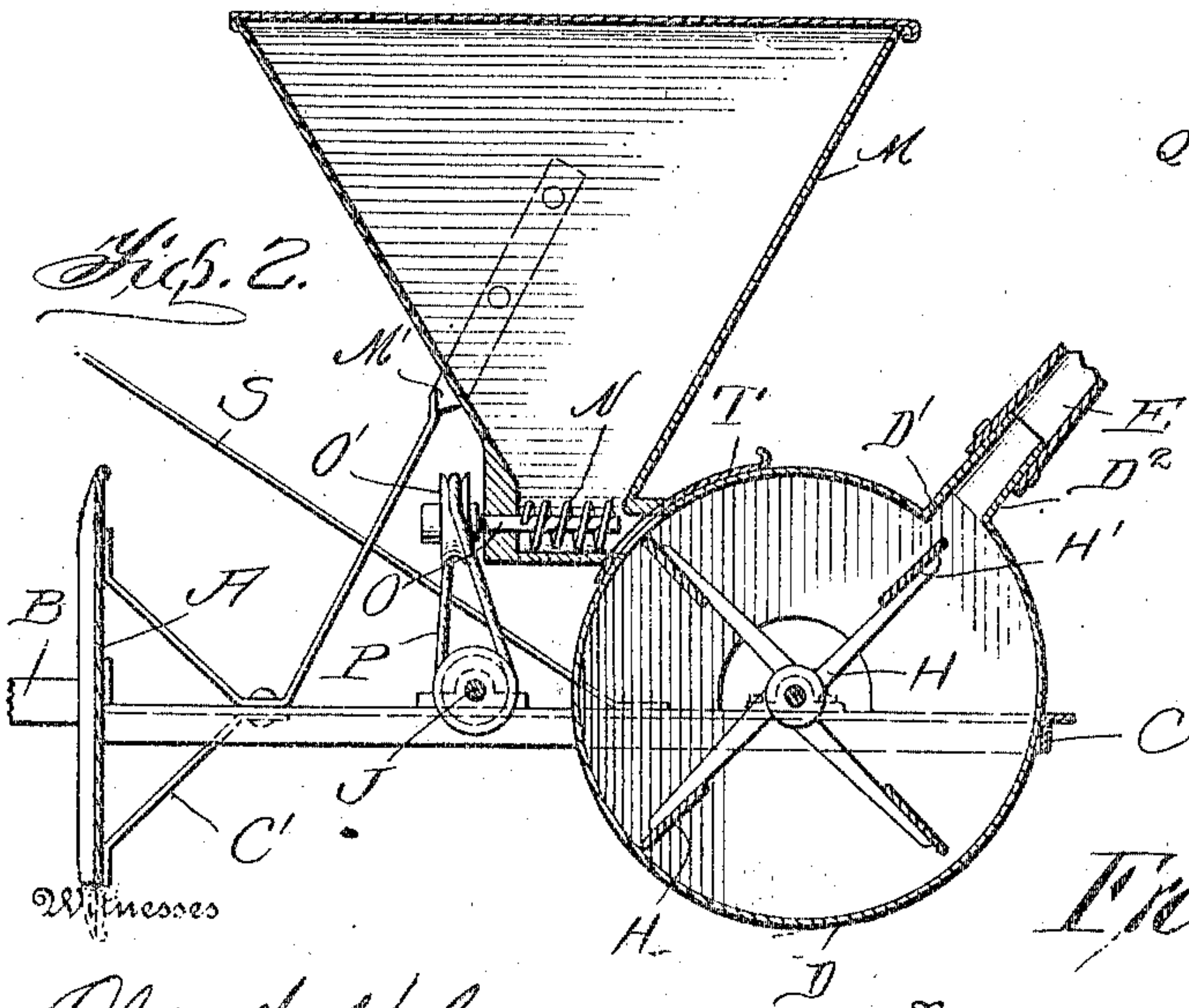


Fig. 3.

Fig. 2.



Witnesses

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TREE-SPRAYER.

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Specification of Letters Patent.

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To all whom it may concern:

Be it known that I, FRANK M. THOMAS, a citizen of the United States, residing at Muncie, in the county of Delaware, State of Indiana, have invented certain new and useful Improvements in Tree-Sprayers, of which the following is a specification.

This invention relates to certain new and useful improvements in tree sprayers, and more particularly to devices for spraying trees with powder for protecting them from insects, the object being to provide a device by means of which all portions of the tree can be readily reached.

Another object of my invention is to provide a device which is adapted to be arranged in such position on a person that it can be readily operated by one hand so that the free hand can be used to control the nozzle.

Another object of my invention is to provide a device which is exceedingly simple and cheap in construction, and one which is provided with a hopper having feed mechanism arranged at the bottom for conveying the powder out of the same into the fan casing so that the same will be thrown into engagement with an abutment, whereby all the lumps will be broken up before it is expelled out of the spout.

With these objects in view my invention consists in the novel combination and operation of parts, all of which will be fully described hereinafter and pointed out in the claims.

In the accompanying drawings—Figure 1 is a perspective view of my improved device showing the application of the same; Fig. 2 is a longitudinal sectional view through the device, the supporting straps being detached, and Fig. 3 is a plan view of the supporting straps detached.

In carrying out my improved invention, I employ a body plate A which is formed so as to fit snugly up against the body and is preferably secured thereto by a belt B. Secured to the outside of the plate A is a U-shaped frame C supported in a rigid position by braces C', having a fan casing D mounted on the same at the outer end, said fan casing being provided with an abutment D' having an outwardly projecting spout D², to which is connected a flexible tube E carrying a nozzle F which is preferably formed of some very light material, such as

tin or aluminum, and is provided with an enlarged end for the purpose hereinafter fully described. The fan casing is provided with oppositely disposed openings, as clearly shown, through which extends a shaft G which is mounted in bearings G' secured on the frame, and mounted on the shaft within the casing is a fan H provided with blades H' so constructed that the powder when fed into the same will be forced up against the abutment.

Mounted in suitable bearings fixed on the frame to the rear of the casing is a shaft J having a gear wheel K secured on one end provided with a handle K' for turning the same, said gear meshing with a pinion L fixed on the end of the shaft carrying the fan so that when the first mentioned gear is turned, the fan will be operated.

Extending upwardly from the frame are braces M' carrying the hopper M having a worm feed N arranged in its bottom, said hopper being connected to the fan casing, as clearly shown, so that as the worm is revolved the powder within the hopper will be carried into the fan casing. The worm is carried by a shaft O on which is mounted a pulley O' over which passes a belt P carried by the main drive shaft, and it will be seen that as the gear wheel with the handle is operated the feed and the fan will be rotated at the same time.

To insure the frame being held in a rigid position on the body of the person, I employ a supporting means which comprises a pair of loops Q connected together by straps Q', said loops being adapted to fit over the arms and shoulders of the user, and these loops are preferably provided with eyes Q² to which are connected the snap hook members S' of a pair of straps S secured to the side bars of the frame A.

A sliding stop T is mounted in the fan casing for controlling the feed of the powder from the hopper said cut off being provided with a slot which registers with the opening in the casing.

Having thus described my invention what I claim as new and desire to secure by Letters Patent is—

1. A device of the kind described comprising a body plate provided with a frame, of a fan casing carried by said frame provided with an abutment, a tube extending outwardly from said abutment, a fan arranged

within said casing, a hopper for delivering powder to the casing, and means for operating said fan.

2. In a device of the kind described, the combination with a plate provided with means for securing it upon the body of a person, a frame extending outwardly from said plate, a fan casing carried by the frame provided with an abutment, a spout extending outwardly from said abutment, a flexible tube connected to said spout and a nozzle carried by said flexible tube.

3. A device of the kind described, comprising a body plate provided with means for attaching it to the body of a person, a frame carried by said body plate provided

with said bars, supporting straps carried by said frame, a fan casing provided with an abutment arranged between the side bars of said frame, a fan arranged within said casing, a hopper connected to said fan casing, feeding means arranged within the bottom of the hopper, means for operating said fan and feeding means, a spout extending outwardly from the abutment of said casing, and a flexible tube connected to said spout carrying a nozzle.

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