

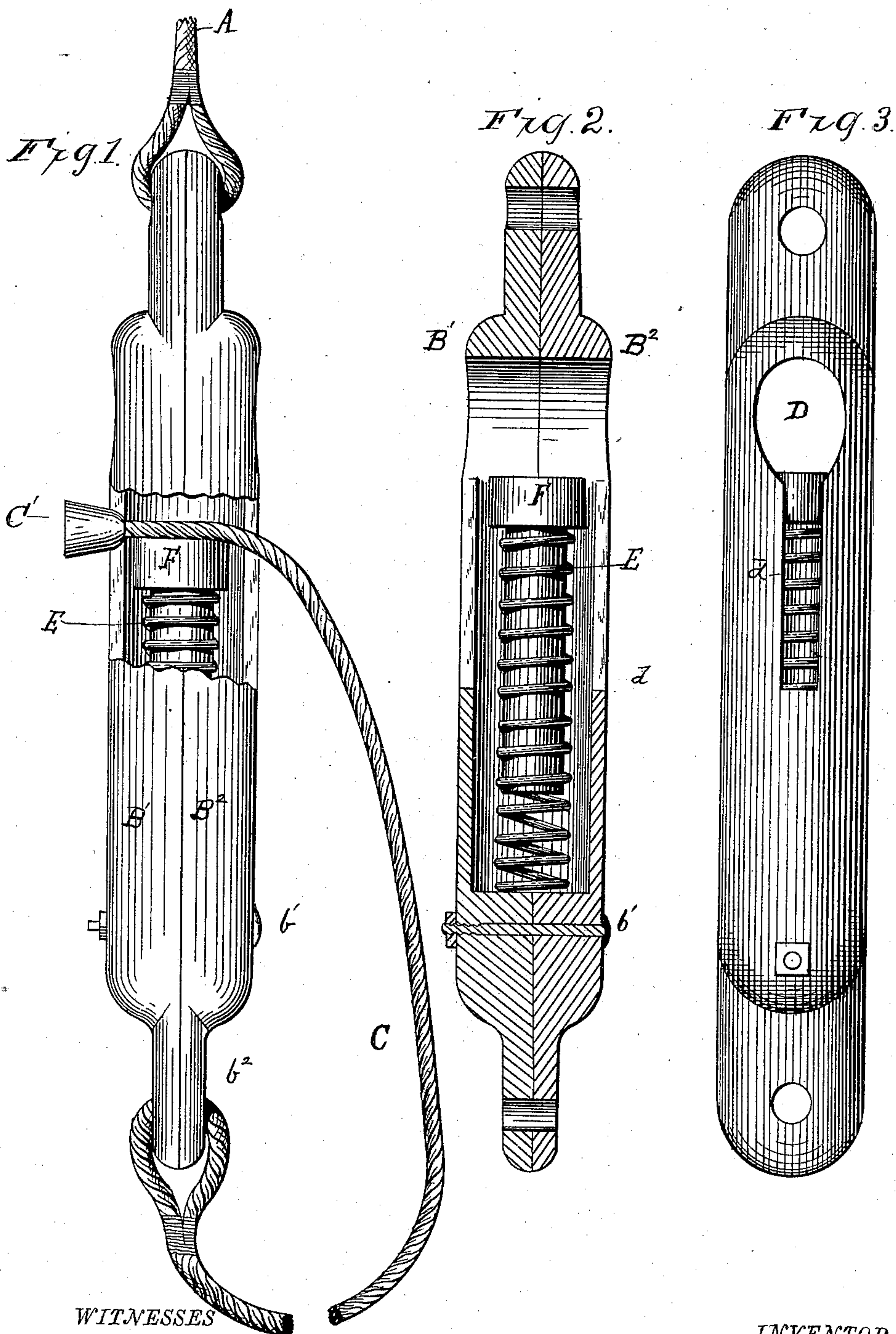
(No Model.)

M. K. BRUBAKER.

TOBACCO DROPPER.

No. 316,601.

Patented Apr. 28, 1885.



WITNESSES

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TOBACCO-DROPPER.

SPECIFICATION forming part of Letters Patent No. 316,601, dated April 28, 1885.

Application filed April 21, 1884. (No model.)

To all whom it may concern:

Be it known that I, MARTIN K. BRUBAKER, a citizen of the United States, residing at Mount Joy, in the county of Lancaster and State of Pennsylvania, have invented new and useful Improvements in Tobacco-Droppers, of which the following is a specification.

This invention relates to devices for lowering and automatically releasing bundles or hands of tobacco, bags of grain, and other materials.

It consists in the combination of a looped cord, chain, or wire having a detachable end, with a device to which the other end of said cord is secured, and devices which automatically free said detachable end when the loop reaches the floor, for the purpose of disengaging the bag or bundle therefrom.

The said invention further consists, more specifically, in the combination of a hollow weighted casing having a key-hole slot in its upper part, and inclosing an upwardly-spring-pressed plunger operating behind said slot with a cord chain or wire having one end secured to the lower end of said casing, and having the other end provided with a knot and ferrule or equivalent device which is adapted to engage with the walls of said slot, and to be freed automatically by the action of said plunger, substantially as hereinafter set forth.

In the accompanying drawings, Figure 1 represents a side view of the device embodying my invention, the detachable end of the cord being engaged. Fig. 2 represents a vertical section on the line $x x$ of Fig. 2, the cord not being shown, and the plunger being in its normal position. Fig. 3 represents a detail view in elevation of the casing, taken from the side opposite to that shown in Fig. 1.

The same letters of reference designate the same parts in the several figures.

A designates a suspending-cord, which is attached to a heavy hollow casting or casing, B, by means of an eye, b , at the upper end of the latter. This casing consists of two long shells or sections, B' B^2 , which are curved into trough shape and held together edge to edge by a bolt, b' . These shells have in their upper ends the aforesaid eye b . At the lower end of said casing is another eye, b^2 , formed in lugs, which extend downward from said castings. To this eye b^2 one end of a short cord, C, is attached,

the other end thereof being provided with a knot or enlargement covered by a conoidal ferrule, C' .

In each of the shells or sections B' B^2 (near the upper end thereof) is a key-shaped slot, D, the large end of said slot being uppermost. These slots are directly opposite each other, and their upper ends are large enough to allow said ferrule to be passed entirely through said casing. This may obviously be accomplished from either side. The long lower parts, d , of these slots are too narrow to allow said ferrule to be pulled through them.

Within said casing is a spiral spring, E, which bears upwardly against a plunger, F, normally forcing said plunger into a position between the slots D, and extending upward to the junction of the long narrow lower parts, d , of said slots with the larger upper parts of said slots. The inner face of the casing of course acts as a guide for said plunger.

The operation of the device is as follows: When a number of lathes of tobacco, each holding several stalks, are to be lowered from their place of suspension in the drying-house, they are simply disengaged from the scaffold, and the cord C is passed below and around them in a loop, which is closed by passing the ferrule C' through the large upper ends of the slots D, then forcing down the plunger F against the resistance of spring E, and passing ferrule C' down behind the narrow lower parts, d , of said slots. The weight of the tobacco will draw on said cord so as to hold said ferrule in the narrow part d of the slot D on the side of the casing opposite to the bundle of tobacco, and will hold down the plunger F. The suspending cord or rope A is then lowered until the bundle touches the floor. The plunger F is thereby relieved of the strain of the weight, and the spring E forces said plunger up, causing the ferrule C' to move from the narrow part d of the slot D to a point opposite the larger upper part of said slot. The cord A is then raised, and the cord C, under the friction of the incumbent tobacco, pulls loose at the upper end, the ferrule passing freely through the large upper ends of slots D. The loop is thus opened and the tobacco left on the floor.

The same device and procedure are obviously applicable to bags of grain and a great

variety of other articles. Of course, chains, belts, wires, or ropes may be used instead of cords.

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

1. A device for automatically lowering tobacco and other articles, consisting of a cord having one end fixed and the other detachable, a shell or casing which engages with the detachable end of said loop, and a plunger which automatically severs such engagement when the cord is relieved from the weight of the tobacco, substantially as set forth.

2. The combination of a casing having a key-hole slot in its upper part with an upwardly - spring - pressed plunger operating within said casement in proximity to said slot, and a loop-cord for inclosing tobacco and other articles, having one end secured to said casing, and the other end provided with an enlargement adapted to be passed through the large

upper part of said slot and be drawn down behind the narrow lower part thereof, substantially as set forth.

3. The casing B, consisting of shells B' B², each of which has in its upper part a key-hole-shaped slot D, in combination with spring E and plunger F, arranged and operating as stated within said casing, and the cord C, attached at one end to said casing, and provided with a conoidal ferrule, C', on its other end, said ferrule being adapted to pass through the large upper parts, D', of the said slots, but not to pass through the narrow lower parts, d, thereof, substantially as set forth.

In testimony whereof I have hereunto set my hand in the presence of two subscribing witnesses.

MARTIN K. BRUBAKER.

Witnesses:

ALLAN A. HERR,
I. H. HERR.