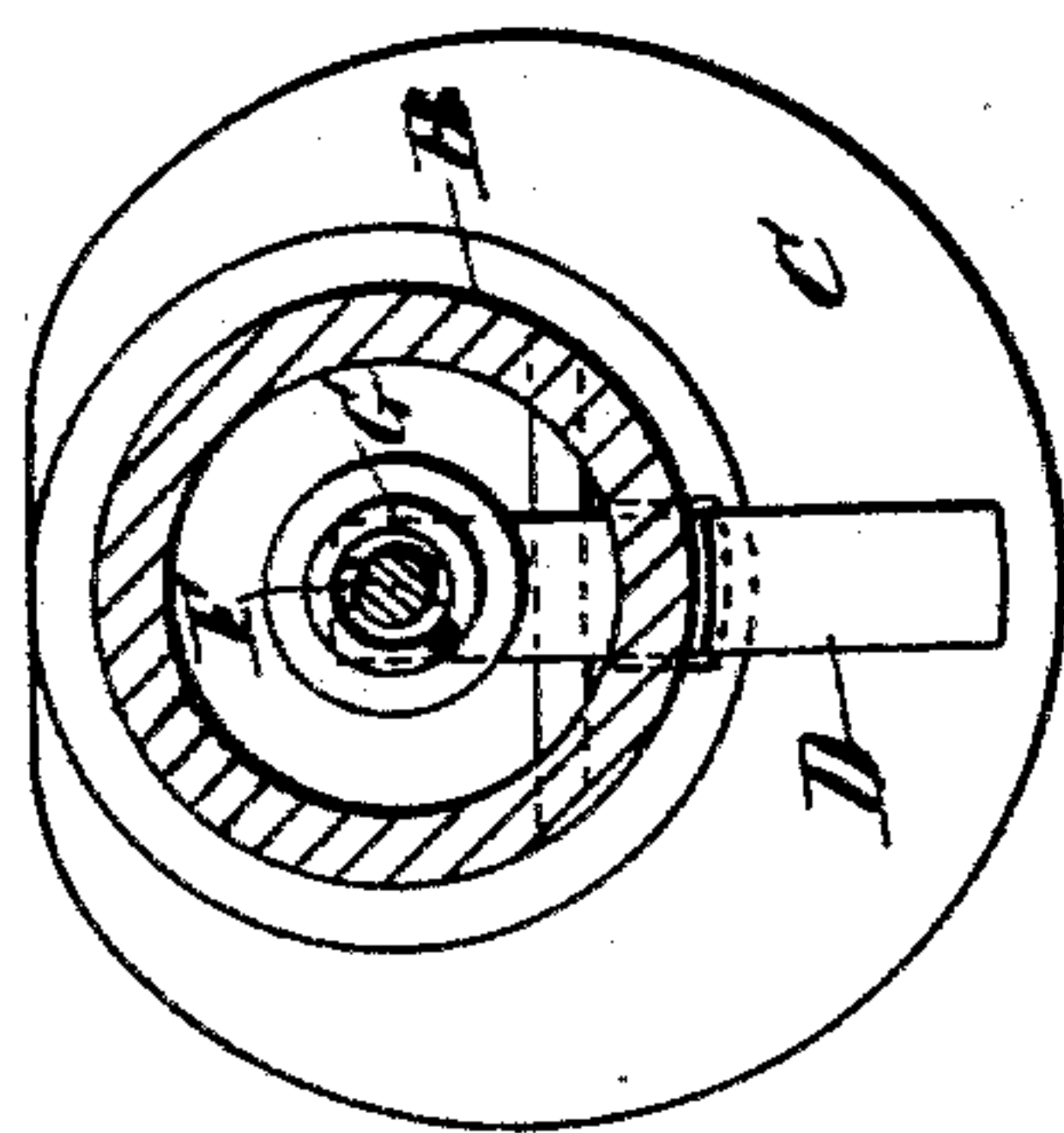


(No Model.)

A. F. M. BROOKE.
POLE TIP.

No. 584,171.

Patented June 8, 1897.



151

FIG. 3

WITNESSES :

Donn Turtchell
H. L. Reynolds.

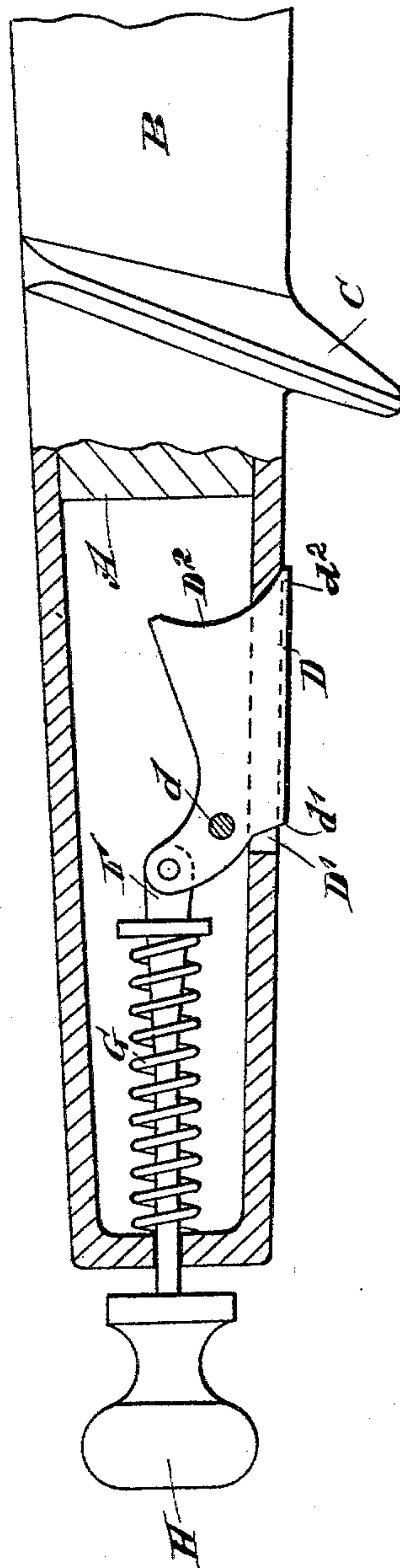
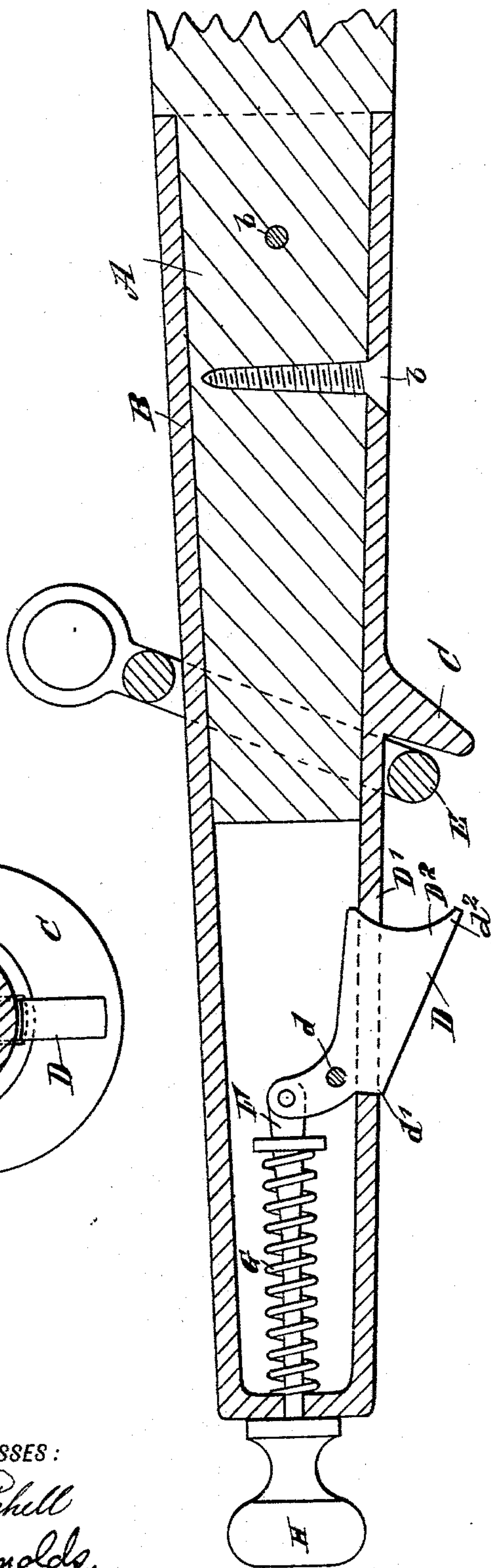


Fig. 2.

INVENTOR

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BY

Trinity 13

ATTORNEYS.

UNITED STATES PATENT OFFICE.

ARTHUR F. M. BROOKE, OF CALGARY, CANADA.

POLE-TIP.

SPECIFICATION forming part of Letters Patent No. 584,171, dated June 8, 1897.

Application filed October 26, 1896. Serial No. 610,152. (No model.)

To all whom it may concern:

Be it known that I, ARTHUR F. M. BROOKE, of Calgary, Alberta, North-West Territories, Dominion of Canada, have invented a new and Improved Pole-Tip, of which the following is a full, clear, and exact description.

My invention relates to an improvement in those pole-tips which serve to prevent a neck-yoke from being accidentally disengaged from the pole.

Reference is to be had to the accompanying drawings, forming a part of this specification, in which similar characters of reference indicate corresponding parts in all the figures.

Figure 1 is a longitudinal section. Fig. 2 is a longitudinal section, showing the parts in slightly different position; and Fig. 3 is a cross-section taken near the tip.

In Fig. 1 the ring E of the neck-yoke is shown as surrounding the tip. The tip consists of a hollow casing B, placed upon the outer end of the pole A and secured thereto by screws b or any other suitable means. It is provided with an angular flange C, adapted to be engaged by the ring E of the neck-yoke, the ring preventing the neck-yoke from sliding farther back upon the pole. The pole does not extend entirely to the end of the tip. The extreme forward end of the casing is unoccupied by the pole. Upon the lower side of the tip a slot D' is formed. Pivoted in this slot upon the pivot-pin d is the catch or latch D. The inner end of this is pivoted to the rod F, which extends forward longitudinally with the pole and through a hole in the end of the tip. Upon the outer end of this rod F is fixed a knob H.

Surrounding the rod F and within the tip is the spiral spring G, which serves to press the rod back within the tip, and thus to throw the catch out into the position shown in Fig. 1. The rear end of this catch is concaved, as shown at D², the object being that in case the neck-yoke is pulled forward upon the pole the concave end of the catch will catch the ring E and securely hold the same from coming off. This will be held more securely with the concaved end than were the same square.

The portion of the catch D occupying the forward end of the slot D' is so shaped that when the catch is out or in the position shown in Fig. 1 it will bear against the forward end

of the slot, and thus take the strain off of the pin d. Were the entire strain of the forward pull of the neck-yoke placed upon the pin d the pin would either have to be much increased in size or there would be danger of breaking the pin. With the end of the latch at d' bearing against the forward end of the slot D' the strain is taken thereby and the pivot-pin relieved of the majority of the strain. The rear end of the catch D is provided with a projection d², which engages the casing as the plate is moved inward to release the ring E and which prevents the catch D from moving completely into the casing. The shoulder d', acting to limit the outward movement of the catch, and the projection d², acting to limit the inward movement of the catch, allow the same operation within a definitely-limited space.

In using my device the latch may be depressed to the position shown in Fig. 2, so as to remove the neck-yoke by engaging the latch itself with the hand or by pulling upon the knob H. The neck-yoke is then readily removed. With such a device as this upon carriage and wagon poles many accidents which now happen might be prevented.

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

1. A pole-tip having a hollow elongated casing, one end of which is open and the remaining end of which is provided with an orificed head, the casing also having an exterior flange and a longitudinal slot forward of the flange and at the bottom of the casing, a catch-plate located within the slot, a pin pivotally mounting the catch-plate and located within the casing, the catch-plate being capable of swinging in and out of the casing to hold and release the neck-yoke, a rod running longitudinally in the casing and slidable in the orificed head thereof, the inner end of the rod being pivoted to the catch-plate and the outer end of the rod projecting beyond the casing, and an expansive spring embracing the rod and pressing against the same and against the head of the casing whereby to normally and removably hold the catch-plate outward, substantially as described.

2. A pole-tip having an elongated casing, one end of which is open and the remaining

end of which is provided with an orificed head, the casing also having an exterior flange and a slot forward of the flange and in the bottom of the casing, a rod running longitudinally through the outer portion of the casing and slidable in the orificed head thereof, an expansive spring embracing the rod and pressing against the same and against the head of the casing, a pivot secured within the casing at the forward portion of the slot, and a catch-plate pivotally connected to the rod and swinging on the pivot, the catch-plate having a

shoulder at its forward end and a projection at its rearward end, the shoulder being capable of bearing against the front end of the slot to limit the outward movement of the plate and the projection being capable of engaging with the casing at the rear end of the slot to limit the inward movement of the plate, substantially as described. 15

ARTHUR F. M. BROOKE.

Witnesses:

CHAS. B. WOOLVERTON,
FRANK HUTT.