(No Model.)

C. H. RANDALL.

VEHICLE POLE TIP.

No. 426,544. Patented Apr. 29, 1890.

Fig. 1.

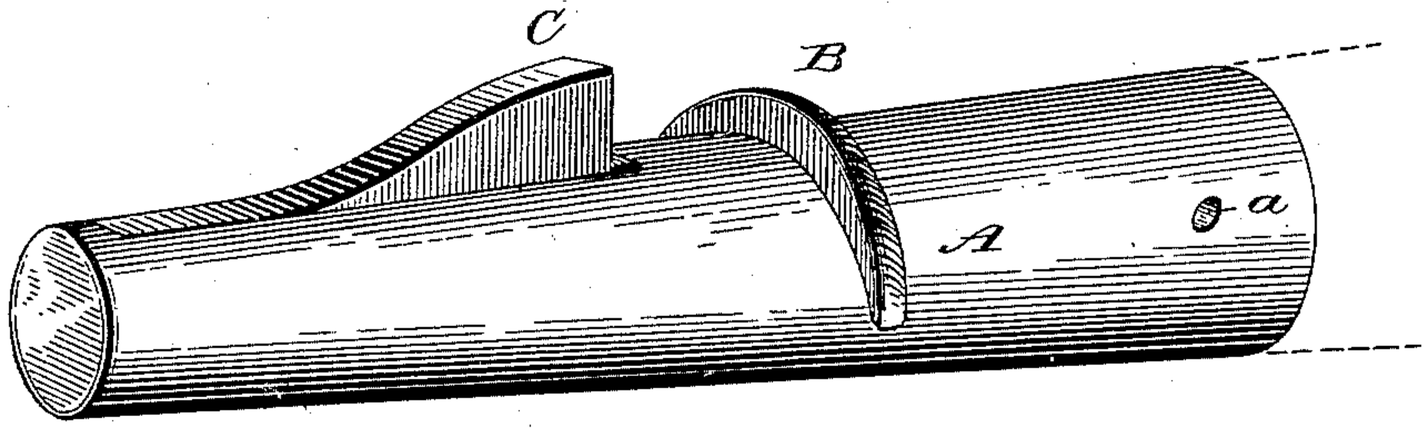


Fig. 2.

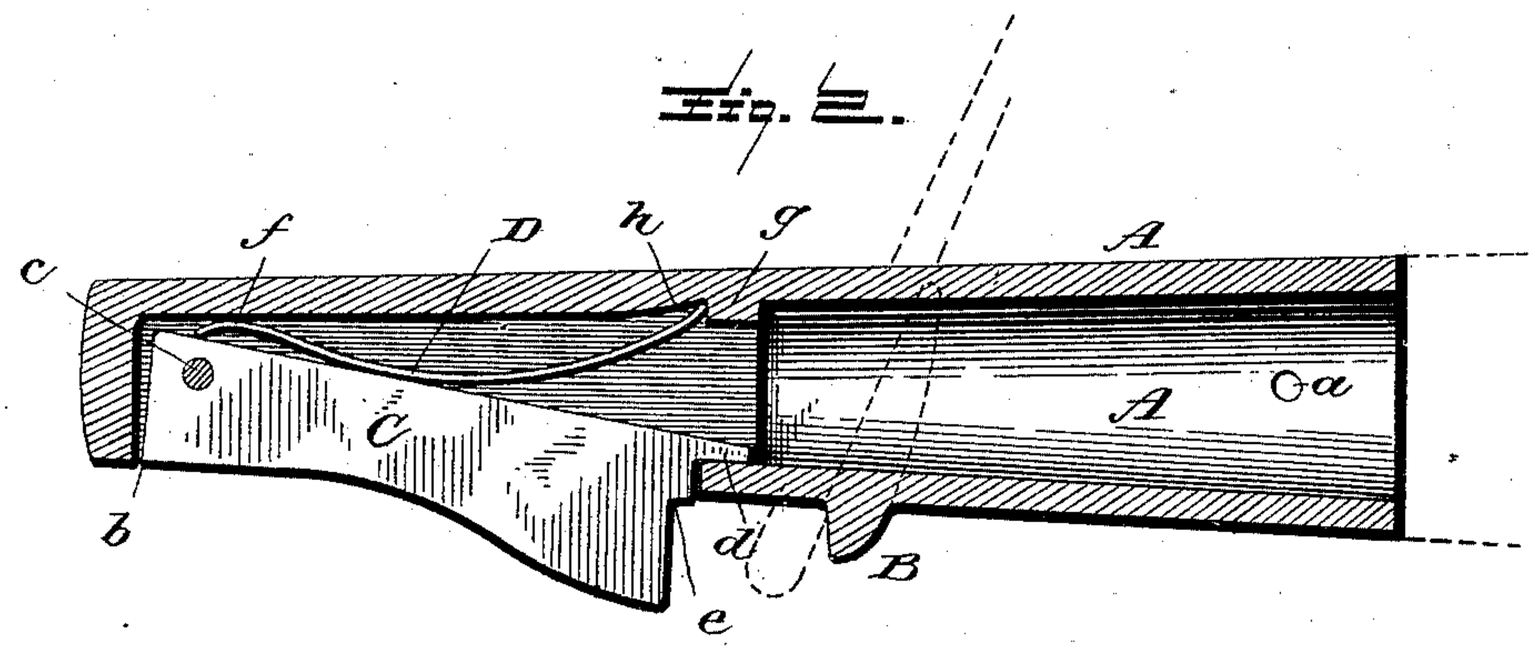


Fig. 3.

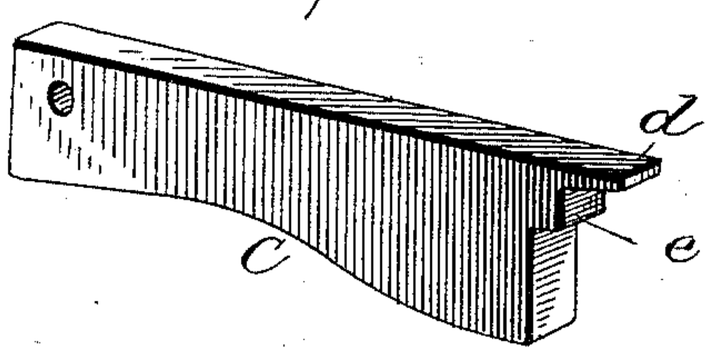
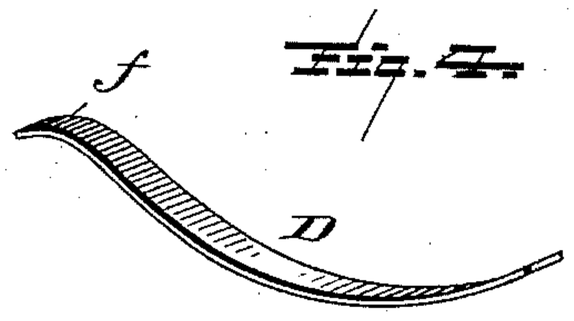


Fig. 4.



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VEHICLE-POLE TIP.

SPECIFICATION forming part of Letters Patent No. 426,544, dated April 29, 1890.

Application filed January 16, 1890. Serial No. 337,045. (No model.)

To all whom it may concern:

Be it known that I, CHARLES H. RANDALL, a citizen of the United States, residing at Newark Valley, in the county of Tioga and State of New York, have invented certain new and useful Improvements in Vehicle-Pole Tips; and I do hereby declare that the following is a full, clear, and exact description of the invention, reference being had to the annexed drawings, making a part of this specification, and to the letters of reference marked thereon.

This invention relates to certain new and useful improvements in pole-tips; and it has for its object among others to provide an improved tip which shall be strong and durable, and in which the spring shall be retained against displacement and act near its center upon the latch.

Other objects and advantages of the invention will hereinafter appear and the novel features thereof will be specifically pointed out in the claims at the end of the specification.

The novelty in the present instance resides in the peculiarities of construction and the combinations, arrangement, and adaptation of parts, all as more fully hereinafter described, shown in the drawings, and then particularly pointed out in the appended claims.

The invention is clearly illustrated in the accompanying drawings, which, with the letters of reference marked thereon, form a part of this specification, and in which—

Figure 1 is a perspective view of my improved pole-tip reversed. Fig. 2 is a vertical longitudinal section through the same in the position which it occupies when in use, with a strap shown thereon in dotted lines. Fig. 3 is a perspective view of the latch removed. Fig. 4 is a like view of the spring.

Like letters of reference indicate like parts throughout the several views.

Referring now to the details of the drawings by letter, A designates a casting forming the body portion of the tip, which may be of any suitable metal and of the desired size. It is provided near its larger end with an opening *a* for the passage of the means which secures it to the end of the vehicle-pole with which it is used. Near its center the casting is provided with a lug or part ring B, which serves as a holdback or stop for the strap, as shown in Fig. 2. Forward of this lug or stop the casting is provided upon its under side with a longitudinal opening *b* for the passage of the latch C, as shown in Figs. 1 and 2.

The latch C is pivoted at its forward end within this longitudinal opening upon the transverse pivot *c*, supported in the walls of the chambered casting. The rear end of this latch is designed to work freely under the influence of the spring D, and is provided with the two lugs or steps *d* and *e*, the former designed to engage the inner wall of the chamber of the casting, as shown in Fig. 2, to prevent falling out of the latch, and the latter designed to strengthen the former and to provide for the working of the latch with less friction, and is of such thickness as to be flush with the outer periphery of the casting when the latch is pressed out. The end of the latch outside this second step is so formed that when the latch is pressed in it completely closes the space between the end of the latch and the end wall of the opening in the casting.

The spring D is a flat steel spring bent into the form shown in Figs. 2 and 4 and arranged behind the latch with its central portion or bend only acting on the latch, thus offering less resistance to the inward movement of the latch against the tension or power of the spring, and yet the full force of the spring is obtained to keep the latch out. One end of this spring is bent or turned over, as shown at *f*, so as to allow it to more readily move lengthwise when under tension and to provide a rounded bearing-surface upon the upper wall of the recess in the casting, as shown best in Fig. 2. The opposite end of the spring is retained in position by means of a shoulder *g* within the end of the casting, the cut-away portion forming the shoulder being upon an inclined plane, as shown in Fig. 2 at *h*. This provides for more unrestricted movement of the spring. The parts are assembled by first placing the spring in position within the chamber at the end of the casting and the latch then placed in position with its end step engaged behind the wall of the casting, as shown in Fig. 2, and the pivot-pin then passed through holes in the casting and a hole in the outer end of the latch.

What I claim as new is—

1. A pole-tip consisting of the body portion

formed with longitudinal openings for the passage of the latch and with interior shoulder *g*, the pivoted latch working through said opening and formed with steps *d* and *e*, and the flat spring within the chamber at the outer end of the casting independent of both the casting and latch, and bent at its center, which bears against the latch, substantially as and for the purpose specified.

2. The pole-tip described, consisting of the body portion formed with longitudinal opening and interior shoulder *g*, having inclined wall *h*, the latch pivoted within the casting and working in the longitudinal opening therein and formed with two steps *d* and *e* upon different planes, and the flat spring D, arranged within the casting substantially parallel with the latch and bearing thereon at its center only, and at one end bearing against the shoulder *g*, and its other end curved to form a rounded bearing on the upper wall of the chamber of the casting, substantially as shown and described, and for the purpose specified.

In testimony that I claim the above I have hereunto subscribed my name in the presence of two witnesses.

CHARLES H. RANDALL.

Witnesses:
F. H. CARGILL,
E. F. BELDEN.