B. FOLTZ.

VEHICLE-POLE TIP.

No. 192,159. Patented June 19, 1877.

Fig. 1.

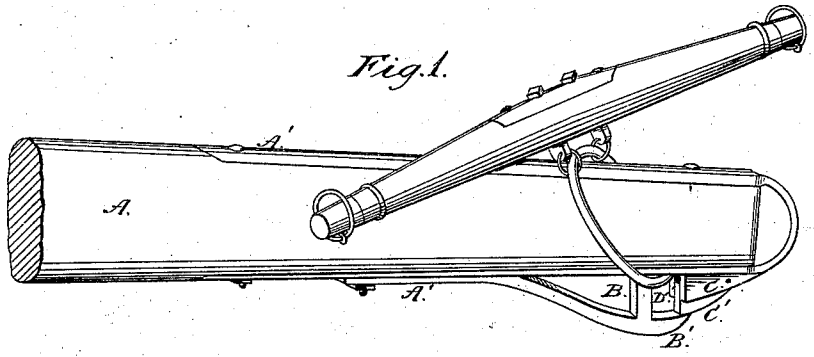


Fig. 2.

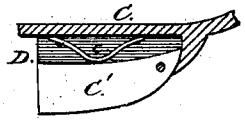


Fig. 3.



Fig. 4.

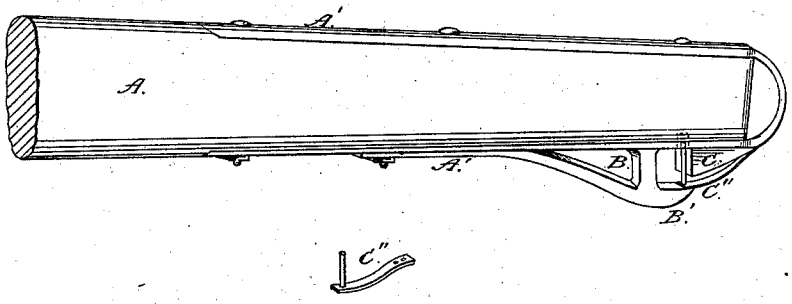
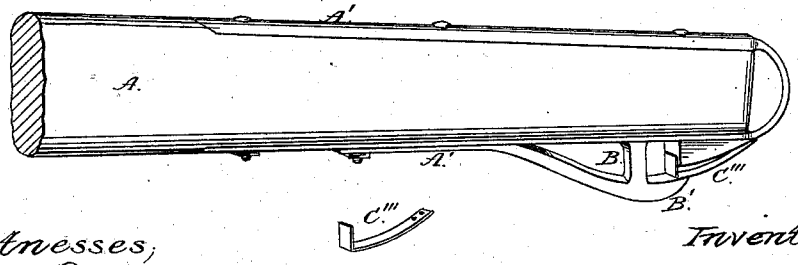


Fig. 5.



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UNITED STATES PATENT OFFICE.

BENJAMIN FOLTZ, OF ROCKFORD, ILLINOIS.

IMPROVEMENT IN VEHICLE-POLE TIPS.

Specification forming part of Letters Patent No. **192,159**, dated June 19, 1877; application filed March 19, 1877.

To all whom it may concern:

Be it known that I, BENJAMIN FOLTZ, of Rockford, in the county of Winnebago and State of Illinois, have invented a new and useful Improvement in Neck-Yoke Attachments; and I do hereby declare that the following is a full and exact description of the same, reference being had to the accompanying drawings, and to the letters of reference marked thereon.

The object of the invention is to secure the neck-yoke to the pole in such manner that the said neck-yoke cannot be easily detached therefrom by accident in case any part of the draft apparatus shall become inoperative.

The lines are also prevented from being caught upon the end of the tongue by reason of the shortening of the part extending forward of the neck-yoke. Lightness, neatness of finish, durability, strength, and economy of manufacture are also attained.

The invention consists of a novel combination of the metallic strap upon the end of the pole, the holdback-post, and a locking-latch, so arranged that when the neck-yoke ring is in working position the locking-latch secures the same in such manner that it can only become disconnected by the hand of the operator, as will be hereinafter fully described.

In the drawings, Figure 1 is a perspective view of the invention, showing the neck-yoke in position for attaching the team. Fig. 2 is a longitudinal sectional view of the locking-latch within the recessed lug, and showing the securing-spring. Fig. 3 is a view of the locking-latch detached. Figs. 4 and 5 are modifications of the invention shown in Fig. 1.

Similar letters of reference denote corresponding parts in all of the figures.

A represents the wood portion of the pole, and A′ the strap-iron. B represents the holdback-iron located upon the under side of the pole, and against which the neck-yoke ring rests when the team is in a backing position. B′ is a lip reaching forward of the holdback-post, and acts as a guard for protecting the pole, the neck-yoke ring, and the locking-latch C′.

This locking-latch C′ is clearly shown in Fig. 3 detached from the main iron. C is a recessed lug, secured to the tongue-iron, and having an abrupt end for the neck-yoke ring to pull against should the draft-apparatus become broken.

It will be observed that this abrupt end, in connection with the pole, holdback-post, and lip B′, forms the four sides of the inclosure within which the ring rests. *c* is a spring, (which can be leaf, spiral, or of any other required form,) that acts upon the latch C′ and holds the said latch in a closed position. D is a recess made within the lug C, within which the latch C′ vibrates.

It will be observed that the said latch is pivoted or hinged at its forward end, leaving the rear end free to swing far enough upon this pivotal connection to allow the passage of the ring within the inclosure before mentioned.

It will also be observed that by using this locking device the pole can be shortened at the point forward of the neck-yoke, and as all parts are supplied with guards the lines forming a part of the harness will not be caught upon any protruding points.

Modifications of the spring-latch are shown in Figs. 5 and 6, where the spring operates over and parallel with the abrupt end of the lug C, which will be understood.

This attachment is adapted for use upon the poles of harvesters, cultivators, &c., as well as upon wagons and sleighs, and will effectually prevent accidents that may arise from the dropping of the tongue upon the ground while the team is in motion.

The operation is as follows: When the team is to be connected to the vehicle the ring of the neck-yoke is made to pass over the end of the pole, and the same is drawn rearward until it comes in contact with the inclined latch, which, by such contact will cause the latch to rise until its rear end is reached, and when passed the latch assumes its normal position, and the neck-yoke is securely locked in place. When it is desired to uncouple the neck-yoke from the vehicle the spring-latch is raised by the hand of the operator sufficiently far to allow the ring to pass over the said latch, and thus free the team and the neck-yoke.

If desired, the spring C can be dispensed with by adding sufficient weight to the latch to have it operate by gravity alone.

It will be observed that the labor of ironing

poles by this method can, by the use of malleable cast-iron, be simplified and made cheaper than when done by the ordinary method.

I am aware that tongues of ox-wagons have been made having a slide entering within the tongue forward of the draft-ring, and dropping in place by its own weight, and by which the vehicle is drawn. Also, that circular metallic carriage-tips wholly inclosing a portion of the pole have been used, and having a recess for the insertion of a spring-latch forward of the neck-yoke; but in these devices the forward draft, when used, comes direct against the latch instead of wholly against a permanent fastening secured to the pole, as in my improvement.

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

1. The combination of the vehicle-pole, the upper strap-iron, the under strap-iron, the holdback-post, the guard B′, the permanent lug C, and the pivotal locking-latch, all arranged and operating substantially as described and set forth.

2. In a vehicle-pole having the upper and lower strap-iron, the combination of the holdback-post, the permanently-secured lug for use in the forward draft, and the spring-latch for securing purposes, all arranged and operating substantially as described, and for the purpose set forth.

3. The combination of the tongue, tongue-iron A′, holdback B, lip B′, recessed lug C, latch C′, and spring *c*, all these parts arranged and operating in conjunction with the neck-yoke, substantially as described.

This specification signed and witnessed this 9th day of March, 1877.

BENJAMIN FOLTZ.

Witnesses:
G. W. FORD,
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