

F. E. WALKER.
SINGLE TREE-CLIP.

No. 174,036.

Patented Feb. 22, 1976.

FIG. I

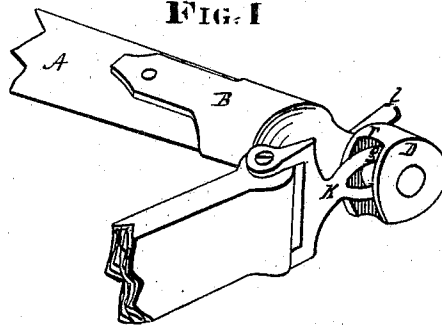
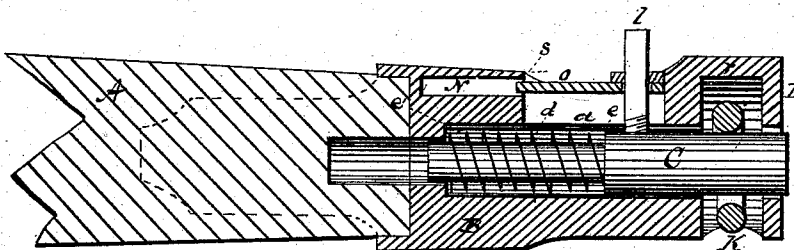


FIG. II.



WITNESSES

F. B. Townsend,
James Stevenson

INVENTOR

Francis E. Walker
per Atty. *A. H. Evans & Co.*

UNITED STATES PATENT OFFICE.

FRANCIS E. WALKER, OF BEDFORD, IOWA.

IMPROVEMENT IN SINGLE-TREE CLIPS.

Specification forming part of Letters Patent No. **174,036**, dated February 22, 1876; application filed June 18, 1875.

To all whom it may concern:

Be it known that I, FRANCIS E. WALKER, of Bedford, Taylor county, Iowa, have invented certain new and useful Improvements in Single-Tree Clips; and I hereby declare the following to be a full, clear, and exact description thereof, reference being had to the accompanying drawings, making a part of this specification, in which—

Figure 1 is a perspective view. Fig. 2 is a longitudinal section.

The object of my invention is to provide a strong, simple, and durable automatic single-tree clip, to which the trace can be quickly and easily attached or detached, as the case may require; and it consists in the construction and combination of devices hereinafter described and claimed.

In order to enable others skilled in the art to make and use my invention, I will proceed to describe the exact manner in which I have carried it out.

In the said drawings, A represents a single-tree, and B a sleeve or ferrule fitting tightly on the end. This sleeve has a longitudinal slot, *a*, extending entirely through it and into the end portion of the single-tree, as shown in Fig. 2. In this slot works the sliding bolt C, which has a spring, *d*, coiled around it, bearing against the shoulders *e e'*. Near the outer end of the sleeve B is formed a transverse recess, *r*, which is made large and deep enough to admit the end of the trace-link K when the bolt C is withdrawn. Attached to the bolt C is a projecting arm, *l*, by which the bolt is moved backward into the slot *a* when it is desired to fasten or unfasten the trace from the single-tree. This arm *l* works in the elongated slot *s*, and has attached to it a sliding plate, *o*, which, when the arm is forced back, enters the recess N; but when the arm is in position

in the forward end of the slot, the plate covers the slot and prevents dust or dirt from entering to interrupt the working of the bolt. The forward end of the bolt C has its bearing in the portion D of the sleeve B.

When it is desired to fasten the trace to the single-tree, all that is necessary is to force back the arm *l*, which will force the bolt back out of the recess *r*, allowing the portion *g* of the trace to enter, when, by releasing the arm *l*, the now compressed spring will force the bolt C back in position and through the eye of the trace, thus firmly securing the trace to the single-tree.

When it is desired to unfasten the trace from the single-tree, the arm *l* must be forced back, which will cause the bolt to be withdrawn from the recess *r*, and the trace will be released.

I am aware that spring-bolts have been arranged within a casing, and provided with bearings and a protecting-cap, as shown in the patent to Edwin Brown, October 31, 1865; but in such cases the bolt which holds the eye of the tug is not centrally located in the end of the clip, and is attached by an arm to the end of the main bolt, around which the spring is coiled. Such is not my invention.

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

The centrally-sliding longitudinal bolt C, provided with the spring *d*, in combination with the slotted and centrally recessed sleeve B, sliding arm *l*, and sliding plate *o*, which closes the slot *a*, all constructed to operate substantially as and for the purpose set forth.

FRANCIS E. WALKER.

Witnesses:

ALX. JOHN,
W. F. EVANS.