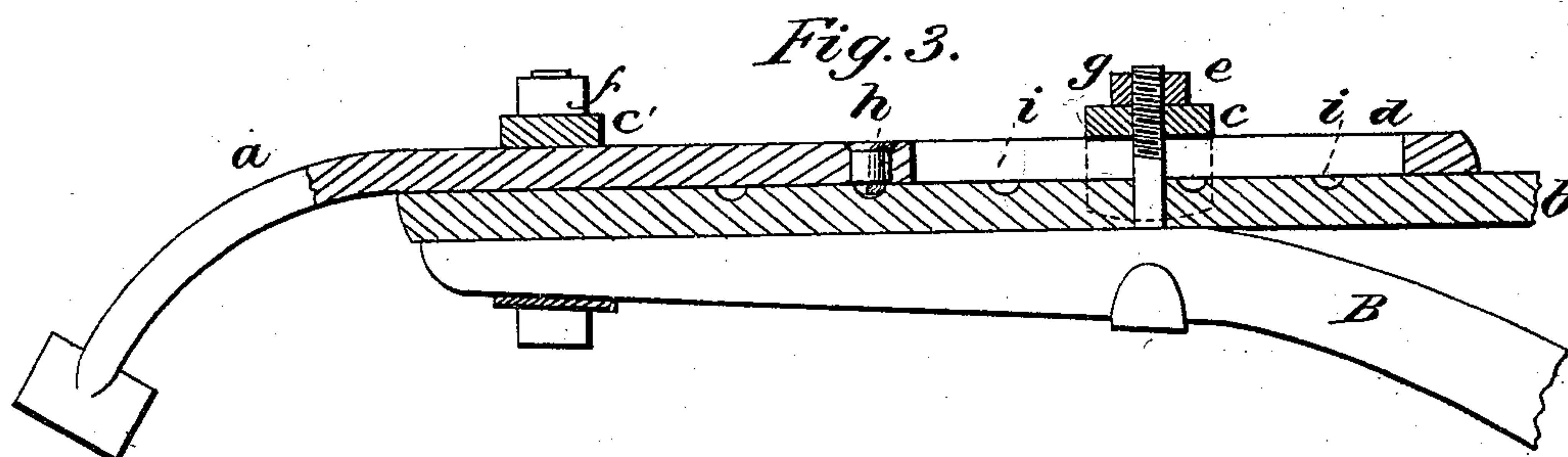
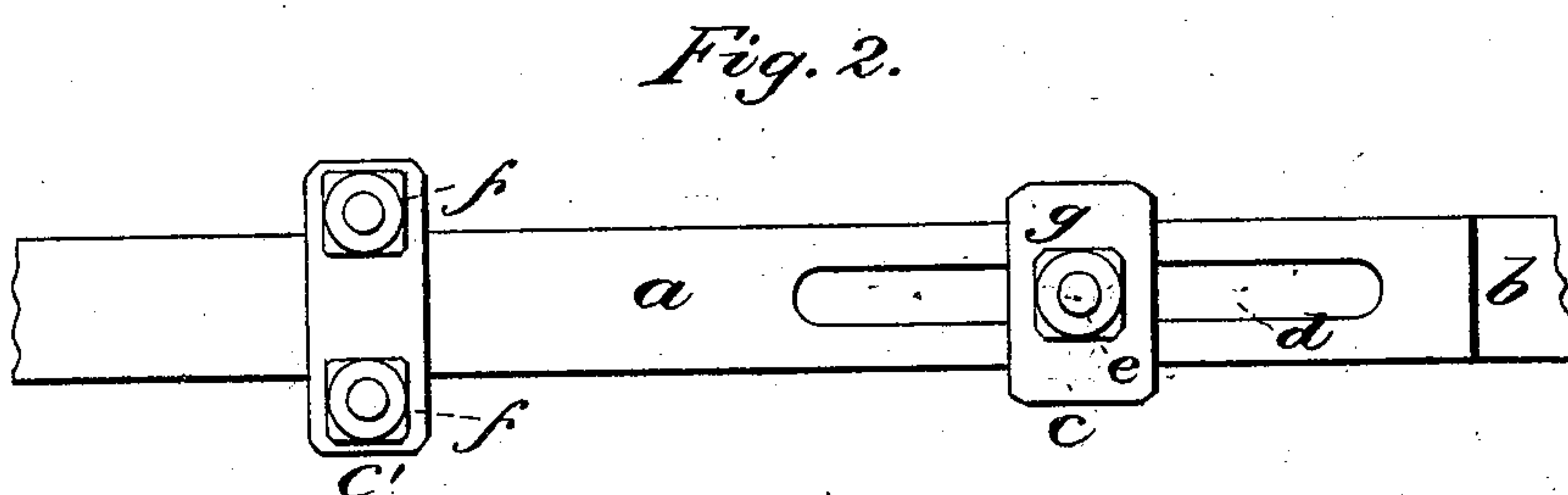
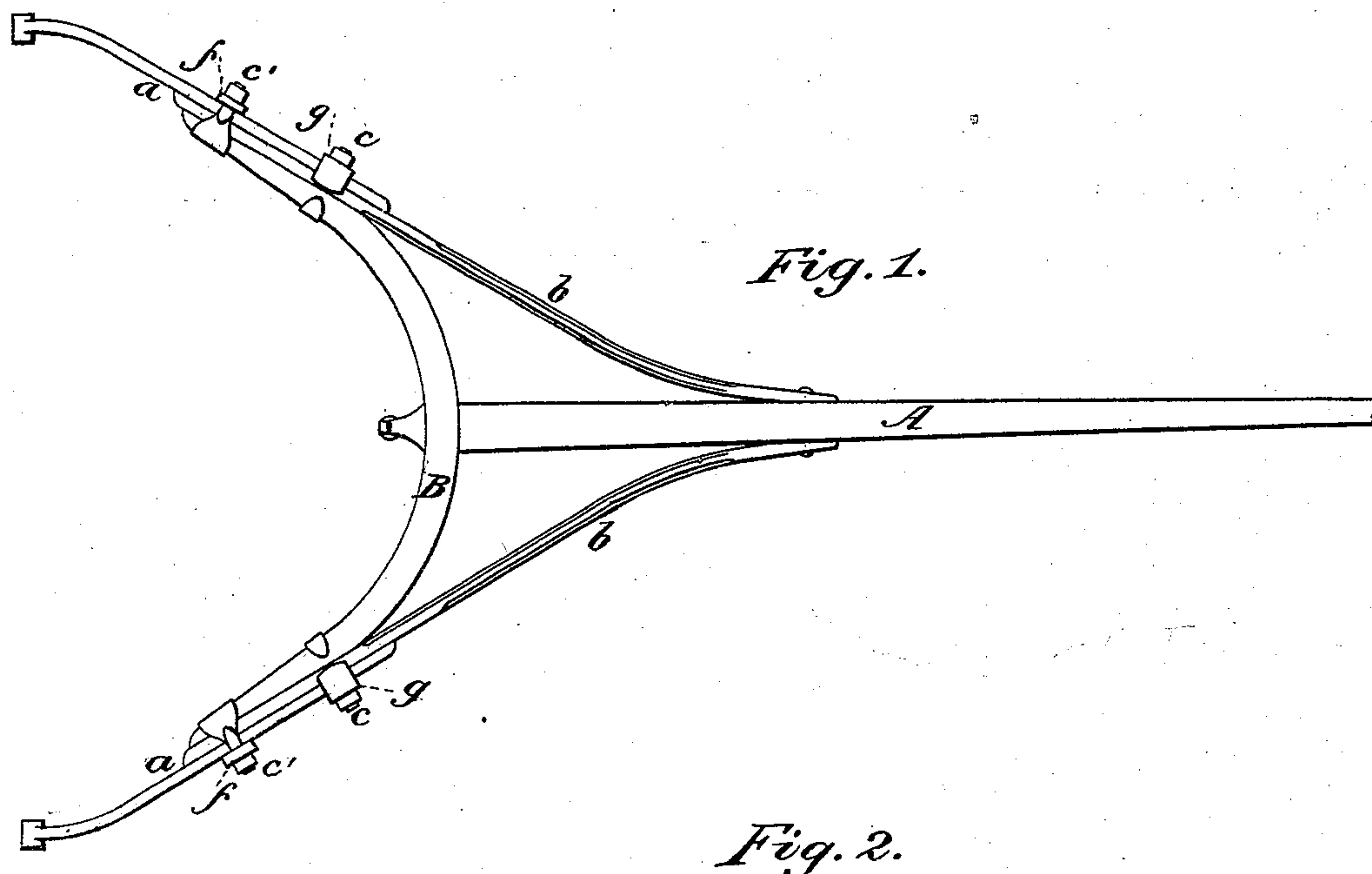


I. K. LITTLEFIELD.
Carriage-Pole Attachments.

No. 148,310.

Patented March 10, 1874.



Witnesses.
Frank H. Jordan.
Edwin W. Haskell.

Inventor.
Ireneal K. Littlefield
per Wm Henry Clifford
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UNITED STATES PATENT OFFICE.

ISREAL K. LITTLEFIELD, OF BRIDGTON, ASSIGNOR OF ONE-HALF HIS RIGHT
TO ENOCH MARTIN AND ISRAEL P. WATERHOUSE, OF PORTLAND, ME.

IMPROVEMENT IN CARRIAGE-POLE ATTACHMENTS.

Specification forming part of Letters Patent No. **148,310**, dated March 10, 1874; application filed
January 9, 1874.

To all whom it may concern:

Be it known that I, ISREAL K. LITTLEFIELD of Bridgton, in the county of Cumberland and State of Maine, have invented certain new and useful Improvements in Carriage-Pole Attachments; and I do hereby declare that the following is a full, clear, and exact description thereof, that will enable others skilled in the art to which it appertains to make and use the same, reference being had to the accompanying drawings, and to the letters of reference marked thereon, which form a part of this specification.

Figure 1 is a top-plan view of a carriage-pole with my invention attached thereto. Fig. 2 is a view in detail, parts being broken away, of the sliding bolt or bar, showing its slot and the nuts for holding the bar when desired firmly and securely to the brace that is connected with the pole and cross-bar. Fig. 3 is a detail view, partly in section.

Same letters show like parts.

The object of my invention is to produce an attachment to ordinary poles whereby they may be connected to carriages that vary in the width or distance between their fastenings for securing the pole to the carriage axle-tree.

It may be thus described:

A shows the carriage-pole; B, the cross-bar or "spreader." The inner end of the pole is attached to the cross-bar in the usual manner. *a a* show two sliding bars, to be hereinafter described. In the upper end of each of these sliding bars is a slot, *d*, shown in Figs 2 and 3. *b b* are braces, which extend from the pole to the outer ends of the cross-bar B, as shown in Fig. 1, to which they are firmly fastened. The sliding bars *a* are connected with the braces *b* by the clamps *c c'*. In the clamp *c* is a set-screw, *e*, which is passed through the center of said clamp, (see Figs. 2 and 3,) and into the brace *b*. This set-screw, it will be seen, passes also through the slot *d* in the sliding bar. On the lower side of the sliding bars *a*

are projections *h*, which fit into recesses *i* on the braces *b*. These projections and recesses are clearly shown in Fig. 3, and their purpose is to prevent the sliding bar from slipping should the set-screws become slightly loosened.

The operation is simple, and may be thus described: Supposing the pole A, with its accompanying devices, before described, to be attached to a carriage whose width of fastening on the axle-tree is the same as those shown in Fig. 1, and it is required to fit this pole to another carriage whose distance between the fastenings is somewhat less. All that is necessary to do is to slacken the nuts *f* on the clamp *c'*, the nuts *g* on the clamp *c*, and slide the bolts upward, which operation, it will be observed, diminishes the distance between the ends of the sliding bolts *a*. When they are brought as near together as required, the projection *h* is allowed to sink into one of the recesses *i*, the nuts *f* and *g* are tightened, and the sliding bars are held securely in position.

This, it will be observed, is a very simple and convenient attachment.

Figs. 2 and 3 are on an enlarged scale from that of Fig. 1.

What I claim as my invention, and desire to secure by Letters Patent, is—

The combination, with a carriage-pole having the braces *b* and cross-bar B, of the clamps *c c'*, set-screw *e*, and sliding bolts *a*, provided with the slots *d* and projections *h*, the said projections *h* being made to fit corresponding recesses in the braces *b*, substantially in the manner and for the purpose set forth.

In testimony that I claim the foregoing I have hereunto set my hand this 18th day of August, 1873.

ISREAL K. LITTLEFIELD.

Witnesses:

NATHAN CLEAVES,
THOS. B. HASKELL,
HENRY B. CLEAVES.