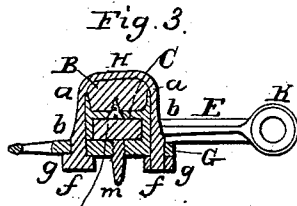
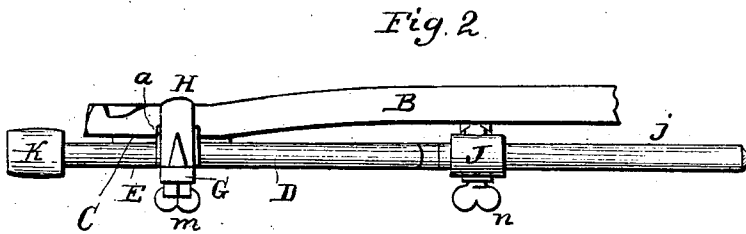
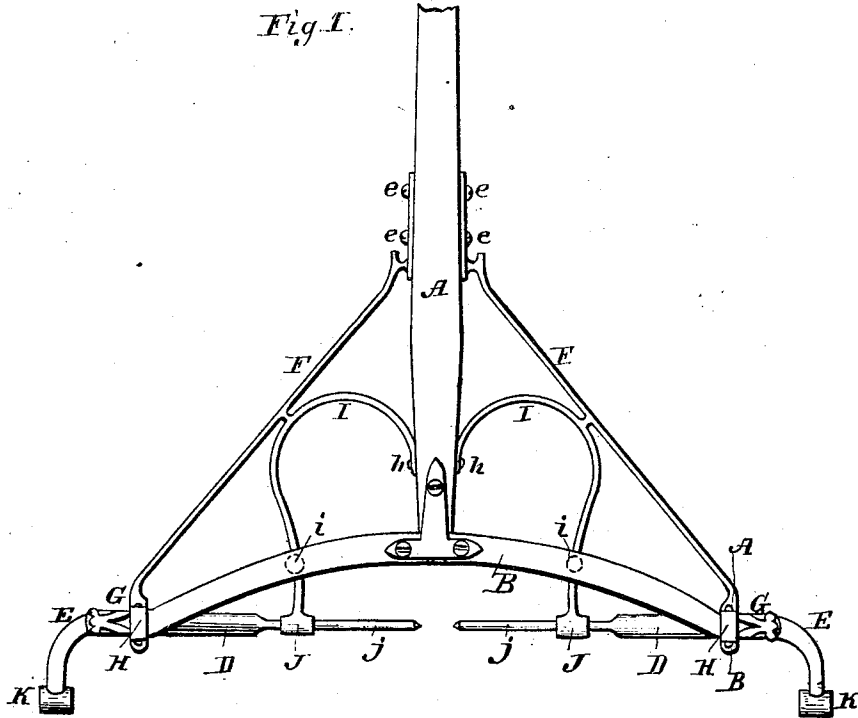


H. F. EDWARDS.  
Carriage-Pole Attachment.

No. 88,149.

Patented March 23, 1869.



Witnesses:  
Thos. H. Dodge  
D. L. Miller.

Inventor:  
H. F. Edwards

# United States Patent Office.

H. F. EDWARDS, OF WORCESTER, MASSACHUSETTS, ASSIGNOR TO HIMSELF AND B. I. PEABODY, OF SAME PLACE.

Letters Patent No. 88,149, dated March 23, 1869.

## ADJUSTABLE POLE-ATTACHMENT FOR CARRIAGES.

The Schedule referred to in these Letters Patent and making part of the same.

Know all men by these presents:

That I, H. F. EDWARDS, of the city and county of Worcester, and Commonwealth of Massachusetts, have made certain new and useful Improvements in Adjustable Pole-Attachments for Carriages, &c.; and I do hereby declare that the following is a full, clear, and exact description of the same, reference being had to the accompanying drawings, forming a part of this specification, in which—

Figure 1 represents a plan or top view of the rear portion of a carriage-pole with my improved attachment applied thereto;

Figure 2 represents a rear view of a part of the device shown in fig. 1; and

Figure 3 represents a section on line A B, fig. 1.

To enable those skilled in the art to which my invention belongs, to make and use the same, I will proceed to describe it more in detail.

The nature of my invention consists in the combination with the pole of a carriage of a peculiar-constructed adjustable attachment, as shown in the drawings, and hereafter explained.

In the drawings, the part marked A is the pole, to the rear end of which is secured the curved cross-piece B. To the under side of each end is secured a metal guide-piece, C, by means of a screw, 1.

The guide-pieces C have bevel-flanges *a a*, which fit on each side of the ends of the cross-piece B, as shown in fig. 3 of the drawings.

The lower sides of the guide-pieces C are provided with flanges *b*, between which the rectangular parts D of the slide-pieces E work.

The braces F are secured to the pole, at their front ends, by means of screws or bolts *e*, while their rear ends G are fastened to the under sides of the ends of the cross-piece B, by means of clips H.

The loop-part of the clips H clasps the ends of the cross-piece B, while their ends *f*, pass around the guide-pieces C, thence through holes in the enlarged rear ends G, and are provided with threads to receive the nuts *g*, whereby the ends G can be screwed firmly against the lower edges of the flanges *b* of the guide-pieces C, as fully indicated in fig. 3 of the drawings.

Combined with the braces F, are auxiliary braces I, the forward curved ends of which are fastened to the pole by screws, or bolts *h*. Braces I are also secured to the under side of the curved cross-piece B, by means of bolts or screws *i*, shown in dotted lines, fig. 1, the braces being enlarged to admit of the passage of the bolt or screws *i*.

Braces I extend back of the cross-piece B, and are provided with enlarged eye-pieces J J, to receive the round ends *j j* of the slide-pieces E E, as indicated in figs. 1 and 2.

The eye-pieces J J may be made separate from the braces I I, in which case they should be provided with arms, to be fastened to the cross-piece B. I prefer, however, to make each of the braces F, with its auxiliary brace I, in one piece, and support the eye J in the manner shown in the drawings.

Thumb-screws *m m* are fitted to the rear ends G of the brace F, while thumb-screws *n n* are fitted to the under sides of the eye-pieces J, and by means of which thumb-screws *m* and *n*, the slide-pieces E E are held securely in place.

It will therefore be seen that the slide-pieces E E can be moved in or out, to adjust the eyes K K to fit between the ears of a narrow or wide carriage, and then securely fastened, by means of the thumb-screws *m n*, in such adjusted position.

By my improvements, the eyes K K always remain in the same horizontal line, that is, the holes through the same remain in a line at right angles to the pole, which obviates the objections to the curved sliding-pole attachments, which have heretofore been employed, in some instances, for adjusting poles to carriages of different widths.

In the latter case, the eyes, as soon as they are moved, are thrown out of line, and consequently the holes through the same must be made much larger than the eye-bolts, in order to prevent binding, thus rendering the carriage liable to rattle, and more liable to get out of order than when my improved pole-attachment is employed.

Having described my improved adjustable pole-attachment for carriages,

What I claim therein, and desire to secure by Letters Patent, is—

1. The combination, with the rear cross-piece of a carriage-pole, of the horizontally-sliding eye-pieces E E, having their axis or line of motion at right angles to the pole, substantially as shown and described.

2. The combination, with the cross-piece B and ends *j j*, of the eye-pieces J J, substantially as and for the purposes set forth.

3. The combination, with the ends of the cross-piece B, and the ends G of the braces F, of the clips H H and guide-pieces C, substantially as and for the purposes set forth.

4. The combination, with the slide-pieces E E, brace-ends G G, clips H H, and eye-pieces J J, of the thumb-screws *m* and *n*, substantially as shown and described.

H. F. EDWARDS.

Witnesses:

THOS. H. DODGE,  
D. L. MILLER.