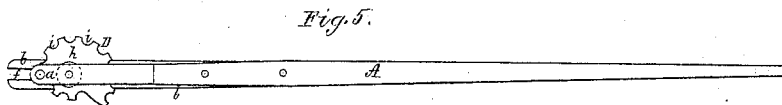
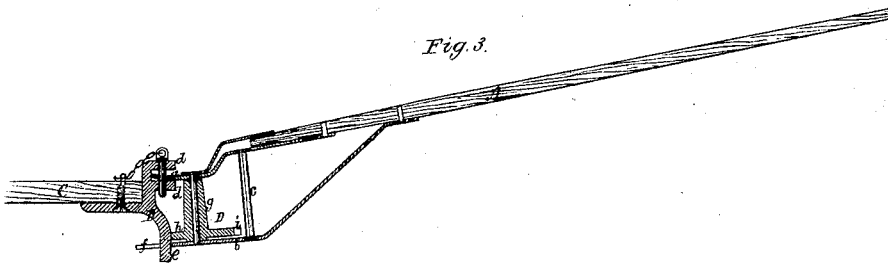
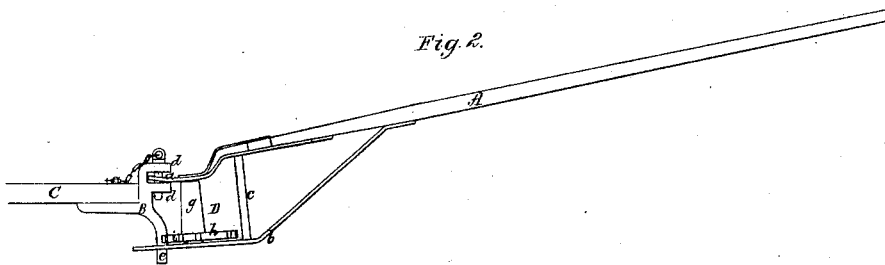
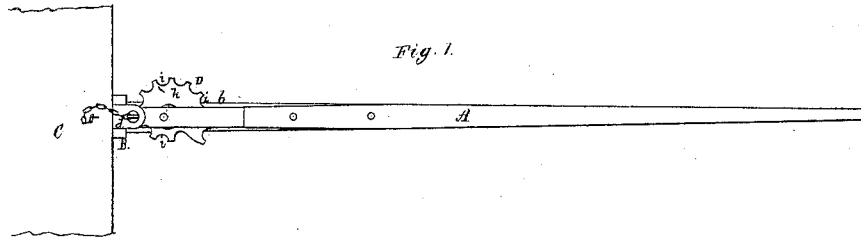


A. G. SAFFORD.

Improvement in Pole-Adjusters for Horse-Cars.

No. 114,205.

Patented April 25, 1871.



Witnesses.

S. N. Piper

L. N. Miller

A. G. Safford

by his attorney

R. H. Eddy

United States Patent Office.

ALBERT GALLATIN SAFFORD, OF BOSTON, MASSACHUSETTS.

Letters Patent No. 114,205, dated April 25, 1871.

IMPROVEMENT IN POLE-ADJUSTERS FOR HORSE-CARS.

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

To all persons to whom these presents may come:

Be it known that I, ALBERT GALLATIN SAFFORD, of Boston, of the county of Suffolk and State of Massachusetts, have invented a new and useful Mechanism for Determining the Inclination of the Pole of a Horse-Railway Carriage; and I do hereby declare the same to be fully described in the following specification and represented in the accompanying drawing, of which—

Figure 1 is a top view;

Figure 2, a side elevation; and

Figure 3, a vertical section of a carriage-pole and its supporter as provided with my invention.

Figure 4 is a top view of the adjuster, to be hereinafter described.

Figure 5 is a top view of the pole as separate from its supporting fixture B.

In the drawing—

A denotes the pole, and

B its supporter or the fixture for pivoting the pole to the carriage.

The part of the carriage to which such fixture is applied is shown at C.

The pole as usually made has at its rear part an eye-piece, *a*, and a furcated brace, *b*, they being connected by a standard, *c*.

The eye-piece goes between the ears *d d* of the sup-

porter B, and the tail or journal *e* of the supporter is received in the fork *f* of the brace *b*.

In carrying out my invention I arrange between the eye-piece *a* and the brace *b*, in manner as shown, what I term the rotary adjuster D, which consists of an upright shaft, *g*, and a nautilus or scroll-shaped plate, *h*, having a series of notches, *i i i*, in and around its periphery, all being formed as represented.

The adjuster is to be pivoted to the eye-piece and the brace, so as to be capable of being revolved horizontally between them.

The journal *e* of the supporter B when in the fork of the brace is to rest in some one of the notches of the adjuster. By turning the adjuster around more or less, as occasion may require, it may be changed in position so as to cause the pole to assume such an inclination as it may be desirable to impart to it.

I claim—

The arrangement and combination of the adjuster D, as described, with the forked brace *b* and eye-piece *a* of the pole A, and with or for use with the supporter B, in manner and for the purpose as explained.

ALBERT GALLATIN SAFFORD.

Witnesses:

R. H. EDDY,

J. R. SNOW.