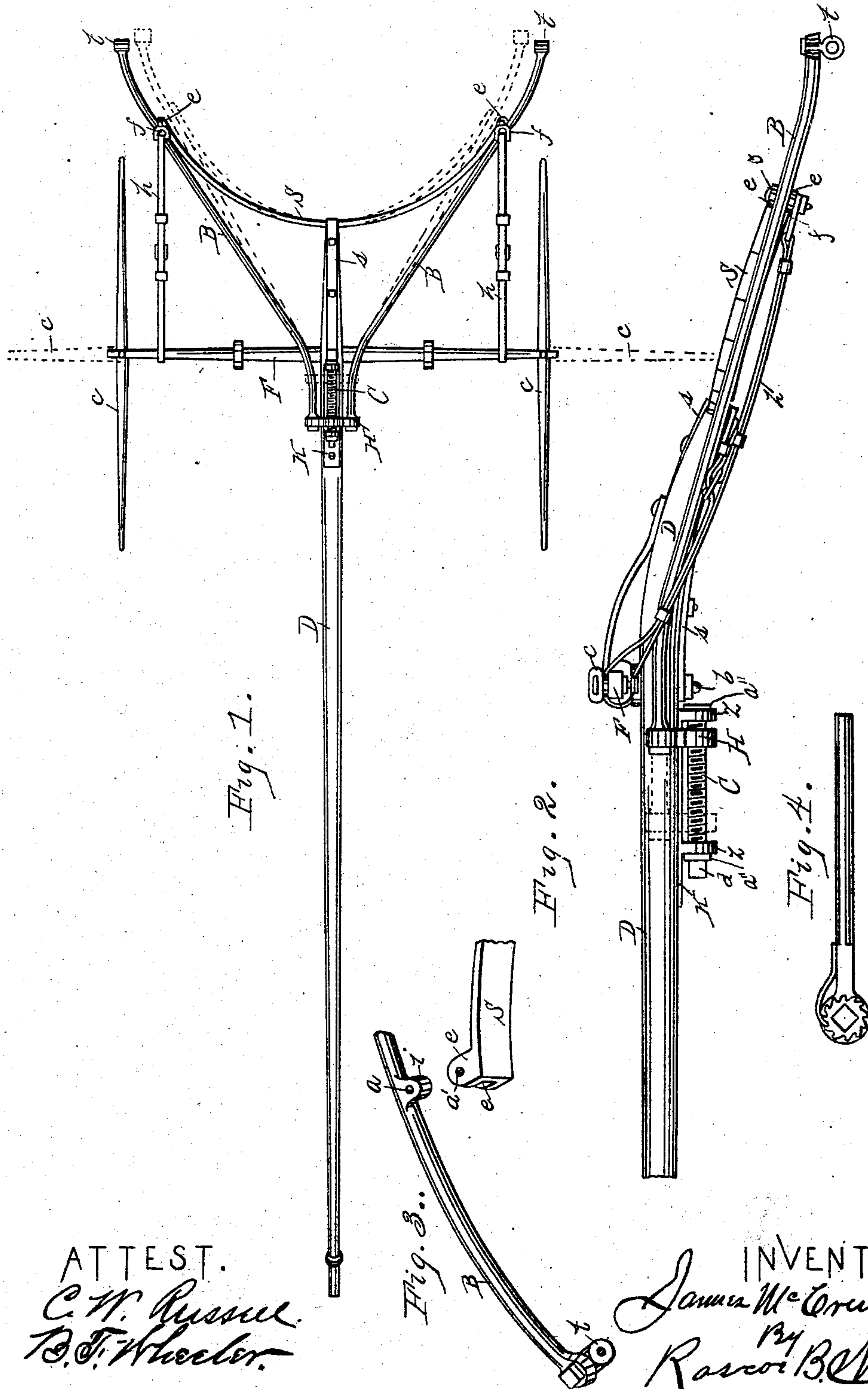


(No Model.)

J. McCRUDDEN.
CARRIAGE POLE.

No. 365,444.

Patented June 28, 1887.



ATTEST.
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UNITED STATES PATENT OFFICE.

JAMES McCRUDDEN, OF OVID, MICHIGAN.

CARRIAGE-POLE.

SPECIFICATION forming part of Letters Patent No. 365,444, dated June 28, 1887.

Application filed December 18, 1886. Serial No. 221,954. (No model.)

To all whom it may concern:

Be it known that I, JAMES McCRUDDEN, a citizen of the United States, residing at Ovid, in the county of Clinton and State of Michigan, have invented certain new and useful Improvements in Carriage-Poles; and I do declare the following to be a full, clear, and exact description of the invention, such as 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 and figures of reference marked thereon, which form a part of this specification.

My invention in carriage-poles relates to that class wherein the points of attachment to the carriage are made adjustable by expanding or contracting the attaching-points, so as to enable the ready attachment of the pole to vehicles wherein the hasp or clip to which the rear ends of the pole attach vary in distance from each other on account of their location on the axle by the manufacturer; and by my present arrangement a pole constructed for a carriage may be so adjusted as to enable using it on a sleigh.

My invention consists in the general arrangement of parts, as hereinafter fully set forth, and pointed out particularly in the claims.

In the drawings forming a part of this specification, Figure 1 is a bottom plan of my invention. Fig. 2 is an enlarged side elevation of same. Fig. 3 shows enlarged details broken away. Fig. 4 is a view of a ratchet-wrench, which I use for adjusting the pole.

In the drawings, D is the pole; F, the evener; *c c*, the whiffletrees, all of which are in common use.

B B are braces or draft-rods, to the free ends of which I attach the swivel-eyes *t t*, through which the bolts pass, securing the pole to the vehicle.

To the forward ends of the brace-rods B B, I attach a traveling cross-head, H, which I locate under the tongue in advance of the evener, as shown in Figs. 1 and 2. Said cross-head is provided with a screw-threaded hole. Passing horizontally through the center, fitting said hole, is a screw-threaded shaft, C, having its ends journaled in the depending hangers Z Z of the plate K, firmly attached to the under face of the pole. The shaft C is provided

with the collars *a' a'*, one of each bearing against the outer face of the hangers Z Z, whereby said shaft is prevented from working endwise, as said shaft is revolved in the hangers. The projecting end *d* of said shaft is made square to receive a wrench, whereby said shaft may be turned as desired.

S is a concavo-convex spring, being attached at its center to the rear end of the tongue; and *s* is a hasp or metal strap passing over the spring and onto the upper and under face of the tongue, to hold the spring in position. Each end of the spring S is provided with a set of ears, *e e*, having a space between them.

I form on each brace B, at the point of contact with the end of the spring S, a lug, *i*, as clearly shown in Fig. 3. Said lug fits snugly between the ears *e e* of the spring, said parts being hinged together by means of a bolt, *o*; and *f* is a clasp or loop-plate attached to the end of the spring, through which I pass the strap *h*, leading to and around the evener F.

It will be observed from the foregoing construction, should the points *t t* of the tongue attachment to the vehicle, as shown in the position of Fig. 1, be too far from each other to properly meet the fastenings upon the axle of the vehicle, the points *t t* may be brought toward each other by applying a wrench to the square head *d* of the shaft C and turning said shaft so as to force the traveling head H back to the position shown in Fig. 2, or dotted position of Fig. 1, whereby the forcing back of the braces B B causes the ends of the spring S to be thrown toward each other, carrying the attaching-points *t t* inward to the position of Fig. 2 or dotted position of Fig. 1. The attaching points are moved from each other by simply turning the shaft C in an opposite direction, when the drawing forward of the braces B B causes the spring S to straighten, thus throwing the points *t t* outward or from each other.

It will be observed from the foregoing construction of parts that a very slight movement of the points *t t* may be obtained, thus enabling me to make a very accurate and complete adjustment of the attaching ends of the braces B B. The swivel-eyes *t t* may be dispensed with, and the bolts attaching the tongue to the vehicle may pass directly through the ends of the braces B B.

Having thus fully set forth the points of my

invention, what I claim as new, and desire to cover by Letters Patent, is—

1. In combination with the tongue, the concavo-convex spring attached to the rear end thereof, the draft-rods hinged to said spring, having their front ends attached to the traveling head mounted on the screw-threaded shaft C, said shaft being journaled in the hangers of the plate K, as and for the purposes specified.
2. In combination with the tongue, the curved metal spring S, having ears *e* formed on its ends, the braces B, with lugs *i*, pivoted to said ears, the traveling head H, carrying the forward ends of the braces and having a screw-threaded bearing on the shaft C, said shaft being journaled in the hangers Z Z of the plate K, and having collars *a'' a''*, substantially as specified.

3. The combination of the tongue, the concavo-convex spring attached to the rear end of the tongue, the metal strap *s*, passing over the end of the tongue and said spring, the braces B B, each carrying a swiveled eye at the free end and having hinged connection to the ends of said spring, their forward ends being attached to the traveling head, and mechanism set forth for moving said head, as and for the purposes specified.

In testimony whereof I affix my signature in presence of two witnesses.

JAMES MCCRUDDEN.

Witnesses:

B. V. SOULE,

JAMES McLAUGHLIN.