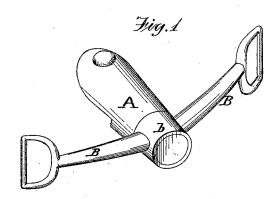
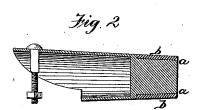
## R. S. GRUMMON.

Pole-Crabs for Vehicles.

No. 199,152.

Patented Jan. 15, 1878.





Witnesses; <u>Chal</u>Qbill WBMagnider.

Inventor Robert d. Grummon by his atty Gog \* Cog

## UNITED STATES PATENT OFFICE.

ROBERT S. GRUMMON, OF NEWARK, NEW JERSEY.

## IMPROVEMENT IN POLE-CRABS FOR VEHICLES.

Specification forming part of Letters Patent No. 199,152, dated January 15, 1878; application filed June 2, 1877.

To all whom it may concern:

Be it known that I, ROBERT S. GRUMMON, of Newark, in the county of Essex and State of New Jersey, have invented a new and useful Improvement in Pole-Crabs for Vehicles, of which the following is a specification, reference being had to the accompanying drawings.

The invention relates to certain improvements in pole-crabs which are used upon the tongues and poles of vehicles; and consists in the matters hereinafter fully described.

The object of the invention is to afford a pole-crab having all the strength of the best forms now in use, and which will be more easy of transportation and much more cheaply produced.

Figure 1 is a perspective view of a device embodying the elements of the invention. Fig. 2 is a vertical central longitudinal section of same.

In the accompanying drawings, A represents the pole-tip, which is provided at one end with a socket to receive the front extremity of the pole, wherein it is or may be secured in any suitable manner. The other end of the pole-tip is reduced to a less diameter, forming the annular recess a.

B represents a bar or yoke, the ends of which are provided with apertures, through which are passed the straps serving to connect this yoke with the collars on the horses. At or near the center of the yoke B is provided the socket collar or aperture b, of such dimensions as to receive that part of the poletip about the recess a.

The crab is formed by inserting the end of the pole-tip into the socket b, and there securing it rigidly by brazing, shrinking, riveting, or in any other suitable manner.

The pole-crabs now in use are generally made of one piece, of the same material, and

are usually composed of wrought or cast iron. These are not desirable or practicable, for the reason that the cast-iron crab cannot be depended upon for strength, and the wrought-iron crabs are apt to part, and are very expensive and difficult of construction.

The novelty and utility of this invention consists in constructing the crab of two or more pieces of the same or different material. Thus, in the present instance, the pole-tip or part A is made of one material, preferably of some cast metal, and the yoke B of another, preferably of some wrought metal. They are entirely independent of each other, can be attached together in any way desired, or separated and packed for transportation, while the destruction or breakage of either does not affect the other piece, so that the whole crab is not destroyed, as is the case with those now in use, whether cast or wrought, when one part of it only is injured.

I am aware that neck-yokes have been constructed of several pieces of material, arranged so that the yoke is indirectly secured to the pole, or a swivel thereon; hence I lay no claim to such a device; but

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

A pole-crab consisting of a pole-tip and yoke composed of different materials, the yoke being secured directly upon the tip, substantially as shown and described.

In testimony that I claim the foregoing improvement in pole-crabs for vehicles, as above described, I have hereunto set my hand this 31st day of May, 1877.

ROBERT S. GRUMMON.

Witnesses:

WM. D. CARTER, E. G. BURNET.