R. BEEM.

DRAFT ATTACHMENT.

No. 184,574. Patented Nov. 21, 1876.

Fig. 1.

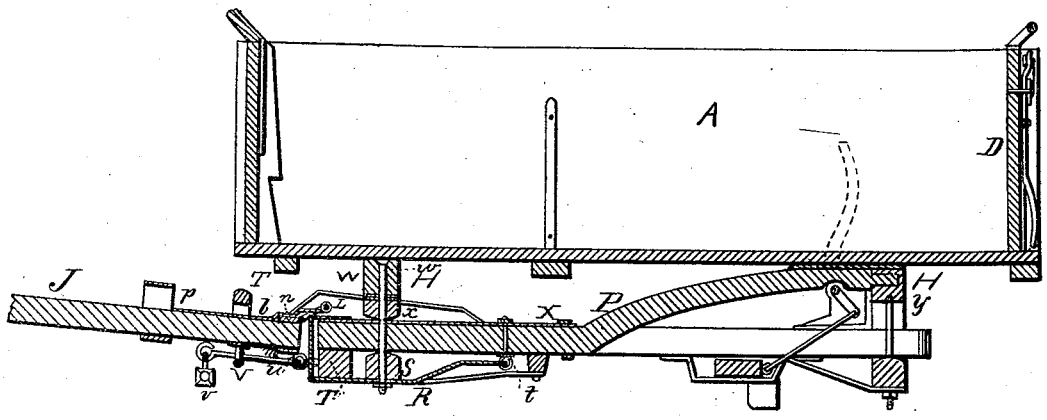
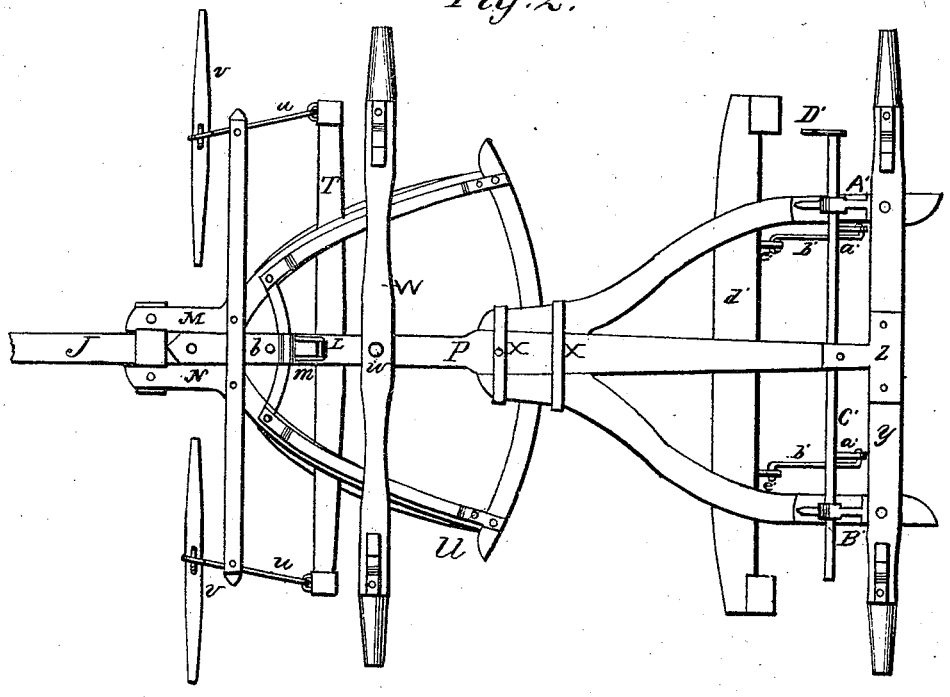


Fig. 2.



Witnesses
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UNITED STATES PATENT OFFICE.

RICHARD BEEM, OF ANTRIM, OHIO.

IMPROVEMENT IN DRAFT ATTACHMENTS.

Specification forming part of Letters Patent No. **184,574**, dated November 21, 1876; application filed April 19, 1876.

To all whom it may concern:

Be it known that I, RICHARD BEEM, of Antrim, in the county of Guernsey and State of Ohio, have invented a new and useful Improvement in the Construction of Wagons, of which the following is a specification, reference being had to the accompanying drawings.

The invention relates to an improvement in the running-gear of vehicles, and consists in the mechanism hereinafter specifically described.

Figure 1 is a central vertical longitudinal section of a device embodying the elements of the invention. Fig. 2 is a top view of the running-gear.

J represents the tongue, provided on its rear end with the strap *b*, which incloses one side of the link L in such manner as to allow the free vibratory motion to the other side toward the front of the tongue, and resting, when in its initial position, upon the upper surface of said tongue. To adjust the tongue in position, pass its rear end between the bars M N of the front hound, and into the pocket or receiver *m*, the bar *n* of which being between the strap *b* and link L, and the end of the tongue, so that as the tongue is forced rearward the link will pass beyond the bar *n* and fall behind it, thus preventing the tongue from being removed from the wagon by jolting or any sudden movement of the horses. When desired to withdraw the tongue, the link L must be raised above the plane of the upper surface of the bar *n*, and the tongue drawn forward, it then being capable of removal at will.

The front ends of the bars M N are connected by the bars *p*, forming a jaw in the outline of a parallelogram, in which the tongue is supported and allowed an upward movement.

It will be observed that the great advantage derived from securing the tongue by the above-described means is in the fact that no bolts or screws are employed, and that it is impossible to remove the tongue without raising the link.

P represents the coupling-pole, which connects the two hounds, and is provided, at a suitable point on its under surface, with the hook-bolt *t*, which secures the rear end of the shoe R, the other end passing forward below the center of the axle S and double-tree T, thence around the front of the double-tree and coupling-pole, upon the upper surface of which it is secured by a bolt passing down through it, the coupling-pole and double-tree thus fastening them together and allowing each its proper operation. The ends of the axle and double-tree are secured and supported by means of the bars U, having their rear ends bolted to the rear of the hound, their central parts to the axle, and their front ends on the bars M N, at a point opposite the jaw *m*. To the ends of the double-tree T are movably attached the link-bars *u*, which pass through the links V, and are provided with the single-trees *v*.

The front hound is secured to the coupling-pole by the king-bolt *w*, which passes through the bolster W, bar *x*, coupling-pole P, and axle S, all of which are allowed to perform their operation independent of each other.

Near the jaws X of the hind hound the coupling-pole is curved upward and forward a suitable distance, and has its rear end tenoned in the center of the front of the bolster Y, the joint being made additionally secure by means of the T-plate Z.

It is obvious that the rear bolster and coupling-pole can be secured by other means than the above-described, and also that by the above construction greater strength is obtained than by any of the devices commonly employed.

The front hound is secured in position by the king-bolt, and is allowed all necessary lateral play.

The double-tree T is bolted immediately beneath the front of the coupling-pole, and turns to either side with the front hound, and, at the same time, moves laterally in the opposite direction, thus facilitating the horses in turning, by not crowding their hind parts, allowing them the free use of their bodies, and enabling them to turn readily and easily.

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

1. The shoe R, having its rear end secured

by the hook-bolt *t*, and arranged as shown, in combination with the coupling-pole P and double-tree T, substantially as described.

2. The combination of the shoe R, coupling-pole P, double-tree T, bolster W, bar *x*, and axle S, substantially as set forth.

In testimony that I claim the foregoing improvement in the construction of wagons, as above described, I have hereunto set my hand this 1st day of April, 1876.

RICHARD BEEM.

Witnesses:

JAMES STOCKDALE,

GEORGE W. MONSON.