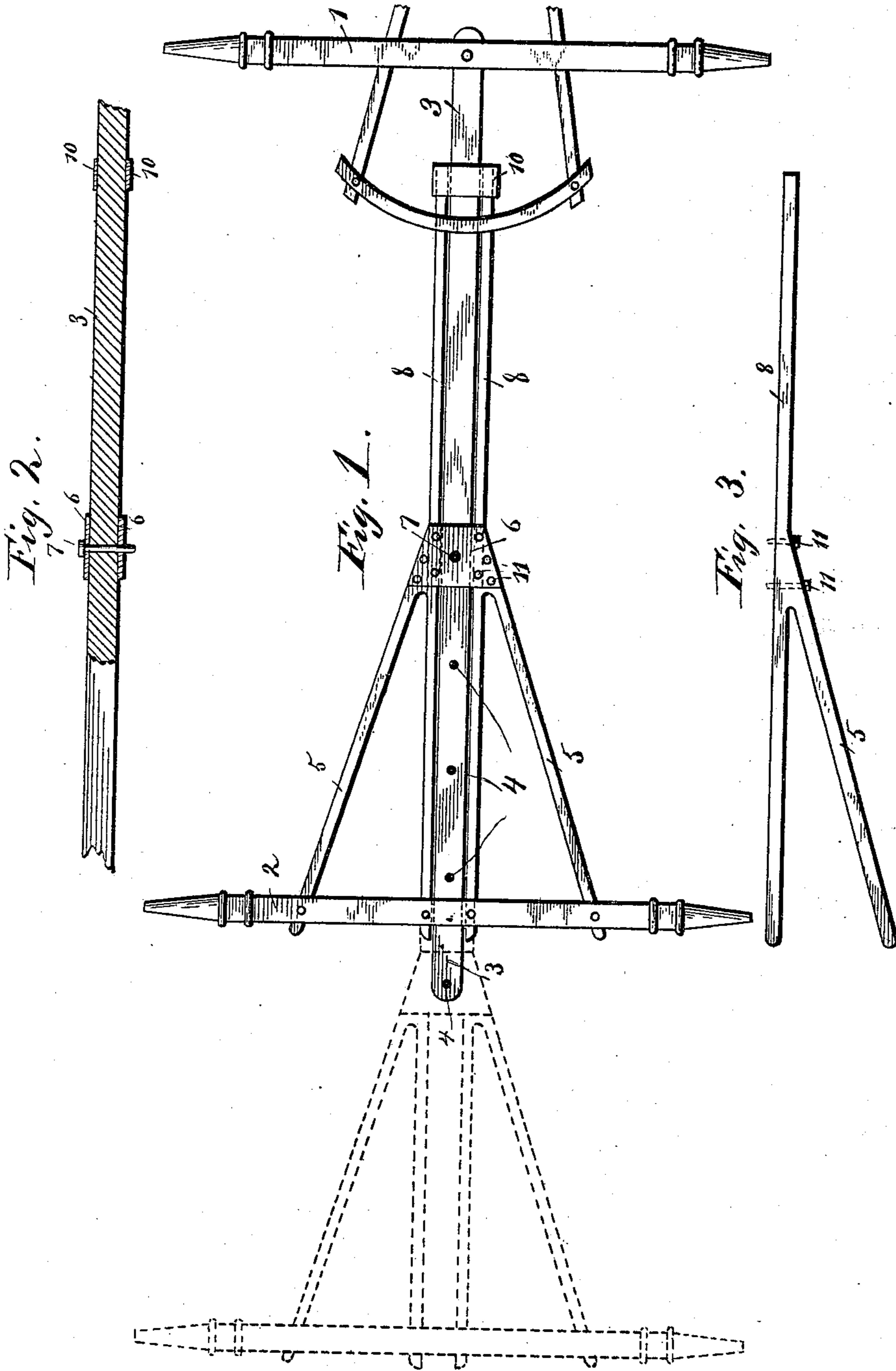


(No Model.)

J. R. HESS.
WAGON REACH.

No. 488,894.

Patented Dec. 27, 1892.



Witnesses,
E. G. Jutika
C. P. Elwell

Inventor,
John R. Hess
By *Ry Skaffius & Atkins*
Attorneys.

UNITED STATES PATENT OFFICE.

JOHN R. HESS, OF SOLON, IOWA, ASSIGNOR OF ONE-HALF TO JACOB H. FISHER, OF SAME PLACE.

WAGON-REACH.

SPECIFICATION forming part of Letters Patent No. 488,894, dated December 27, 1892.

Application filed July 6, 1892. Serial No. 439,154. (No model.)

To all whom it may concern:

Be it known that I, JOHN R. HESS, of Solon, county of Johnson, and State of Iowa, have invented certain new and useful Improvements in Wagon-Reaches, of which the following is a specification, reference being had to the accompanying drawings.

The object of my invention is to produce a strong extensible wagon reach of improved construction, whereby the reach may be extended its entire length without danger of uncoupling or tilting of the front or rear frames.

In the accompanying drawings, Figure 1 is a top plan view of the front and rear axles of a wagon provided with my reach close coupled, and showing the long coupling in dotted lines; Fig. 2 is a side view partly in section of my reach detached; Fig. 3 is a top plan view of the reinforcing pieces detached.

Referring to the figures on the drawings, 1 indicates the front frame or axle, and 2 the rear frame or axle of a wagon.

3 indicates the reach or coupling-pole, which consists preferably of a piece of wood squared or round, in the usual manner, pivotally secured to the frame 1, and provided with holes 4 for increasing or diminishing the distance between the front and rear axles.

5 indicates hounds fastened at one end, respectively, to the extremities of the axle 2, and converging toward the middle of the wagon where they are united together to form a sheath 6 for the coupling-pole.

7 indicates a pin adapted to pass through the sheath and to pass through the holes 4 to unite it to the coupling-pole and thereby fasten the front and rear axles together.

The parts above described are all well known in the art.

My invention consists in providing reinforcing or extension pieces 8 which consist of parallel bars separated a suitable distance to admit the free motion between them of the

coupling tongue, and which extend forwardly and rearwardly from the sheath to which they are firmly united. At their rear ends they are fastened to the axle or frame 2, and at their forward ends they are fastened together by a band 10 or the like, which forms an auxiliary supporting piece upon the coupling-pole.

Any suitable means of fastening the extension pieces to the sheath may be employed, as for instance those illustrated in Fig. 3 of the drawings, in which the hounds and the extension pieces are shown as consisting of one piece having its rearward end bifurcated and reinforced by bolts and nuts 11. In this form the sheath passes around the extension piece near its point of bifurcation; but of course separate hounds and extension pieces may be employed, if preferred.

It will be observed that if the coupling-pole is drawn out its full length, as illustrated in dotted lines in Fig. 1, the band 10 will still cause the coupling parts to afford the same support vertically and laterally as would be afforded by the hounds in the ordinary close coupled wagon.

What I claim is:—

The combination with the front and rear axles, the coupling pole with a series of holes therein, and the hounds of the rear axles secured to a sheath having a hole to receive a pin in connection with the holes of the coupling pole, of the extension pieces secured midway to said sheath and arranged and adapted to slide on opposite sides of the coupling pole, and a guide band secured to the front ends of the extension pieces, substantially as specified.

In testimony of all which I have hereunto subscribed my name.

JOHN R. HESS.

Witnesses:

C. H. SHIRCLIFF,
W. J. SHIRCLIFF.