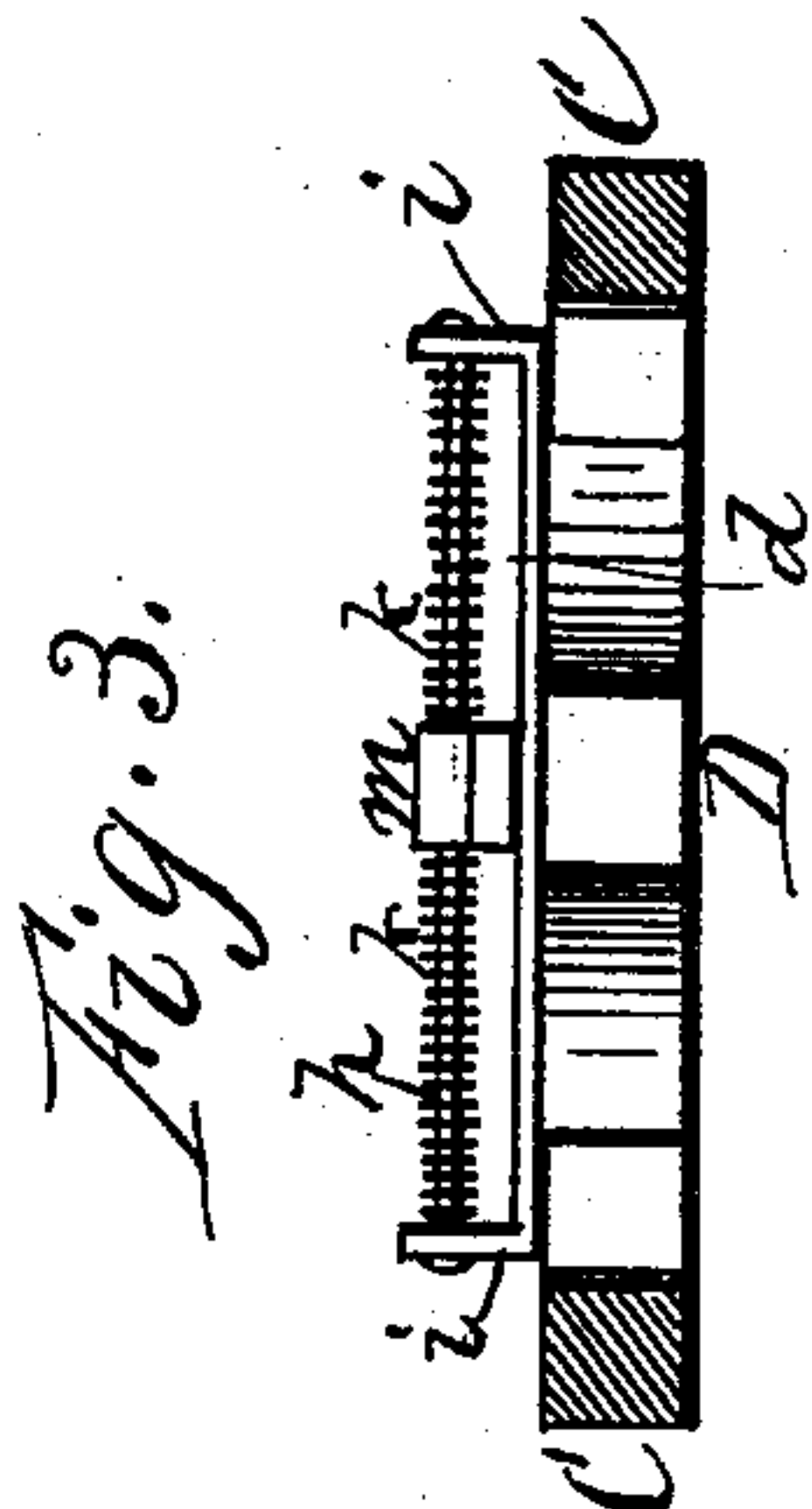
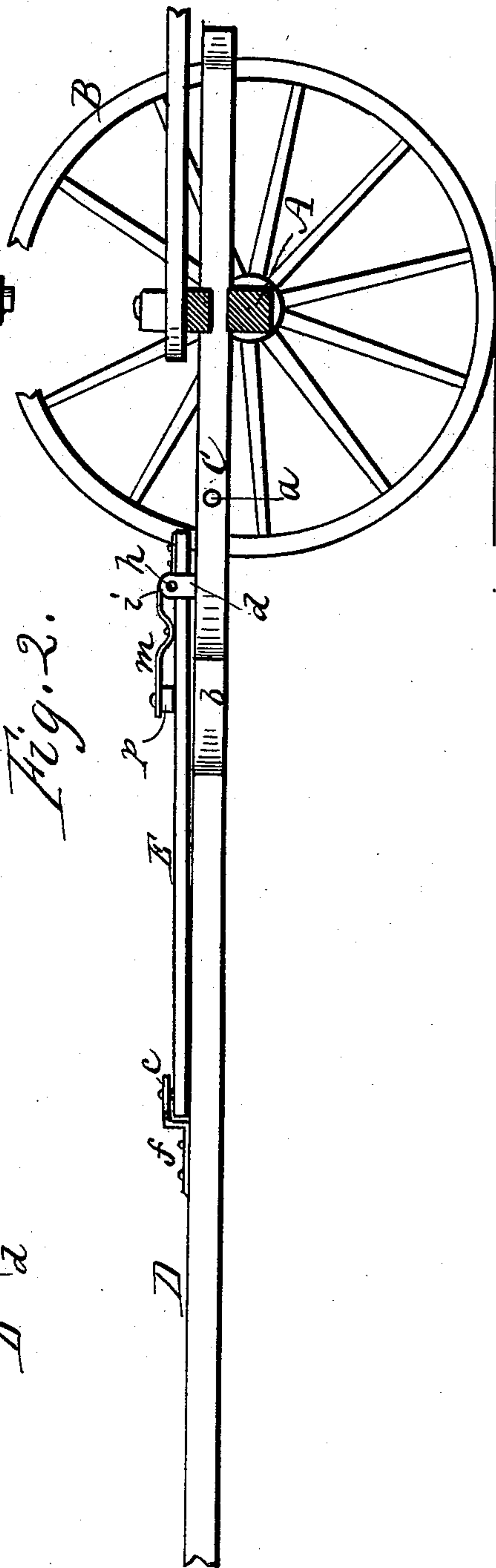
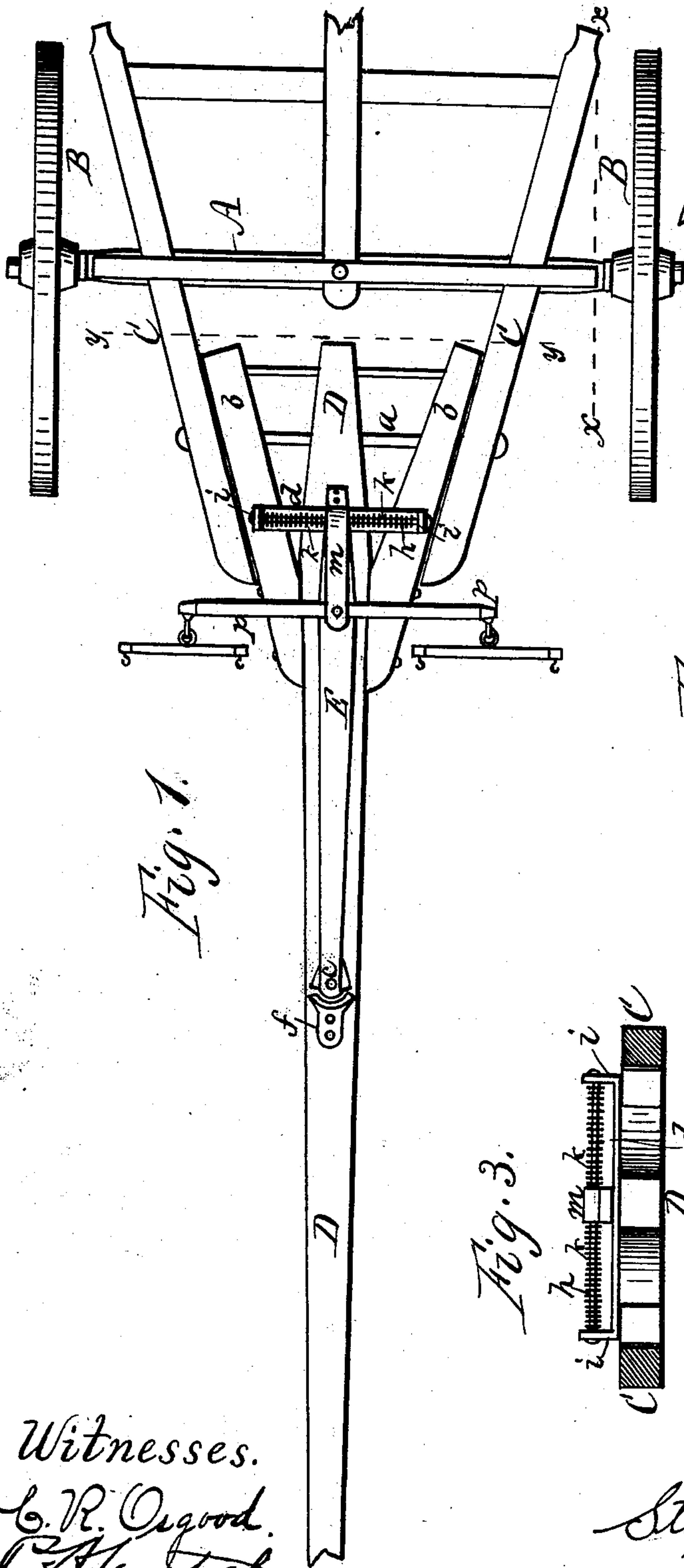


(No Model.)

S. NORTON.
WAGON TONGUE ATTACHMENT.

No. 507,076.

Patented Oct. 17, 1893.



Witnesses.
C. R. Osgood.
P. A. Hooper

Inventor:
Stephen Norton,
per R. F. Osgood,
Atty

UNITED STATES PATENT OFFICE.

STEPHEN NORTON, OF ROCHESTER, NEW YORK, ASSIGNOR TO WILLIAM H. RICE, OF SAME PLACE.

WAGON-TONGUE ATTACHMENT.

SPECIFICATION forming part of Letters Patent No. 507,076, dated October 17, 1893.

Application filed June 15, 1893. Serial No. 477,758. (No model.)

To all whom it may concern:

Be it known that I, STEPHEN NORTON, of Rochester, in the county of Monroe and State of New York, have invented a certain new and useful Improvement in Wagon-Tongue Attachments; and I do hereby declare that the following is a full, clear, and exact description of the same, reference being had to the drawings accompanying this specification.

The object of my improvement is to prevent the swaying of the tongue from side to side in passing over irregular surfaces, thus obviating striking the sides of the horses and giving greater ease to the draft.

To this end the invention consists in the construction and arrangement of parts hereinafter described and claimed.

In the drawings—Figure 1 is a plan view showing my invention connected with the hounds of a wagon. Fig. 2 is a longitudinal, vertical section of the same in line *xx* of Fig. 1. Fig. 3 is a vertical cross section in line *yy* of Fig. 1.

A indicates the front axle, B B the front wheels, and C C the hounds of an ordinary wagon.

D is the tongue, pivoted in the hounds by the ordinary bolt *a*, and provided with the usual braces *b b*, which rest inside the hounds.

My improvement is as follows:—E is a bar, which I denominate the draft bar, resting either above or below the tongue, being attached at its front end to the tongue by a bolt *c* which forms a pivot, and being sustained at its rear end by a cross piece *d* which extends across the rear end of the tongue resting on the braces *b b*. It will be seen that the draft bar turns at its front end on the bolt *c*, and that its rear end is free to move laterally over the cross piece *d*. The front end of the draft bar is stayed by a clip *f* firmly bolted to the tongue, so that a portion of the end thrust is taken from the bolt and shared by the clip. To facilitate the easy turning of the draft bar its front end is rounded, and the clip in which it rests is concaved and is provided with flanges which form stops to the side motion of the bar at the extreme of its turning movement.

h is a rod extending crosswise over the

draft bar, its ends resting in lugs *i i* at the ends of the cross piece *d*. *k k* are springs on this rod, bearing at one end against the lugs *i i* and at the other against the draft bar. By this means the draft bar is held central.

m is a shackle, attached at its rear ends by bolts to the top of the draw bar, its front end being arched or raised from the surface of the bar and serving as an attachment for the evener or double-tree *p*. Said evener is placed in the space between the shackle and the top of the draw bar and is secured by a bolt, by which means it has free movement.

By the construction before described the tendency of the tongue to sway from side to side is in a great degree obviated, since the action of the draw bar is to keep the tongue in a direct line. For instance, if the right wheel strikes an obstruction the pole is turned to the right and the center of draft is also turned to the right. The draw bar then being thrown to the right, and bearing at its front end where it is bolted to the tongue, it, for the time being, forms a side brace and acts counter to the pole and forces it back to place. The springs *k k* steady the draw bar and center the same after it has performed its action.

This invention is applicable not only to common wagons, but also to all vehicles where tongues or poles are used.

I do not confine myself to this particular draw bar but any device that does the same work in substantially the same way may be employed. Any similar means for changing the center of draft may be used.

Having described my invention, what I claim as new, and desire to secure by Letters Patent, is—

1. The combination, with the tongue, of a draw bar attached thereto at its front end, an evener attached to the bar in the rear, and springs for centering the bar, as and for the purpose specified.

2. The combination, with the tongue, of a draw bar attached thereto at its front end, a clip forming a stop at the front end of the bar, an evener attached to the bar in the rear, and springs for centering the bar, as and for the purpose specified.

3. The combination, with the tongue D, of

the draw bar E, pivoted thereto at its front
end, the clip *f* forming a stop to the front end
of the bar, the cross piece *d* supporting the
rear end of the bar, the rod *h* extending over
5 the bar, the springs *i i* for centering the bar,
the shackle *m* attached to the bar, and the
evener *p*, as shown and described and for the
purpose specified.

In witness whereof I have hereunto signed
my name in the presence of two subscribing 10
witnesses.

STEPHEN NORTON.

Witnesses:

F. B. HUTCHINSON,
WM. H. RICE.