

(No Model.)

M. M. RUSSELL.

TONGUE SUPPORT.

No. 334,289.

Patented Jan. 12, 1886.

Fig. 1

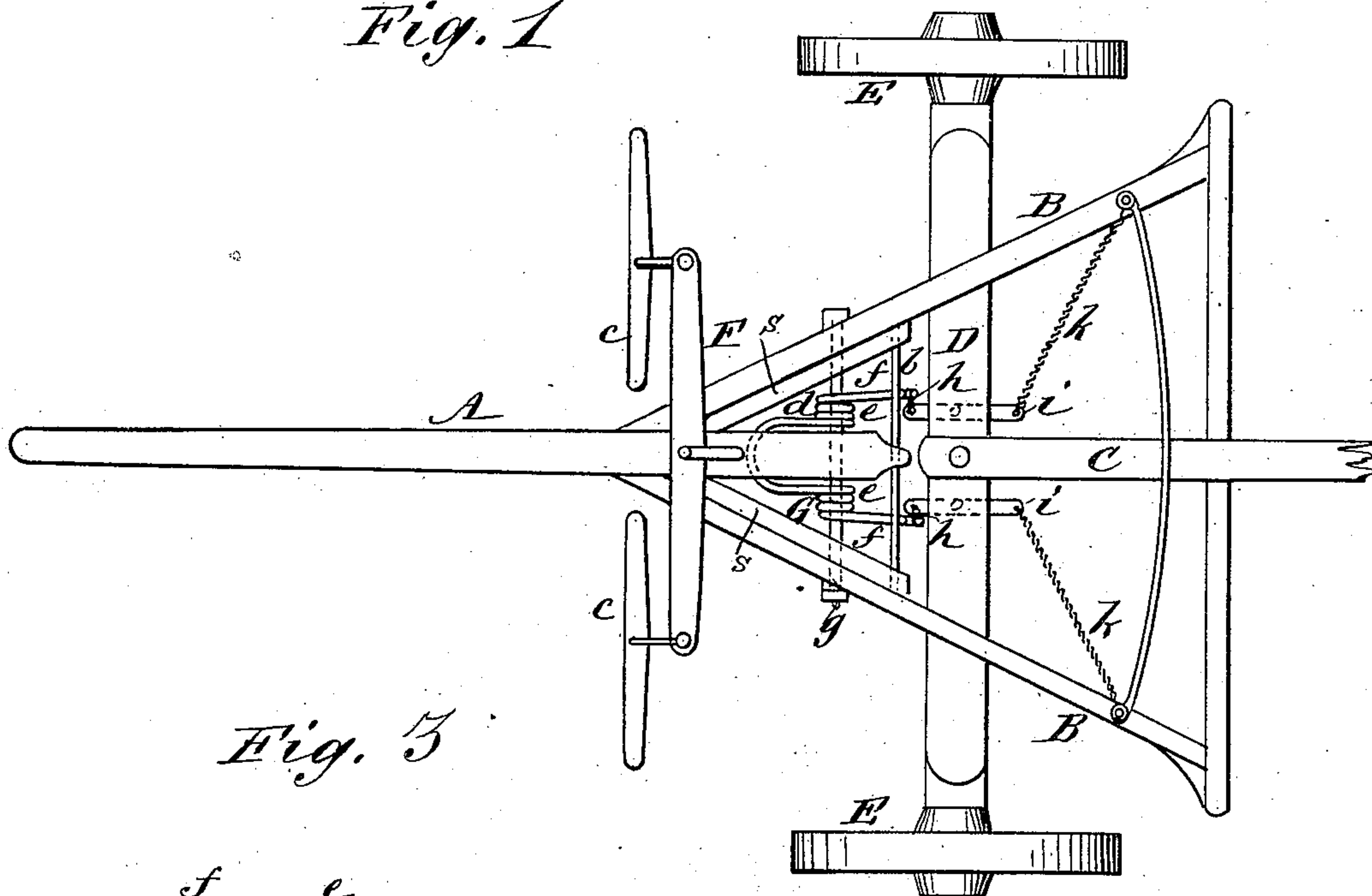


Fig. 3

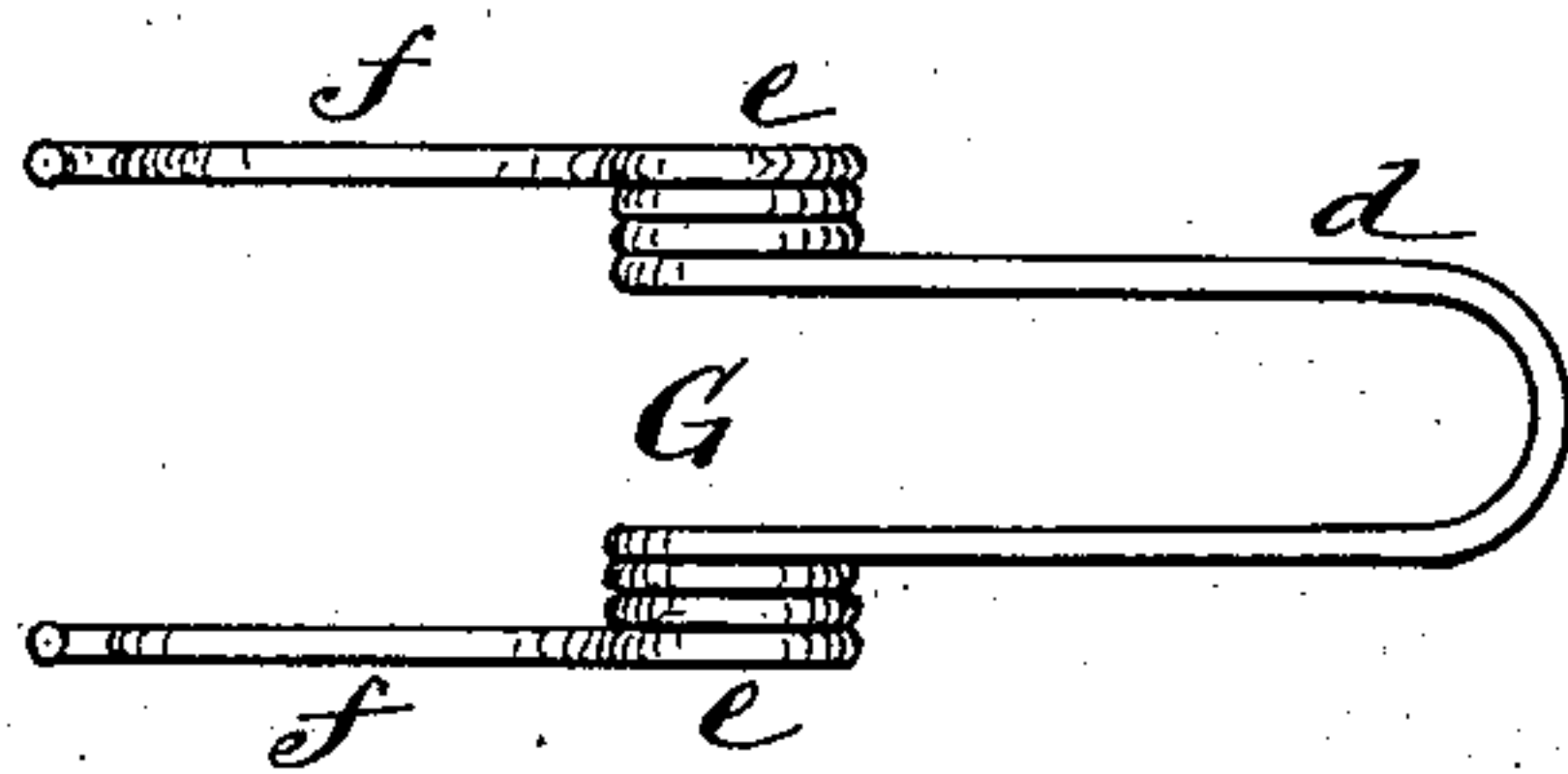
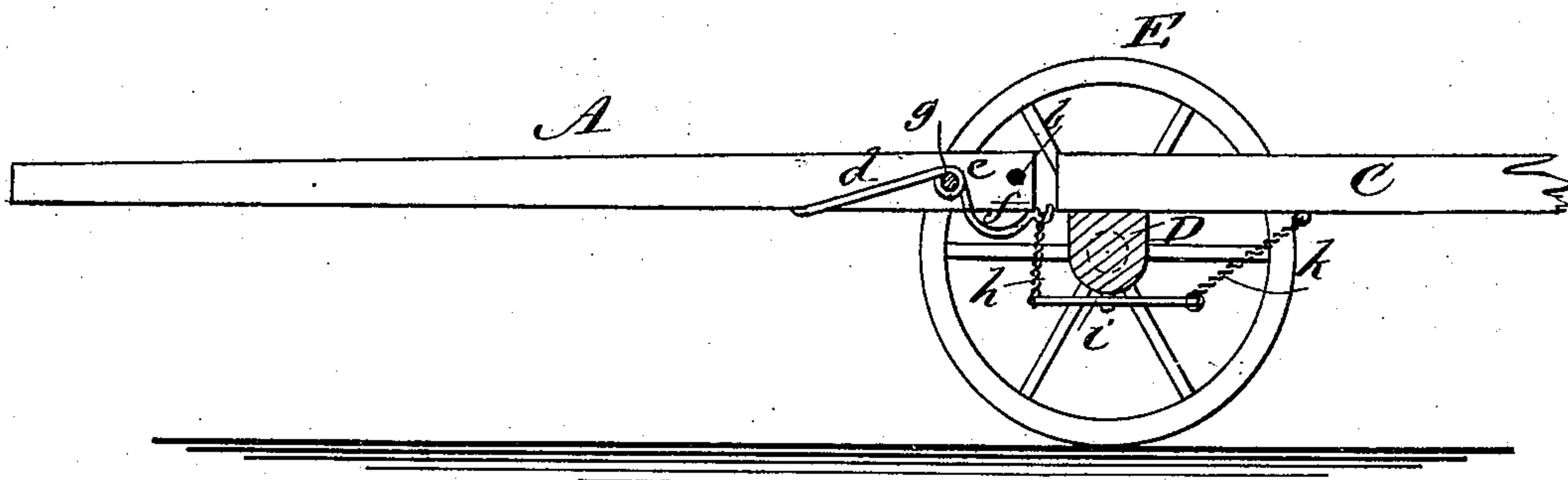


Fig. 2



WITNESSES:

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MILO M. RUSSELL, OF HAYWARD, WISCONSIN.

TONGUE-SUPPORT.

SPECIFICATION forming part of Letters Patent No. 334,289, dated January 12, 1886.

Application filed June 6, 1885. Serial No. 167,896. (No model.)

To all whom it may concern:

Be it known that I, MILO M. RUSSELL, of Hayward, in the county of Sawyer and State of Wisconsin, have invented certain new and useful Improvements in Spring-Supports for Wagon-Tongues, of which the following is a full, clear, and exact description.

This invention consists in a special combination, with the running-gear of a wagon and its tongue, of a spring of peculiar construction with lever and detachable connections for holding said tongue, whereby provision is made for adjusting the tension of the spring and the whole heft is equalized, substantially as hereinafter described.

Reference is to be had to the accompanying drawings, forming a part of this specification, in which similar letters of reference indicate corresponding parts in all the figures.

Figure 1 represents a plan view of the running-gear of a wagon in part, with tongue attached, and having my invention applied. Fig. 2 is a partly-sectional side view of the same; and Fig. 3, a top view, upon a larger scale, of the spring used to support the tongue, detached.

A indicates the tongue, and *b* the bolt or pin which braces the tongue and tongue-braces that work within the hounds.

B B are the hounds; C, the reach; D, the front axle; E E, the forward wheels of the vehicle; F, the whiffletree, and *c c* the eveners.

G is the spring for supporting the tongue, of U shape, as at *d*, for a portion of its length, and with intermediate side coils, *e e*, terminating in two hook-shaped arms, *f f*. Said spring is connected with the hounds B B by a bolt, *g*, arranged in front of the bolt *b* and fitted to pass freely through the side coils, *e e*.

It is upon this bolt *g* that the tongue A, with its angular braces *s* and brace-bolt *b*, work or rock within the hounds B. The U-shaped portion *d* of the spring is arranged to bear at its outer end under the tongue in advance of the bolt *g* and in rear of the whiffletree F, and its rear hook-shaped arms, *f f*, are connected by chains *h h* with two levers, *i i*, fitted to rock intermediately of their length on the under

side of the axle D, and having their rear arms connected by chains or rods *k k* with the hounds in rear of said axle.

By this construction and combination of the spring with the other parts or devices connected therewith, it will be seen that the heft of the tongue A, bearing down on the spring G, causes the front arms of the levers *i i* to be raised and their rear arms to pull down on the hounds behind the axle, thereby equalizing the whole heft, and that, unlike other bent or arm-shaped and coiled springs which have been used for supporting the tongue, it does not require to be taken off when removing the eveners, and does not bear up on the reach or hounds to wear or break the reach or throw all the heft in front and back on the reach. The peculiar shape of my spring and its being made to hitch by a lever-connection to the hounds obviate this, and, what is very important, by simply taking up or letting out the chain connections any desired amount of tension may be given to the spring, and it is well known that different parties prefer different degrees of tension in the spring-support of the tongue, and a spring having a fixed tension, as under former arrangements, does not admit of such variation to suit different requirements or wants.

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

The combination, with the tongue A, hounds B B, and axle D, of the spring G, constructed as described, with hook-shaped rear arms, *f f*, the bolt *g*, arranged in front of the axle and forming the fulcrum of said spring and rocking support for the tongue, the levers *i i*, pivoted to the under side of the axle and the hitching and unhitching chains *h h* and connections *k k*, arranged to connect said levers and the hounds on opposite sides of the axle, substantially as shown and described.

MILO M. RUSSELL.

Witnesses:

J. G. GLOBENSKY,
E. O. JOHNSON.