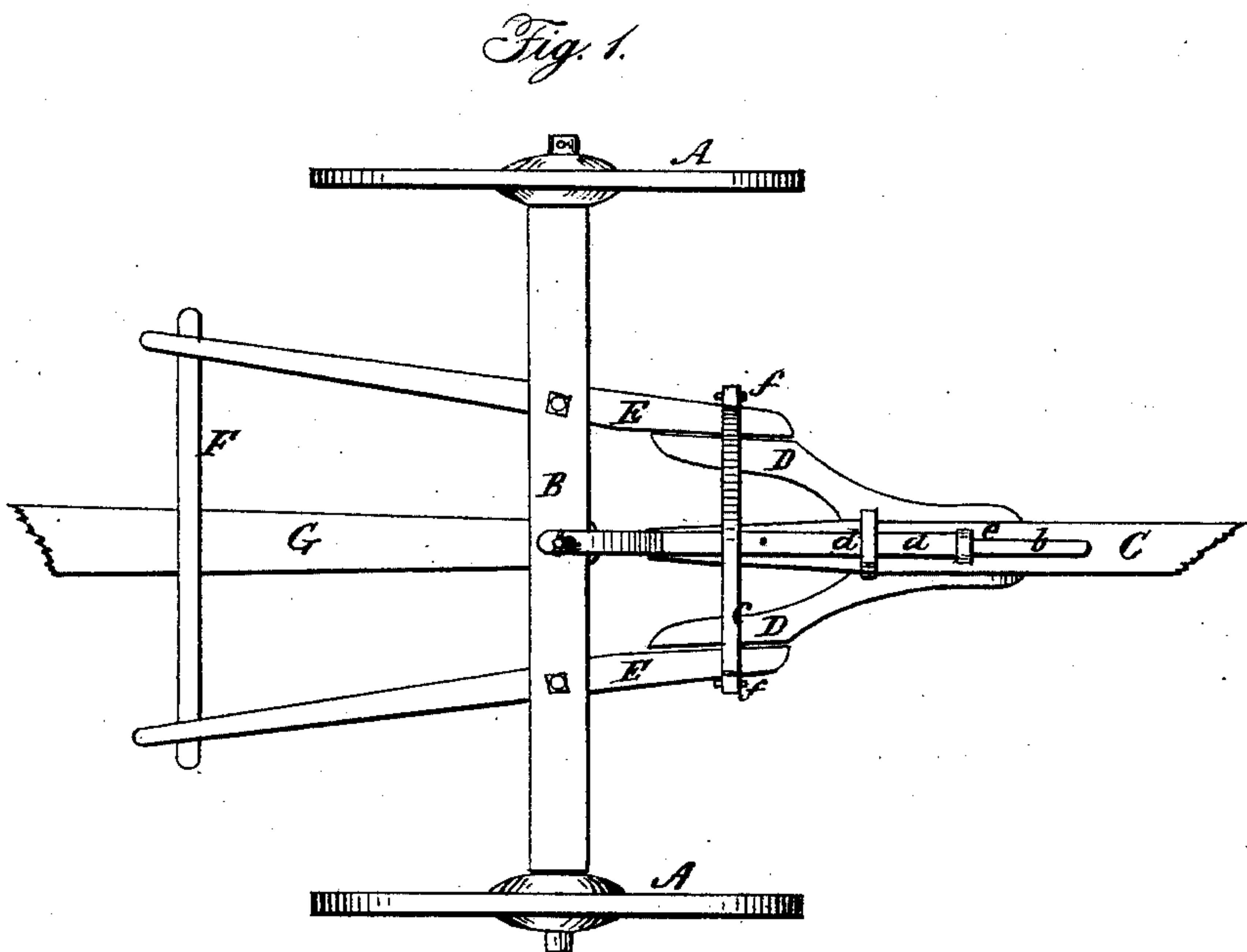
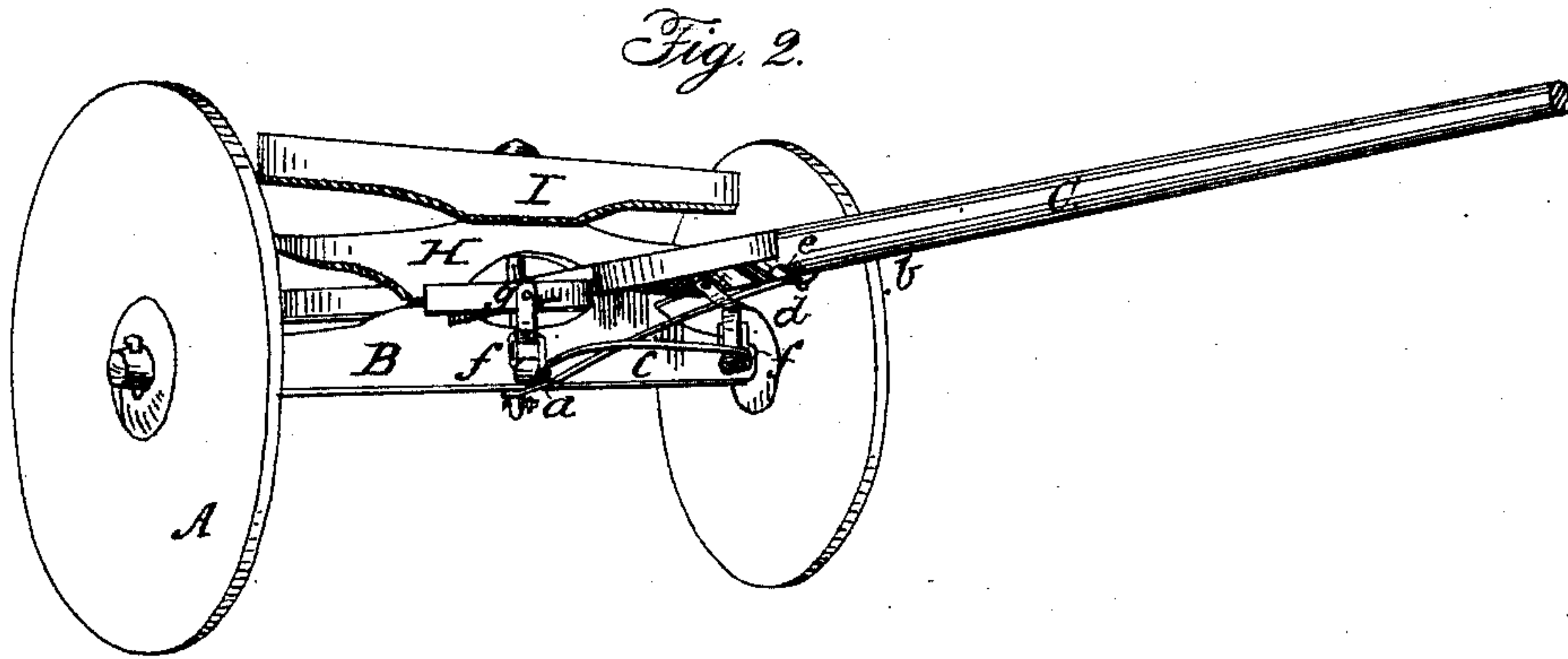


HIGLEY & TOOTHAKER.

Wagon-Tongue Support.

No. 62,651.

Patented Mar. 5, 1867.



Witnesses:

J. G. Clayton
W. C. Clayton

Inventor:

Oswin Higley
Therence Toothaker
per J. G. Clayton
Attorney

United States Patent Office.

OSWIN HIGLEY AND SPENCER TOOTHAKER, OF FREDONIA, OHIO.

Letters Patent No. 62,651, dated March 5, 1867.

IMPROVEMENT IN WAGON-TONGUE SUPPORTER.

The Schedule referred to in these Letters Patent and making part of the same.

TO ALL WHOM IT MAY CONCERN:

Be it known that we, OSWIN HIGLEY and SPENCER TOOTHAKER, of the town of Fredonia, in the county of Licking, and in the State of Ohio, have invented a new and useful Mode of Supporting and Holding up Wagon Tongues; and we do hereby declare that the following is a full, clear, and exact description thereof, reference being had to the accompanying drawings, and to the letters of reference marked thereon, in which—

Figure 1 is a plan view with the tongue of the wagon reversed to represent the improvement.

Figure 2 is a perspective view of the invention with the carriage in position for use.

The nature of our invention consists in holding the tongue or thills of a carriage suspended, by means hereinafter set forth, by springs, as will be fully hereafter described.

To enable others skilled in the art to make and use our invention, we will proceed to describe its construction and operation.

In the construction of our invention, the wagon or carriage is made as wagons or carriages are ordinarily made.

In the drawings, fig. 1 represents the front part of the wagon or carriage, in which A A are the wheels, B the axle, C the tongue, D D and E E the hounds, G the perch-pole, F the slide-bar. In this figure the carriage is represented on the under side, the more clearly to show our improvement. *a* represents the spring, which at the rear end is securely attached to the axle B, and extends forward over spring *c*, the ends of which are attached to hounds E E extending back to the sliding bar F by means of lugs or supports *ff*, which are attached to the bolt *g*, which bolt connects together the hounds D D and E E, and tongue C, and the spring *a* extends forward under the tongue C, in front of the hounds D D, and is kept in its position by clip *d* attached to the tongue, and guide *e* secured to spring *a* at its front end. A plate, *b*, is here attached securely to the tongue, on which the spring *a* slides to prevent the wearing away of the tongue. Thus, having described the parts in detail, we will describe the operation.

In the operation it will be seen that the tongue or thills of a wagon or carriage are allowed to rest on the front end of the spring *a*, having its rear end firmly attached to the axle-tree B. The said spring *a* rests on spring *c*, attached to the hounds E E, which spring is bent as an elliptic spring and secured to the hounds by bearings or lugs *ff*, so that when the weight of the tongue or thills rests on spring *a*, the front end being loose, and not attached to the tongue, it is allowed to slide back and forward on the under side of the same, thus giving elasticity to it. Thus by the combination of the springs *a* and *c* we are able to keep the tongue or thills in a straight line, and prevent them from resting on the ground, which is a very great convenience to those using carriages.

We are aware that devices for supporting the tongue or thills of themselves are not new, as it has been done before. Nor do we claim a rigid supporter with loops attached to the hounds to support the spring, which is parallel to the tongue, as is seen in the rejected case of M. Mouvry of May 4, 1860, and the case of A. P. Frye, of March 23, 1861.

But what we claim as new, and desire to secure by Letters Patent, is—

The springs *a* and *c*, constructed as described, in combination with the tongue or thills C, hounds E E, and axle B, for the purposes set forth and specified.

In testimony that we claim the above-described invention for holding up the tongues of wagons, we have hereunto signed our names this 10th day of November, 1866.

OSWIN HIGLEY,
SPENCER TOOTHAKER.

Witnesses:

GEO. W. INGRAHAM,
MILES ARNOLD.