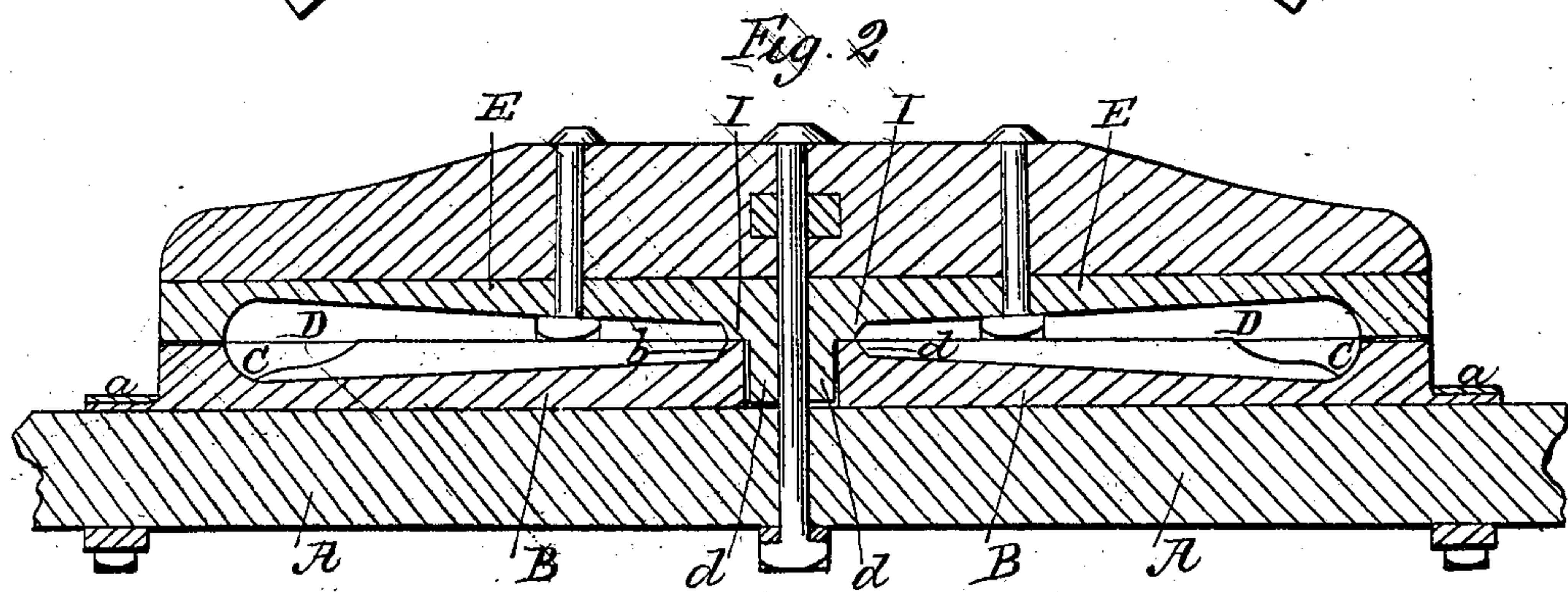
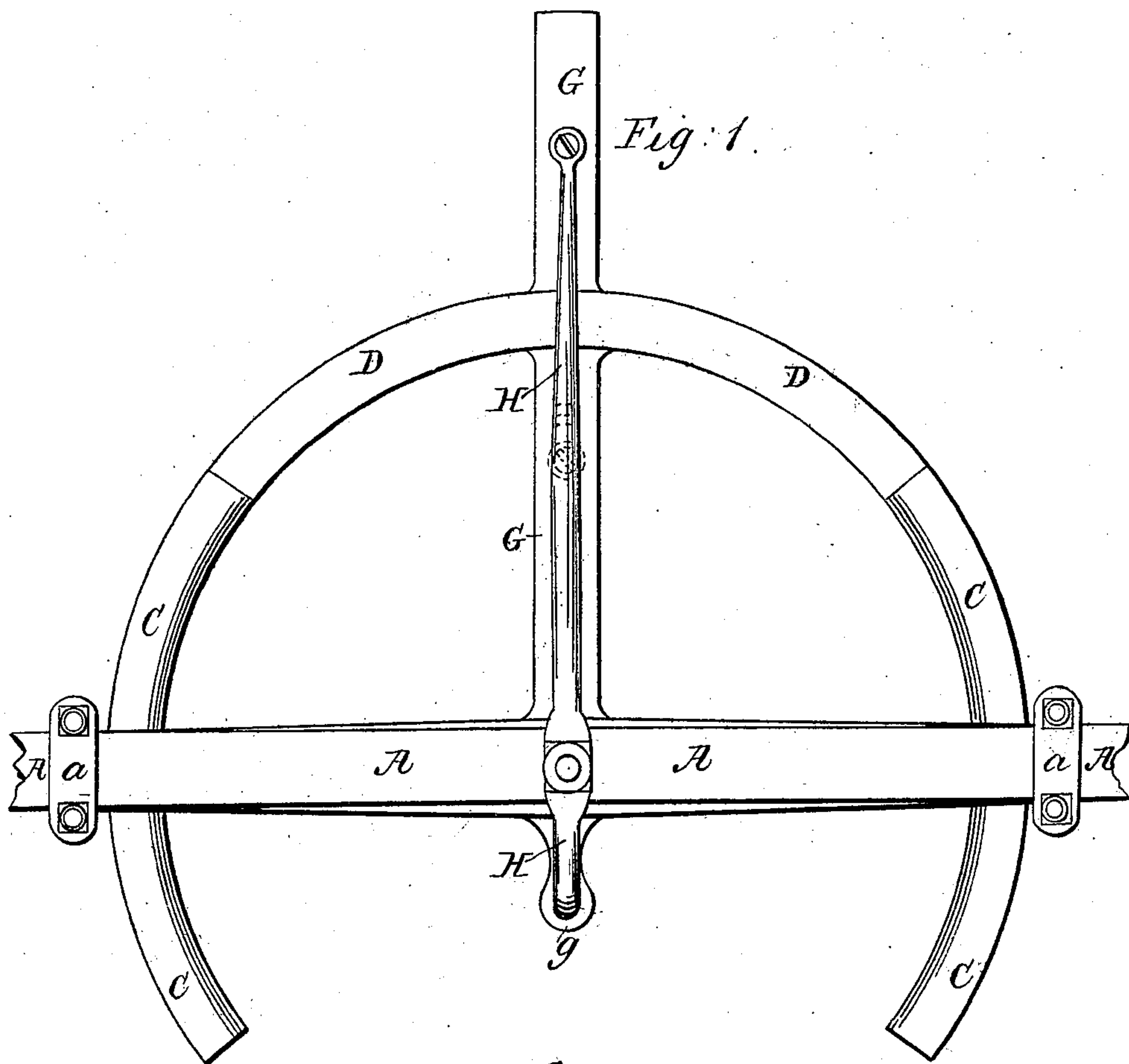


D. WEAVER.
Fifth Wheel for Carriages.

No. 93,376.

Patented Aug. 3, 1869



Witnesses.

*Alfred C. ...
Randolph C. ...*

Inventor.

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by Prindle & Dyer,
Attorneys*

United States Patent Office.

DANIEL WEAVER, OF DAYTON, OHIO.

Letters Patent No. 93,376; dated August 3, 1869.

IMPROVEMENT IN FIFTH-WHEELS FOR CARRIAGES.

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

To all whom it may concern:

Be it known that I, DANIEL WEAVER, of Dayton, in the county of Montgomery, and in the State of Ohio, have invented certain new and useful Improvements in Fifth-Wheels for Carriages; and do hereby declare that the following is a full, clear, and exact description thereof, reference being had to the accompanying drawing, making a part of this specification, in which—

Figure 1 is a plan view of the bottom of my improved circle-iron or fifth-wheel, and

Figure 2 is a vertical section of the same, through the centre, lengthwise, of the axle.

Letters of like name and kind refer to like parts in each of the figures.

The nature of my invention consists, principally, in the use of a pivot-hub upon the lower side of the circle-iron, which fits into a corresponding socket in the lower plate, and relieves the king-bolt from all lateral strain and from all wear.

It further consists in the use of an arm, extending radially from the centre of said circle-iron, and forming a part of the same, which furnishes a convenient and durable means for attaching the reach to said circle-iron, and thereby connecting the front and rear axles; and

It also consists in forming said fifth-wheel and its connections in two parts, so as to permit of their being made of cast metal.

In the annexed drawing—

A represents the axle, having secured upon its upper side, by means of clips, *a a*, a bar or plate of metal, B, which bar or plate has attached near its outer ends, and forming a part of the same, two segments of a circle, C C, the upper faces of which are horizontal, and are elevated from one-half to three-quarters of an inch above said bar.

A boss, *b*, rises from the centre of the bar B to a corresponding height with the upper surfaces of the segments C C, and is provided with a round opening, from three-quarters to one inch in diameter, extending vertically through the same.

D represents the circle-iron or fifth-wheel, secured to and forming a part of a bar or plate, E, which corresponds in shape to the lower bar B, and is provided upon its lower side with a boss, *d*, from which projects

downward a hub, *d'*, of suitable size and shape to fit loosely into the opening in the lower boss *b*, forming an axial-pivot for said circle-iron. The upper side of the boss *b* and the lower side of the boss *d* furnish a suitable horizontal bearing for said circle-iron, and enable it, in connection with the segments C C, and corresponding ring D, upon the upper plate, to sustain the vertical pressure required.

An opening is provided through the centre of the pivot-hub, *d'*, through which passes the king-bolt, F, and is secured beneath the axle in the usual manner.

G represents an arm, extending radially from the centre of the plate or bar E to the rear, and projecting from four to six inches beyond the circle, to the upper side of which the pole or reach is attached, while to its lower side is secured one end of a brace, H, which passes beneath the axle and is attached to a lug, *g*, projecting forward from the upper plate E. The brace H has a sufficient width beneath the axle to allow of an opening, through which the lower end of the king-bolt passes.

It will be seen that this construction of the circle-iron possesses many advantages over any in use, as by it the king-bolt is relieved from all lateral strain and wear; and a joint is furnished which is very durable and strong.

It also provides a convenient means for connecting the pole or reach with the circle-iron, and through it, with the forward axle, and, as the parts of the device are few, and with exception of the king-bolt, can be constructed of malleable iron, it can be furnished at a smaller cost than any now in use.

Having thus fully set forth the nature and merits of my invention,

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

The within-described fifth-wheel or circle-iron, when constructed as described, with the axial pivot-hub *d'* and corresponding recessed boss *b*, and with the radial arm G, substantially as and for the purpose specified.

In testimony that I claim the foregoing, I have hereunto set my hand, this 29th day of March, 1869.

DANIEL WEAVER.

Witnesses:

THOS. D. MITCHELL,
JAMES C. YOUNG.