

No. 606,864.

Patented July 5, 1898.

M. HALFPENNY.

FIFTH WHEEL.

(Application filed Dec. 13, 1897.)

(No Model.)

Fig. 1.

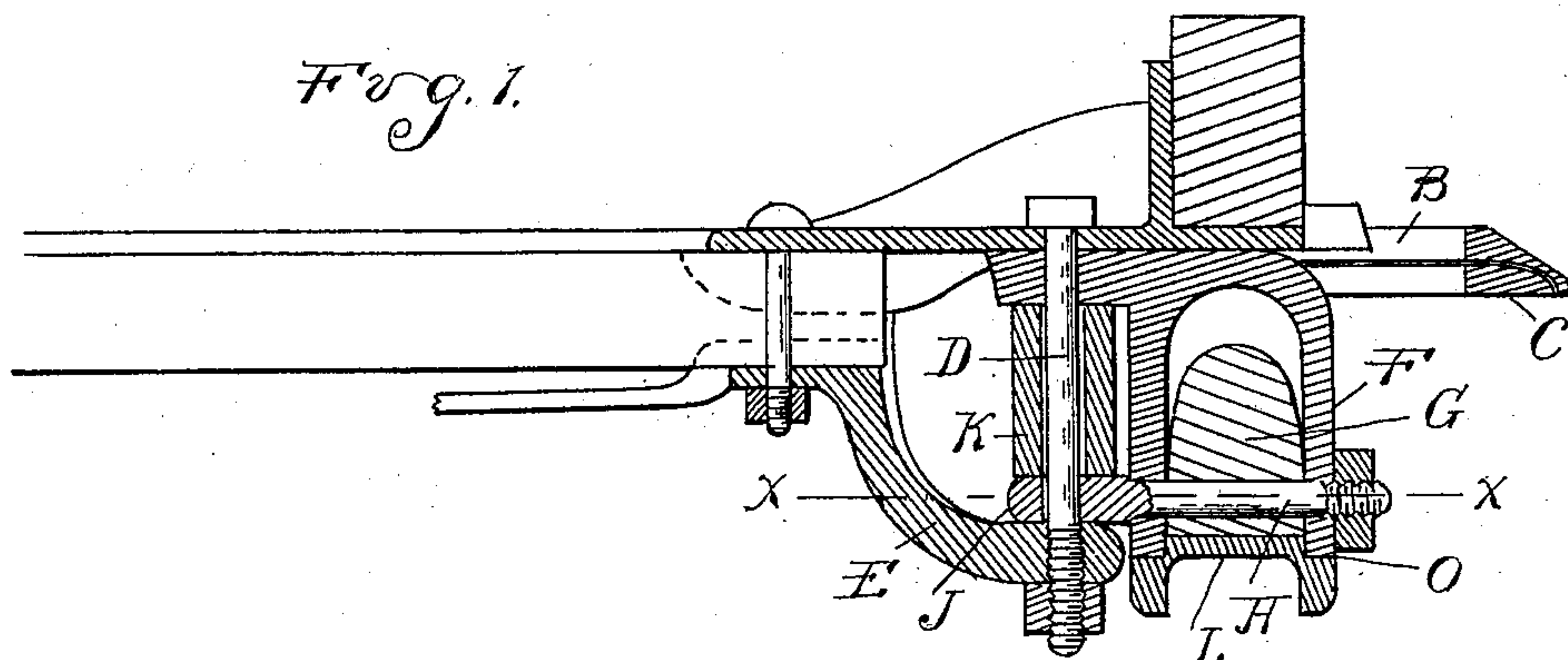


Fig. 2.

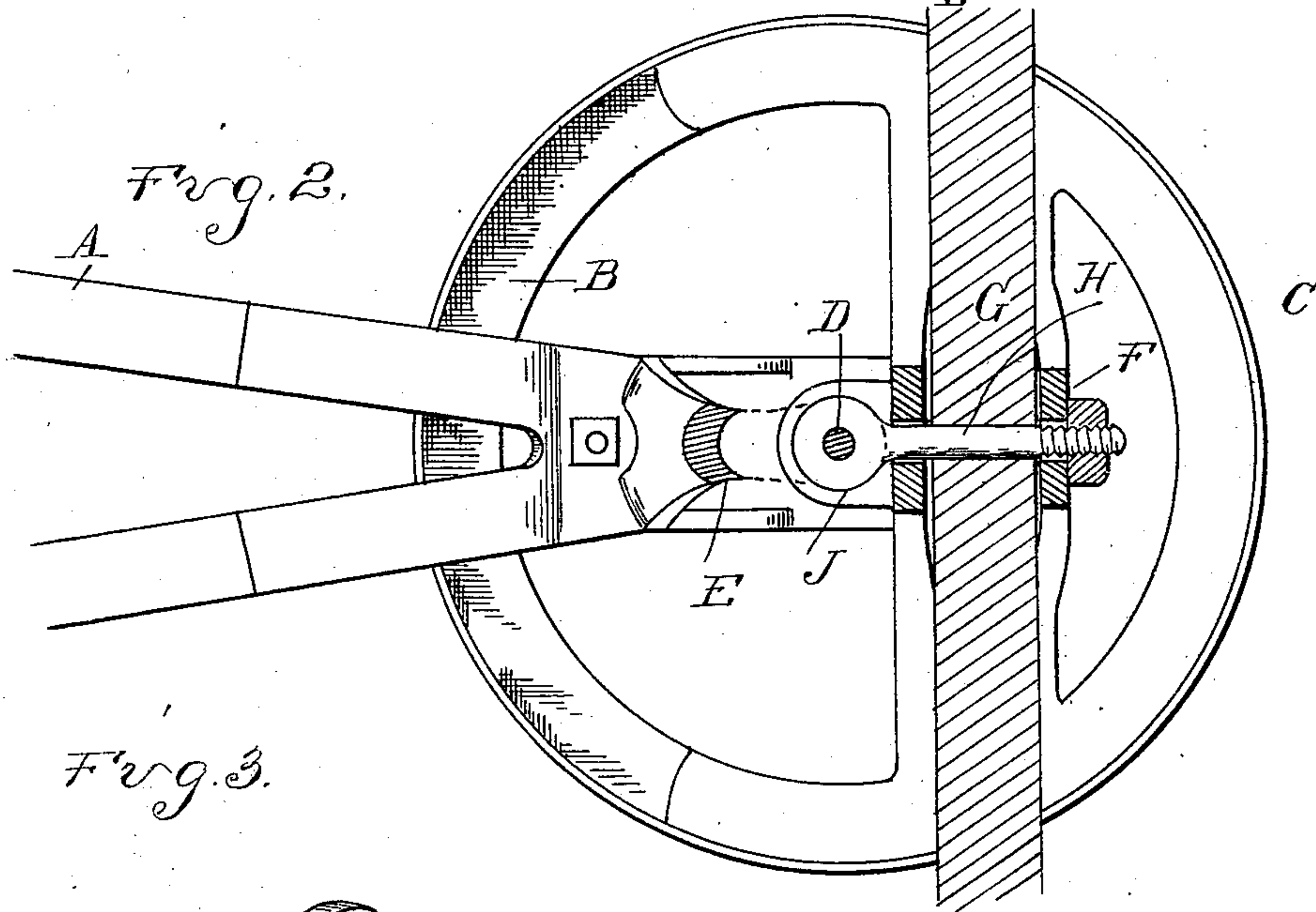


Fig. 3.

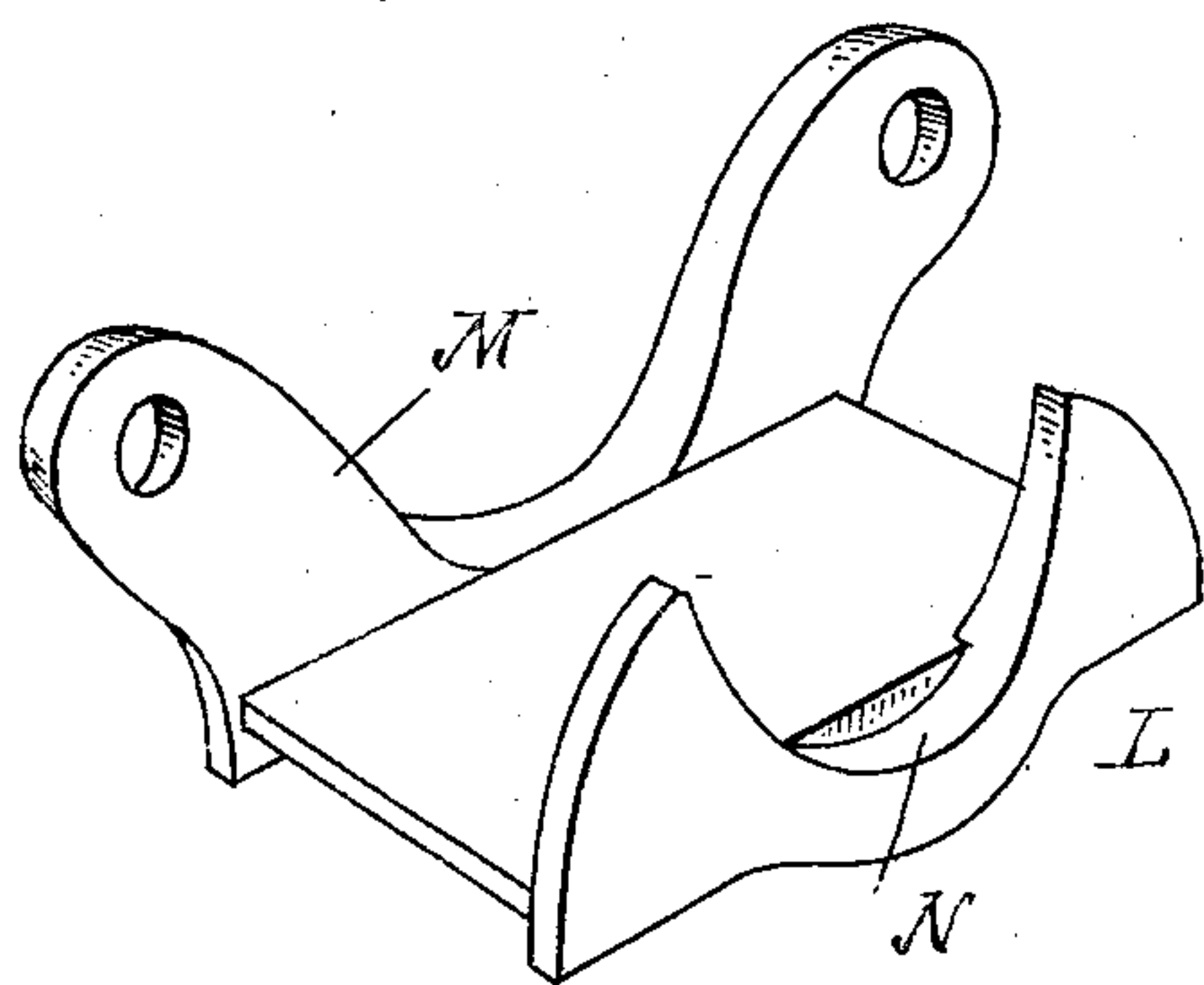
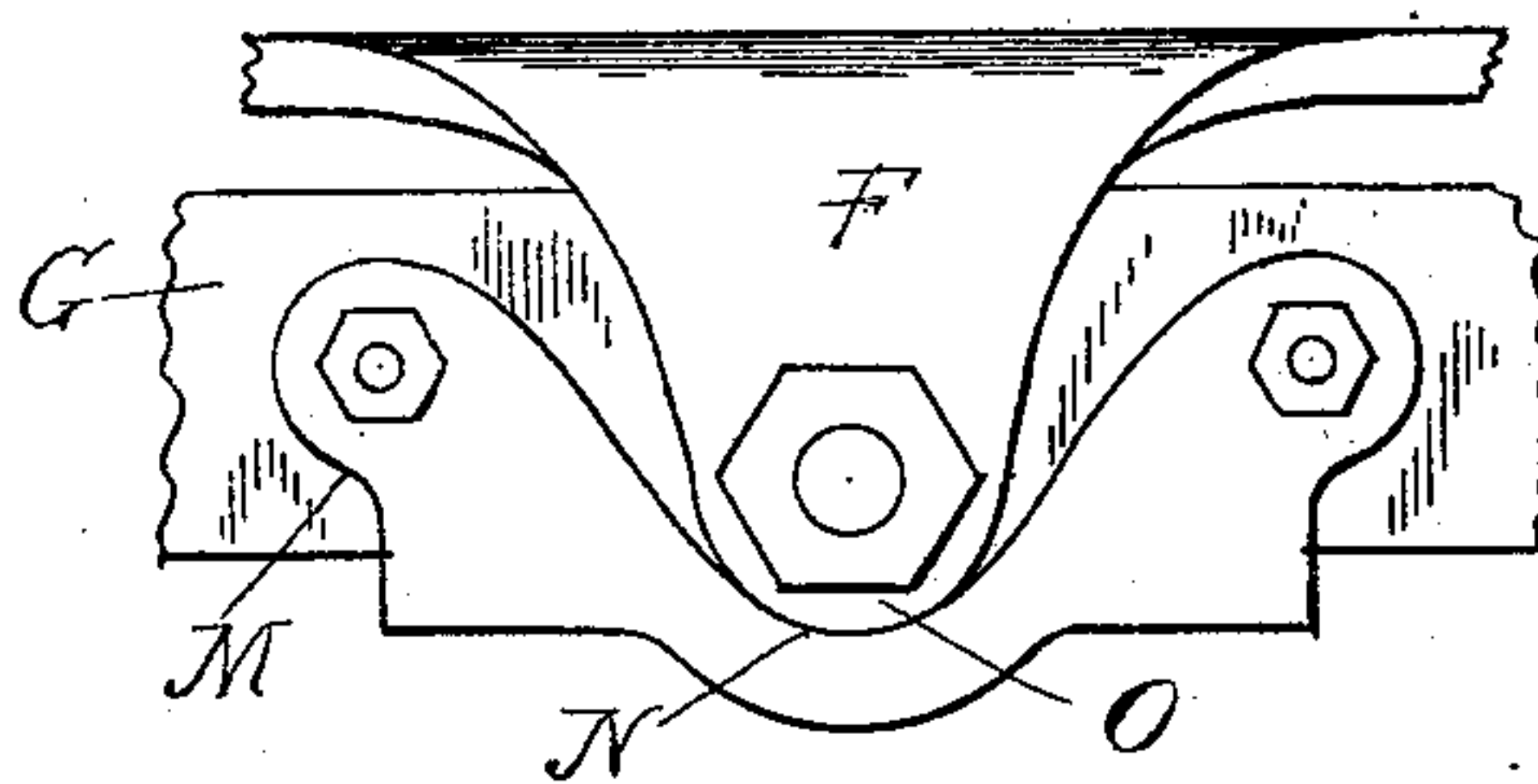


Fig. 4.



Witnesses
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UNITED STATES PATENT OFFICE.

MARTIN HALFPENNY, OF PONTIAC, MICHIGAN, ASSIGNOR TO ROBERT D. SCOTT, OF SAME PLACE.

FIFTH-WHEEL.

SPECIFICATION forming part of Letters Patent No. 606,864, dated July 5, 1898.

Application filed December 13, 1897. Serial No. 661,607. (No model.)

To all whom it may concern:

Be it known that I, MARTIN HALFPENNY, a citizen of the United States, residing at Pontiac, in the county of Oakland and State of Michigan, have invented certain new and useful Improvements in Fifth-Wheels, of which the following is a specification, reference being had therein to the accompanying drawings.

10 The invention consists in the construction of a fifth-wheel in which the axle is designed to have a vertical oscillating movement, and it consists particularly in the construction, arrangement, and combination of the various
15 parts, as more fully hereinafter described.

In the drawings, Figure 1 is a vertical central longitudinal section through a fifth-wheel embodying my invention. Fig. 2 is a bottom plan, partly in section, on line *xx* on Fig. 1.
20 Fig. 3 is a perspective view of the reinforcing-plate for the axle-stock. Fig. 4 is a front elevation, showing the connection between the under circle and the axle-stock.

A are the reach members, which connect
25 to the rear end of the upper circle B of a fifth-wheel.

C is the under circle.

D is the king-bolt, passing through the two circles and upon which the under circle turns
30 as its pivot.

E is a brace extending from the forward end of the reach or from the upper circle downwardly and forwardly and suitably apertured to receive and support the lower end
35 of the king-bolt D.

The under circle is provided with the downwardly-projecting lugs F, preferably forming, in effect, a yoke-shaped support for the axle, or, as in this case, for the axle-stock G, the
40 axle being clipped or otherwise secured thereto, so as to be, in effect, an integral part thereof. The axle is pivoted on a horizontal pivot, so that it may have a lateral vertical oscillation in this yoke. This pivot is formed by a
45 bolt H, passing through the lugs or yoke F and through the axle-stock or the axle, if desired. This bolt H is provided with an eye J, through which the king-bolt D passes and about which it swivels.

50 K is a sleeve which spaces the bolt from

the lower circle. This sleeve may be, if desired, made simply as an extension or thickening of the lower circle, or it may be, as shown, of a separate piece.

L is a reinforcing-plate on the axle-stock, 55 having the side lugs M, embracing the axle-stock and by means of which it is secured thereto. It is also preferably provided with curved bearings N, on which the lower curved ends O of the lugs or yoke F engage to act as
60 a reinforcement of the bolt and to take off some of the strain therefrom.

The details of this construction may be varied quite materially without departing from
65 the spirit of my invention.

I claim—

1. In a fifth-wheel, the combination of the axle supported to oscillate vertically in the lower circle, a horizontal bolt on which the axle is pivotally supported, swiveled at its
70 inner end about the king-bolt.

2. In a fifth-wheel, the combination of the two circles, the king-bolt passing through the same, a rigid brace for the lower end of the king-bolt, a bearing or yoke on the lower circle and the axle supported therein by a transverse pivotal bolt. 75

3. In a fifth-wheel, the combination of the two circles, the king-bolt passing through the same and extending downward, a rigid brace
80 for the lower end of the king-bolt, downwardly-projecting lugs on the under side of the lower circle, the axle between the lugs, and a bolt, swiveled on the king-bolt adjacent to the brace passing through the lugs
85 and the axle, substantially as described.

4. In a fifth-wheel, the combination of the reach, the upper circle secured thereto, the under circle, lugs depending from the under circle, a bolt passing therethrough and
90 through the axle-stock, a reinforcing-plate on the axle-stock, curved bearings N thereon in which the ends of the lugs bear, as and for the purpose described.

In testimony whereof I affix my signature 95 in presence of two witnesses.

MARTIN HALFPENNY.

Witnesses:

EVERETT S. WELD,
JOHN GUMMER.