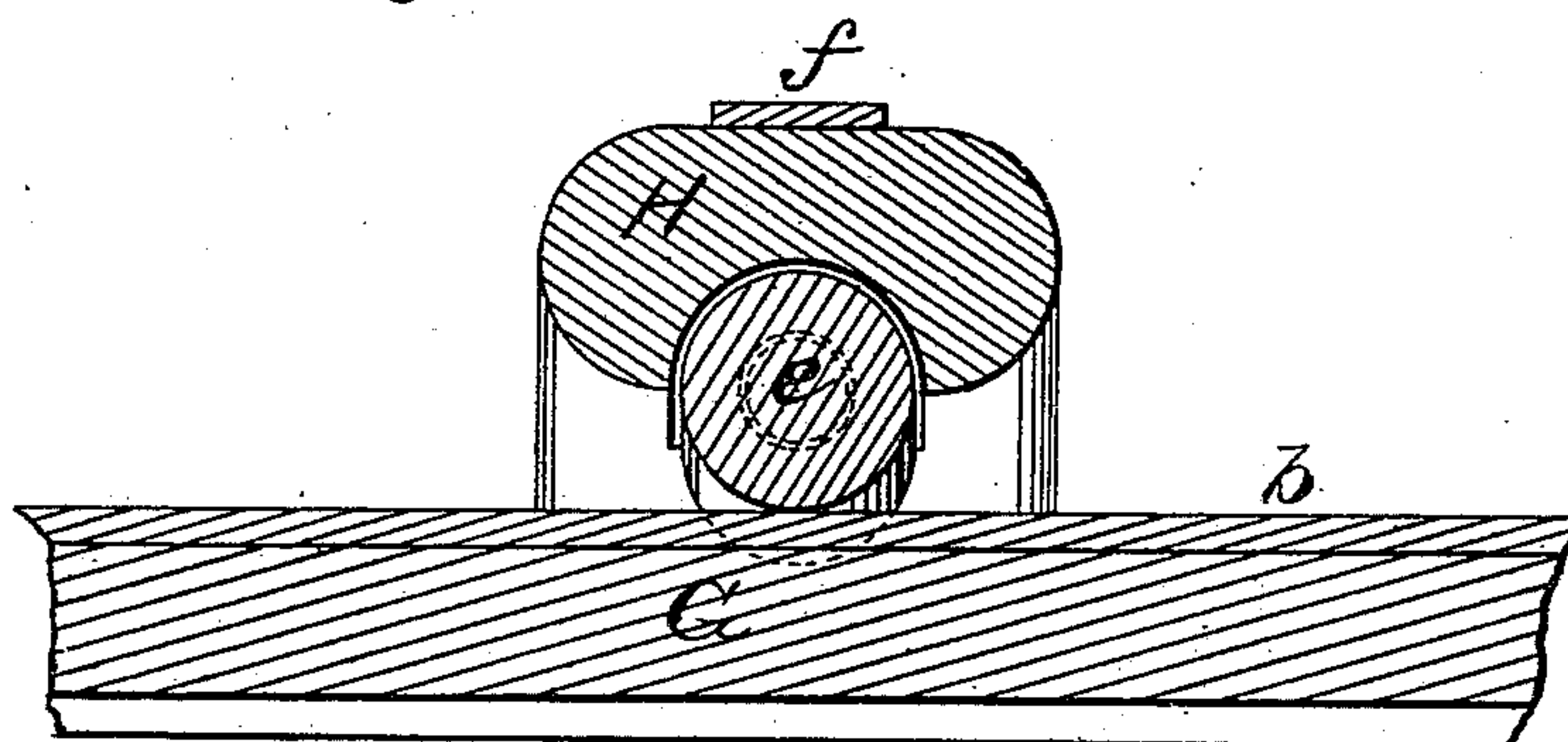
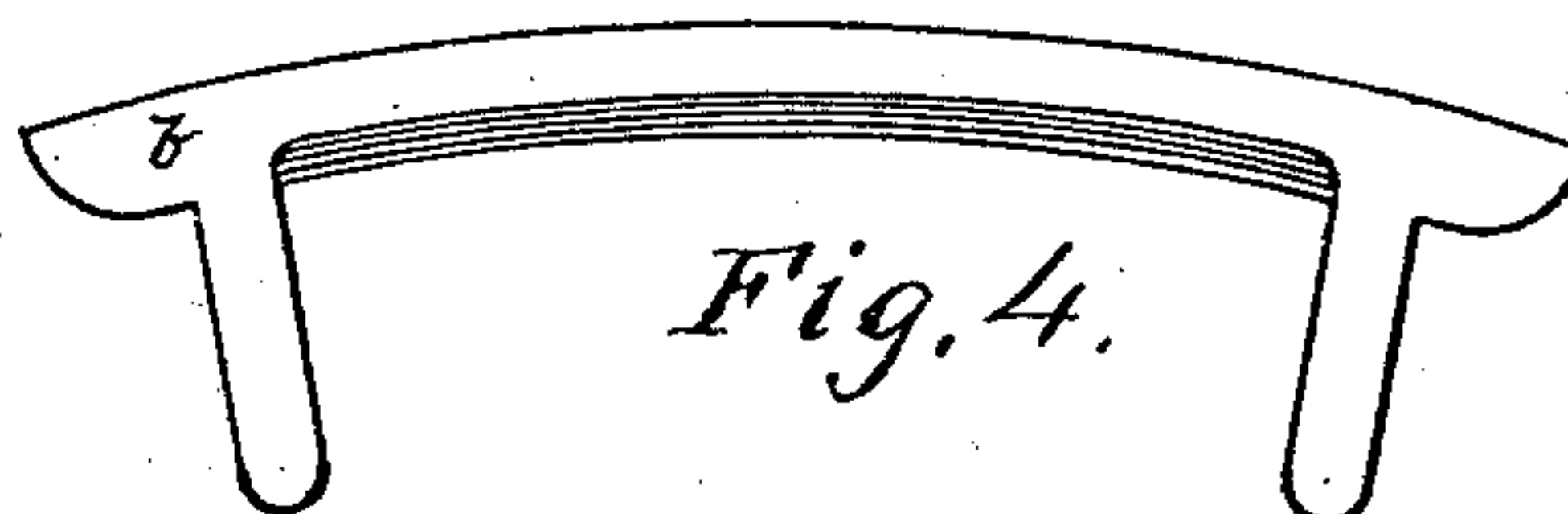
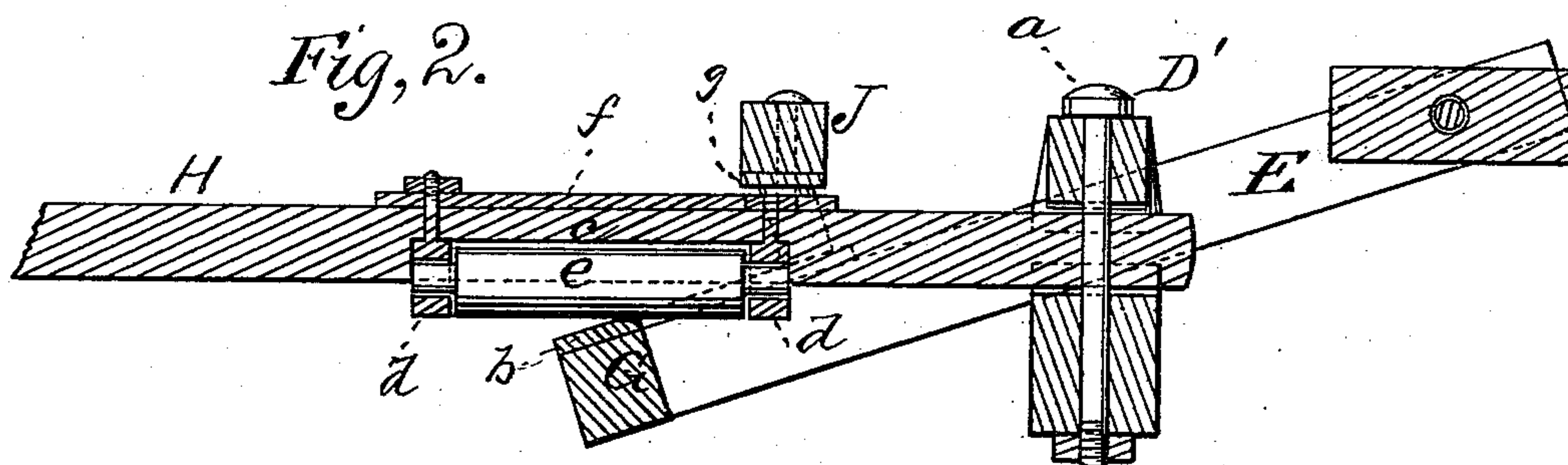
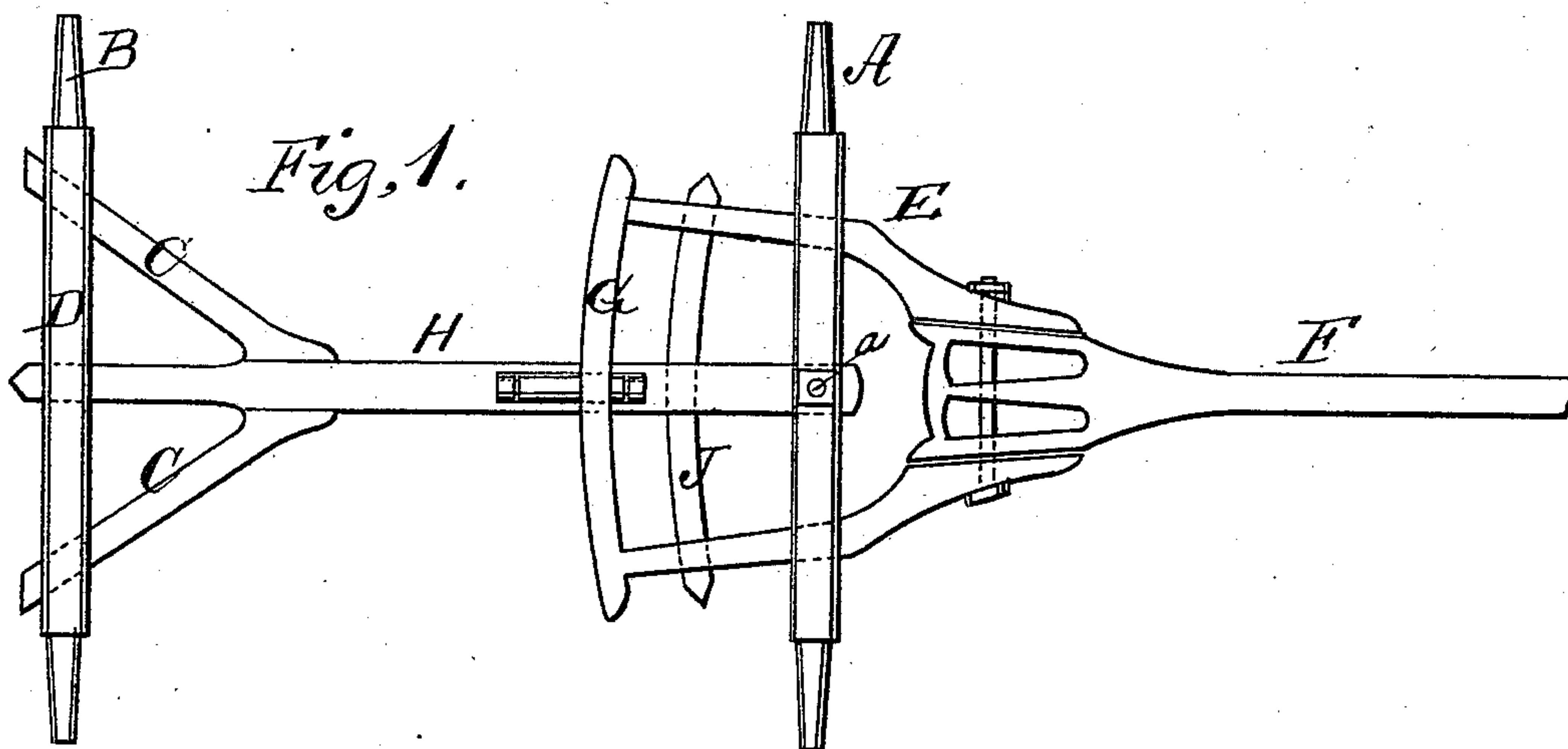


A. B. WEBSTER  
Rub-Irons for Wagon-Reaches.

**No. 213,267.**

**Patented Mar. 11, 1879.**



WITNESSES

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Villette Anderson.  
F. J. J. J. J.

INVENTOR

INVENTOR  
A. B. Webster  
by E. W. Anderson

ATTORNEY

# UNITED STATES PATENT OFFICE.

ASAHEL B. WEBSTER, OF CHARDON, OHIO.

## IMPROVEMENT IN RUB-IRONS FOR WAGON-REACHES.

Specification forming part of Letters Patent No. **213,267**, dated March 11, 1879; application filed November 9, 1878.

*To all whom it may concern:*

Be it known that I, ASAHEL B. WEBSTER, of Chardon, in the county of Geauga and State of Ohio, have invented a new and valuable Improvement in Roller Rub-Irons for Wagon-Reach; and I do hereby declare that the following is a full, clear, and exact description of the construction and operation of the same, reference being had to the annexed drawings, making a part of this specification, and to the letters and figures of reference marked thereon.

Figure 1 of the drawings is a bottom view of my invention applied to a running-gear. Fig. 2 is a longitudinal section of the same. Fig. 3 is a vertical cross-section thereof. Fig. 4 is a detached view of the bearing-plate upon the sway-bar.

This invention has relation to improvements in the running-gear of farm-wagons and other vehicles.

The object of the invention is, mainly, to facilitate the act of turning in vehicles having a king-bolt attachment of the reach to the fore axle, by reducing to a minimum the friction of the said reach upon the sway-bar connecting the rear ends of the hounds.

To this end the nature of the invention consists in the combination, with the sway-bar of a vehicle, and a reach passing over the same and secured by a king-bolt to the front axle, of an anti-friction roller on the under side of said reach and traversing upon a rub-plate on the sway-bar, whereby the above results are effectually attained, as will be hereinafter more fully explained.

In the annexed drawings, the letter A designates the front axle; B, the rear axle; C, the hind hounds, rigidly secured to the rear axle between it and the bolster D; E, the hounds proper, secured to the fore axle between it and the front bolster, D', and having secured thereto in the customary manner the tongue F. The hounds E extend beyond the fore axle, and

their rear ends are connected together by the usual sway-bar G.

H indicates the reach, connected to the front axle by a king-bolt, *a*, and, being carried between the hind hounds, C, rigidly secured to the rear axle, in the usual mode. The sway-bar G has upon its upper face a metallic bearing-plate, *b*. In the under side of the reach is formed a longitudinal recess, *c*, at each end of which is secured an eyebolt, *d*, affording bearings to an anti-friction roller, *e*, that traverses upon the plate *b* of the sway-bar G. The reach has also upon its upper face a longitudinally-arranged friction-plate, *f*, that bears against a corresponding plate, *g*, upon the under side of a bridge, J, erected upon the hounds E in front of the sway-bar. This bridge serves as a guide, in connection with the sway-bar, for the reach, and tends to hold its roller *e* against the said sway-bar.

It is evident that the employment of a roller on the reach and bearing against the sway-bar materially assists in the act of turning around, as by this means the friction of the parts is reduced to a minimum.

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

The combination of the reach H, provided with a recess on its lower side, a friction-roller, *e*, sitting within said recess and journaled in eyebolts *d*, the friction-plate *f*, secured to the upper side of said reach by means of said eyebolts *d*, the hounds E, provided with a sway-bar, G, adapted to move in contact with the friction-roller *e*, and a bridge, J, having a friction-plate, *g*, sliding upon the friction-plate *f*, substantially as and for the purpose specified.

In testimony that I claim the above I have hereunto subscribed my name in the presence of two witnesses.

ASAHEL BRAINARD WEBSTER.

Witnesses:

ERNEST P. WILMOT,  
WILLIS S. METCALFE.