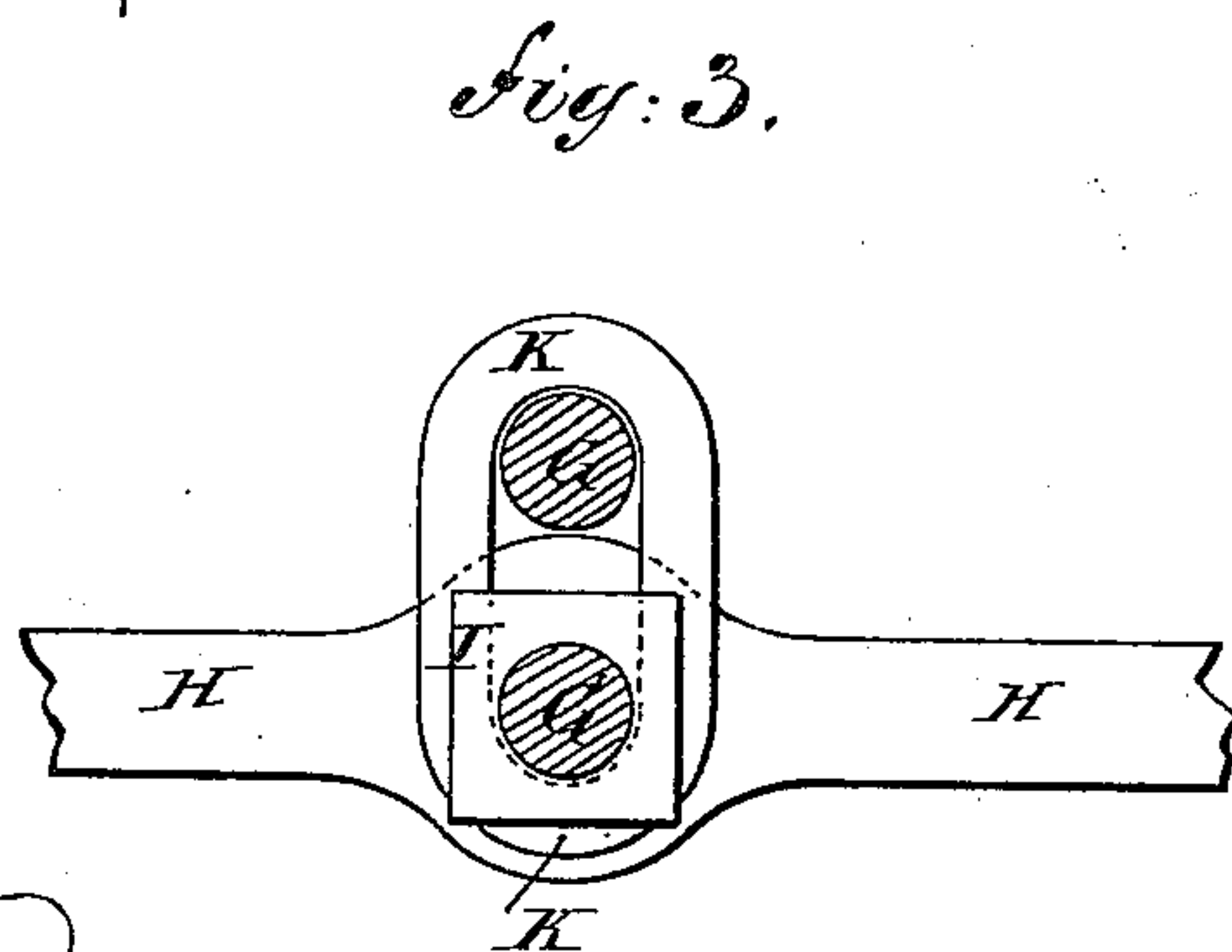
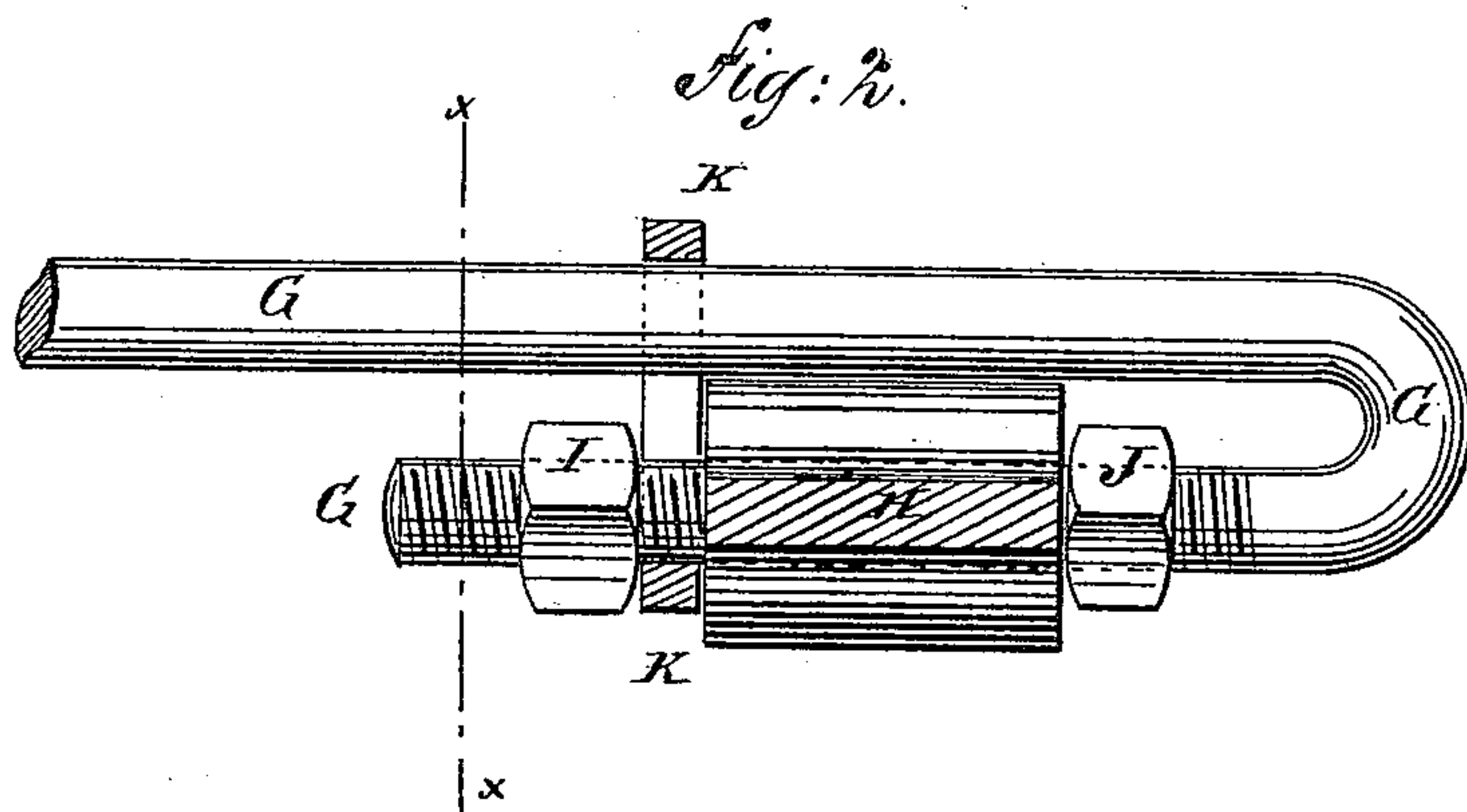
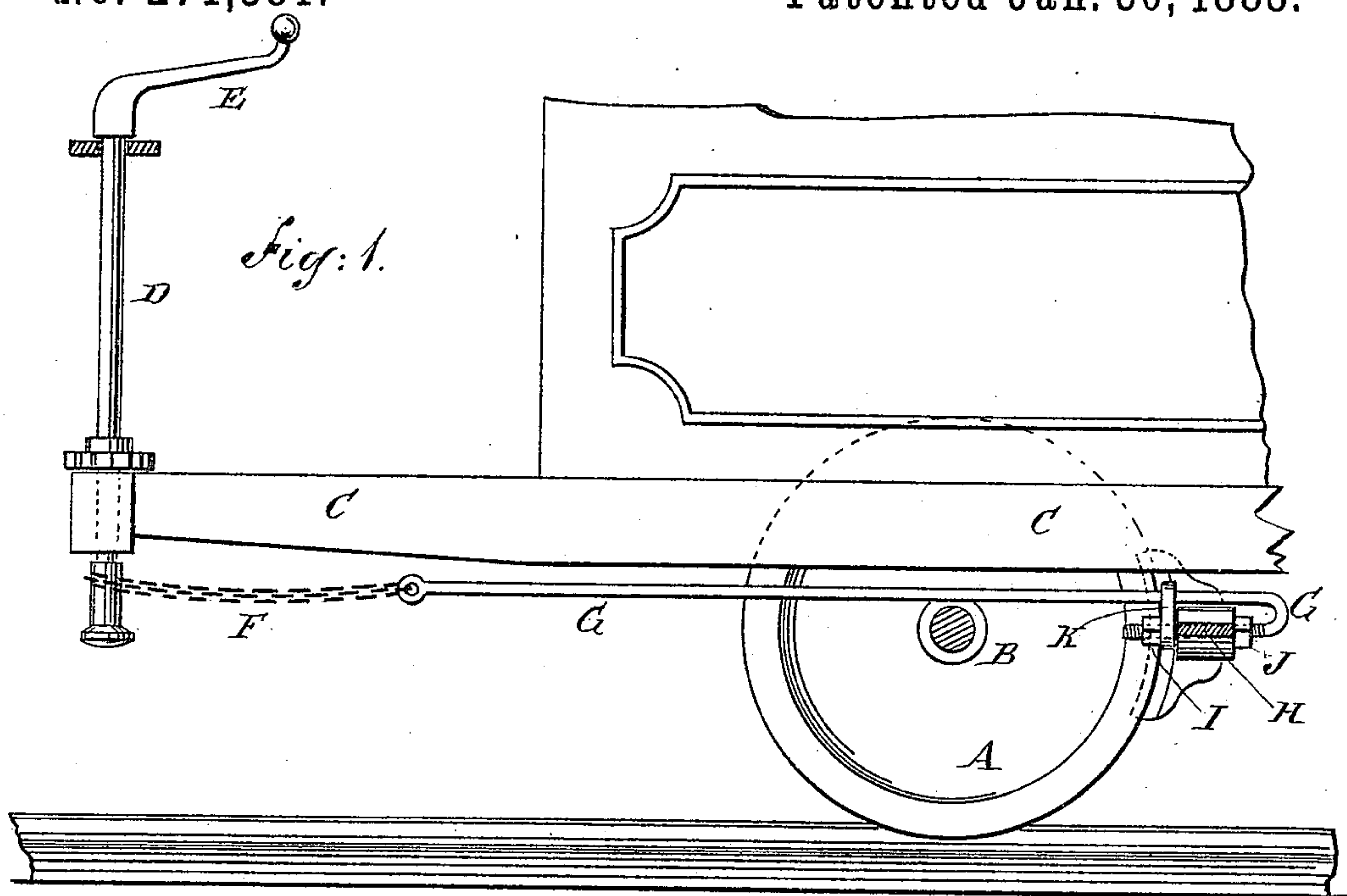


(No Model.)

M. VAN TASSEL.
BRAKE ROD FOR CARS.

No. 271,381.

Patented Jan. 30, 1883.



WITNESSES:

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UNITED STATES PATENT OFFICE.

MATTHEW VAN TASSEL, OF BROOKLYN, NEW YORK.

BRAKE-ROD FOR CARS.

SPECIFICATION forming part of Letters Patent No. 271,381, dated January 30, 1883.

Application filed November 21, 1882. (No model.)

To all whom it may concern:

Be it known that I, MATTHEW VAN TASSEL, of Brooklyn, E. D., in the county of Kings and State of New York, have invented a new and useful Improvement in Brake-Rods for Street-Cars, of which the following is a full, clear, and exact description.

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

Figure 1 is a side elevation of my improvement shown as applied to a car, the car-axle and the brake-beam being shown in section.

Fig. 2 is a side elevation of a part of the brake-rod, and showing the brake-beam and the link in section. Fig. 3 is a sectional elevation of the same, taken through the line *xx*, Fig. 2.

The object of this invention is to prevent the breaking of street-car brake-rods.

The invention consists in a brake-rod made with a U-bend at its rear end. The brake-beam is placed upon the short arm of the brake-rod, and the two arms are connected at the forward side of the said brake-beam by a link, so that the bending of the rod from the turning of the brake-beam will be made to occur in the body of the rod, as will be hereinafter fully described.

A represents the wheel, B the axle, and C the frame, of a street-car.

D is the brake-shaft, to the upper end of which is attached the crank E, and to its lower end is attached the end of a short chain, F.

The other end of the chain F is attached to the forward end of the brake-rod G. The rear end of the brake-rod G is bent into U form, and its short arm or end passes through the brake-beam H, and has two nuts, I J, screwed upon it, one upon each side of the brake-beam H.

At the forward side of the brake-beam H is placed a link, K, through which both arms of

the brake-rod G pass, and which is held in place against the said forward side of the brake-beam H by the forward nut, I.

Heretofore the brake-rod has been made straight and passed directly through the brake-beam, and the constant jarring crystallized the iron, and thus made it brittle, so that when the brake was applied and the brake-beam was raised and turned by the friction of the brake-shoes against the wheels the tendency of the brake-rod to bend at the forward side of the brake-beam and the weakening of the rod by the screw-thread caused the said brake-rod to break at that point.

With my improvement there is less tendency of the rod to crystallize, and the bend, when the brake is applied, occurring in the body of the brake-rod G where it passes through the link K, the said brake-rod is less liable to break, and is thus much more durable.

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

1. A brake-rod having its rear end bent into U form, its shorter arm being adapted to be passed through the brake-beam, and the two arms connected together at the forward side of the said brake-beam, substantially as herein shown and described.

2. The combination, with the brake-rod G, having a U-bend at its rear end, and the brake-beam H, placed upon the short arm of the rod, of the link K, substantially as herein shown and described, whereby the two arms of the rod are securely connected, and the bending of the rod from the turning of the brake-beam is made to occur in the body of the rod, as set forth.

MATTHEW VAN TASSEL.

Witnesses:

JAMES T. GRAHAM,
C. SEDGWICK.