

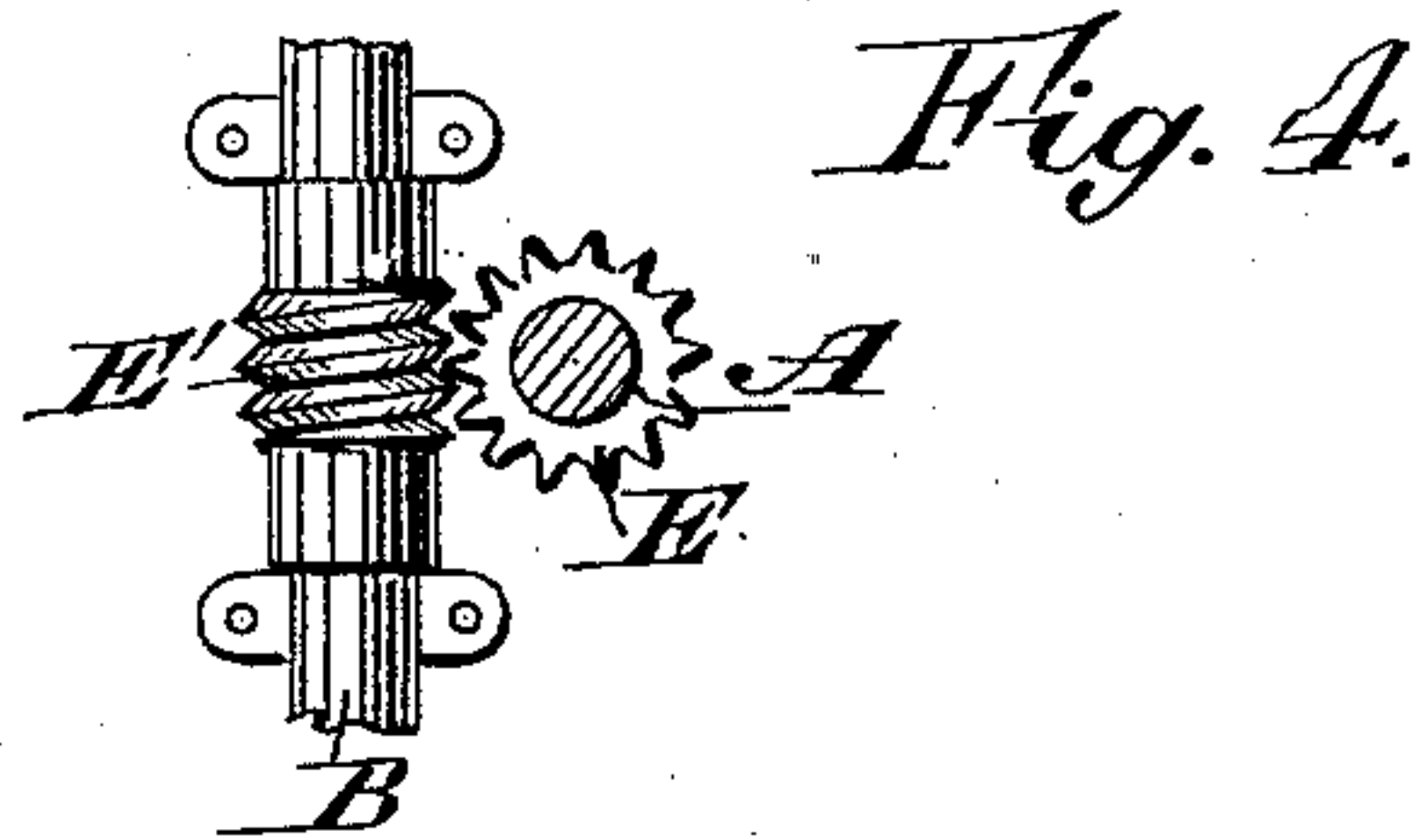
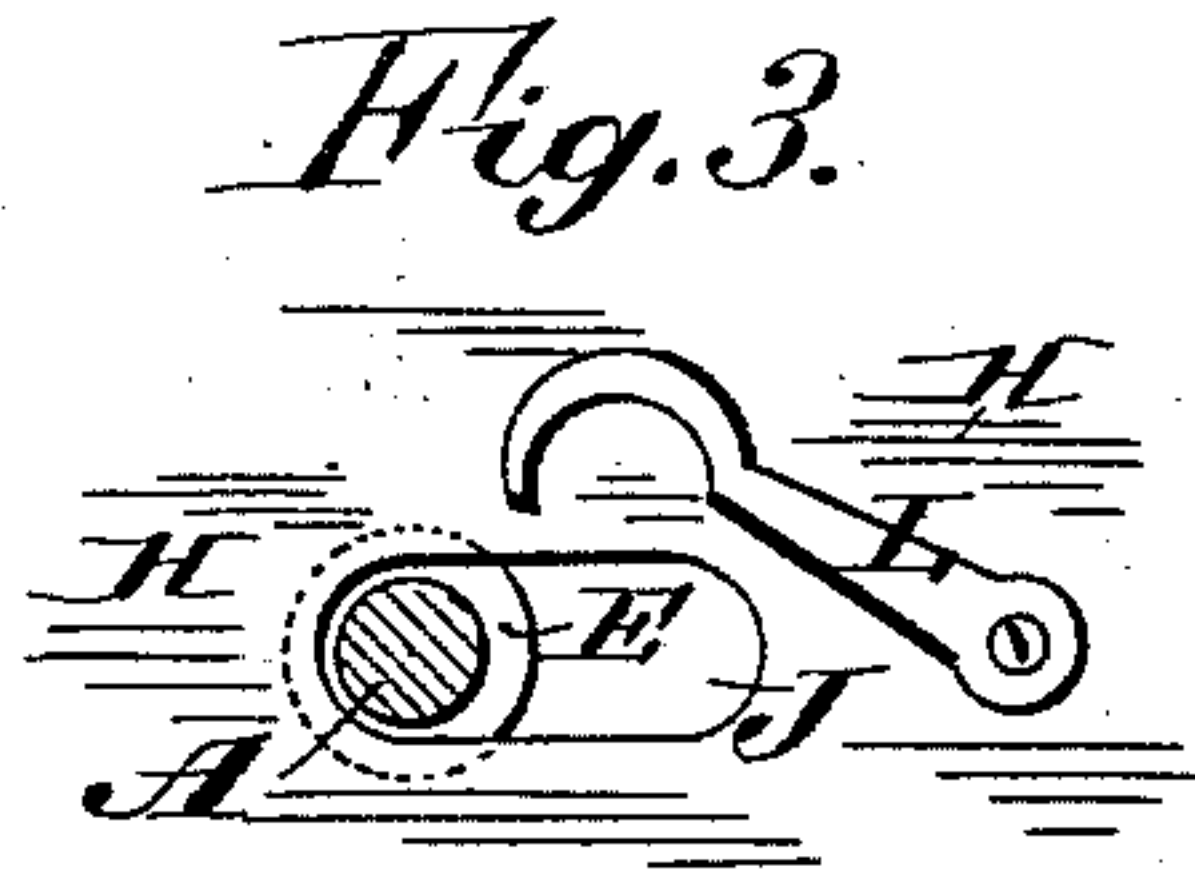
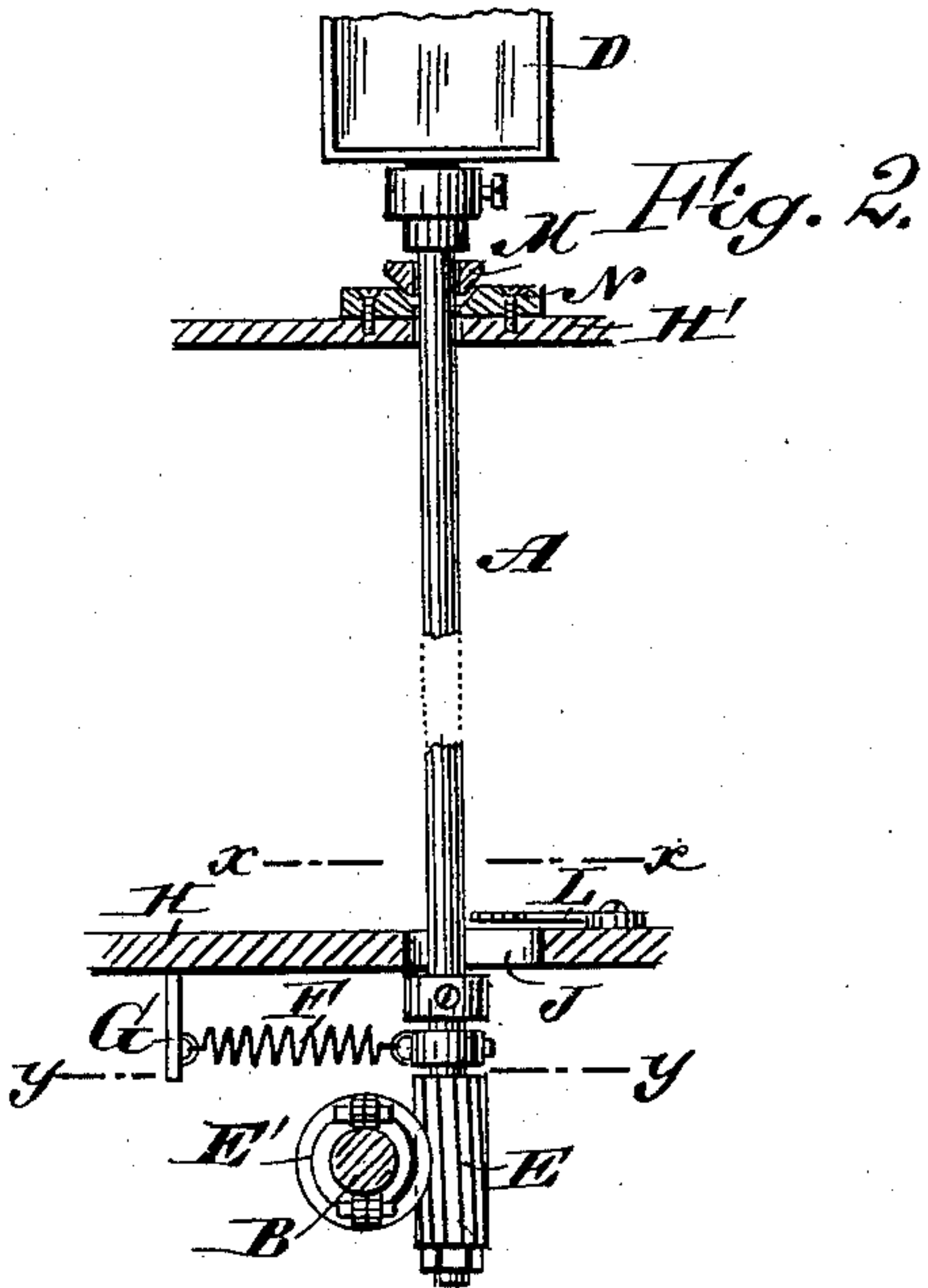
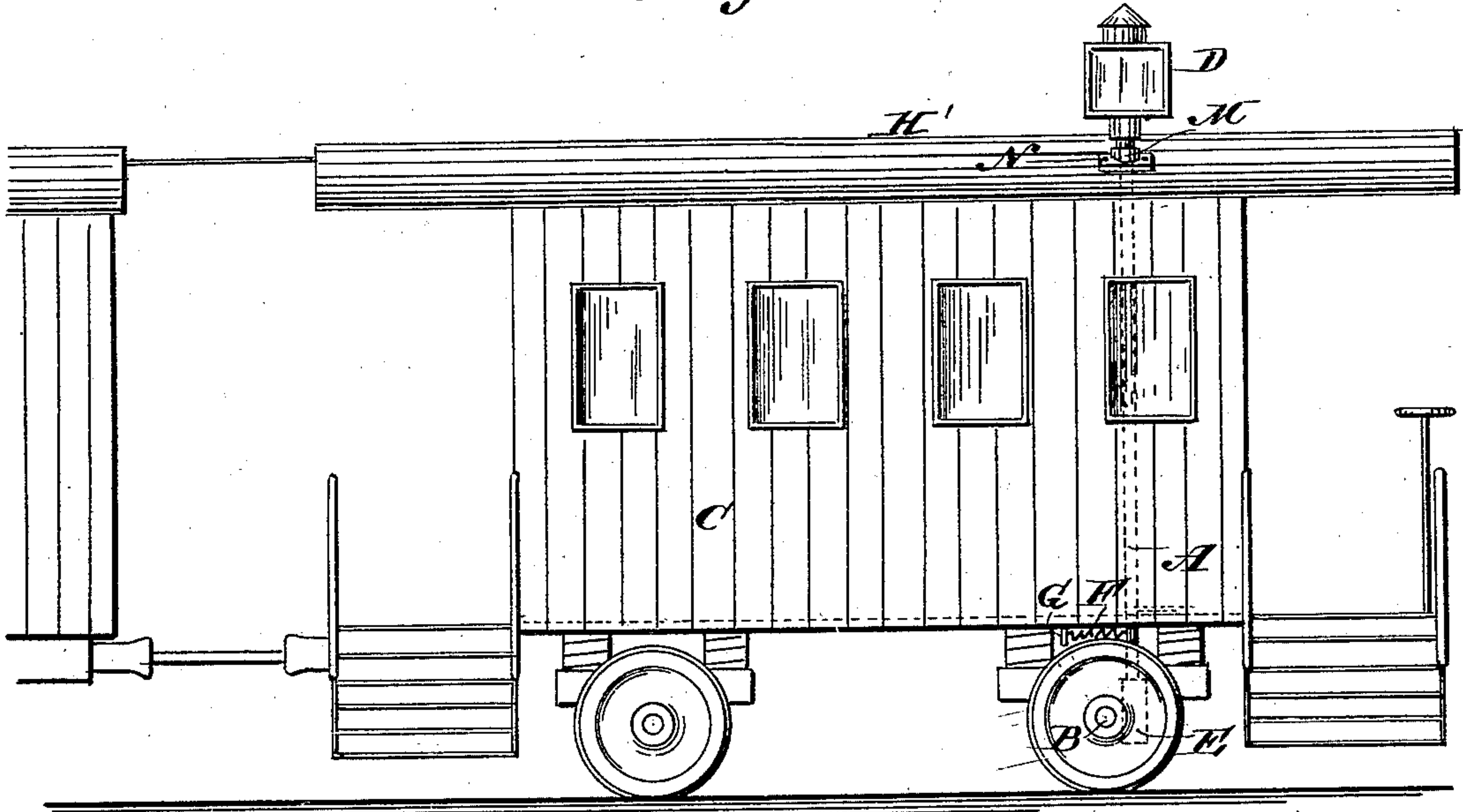
(Model.)

L. W. SCHOONOVER & J. AFFLERBACH.

REVOLVING CAR SIGNAL.

No. 279,821.

Fig. 1. Patented June 19, 1883.



WITNESSES:

Motz
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INVENTOR:

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UNITED STATES PATENT OFFICE.

LEANDER W. SCHOONOVER AND JOSEPH AFFLERBACH, OF PERTH AMBOY,
NEW JERSEY.

REVOLVING CAR-SIGNAL.

SPECIFICATION forming part of Letters Patent No. 279,821, dated June 19, 1883.

Application filed March 13, 1883. (Model.)

To all whom it may concern:

Be it known that we, LEANDER W. SCHOONOVER and JOSEPH AFFLERBACH, both of Perth Amboy, in the county of Middlesex and State of New Jersey, have invented certain new and useful Improvements in Revolving Signals for Railroad-Trains, of which the following is a full, clear, and exact description.

Our invention relates to that class of signals that is applicable to railroad cars, coaches, or locomotives, and that is revolved by the movement of one of the axles; and it consists of the combination and arrangement of parts, substantially as hereinafter fully set forth and claimed.

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, representing our invention applied to the caboose of a railroad freight-train. Fig. 2 is a sectional elevation, showing the preferred construction and method of applying the signal. Fig. 3 is a sectional plan view, taken on the line $x x$ of Fig. 2, showing the slot in the floor of the caboose through which the signal-rod passes and the hook for holding the signal out of action; and Fig. 4 is a detailed sectional plan view, taken on the line $y y$ of Fig. 2, showing the signal-rod and axle of the car-truck, and showing the worm-gearings for revolving the signal.

A represents the signal-rod, which reaches from below the axle B of the truck of the caboose C, up through the top or roof of the caboose. To the top of this rod A, above the caboose, is secured the many-colored signal-lantern D. To the lower end of the rod A is secured the worm-sleeve E, which, when the signal is to be revolved, is held in engagement with the worm E' on the axle B by the action of the coiled spring F, attached to the rod, and to the stud G, fixed to the bottom or floor H of the caboose, as shown clearly in Fig. 2. The floor H of the caboose is slotted, as shown at J, for the passage up through the floor of the signal-rod A, and so that the

lower end of the rod A may be drawn backward to disengage the worm-sleeve E from the worm E', and thus put the signal at rest. For holding the lower end of the rod drawn backward away from the axle B against the tension of the spring F, we pivot upon the floor H of the caboose the hook L, which is adapted to be hooked around the rod A, as will be understood from Fig. 3. Upon swinging the hook L away from the rod A to the position shown in Fig. 3, the spring F will draw the lower end of the rod A forward, causing the worms E E' to engage with each other, and cause the rod A and lantern D to revolve with a speed bearing a certain relation to the speed of the train. To permit the lower end of the rod A to have this movement to and from the axle B, and in order that the lower end of the rod may accommodate itself to the movement of the axle B while the train is rounding curves, we provide the rod A with the conical collar M, which runs in the countersunk plate N, secured to the top or roof of the caboose, as shown clearly in and as will be clearly understood from Fig. 2.

The signal-lantern D, when in operation, being of many colors and being revolved from the axle of the truck of the car, serves not only as a means to indicate the locality of the train, but also to indicate the speed of the train, so that an engineer of a train in the rear may always keep his train a safe distance from the preceding train, and thus avoid all danger of collision. Besides, if the signal is attached to the last car of the train, the engineer of the same train may always know if anything has occurred to part his train; and the signal is cheap and practical for its purpose.

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

1. In a signal, the rod A, having the conical collar M, in combination with the countersunk plate N, the lower end of the rod A being adapted to turn with the car-axle B, and having a yielding connection with the axle worm or pinion, and caused to automati-

cally engage with said worm when disengaged therefrom, substantially as and for the purposes set forth.

2. The bottom H of the car, having the slot
5 J, and the top H', having the bearing M, in combination with the signal-rod A, adapted to be turned by and to have its lower end moved

to and from the axle B, substantially as and for the purposes set forth.

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