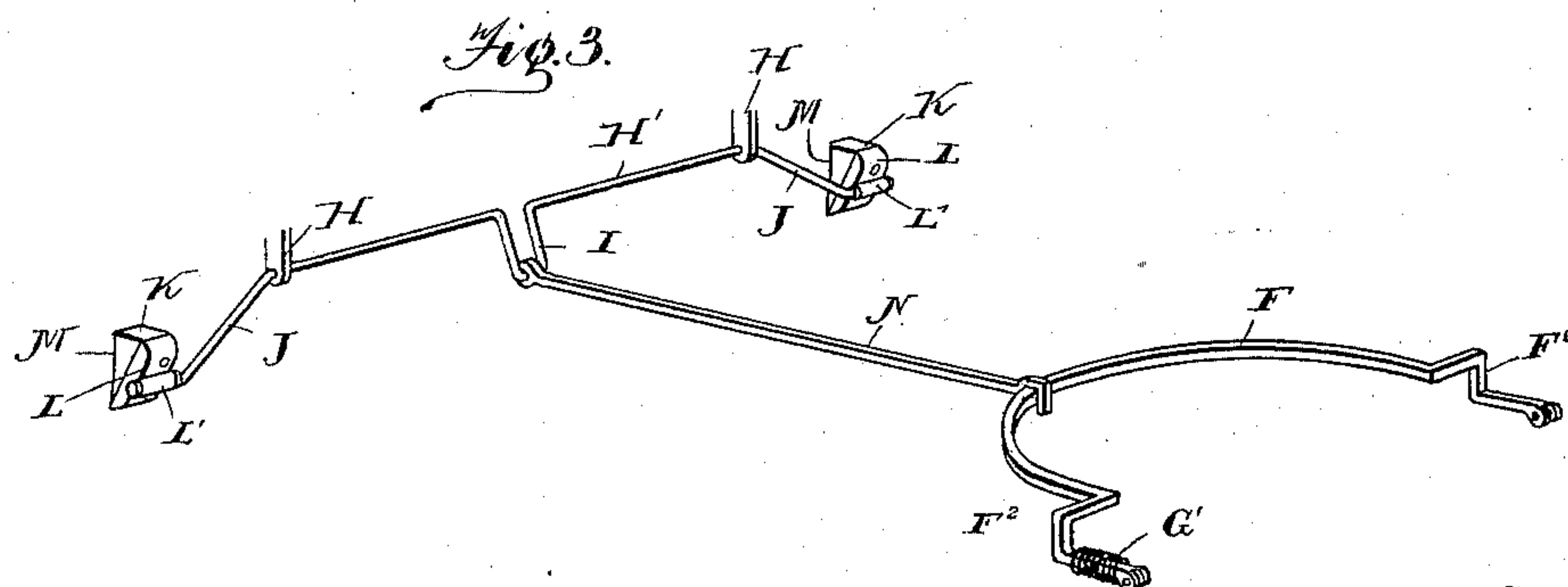
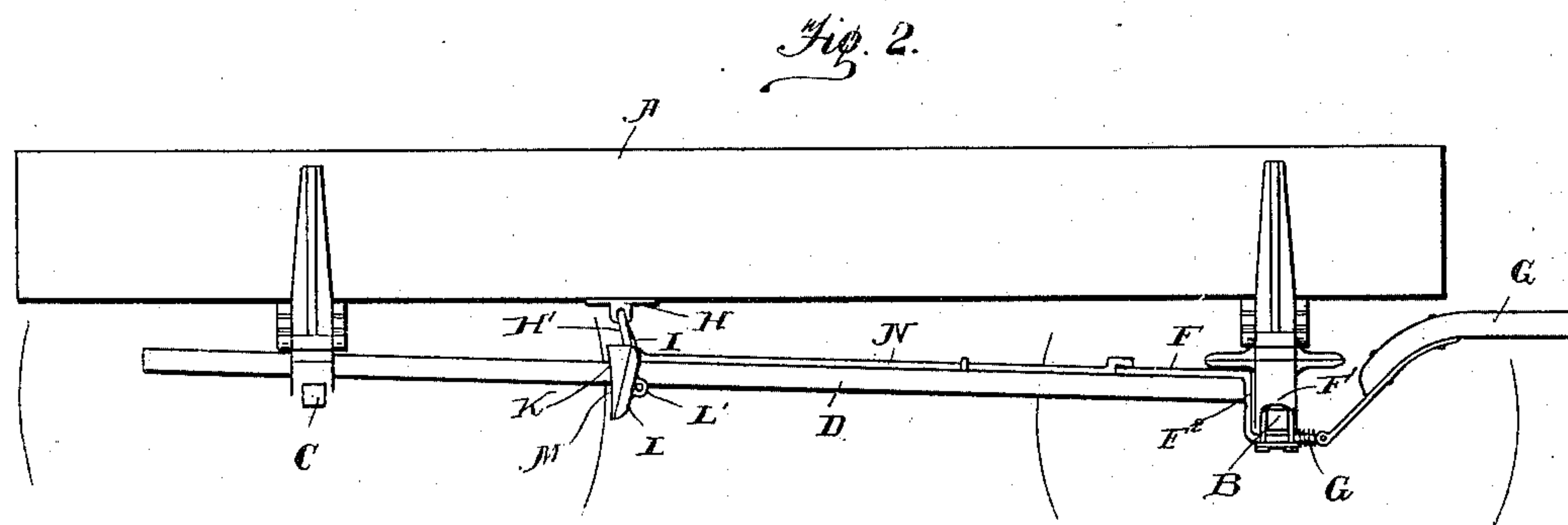
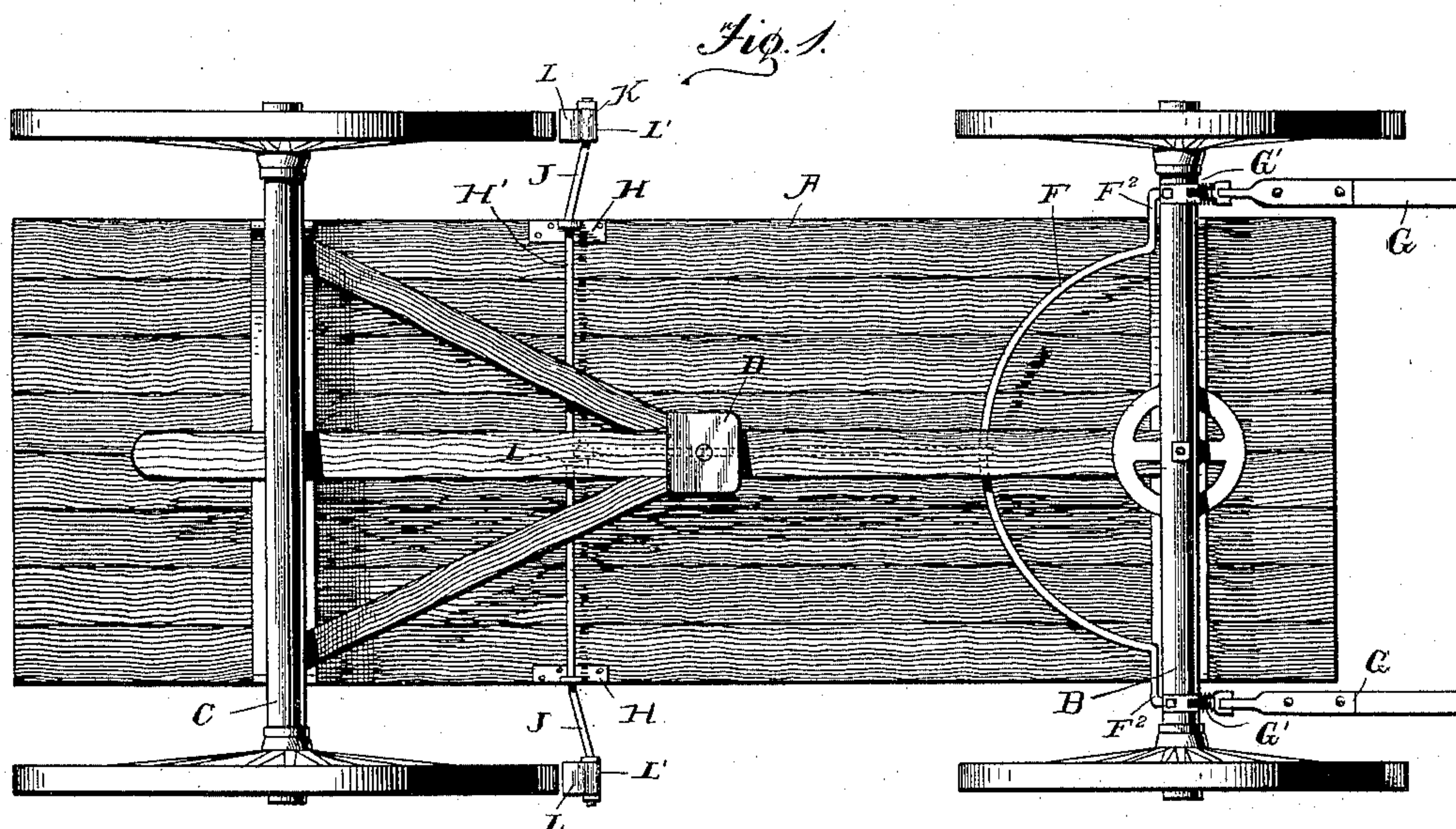


(No Model.)

E. SINNER.
AUTOMATIC WAGON BRAKE.

No. 605,235.

Patented June 7, 1898.



Witnesses

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UNITED STATES PATENT OFFICE.

EDUARD SINNER, OF TIPTON, KANSAS.

AUTOMATIC WAGON-BRAKE.

SPECIFICATION forming part of Letters Patent No. 605,235, dated June 7, 1898.

Application filed May 19, 1897. Serial No. 637,261. (No model.)

To all whom it may concern:

Be it known that I, EDUARD SINNER, residing at Tipton, in the county of Mitchell and State of Kansas, have invented a new and useful Automatic Wagon-Brake, of which the following is a specification.

My invention relates to a brake for wagons which is automatically operated by the horse.

The object of my invention is to provide an automatic brake for attachment to wagons which will be immediately operated when there is any back draft put upon the thills by the horse, as when descending a hill or coming to a stop, so that the wagon can be immediately stopped.

My invention, broadly stated, consists in loosely supporting from the wagon-body the brake-lever which carries the brake-shoes at its ends and connecting it with an arc-shaped piece which is connected with the thills, so that when the arc-shaped piece is moved backward the brake will be applied.

My invention also consists of certain details of construction that will be hereinafter more fully described, and specifically pointed out in the claims.

In order that my invention may be fully understood, I will proceed to describe the same with reference to the accompanying drawings, in which—

Figure 1 is a bottom plan view of a wagon having my automatic brake applied thereto. Fig. 2 is a side elevation, and Fig. 3 is a perspective view of the brake.

In the said drawings, A represents the wagon-body; B, the front axle; C, the rear, and D the running-gear connecting the two axles.

F represents an arc-shaped piece of metal having its curved portion resting on the running-gear and its ends sliding in the bifurcated ends of the clips F'. The arc-shaped piece is bent at F², as at Fig. 3, to allow for the ends fitting beneath the axles. Secured to the ends are the thills G, and it is through these that the brake is operated. G' represents a stout coiled spring surrounding the arc ends to prevent a too free movement in the clips.

Suspended from the wagon-body in the brackets H is the brake-lever H', formed with the crank I at its central portion and the

bent ends J carrying the brake-shoes K. The brake-shoes consist of the back L, provided with the sleeve L', which fits on the end of the brake-lever, and with the tapered face M, arranged as shown. By this arrangement when the wheel is turning forward the face will bind, but when it is turning in the reverse direction the face will be moved away from the wheel.

N represents a rod connected at one end to the crank and at its other end to the arc, the connection at this end being such as to permit the arc to turn in it as the axle is turned.

The operation of the brake is as follows: When the horse pulls upon the thills, it will be seen that the arc will have a slight forward movement in the clips and thus draw the brake-shoes away from the wheels. When, however, the horse exerts a back pressure on the thills, it will be seen that the arc will be moved backward to move the shoes into engagement with the wheel, and owing to the particular arrangement of the shoe the wheel will be easily and quickly braked.

From the foregoing it will be seen that I have provided a simple arrangement for automatically braking a wagon when the horse exerts a backward pressure on the thills.

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

1. In a wagon-brake, the combination of the brake-lever loosely supported from the wagon-body and carrying the brake-shoes at its ends, and a suitable connection between the brake-lever and thills, whereby any back draft on them will apply the brake-shoes, substantially as shown and described.

2. In a wagon-brake, the combination of the brake-lever loosely supported from the wagon-body and carrying the brake-shoes at its ends, an arc-shaped piece having a loose connection with the brake-lever, and a connection with the thills substantially as shown and described.

3. In a wagon-brake, the combination with a rock-shaft mounted upon the wagon-body and carrying brake-shoes at its ends, a transversely-extending rod having its extremities bent to extend beneath the front axle, and a loose connection between said transverse bar and the rock-shaft, of the thills connected to

the extremities of the transverse bar and adapted by their longitudinal movement to actuate the rock-shaft and apply the brake-shoes, substantially as set forth.

5 4. In a wagon-brake, the combination with the rock-shaft carrying brake-shoes at its extremities, clips secured upon the front axle and perforated, a transversely-extended rod having its extremities bent to pass beneath
10 the axle, said bent ends passing through the perforated clips and movable therein, and a loose connection between the transverse rod and the rock-shaft, of the thills connected to the extremities of the transverse rod, sub-
15 stantially as set forth.

5. In a wagon-brake, the combination with a rock-shaft having an intermediate crank portion and carrying brake-shoes at its ex-
20 tremities, an arc-shaped piece having its extremities bent to extend forwardly, guides carried by the axle in which said forwardly-extending ends move, and a longitudinally-extending bar secured to the arc-shaped piece

and loosely connected to the crank of the rock-shaft, of the thills connected to the ex- 25 tremities of the arc-shaped piece, substantially as set forth.

6. In a wagon-brake, the combination with a rock-shaft mounted upon the body of the wagon and carrying brake-shoes at its ex- 30 tremities, a transversely-extending rod having its forwardly-extending ends bent, guides carried by the axle in which said forwardly-extending ends move, a connection between the transversely-extending rod and the rock- 35 shaft, and springs arranged about the ends of the transversely-extending rod between the extremities thereof and the guides, of the thills connected to the extremities of said transversely-extending rod, substantially as 40 set forth.

EDUARD SINNER.

Witnesses:

FRANK MERGEN,
PETER CORPSTEIN.