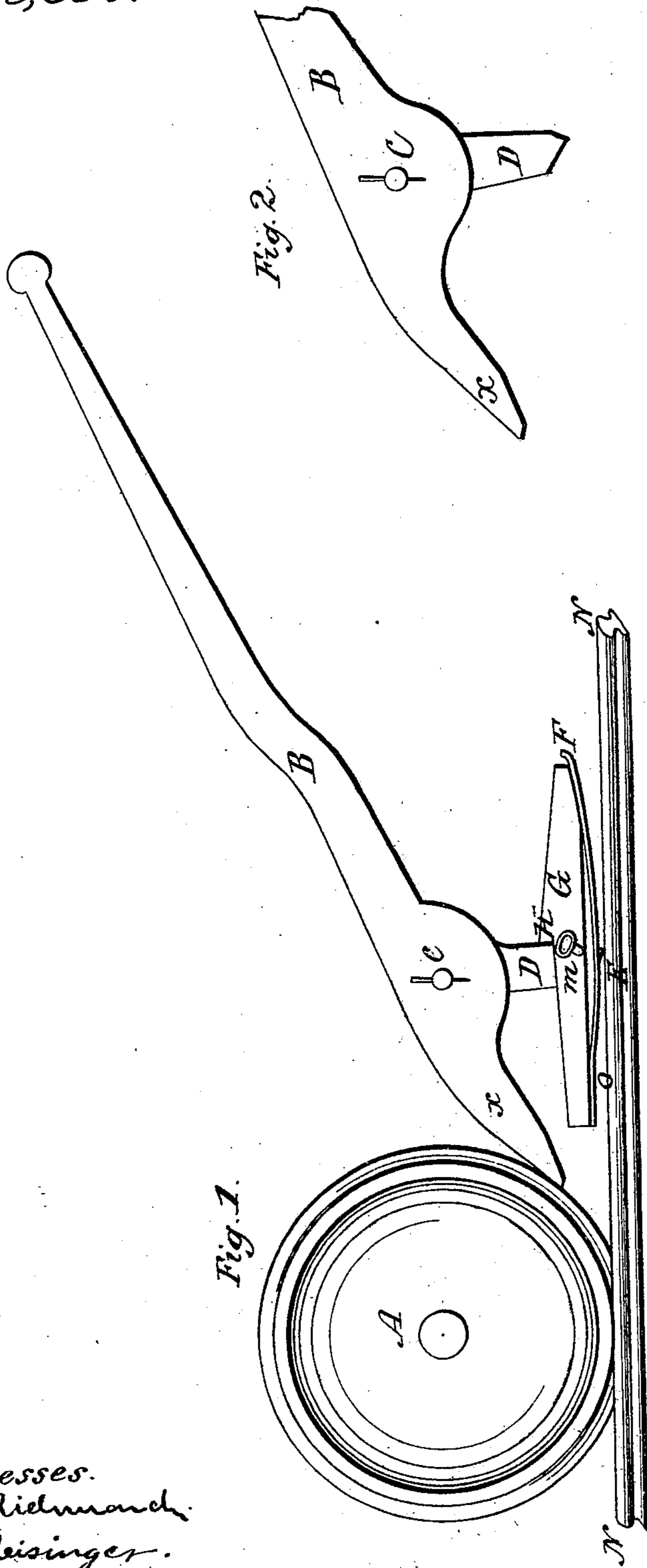


M. G. Collins.

Lifting Jack.

N^o 109,590.

Patented Mar. 29, 1870.



Witnesses.
A. B. Richmond.
Rae Reisinger.

Inventor.
M. Grier Collins.

United States Patent Office.

MATTHEW GRIER COLLINS, OF MEADVILLE, PENNSYLVANIA.

Letters Patent No. 109,590, dated November 29, 1870.

IMPROVEMENT IN COMBINED RAILROAD-JACKS AND PINCH-BARS.

The Schedule referred to in these Letters Patent and making part of the same.

To all whom it may concern :

Be it known that I, MATTHEW GRIER COLLINS, of the city of Meadville, in the county of Crawford, State of Pennsylvania, have invented a new and improved "Combined Railroad-Jack and Pinch-Bar," and I do hereby declare that the following is a full and exact description of the same, reference being had to the accompanying drawing and the letters of reference marked thereon.

Figure 1 represents my invention adjusted in working order.

A represents the wheel of a railroad-car.

N N, a rail.

B is a lever, and may be made of any required and suitable length.

The point X drops down, as shown in drawing.

At O the lever has a slot, in which the fulcrum D is placed with a pin or bolt, c, passing through them both.

The lower end of this fulcrum is shaped like a "chisel," as shown at D, Figure 2.

G, fig. 1, a foot or rail-plate through which the fulcrum D passes in a slot made for that purpose.

On the upper side of this foot G is a shoulder, H, against which the fulcrum D rests. This gives the fulcrum greater strength, as it is supported by this shoulder.

M is a set-screw, by which the fulcrum D is fastened in the foot, and by this construction the lower or chisel-end of the fulcrum may be made to project any desired distance below the foot or rail-plate.

On the lower surface of the foot or rail-plate is bolted a steel spring O F, the end F turning up somewhat like a sled-runner.

This spring is of the same width of the rail-plate, and is bent with a convex surface down.

Through the center of this spring at E, is a slot similar in size to the slot in the foot G, and through this the chisel end of the fulcrum passes.

This spring is made of sufficient stiffness or strength to raise the whole weight of machine from the rail N N, on which it rests, and thereby keep the chisel-end of the fulcrum clear from the rail.

When it is desired to use my invention, the jack is adjusted, as shown at fig. 1, by placing the foot or rail-plate on the rail N N, and shoving it toward the car-wheel until it is brought in the proper distance to operate on the wheel. Then by pressing down on the long end of the lever B, the short end resting against the wheel, the fulcrum D is pushed down so that the chisel-end is brought into contact with the rail N N, slightly penetrating its surface, the spring O F being flattened or bent upward by this pressure, so that the chisel-end of the fulcrum will pass through the slot in the spring, and catch on the rail, as described.

As the wheel moves forward and the pressure or force is removed from the lever B, the spring O F operates to lift the fulcrum from the rail, when the foot may be shoved forward until it is again in position to work, as described.

What I claim as my invention, and desire to secure by Letters Patent, is as follows, to wit:

The fulcrum D, the foot or rail-plate G, the spring O F, in combination with the lever B, when the same are constructed as described, for the purposes set forth.

MATTHEW GRIER COLLINS.

Witnesses :

A. B. RICHMOND,

H. M. RICHMOND.