G. W. Miles,

Spoke-Driving Machine,

No. 68,773. Patented Sep. 10, 1867.

Fig: 1

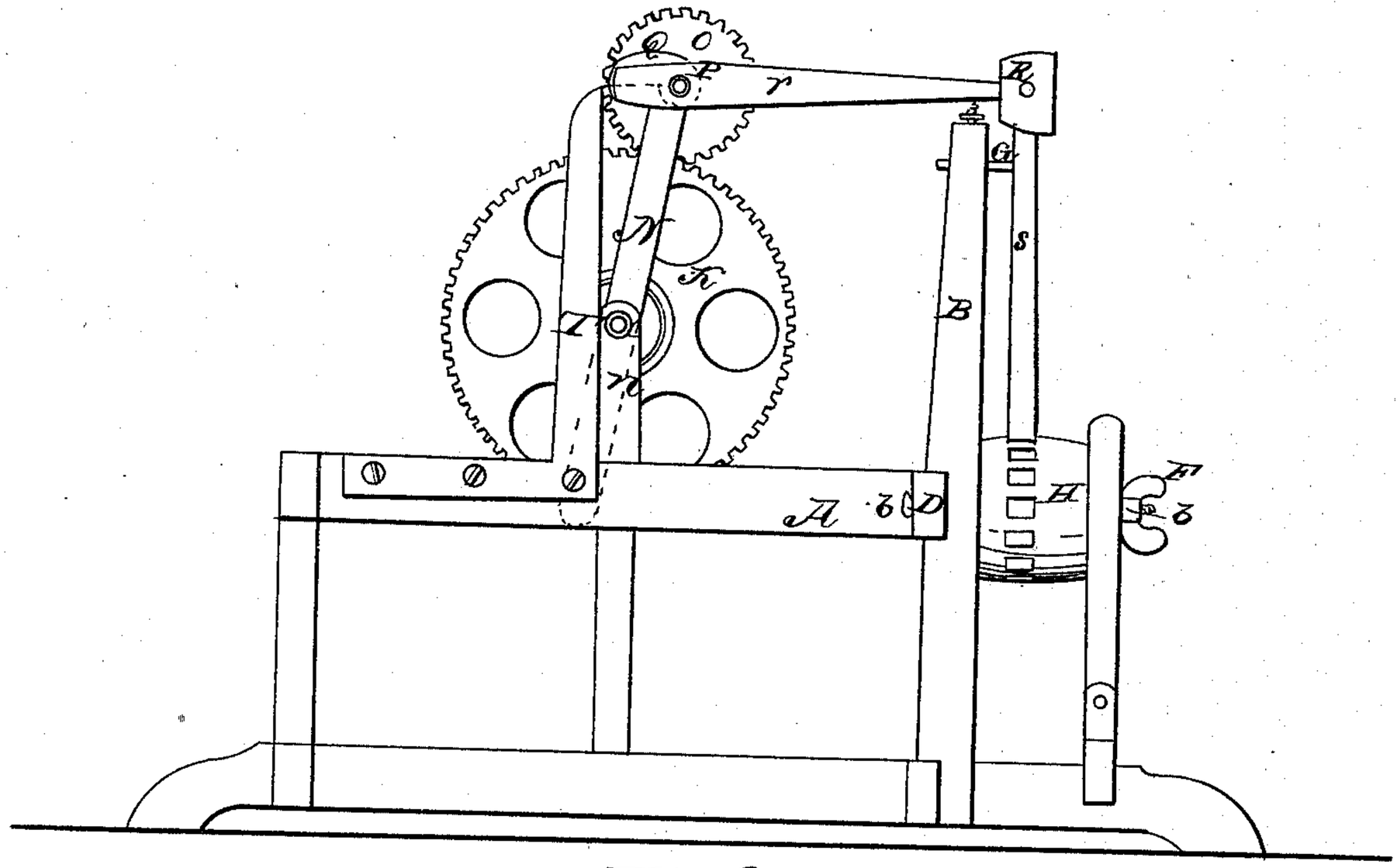
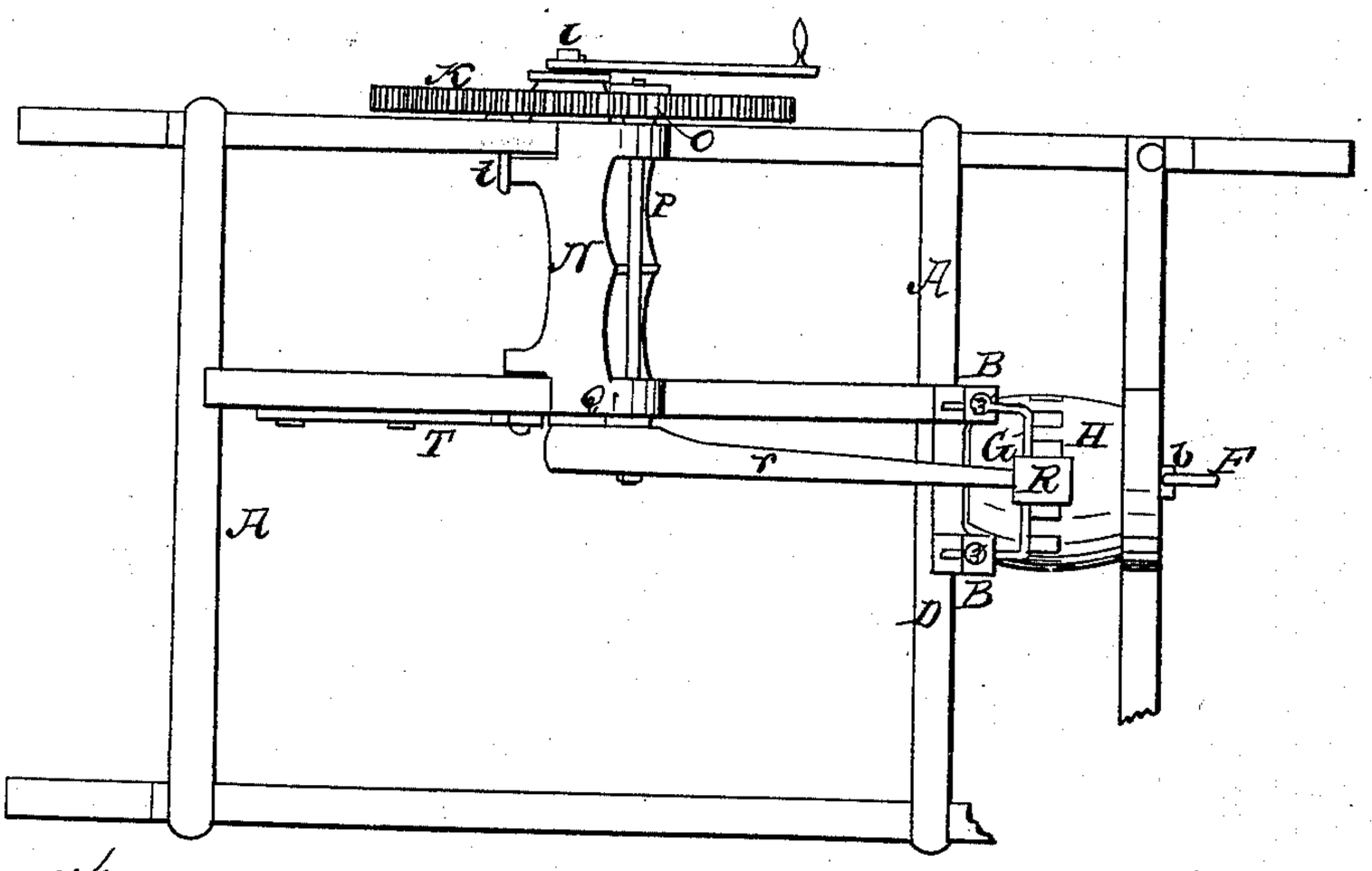


Fig: 2



Witnesses:
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Inventor:
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United States Patent Office.

G. W. MILES, OF MICHIGAN CITY, INDIANA, ASSIGNOR TO HOSLER, MILES AND COMPANY, OF THE SAME PLACE.

Letters Patent No. 68,773, *dated September* 10, 1867.

IMPROVEMENT IN MACHINES FOR DRIVING SPOKES IN WAGON-WHEELS.

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, G. W. MILES, of Michigan City, in the county of La Porte, State of Indiana, have invented a new and useful "Spoke-Driving Machine;" and I do hereby declare that the following is a full and exact description thereof, reference being had to the accompanying drawings, making a part of this specification, in which—

Figure 1 represents the side elevation of the machine, and

Figure 2 the plan of it.

Similar letters of reference mark corresponding parts of the machine.

The nature of my invention consists in a hammer to drive the spokes into the hub, so arranged that by means of a vibrating-frame supporting the shaft, on which said hammer is hung, and by means of an eccentric set on the said shaft, in combination with a proper working gear, the hammer moves in a continuous revolving manner, advancing forward as it strikes, and receding backward after the blow is made, as will be hereinafter fully explained.

To enable others skilled in the art to make and use my invention, I will proceed to describe its construction and operation.

A is a frame, on which the device is mounted. B B are two standards, into the recess of which one end of the hub H is fixed, while the other end of the hub is supported by a bolt, *b*, passing through the cross-piece D of the frame, also through the hub H and the standard E of the frame A, and tightened by a screw-nut, F. There is a metallic guide, G, the bent ends of which pass through the standards B B, and which, by means of set-screws *g g*, can be adjusted so as to keep the spoke S, to be driven into the hub H, in its proper place. A driving cog-wheel, K, is set firmly on the shaft L, supported by the standards M M of the frame A, said shaft passing through the vibrating-frame N, also in which it can revolve freely. The cogs of the wheel K gear into the cogs of the smaller wheel O, set firmly on a shaft, P, that passes through and revolves freely in the vibrating-frame N, on the opposite end of which shaft the hammer R is hung and firmly secured to the shaft. An eccentric, Q, of the shape as represented on the figure, is firmly secured to the end of the handle *r* of the hammer, and is placed between that end and the vibrating-frame N, working against a metallic standard, T, firmly secured to the frame A; the vibratory motion of the frame N having for its limits the standard T on one side, and a pin, *t*, set in the frame A on the other.

The operation of the machine consists in this, that a hub, H, is set in its place in such a manner that the spoke S, to be driven into one of its mortises, stands in a vertical position, its end abutting to the guide G, adjusted accordingly. A power is applied to the driving-wheel K, and the hammer R, as it rises up and descends down upon the spoke S, advances at the same time forward, by means of eccentric Q working against the standard T. As soon as the head of the hammer strikes on the end of the spoke, the eccentric becomes disengaged from the standard T, and the hammer is carried back by the movement of the wheel K and wheel O, until it drops down, carrying the vibrating-frame N forward until its lower part abuts to the pin *t*, when the hammer commences to rise again, and the same operation repeated.

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

The combination of the rotating shaft P, having the hammer attached thereto, with the vibrating-frame N, eccentric Q, and post T, or its equivalent, when arranged to operate substantially as described.

G. W. MILES.

Witnesses:

J. B. TURCHIN,

JAS. R. HAYDEN.