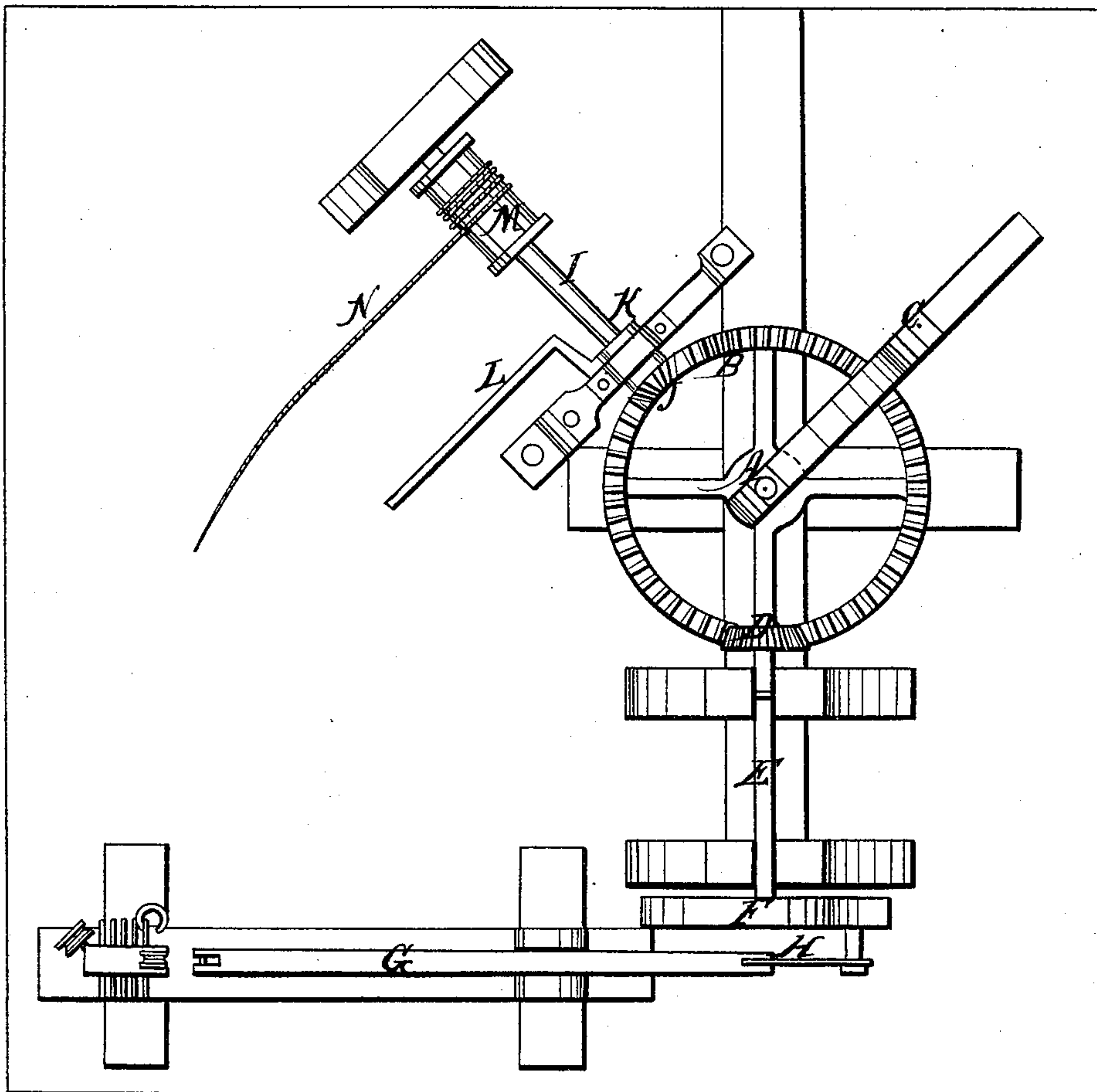


Partridge & Johnson,
Horse Power.
N^o 53,664. Patented Apr. 3, 1866.



Witness:
J. B. Corning

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UNITED STATES PATENT OFFICE.

GEORGE PARTRIDGE, OF ST. LOUIS, MISSOURI, AND DAVID M. JOHNSON,
OF COSHOCTON, OHIO.

IMPROVEMENT IN HORSE-POWERS.

Specification forming part of Letters Patent No. 53,664, dated April 3, 1866.

To all whom it may concern:

Be it known that we, GEORGE PARTRIDGE, of St. Louis, St. Louis county, Missouri, and DAVID M. JOHNSON, of Coshocton, Coshocton county, Ohio, have invented a new and Improved Horse-Power; and we do hereby declare that the following is a full, clear, and exact description thereof, which will enable those skilled in the art to make and use the same, reference being had to the accompanying drawing, forming part of this specification.

The drawing represents a plan or top view of our invention.

This invention relates to a new and improved device for transmitting the power of a horse to a pump or drill. The object of the invention is to obtain a means whereby the power of the animal will be transmitted or applied in the most direct manner possible and with little loss by friction, and which will admit, when the device is used for drilling, of the drill being drawn up with facility.

A represents an upright shaft, on the lower part of which the main or master wheel B is keyed, and having a sweep, C, attached to its upper end.

The wheel B has beveled teeth, and into said wheel a beveled pinion, D, gears, the latter being at one end of a shaft, E, having at its opposite end a crank-pulley, F, to which a walking-beam, G, is attached by a pitman, H.

I is a horizontal shaft, having at one end of it a bevel-pinion, J, which may be made to gear into the wheel B, when desired, by means of an eccentric collar, K, having a lever, L, attached for the convenience of turning it. On this shaft I a drum, M, is placed, having a rope or chain, N, attached.

The operation is as follows: The drill or

pump-piston, whichever is to be operated, is connected to the free or disengaged end of the walking-beam G, and the shaft A being rotated through the medium of the horse attached to the sweep C, the walking-beam is operated through the medium of the gearing B D, crank-pulley F, and pitman H, and in drilling, when it is necessary to raise or draw up the drill or to operate the sand-pump, the bevel-pinion J is thrown into gear with the wheel B by adjusting the eccentric collar K, and motion being thereby communicated to shaft I, the drill is drawn up by the rope or chain N. The sand-pump may also be drawn up by the same means.

The whole arrangement is extremely simple and efficient, there being but few working parts.

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

1. The master wheel B and sweep C, attached to the upright shaft A, in combination with the horizontal shaft E, provided with the bevel-pinion D, and the crank-pulley F, connected with the walking-beam G, all arranged to operate in the manner substantially as and for the purpose set forth.

2. In combination with the parts above specified, the horizontal shaft I, arranged with an eccentric collar, K, or its equivalent, for the purpose of throwing the pinion J in and out of gear with the wheel B, substantially as and for the purpose set forth.

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