(No Model.)

J. R. PATTERSON.

Horse Power.

No. 235,011. Patented Nov. 30, 1880.

Fig. 1.

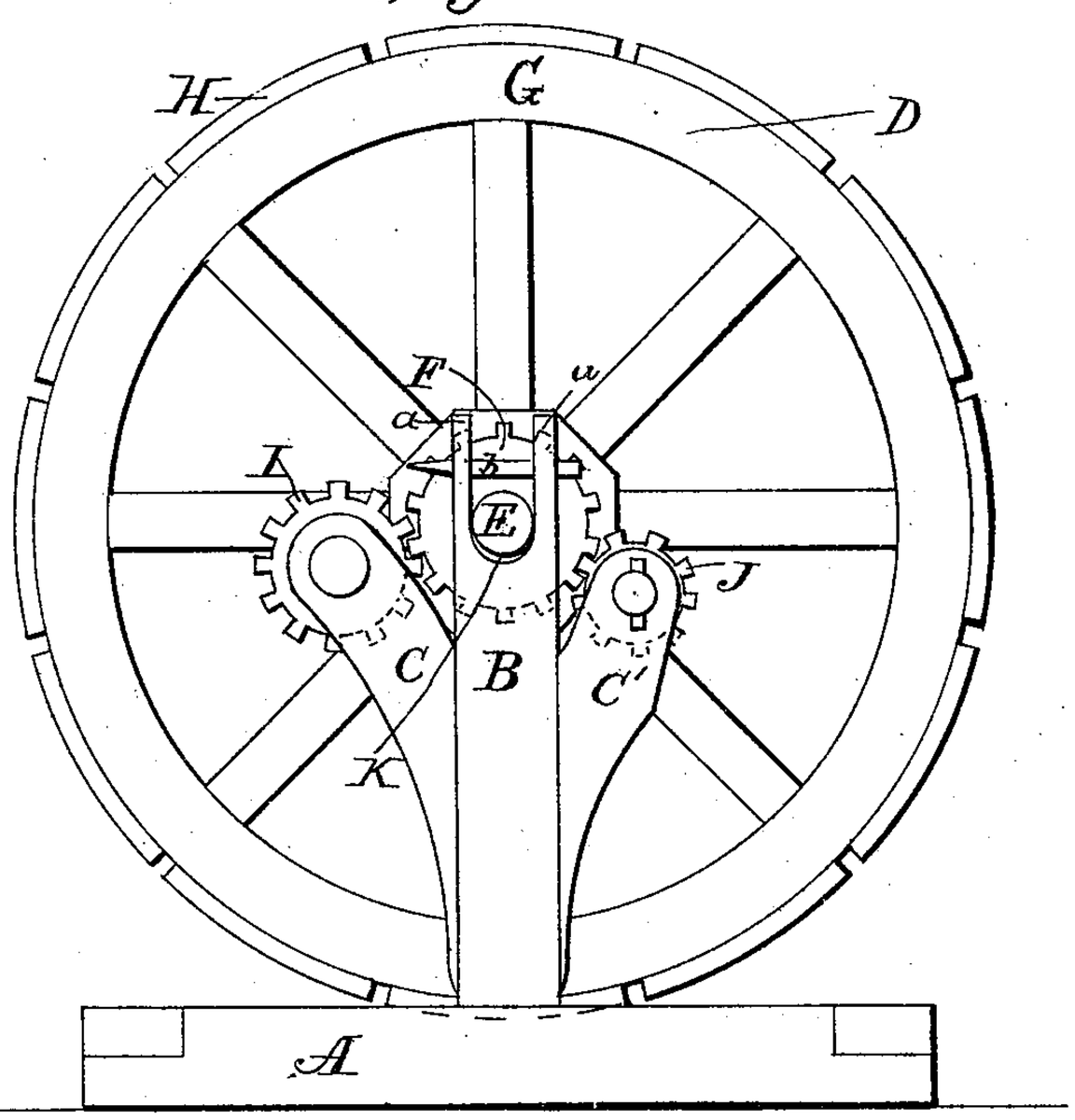
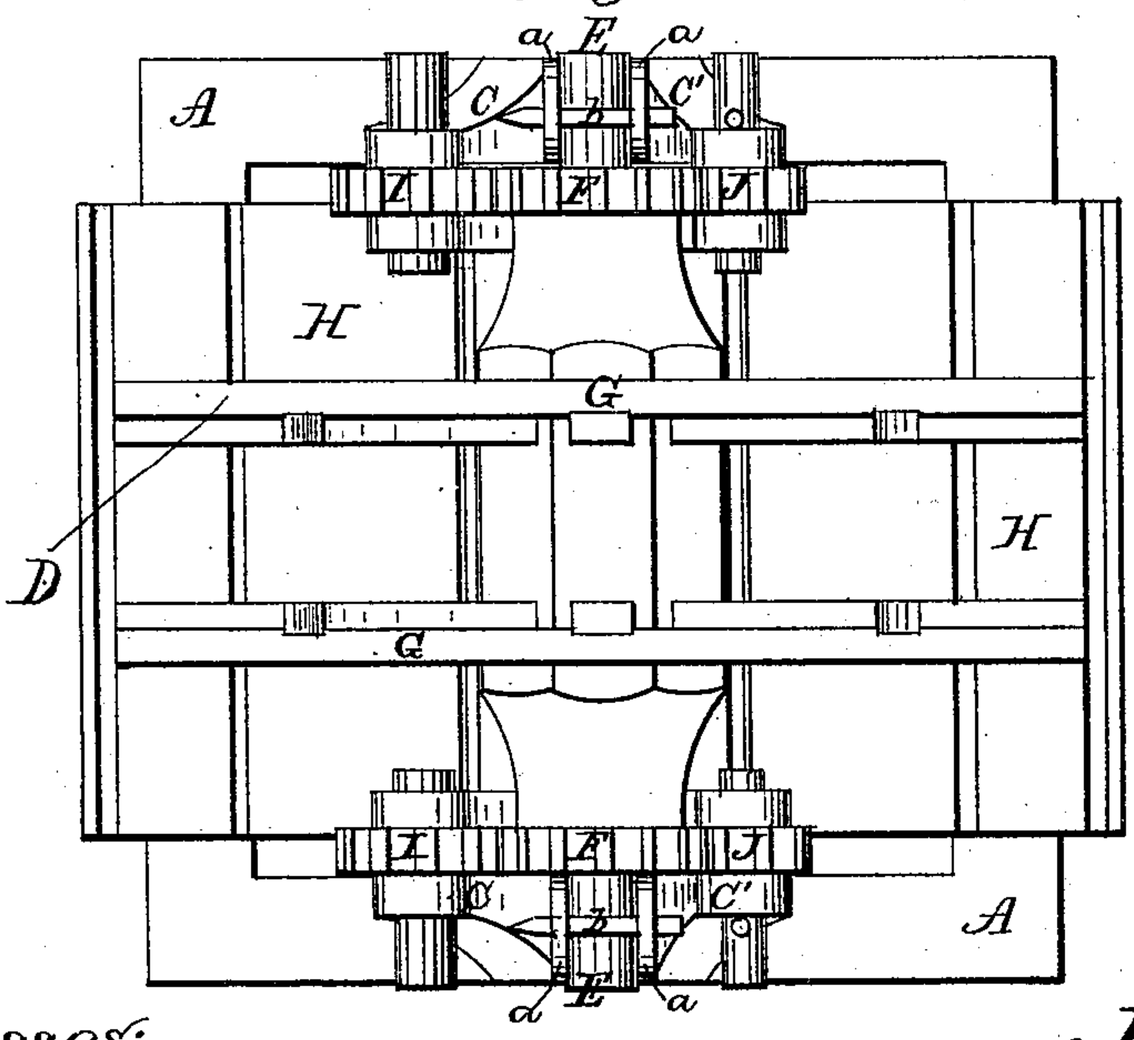


Fig. 2.



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UNITED STATES PATENT OFFICE.

JAMES R. PATTERSON, OF FRANKLIN, ARKANSAS.

HORSE-POWER.

SPECIFICATION forming part of Letters Patent No. 235,011, dated November 30, 1880.

Application filed September 13, 1880. (No model.)

To all whom it may concern:

Be it known that I, J. R. PATTERSON, a citizen of the United States, residing at Franklin, in the county of Izard and State of Arkansas, have invented certain new and useful Improvements in Horse-Powers; and I do hereby declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same, reference being had to the accompanying drawings, and to letters or figures of reference marked thereon, which form a part of this specification.

This invention relates to horse-powers; and it consists in the improved features of construction and combination hereinafter fully described, and particularly pointed out in the claim.

Figure 1 is a side elevation, and Fig. 2 is a plan view, of a horse-power embodying the improvements in my invention.

Referring by letter to the accompanying drawings, A designates the base of the frame, and B B represent the central uprights, from the sides of which extend the arms C C′, for supporting the gearing. D represents the power-wheel, which, in practice, should be about thirty feet in diameter, its shaft E being provided near each end with a cog-wheel, F, five or six feet in diameter. The wheel D should be about ten feet in width, and the rims G, to which the floor H is secured, should be near enough together to permit the team to walk on the projecting portions of the floor.

The boards forming the floor should be secured to the rims G in such a manner as to leave spaces of about an inch in width between them for the escape of trash.

Cog-wheels I have their bearings in the rear arms, C, and are about five or six feet in diameter. Smaller cogs, J, of about one foot or more in diameter, have their bearings in the front arms, C′.

The weight of the wheel D comes, through its cog-wheels F, upon the cogs I and J, and the wheel D, when operated, should revolve toward the smaller cog, J.

The journals K of the shaft E are confined between arms *a a* by pins *b* at the upper ends of the central uprights, B B, but no weight comes upon the journals, they being employed to hold the wheels F in mesh with the cogs I and J. The weight is therefore thrown upon the small cogs J, as the wheel D revolves toward the cogs J, and the cogs I serve principally as idlers.

By this construction of wheel, both the weight of the wheel and the weight of the team are utilized in furnishing the power, while in the machines of this class heretofore used the weight of the team only was utilized.

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

In a horse-power, the wheel D, provided with the projecting floor H and the cogs F F, near the journals K K, in combination with the uprights B B, arms C C′, and cogs I and J, constructed and operating substantially as and for the purposes set forth.

In testimony whereof I affix my signature in presence of two witnesses.

JAMES ROBERT PATTERSON.

Witnesses:

S. F. SIMPSON,

WM. BILLINGSBY.