

(No Model.)

J. L. DOBBS.

MOTOR.

No. 253,685.

Patented Feb. 14, 1882.

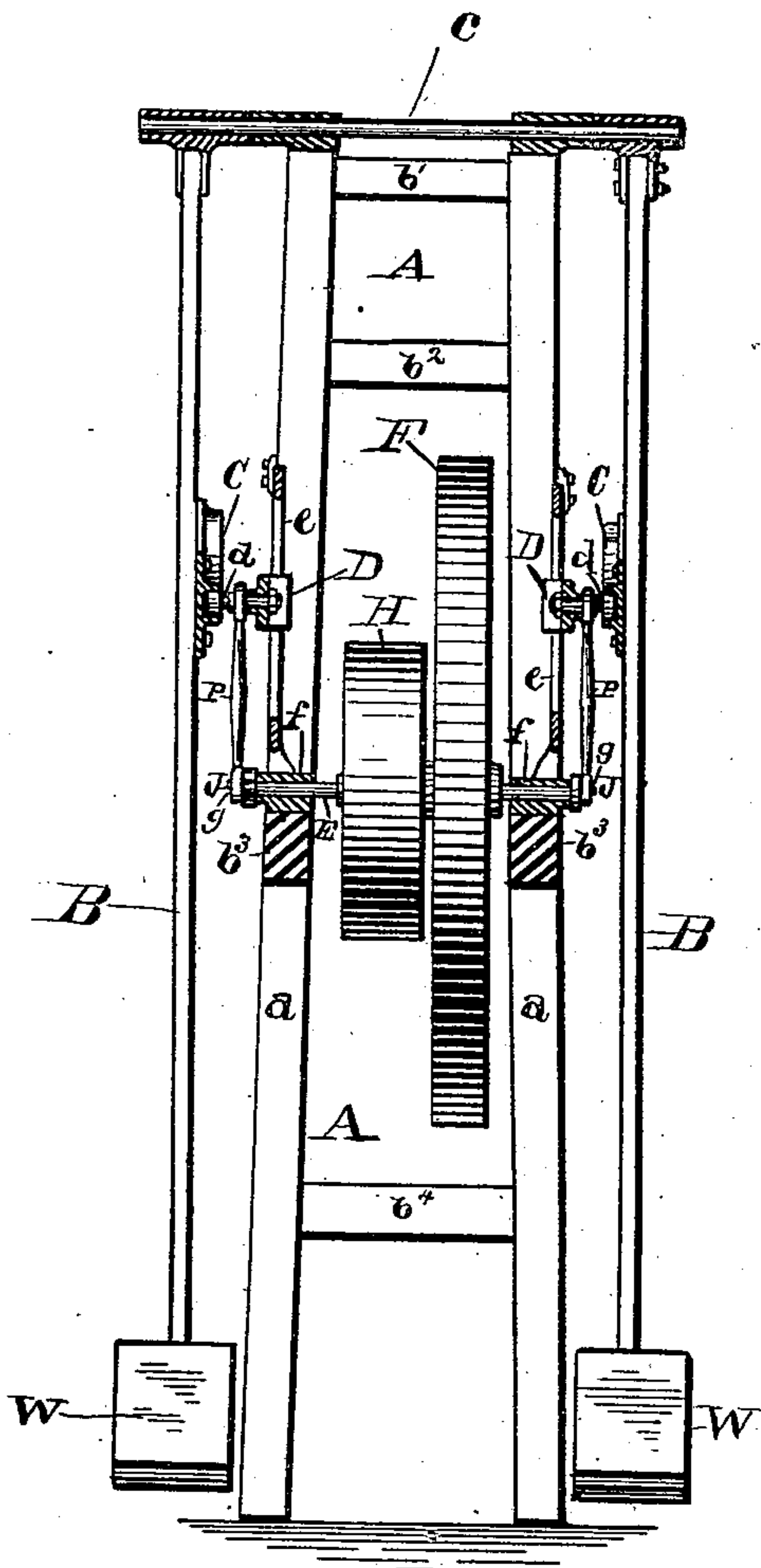


Fig. 2

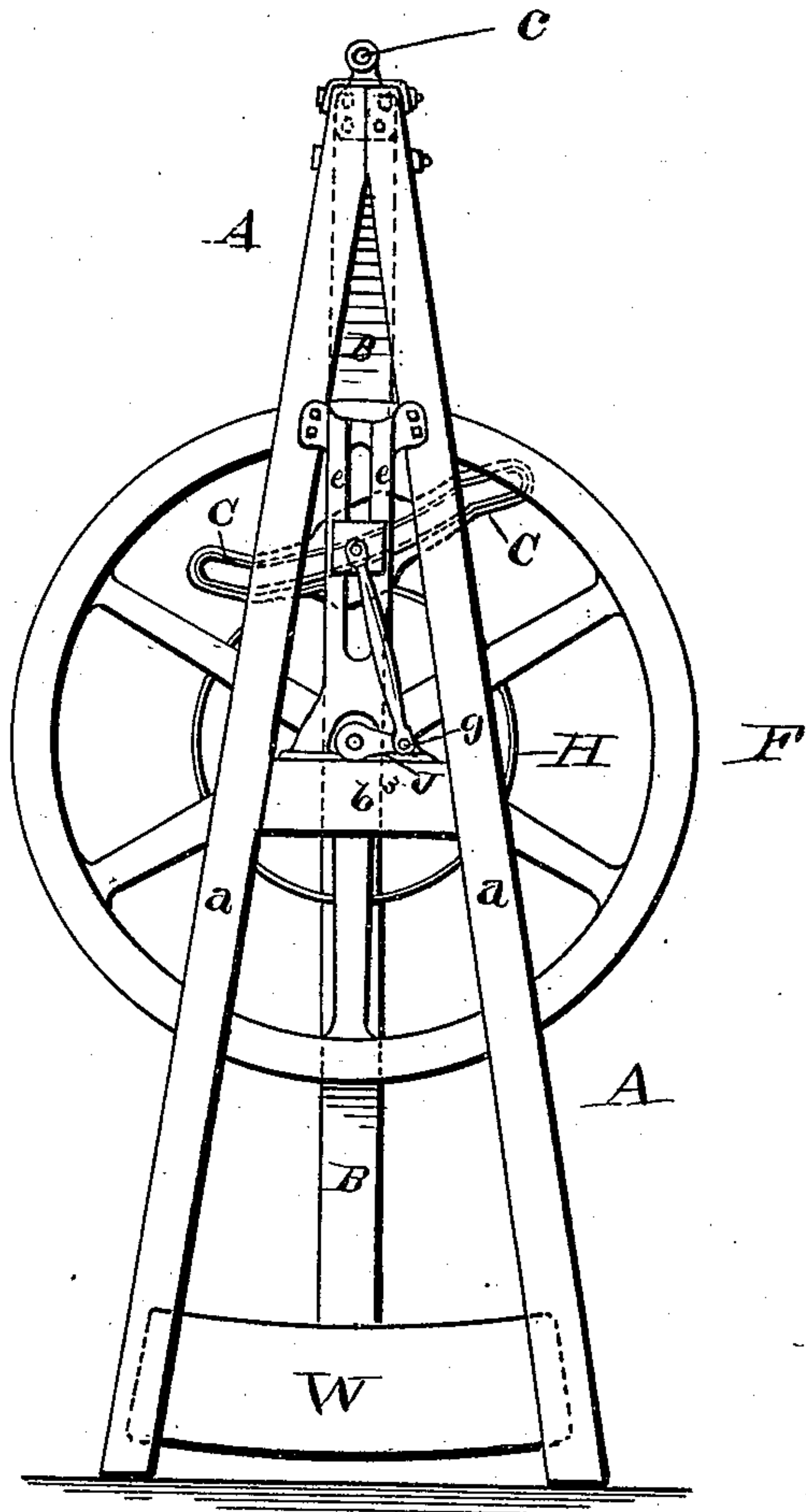


Fig. 1

Attest
Paul A. Stalio
J. Taylor Harr

Inventor.
Joseph L. Dobbs
BY
H. Harrison
Attorney

UNITED STATES PATENT OFFICE.

JOSEPH L. DOBBS, OF CHICAGO, ILLINOIS.

MOTOR.

SPECIFICATION forming part of Letters Patent No. 253,685, dated February 14, 1882.

Application filed December 27, 1881. (No model.)

To all whom it may concern:

Be it known that I, JOSEPH L. DOBBS, a citizen of the United States, residing at Chicago, in the county of Cook and State of Illinois, have invented a new and useful Motor, of which the following is a specification.

My invention relates to a motor or device for increasing power; and the object of my invention is to provide an arrangement for increasing or storing up power, whereby from the power supplied a greater amount of power may be developed, and the effectiveness and the capacity of any motive power be thus increased.

My invention consists in using a heavy weight in the form of a pendulum arranged to act upon a crank-shaft and rotate said shaft, utilizing the power generated by said weight, as will be understood from the accompanying drawings, in which—

Figure 1 is a side elevation of a machine embodying the principal features of my invention. Fig. 2 is a vertical sectional view of the same.

In the drawings, A represents the main frame, which consists of the four posts *a*, secured together by the cross-pieces *b'* *b*² *b*³ *b*⁴.

Supported at the top of the main frame A is a shaft, *c*, on each end of which is hung a long lever, B, carrying at its lower end a heavy weight, W, and provided at a suitable point along its length with a cam, C, in which works a pin, *d*, secured in a cross-head, D, working in slides *e e*.

Running in bearings *ff*, supported on the cross-pieces *b*³ *b*³ of main frame A, is a shaft, E, carrying a fly-wheel, F, and pulley H, and provided at each end with a crank, J, the crank-pin *g* of which is connected to the pin *d* in cross-head D by a pitman, P.

The device can be so constructed that the pendulum may be independent of the fly-wheel and the fly-wheel independent of the power, and can be attached and geared at will.

The operation is as follows: The levers B, carrying the weights W, are set to vibrating in opposite directions. The cams C act on the pins *d* and impart a vertical reciprocating movement to the cross-heads D, which rotates the shafts E and wheel and pulley F and H through the agency of the pitman P and crank J. A very small amount of power will suffice to keep the weights and lever vibrating, while the full power developed by the momentum of said weights will be imparted to the shaft E, and may be utilized for any desired purpose by the use of a belt on the pulley H, or in any other suitable manner.

It will be seen that one of the levers or pendulums B may be dispensed with, if desired, as the machine will work equally as well with one, but of course less power will be developed than when two are used, as shown. It is also evident that this device admits of various constructions, determined by the conditions under which it operates. I therefore do not want to be confined to any particular pattern.

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

1. In a motor, the combination of a weighted pendulum, a cam attached thereto, a rotating shaft having pulley and fly-wheel, and a cross-head, pitman, and crank connecting said cam and shaft, whereby the power is increased by the pendulum acting upon the shaft through the intermediate mechanism, substantially as described.

2. The combination of the weight W, lever B, cam C, cross-head D, pitman P, crank J, and shaft E, substantially as set forth and described.

JOSEPH L. DOBBS.

Witnesses:

FRANK JOHNSON,
CHAS. A. KRESSMAN.