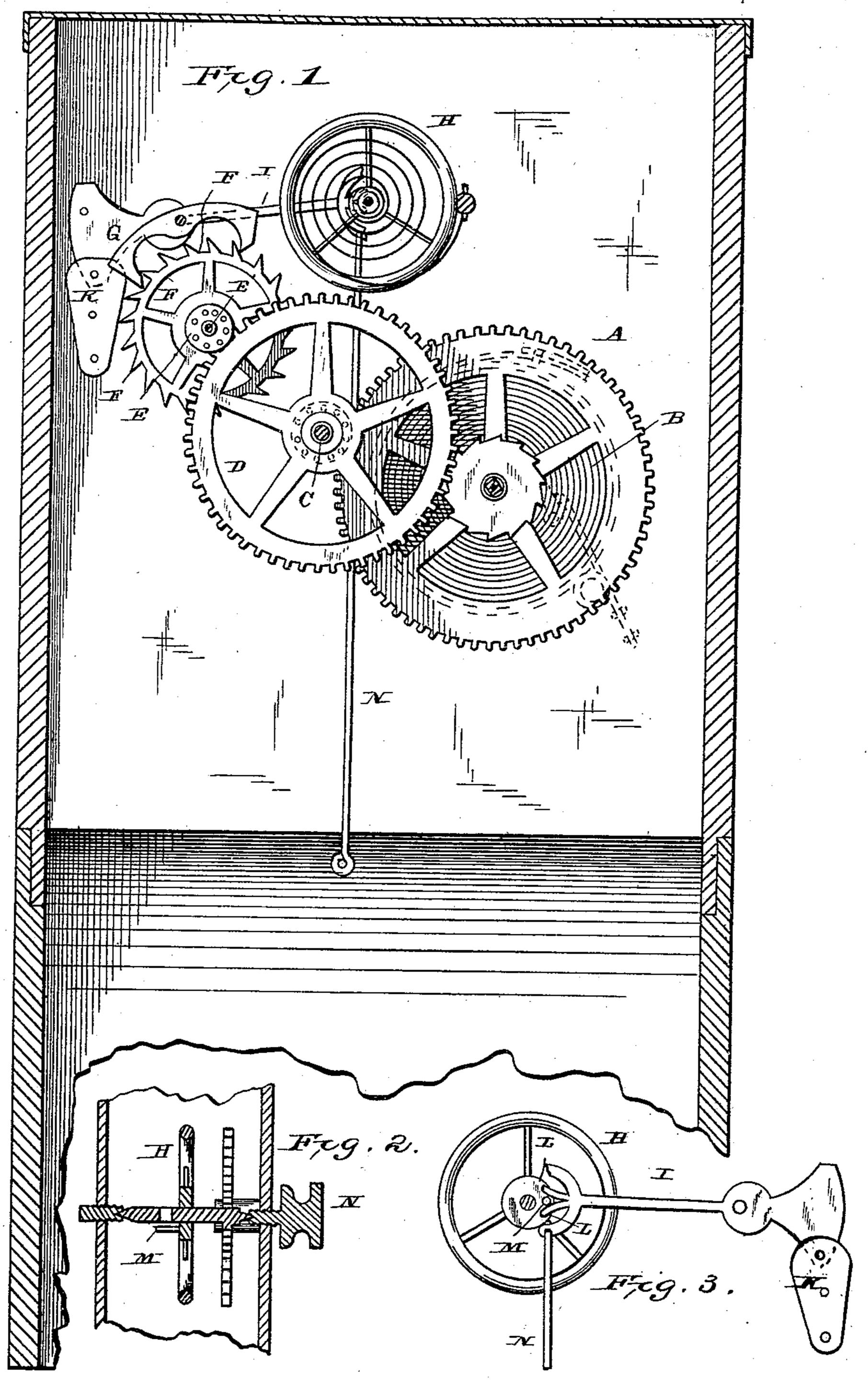
H. H. MARTIN & C. HARTHON.

APPARATUS FOR OPERATING PUMPS.

No. 265,527.

Patented Oct. 3, 1882.



Totnesses. Edward Geweee. J. Imi. Tomber Ho. H. Martin and Conrad Harthon, By E. M. Alexander. Atty

United States Patent Office:

HERMAN H. MARTIN AND CONRAD HARTHON, OF MILLINGTON, ILLINOIS.

APPARATUS FOR OPERATING PUMPS.

SPECIFICATION forming part of Letters Patent No. 265,527, dated October 3, 1882.

Application filed June 15, 1882. (No model.)

To all whom it may concern:

Be it known that we, HERMAN H. MARTIN and Conrad Harthon, of Millington, in the county of Kendall, and in the State of Illinois. 5 have invented certain new and useful Improvements in Apparatus for Operating Pumps; and we do hereby declare that the following is a full, clear, and exact description thereof, reference being had to the accompanying drawings, and to to the letters of reference marked thereon, making a part of this specification.

This invention relates to certain improvements in mechanical powers; and it has for its objects to provide an improved apparatus 15 for pumping water, and is designed to take the place of the windmills ordinarily employed for the purpose, and furnish a means at all times for elevating water independent of the condition of the wind. The gist of the inven-20 tion is the hanging of the actuating-rod N from the free arm of lever I when the weight K is employed, as above set forth. These objects we attain by the means illustrated in the accompanying drawings, in which—

Figure 1 represents a view of our apparatus with the front removed, showing the interior; and Figs. 2 and 3, detached views of portions

of the apparatus.

The letter A indicates a cog-wheel mounted 30 upon a suitable shaft journaled in bearings, the shaft being provided with a squared end, by means of which it may be turned with a suitable key. The shaft has secured to it a convolute spring, B, which is also secured to 35 the casing, and is provided with the pawl-andratchet attachments common to clock-works to permit the spring to be wound. The cogwheel intermeshes with a pinion on the shaft C, which is also provided with a cog-wheel, D, 40 which intermeshes with the pinion E on the shaft E' of an escapement-wheel, F.

The letter G indicates an ordinary anchorescapement pawl, the pallets of which operate in conjunction with the spurs of said wheel, 45 and H a balance-wheel and spring of the ordinary construction located in the casing. The escapement-pawl is provided with an arm or lever, I, which has a weight, K, at one end and at the other is provided with pallets L,

adapted to operate in conjunction with a pin, 50 M, on the balance-wheel, whereby the arm is caused to vibrate when the mainspring is properly wound.

N indicates a rod, which is connected to the arm above mentioned, and with the pump, 55 and which serves as the arm is oscillated to

actuate the pumping machinery.

The letter N indicates a set-screw, which forms a bearing for one of the journals of the balance-wheel, by means of which the said 60 shaft may be controlled to regulate the speed of the apparatus or stop the apparatus entirely.

It is important in carrying out our invention that the rod N be attached to the lower bifurcation of the free end or longest arm of 65 the lever I of the anchor-escapement, so as to bring this rod N as nearly in vertical line with the stud M as possible.

Having thus described our invention, what we claim, and desire to secure by Letters Pat- 70

ent, is—

1. In a pump-motor, the combination of the train of wheels actuated by a mainspring, the escapement, the lever I, the part G, formed thereon, the escapement-wheel, the weight K, 75 pivoted to the part G, and the rod N, pivoted to semi-lunar part of the lever I, all constructed and arranged to operate substantially in the manner and for the purposes described.

2. In a pump-motor, the combination of a 80 train of wheel-work actuated by a spring, the balance-wheel H, the hair-spring, the lever I, provided with a semi-lunar escapement on one end, with a pivoted counterbalancing-weight at the opposite end, the anchor-escapement, 85 and the pump-rod N, pivoted to one arm of the said semi-lunar escapement, all constructed and arranged to operate substantially as described.

In testimony whereof we affix our signatures, in presence of two witnesses, this 12th day of 90 June, 1882.

HERMAN H. MARTIN. CONRAD HARTHON.

Witnesses: M. T. MOLONEY, PATRICK MAGHER.