

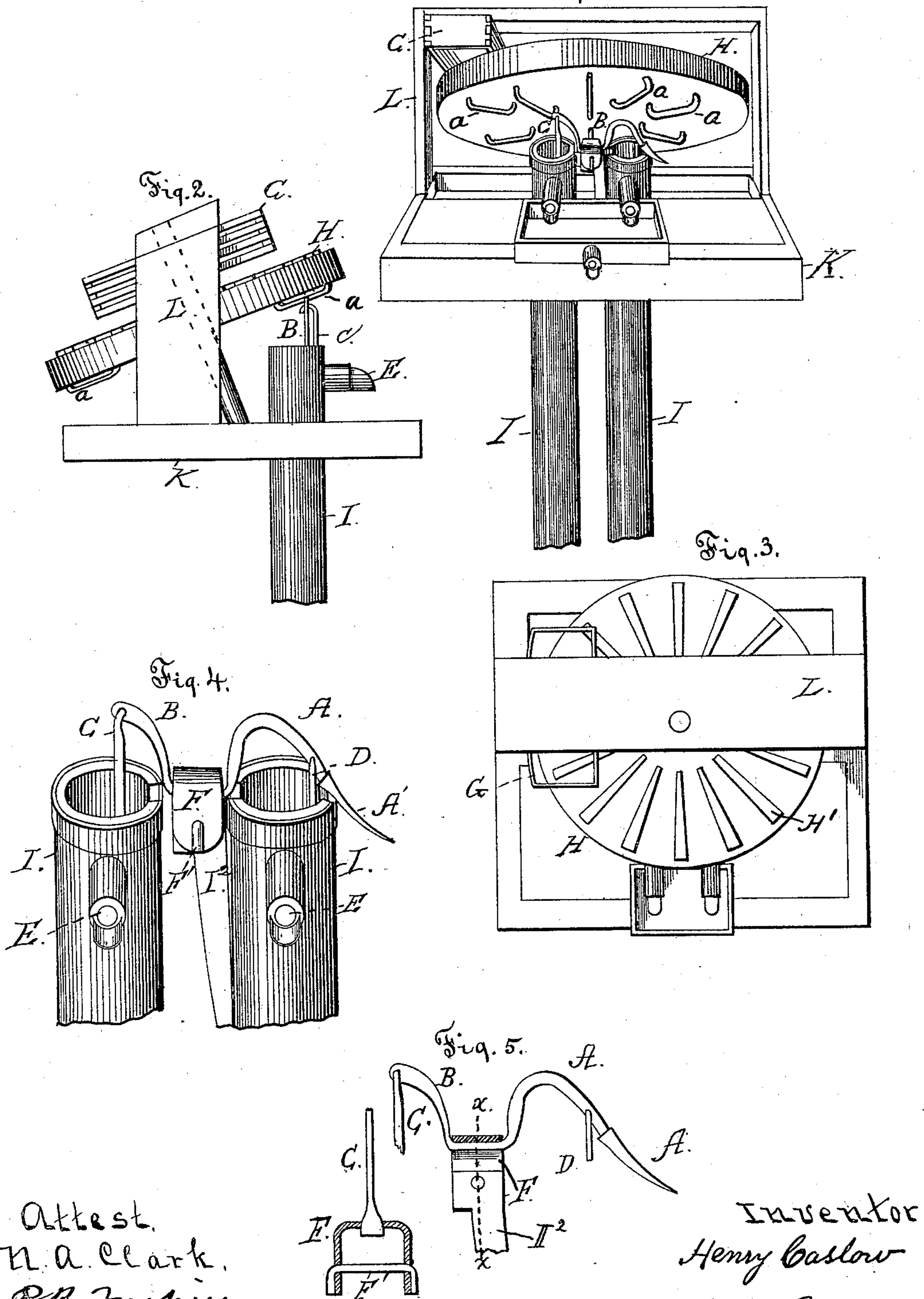
(No Model.)

H. CASLOW.

PUMP.

No. 285,226.

Patented Sept. 18, 1883.



Attest.  
H. A. Clark,  
P. B. Impier

Inventor  
Henry Caslow

By R. S. & A. P. Lacey  
Attorneys



# UNITED STATES PATENT OFFICE.

HENRY CASLOW, OF YORK, PENNSYLVANIA.

## PUMP.

SPECIFICATION forming part of Letters Patent No. 285,226, dated September 18, 1883.

Application filed October 23, 1882. (No model.)

*To all whom it may concern:*

Be it known that I, HENRY CASLOW, a citizen of the United States, residing at York, in the county of York and State of Pennsylvania, have invented a new and useful Pump or Machine for Raising Water, of which the following is a specification.

My invention relates to improvements in pumps or machines for raising water.

It consists in the pump-stock having suitable pistons and piston-rods, the lever pivoted between the stocks and having its ends extended up over the stock and connected to the piston-rod, and the wheel revolving above the said stock, lever, &c., and provided on its under surface with radial projections or cleats arranged to engage alternately the opposite arms of the lever and operate the same.

It consists, further, in other improvements, as will be described.

In the drawings, Figure 1 is a front view, Fig. 2 is a side view, and Fig. 3 is a plan view, of a pump constructed according to my invention. Fig. 4 is a detail view, showing the pump-stock, lever, &c.; and Fig. 5 shows in detail the manner of supporting the lever, all of which will be described.

I I are two pump-stocks arranged side by side and provided with discharge-spouts E E. K is the platform, arranged in the usual manner, and on this platform a vertical frame, L, is mounted. Within the frame L the tread-wheel H is mounted, so that its rim will extend over the tops of the pump-stocks I. This wheel is set at an incline, and is provided on its upper surface with radial cleats H', and is adapted so that a dog can be placed thereon for the purpose of revolving it. A stall or inclosure, G, is provided for confining the dog. On the under side of the wheel there are provided a series of staples or radial projections or cleats, a, which engage the pumping lever or levers A B.

A B are the levers for operating the piston-rods C D. These levers may be made from a single bar of iron, bent in the form shown in Fig. 5; or they may be made separately, and each be attached to the rocking plate F. I prefer to make them from a single bar of iron, as shown. These levers are attached to a rocking plate or connection, F, which is pivoted by a pin, F', on a lug or block, I', arranged

and secured between the pump-stocks. The upper ends of the levers A B are extended upward and so arranged that they will be alternately engaged by the projections or staples a a. When thus engaged, they will have an alternate or rocking motion, and will thereby alternately raise and lower the piston-rods C D. The lever A has its end bent down, so as to provide a short handle, A', which may be used and operated by the hand, and thereby operate both piston-rods. The wheel H is also nicely adjusted, so that by placing the hand on its periphery it can be easily turned for the purpose of operating the levers. A stall, G, is provided and suitably arranged above the wheel H, and adapted as an inclosure for the dog when the latter is to be employed to operate the pump. The lever A B is made approximately in the shape of the letter V, the ends or arms thereof being turned outward over the tops of the pump-stocks I. The apex or lower point of this lever is arranged at a point about on the same level with the tops of the pump-stocks. By this construction and arrangement I secure the necessary stroke for the pistons, and a more sensitive and better action than could be secured by a straight lever.

In the operation of the device, as the wheel H is revolved, its projections a engage first on arm A of the lever and force the said arm and its piston-rod D down, and the projection then passes on to the other arm, B, and forces it down, raising the arm A in position to be engaged by another projection of the series. I arrange these projections so that while one is passing between the arms of the lever the one in front of it in the line of motion is engaging the arm B and the one in rear of it is approaching the arm A, and will engage the said arm as soon as the stroke of the arm B is completed, and this operation is repeated as the wheel is revolved. These projections a are short and give but a limited stroke to the lever, so that the arm A of same, when at its highest point, will not be sufficiently elevated for the end A' of the lever to come in contact with the wheel or its projections. Besides, the lever being arranged with reference to the wheels as shown in Fig. 2, the said end A' will extend out beyond the periphery of the wheel and out of the path thereof. This will be readily understood on reference to the drawings.



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

1. The pump, substantially as described and shown, composed of the stocks having suitable piston-rods, the lever pivoted between the pump-stocks and having its ends extended upward and connected with the piston-rods, the inclined wheel supported above the lever, and provided on its under side with radial projections or cleats arranged in position to alternately engage the arms of the piston-rod levers, and a stall or inclosure arranged above the inclined wheel and near its outer edge, all as and for the purposes set forth.

2. The combination, with the pump-stocks

I I and piston-rods C D, working in the pump-stocks, of the lever A B, pivoted between and having its arms extended over the tops of the pump-stocks and attached to the piston-rods, and the wheel H, supported on the frame B and above the ends of the pump-stocks, and provided with suitable staples or projections on its under side, adapted to engage alternately with the opposite ends of the lever A B, whereby an alternate action is imparted to the piston-rods, substantially as set forth.

HENRY CASLOW.

Witnesses:

GEO. B. KRABER,  
H. L. FISHER.