

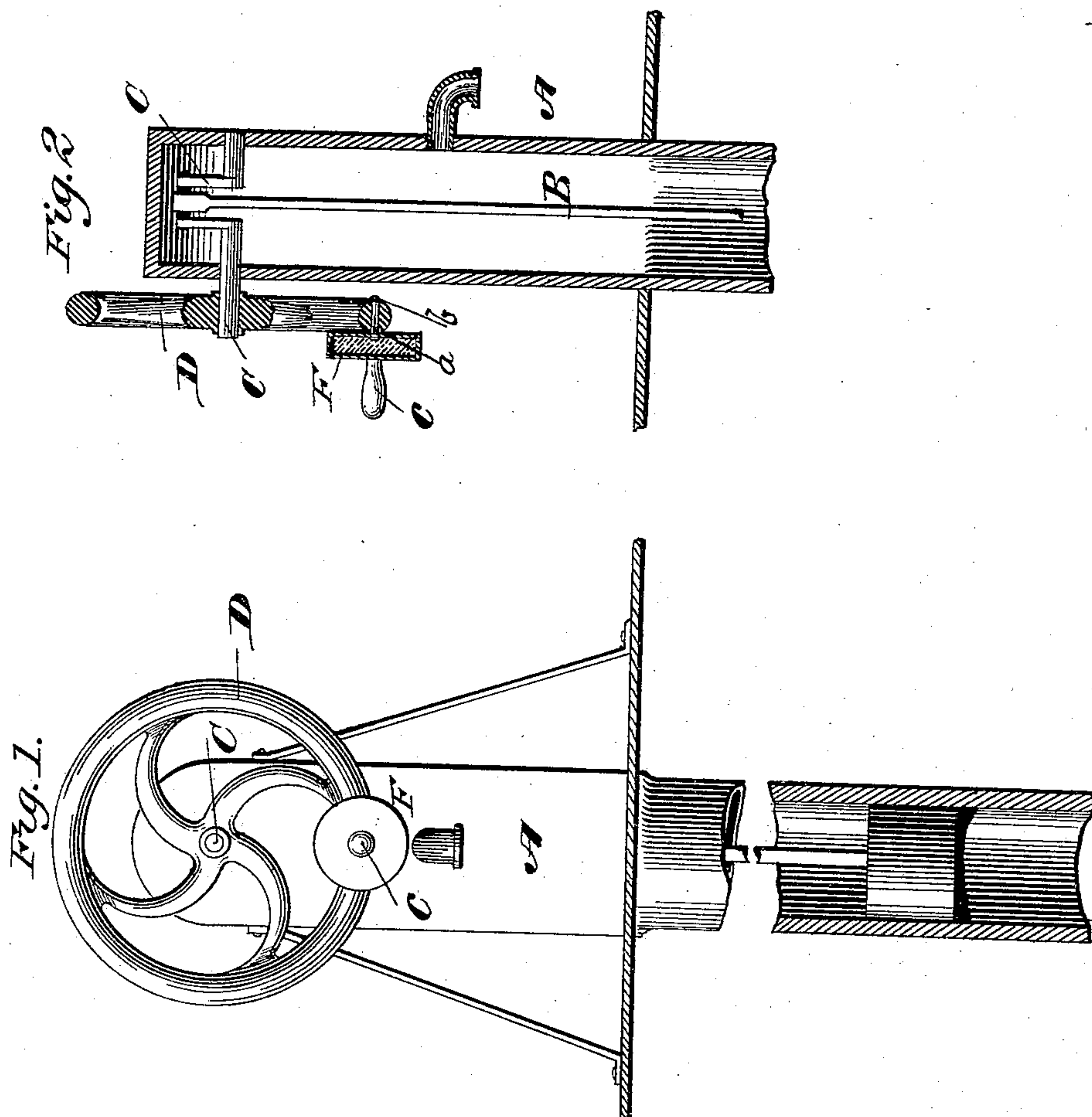
(No Model.)

D. STONER.

PUMP.

No. 370,428.

Patented Sept. 27, 1887.



witnesses.
Henry Lander
T. E. Clapp

Inventor:
David Stoner

UNITED STATES PATENT OFFICE.

DAVID STONER, OF WHITE PIGEON, MICHIGAN.

PUMP.

SPECIFICATION forming part of Letters Patent No. 370,428, dated September 27, 1887.

Application filed November 26, 1886. Serial No. 220,534. (No model.)

To all whom it may concern:

Be it known that I, DAVID STONER, a citizen of the United States, residing at White Pigeon, St. Joseph county, State of Michigan, have invented a new and useful Improved Balance-Wheel for Pumps, of which the following is a specification.

This invention relates to an improvement in balance-wheels which are especially applicable to lifting and suction pumps, which improvement will be fully understood from the following description, taken in connection with the annexed drawings, in which—

Figure 1 is a front elevation of a lifting-pump, partly in section, having my improved balance-wheel applied to it. Fig. 2 is a vertical section of the balance-wheel and upper part of the pump.

Referring to the said drawings by letter, A designates the upper part of a pump-stock, and B the plunger-rod, which is hung from the crank C' of a horizontal shaft, C, suitably journaled in the pump-stock A. On one end of the shaft C is keyed a balance-wheel, D. This balance-wheel is provided with a crank-handle, *c*, which is suitably secured to the box F, preferably of circular form. Concentrically

to this box, opposite to the handle *c*, a pin is suitably secured, which passes through the rim of balance-wheel and is fixed to its rim. 30

I am able to regulate the balancing-weight according to the length of the plunger-rod and force to be overcome. This is done by introducing different weights adapted to be secured to the wheel. Furthermore, it will be observed that the wheel can be very accurately adjusted to balance the load to be raised by varying the weight put in the box F. 35

I am aware that it is very common to apply weights to balance-wheels and to provide such wheels with adjustable weights, and therefore disclaim this feature, broadly considered. 40

What I claim is—

The combination, with a balance-wheel on a crank-shaft, of a weight-receiving box, F, provided with a crank-handle, *c*, on one side, and on the opposite side a device for fastening the box and handle to the said wheel, substantially as specified. 45

DAVID STONER.

Witnesses:

GEO. W. BEISEL,
WM. H. MIDDAGH.