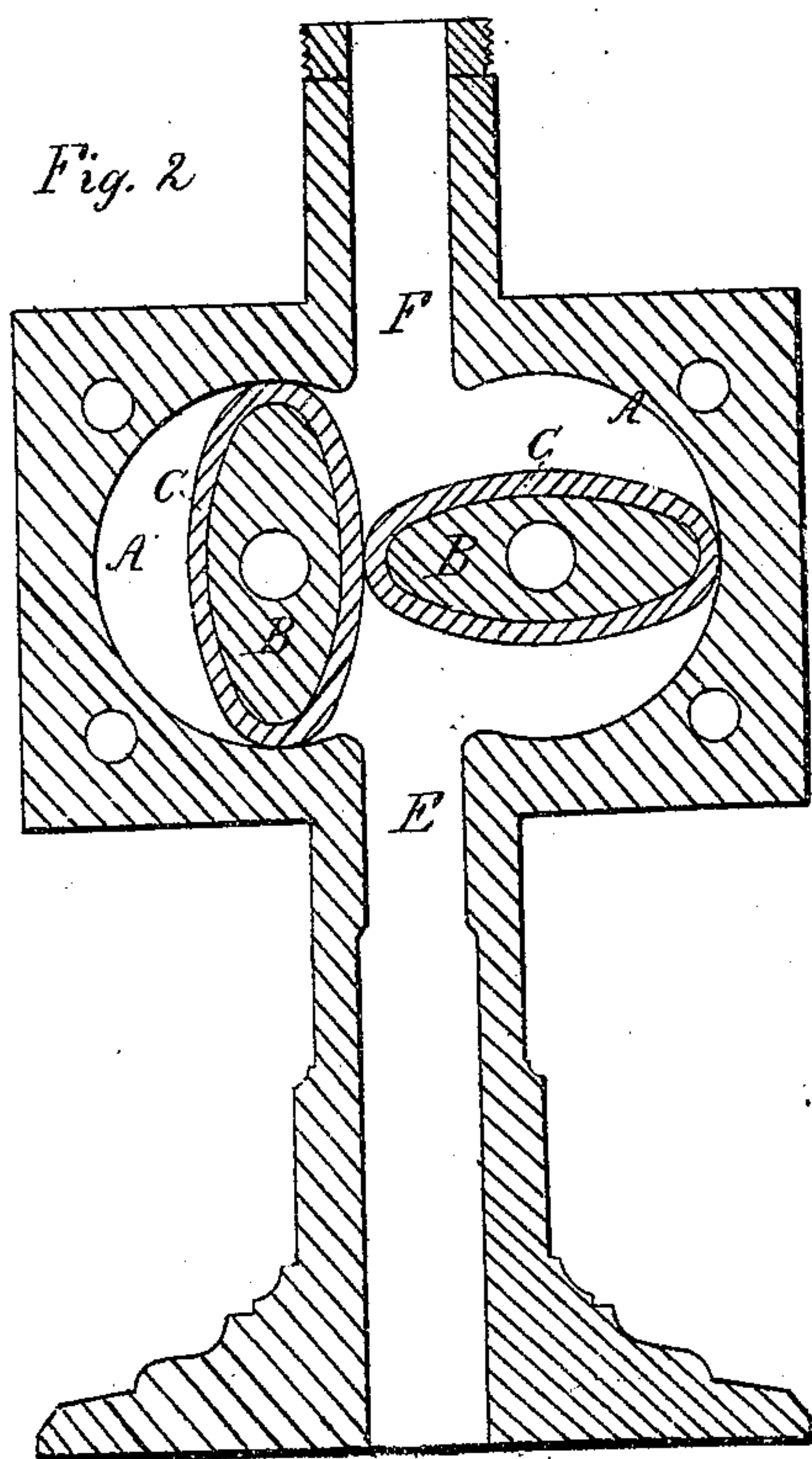
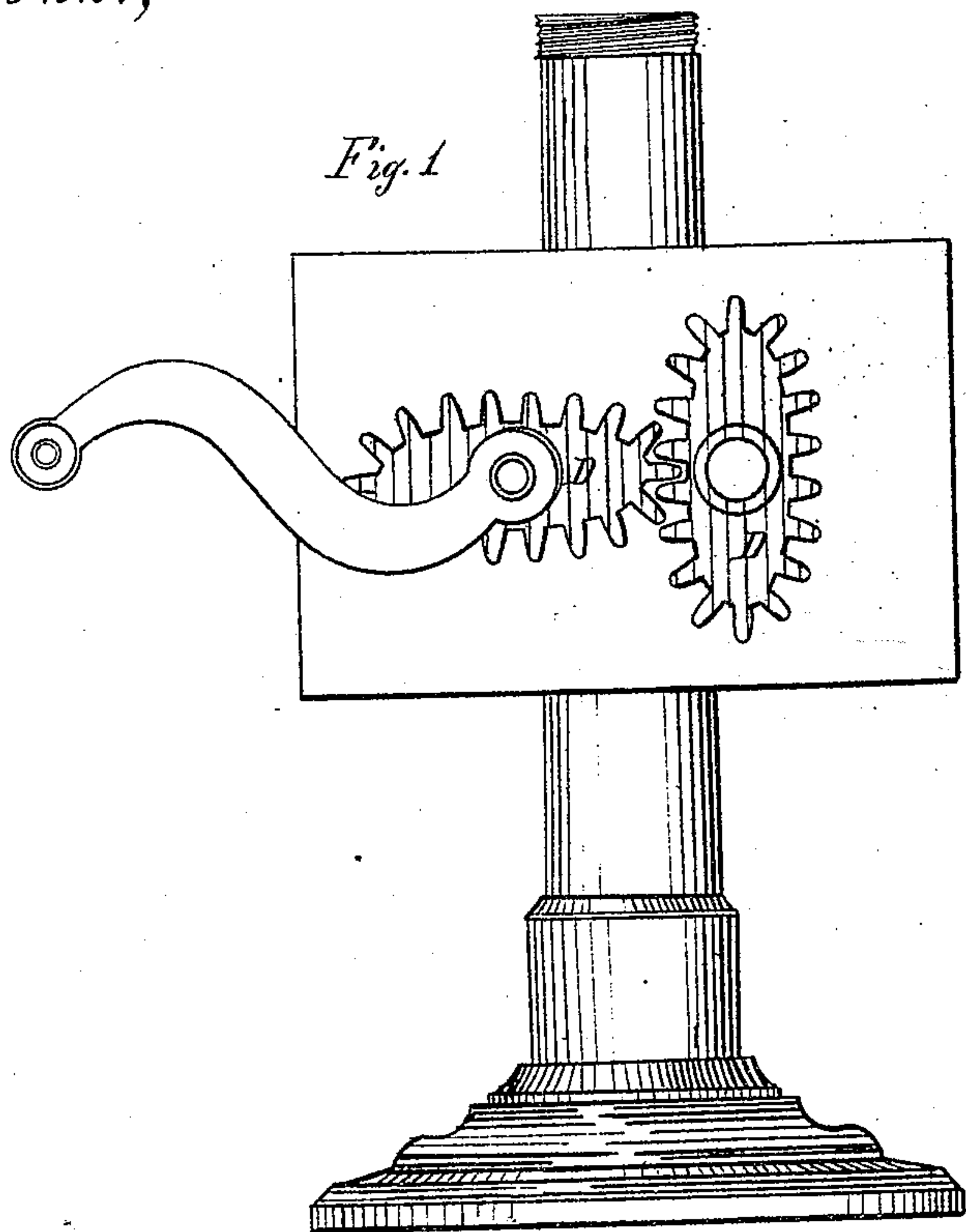


C. N. Clow,
Rotary Pump,
No. 15221, *Patented July 1, 1856.*



UNITED STATES PATENT OFFICE.

CHAS. N. CLOW, OF PORT BYRON, NEW YORK.

ROTARY PUMP.

Specification of Letters Patent No. 15,221, dated July 1, 1856.

To all whom it may concern:

Be it known that I, CHAS. N. CLOW, of Port Byron, in the county of Cayuga and State of New York, have invented a new and useful Improvement in Rotary Pumps; and I do hereby declare that the following is a full and exact description thereof, reference being had to the accompanying drawings, making part of this specification, in which—

Figure 1 is a side elevation, and Fig. 2 is a central longitudinal section.

Like letters designate like parts in both figures.

The nature of my invention consists in providing a suitable shaped case or shell, made of cast iron or other metal, in which revolve two cams, or pistons, moved by suitable gearing on the outside of the case. The shape of the interior of the case will be seen by reference to A, Fig. 2, the outside being of such shape as convenience in construction, or fancy may dictate.

In the case, are two cams B, B, serving as pistons, the extremities of which (or the packing on them) rub the inside of the case; these cams need not of necessity be a true oval as represented in the figures, but may be varied a little, provided their diameter is longer one way than another; so as to afford a space for water between their extremities and the case; they are packed by means of a band C, of some flexible material fastened on their peripheries, which band rubs the case at the extremities of the cams, and is also wide enough to make a tight joint sidewise; if the shape does not admit of this method of packing, any of the ordinary methods may be adopted.

The cams have smooth peripheries, and are placed in the case with their peripheries in contact, thus forming the abutment against which the water is forced, and they are made to revolve together correctly, by

means of gear wheels D, on the outside of the case, on the same shafts to which the cams are attached, the pitch line of which gears correspond in shape to the peripheries of the cams on the inside.

It will be readily seen, that on applying power to the crank, the cams will revolve together in the direction of the arrows, and as they rub the case closely at the extremities and sides, and their peripheries are constantly in contact with each other, a vacuum is produced, and the water flows in at pipe E, and as there is no chance for its return must be thrown out at pipe F.

The advantages derived from a pump constructed as described are obvious. It is simple and cheap, and is capable of raising a large amount of water with a slow movement, and is also a very powerful force pump; there are no valves and therefore anything that will pass through the pipes will go through the pump, and not injure it, and it can be kept in order by any ordinary mechanic.

I am aware that corrugated or coggled pistons have been used and I wish it distinctly understood that I do not claim such cams or pistons, but

What I do claim as my invention, and desire to secure by Letters Patent is:

Cams, or pistons, having smooth peripheries, made to revolve with their peripheries in contact to form the abutment, by gear wheels on the same shafts as said cams, the pitch line of which gears correspond in shape with the peripheries of the cams.

The above specification of my improved pumped signed this 2d day of April, 1856.

CHAS. N. CLOW.

Witnesses:

WILLIAM I. CORNWELL,
S. G. WISE.