

Sheet 1, 2 Sheets.

L. Simkins.
Bilge Water Discharge.
No 55,377. *Patented Jun. 5, 1866.*

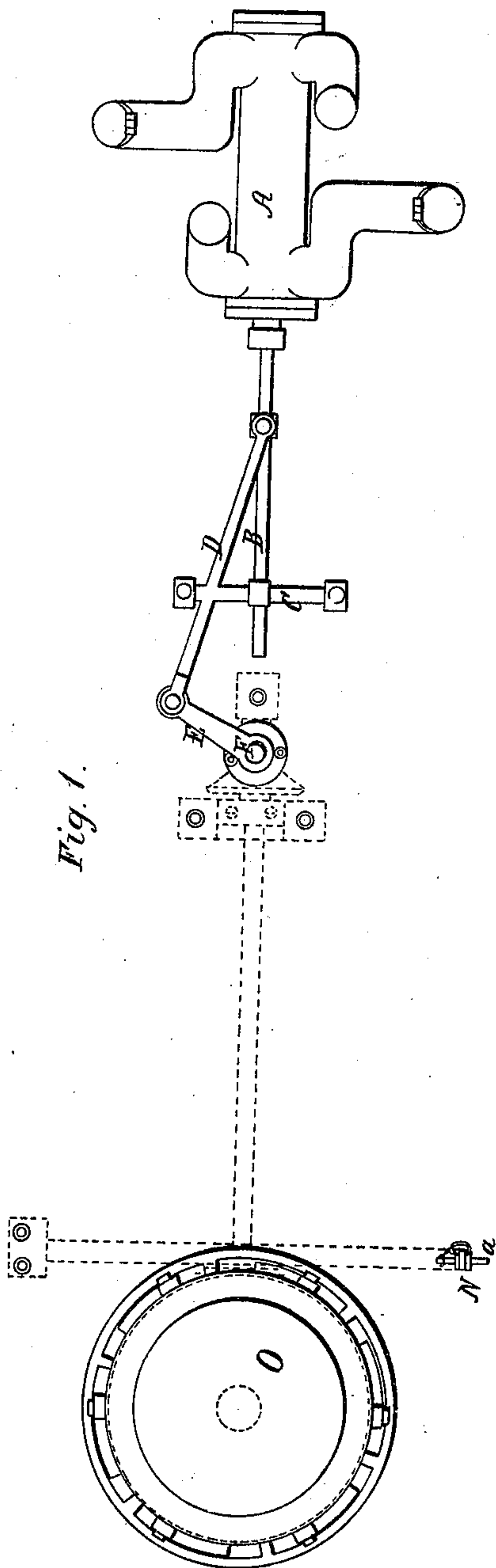


Fig. 1.

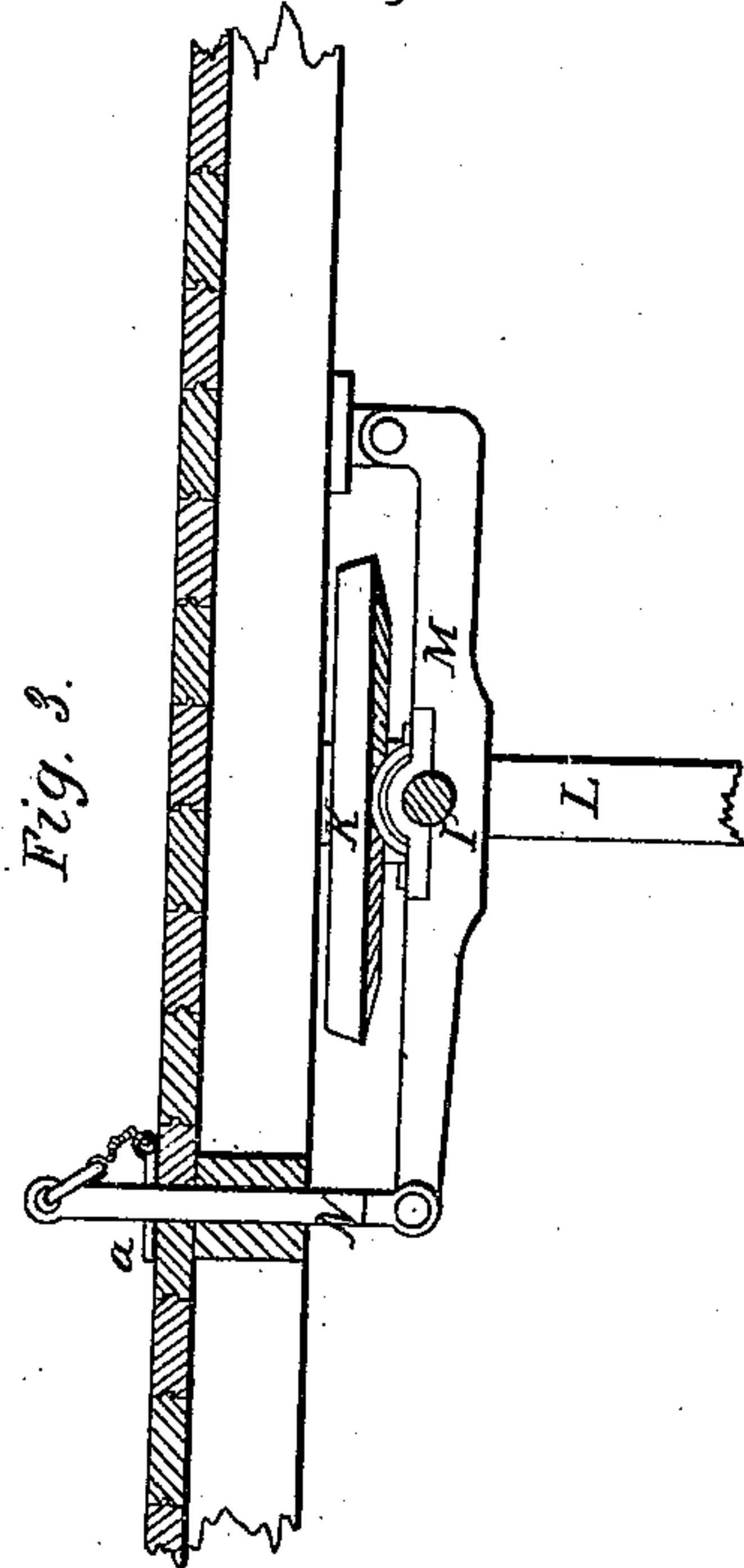


Fig. 2.

Witnesses.
Jas. A. Service.
Alex. F. Roberts

Inventor.
L. Simkins.
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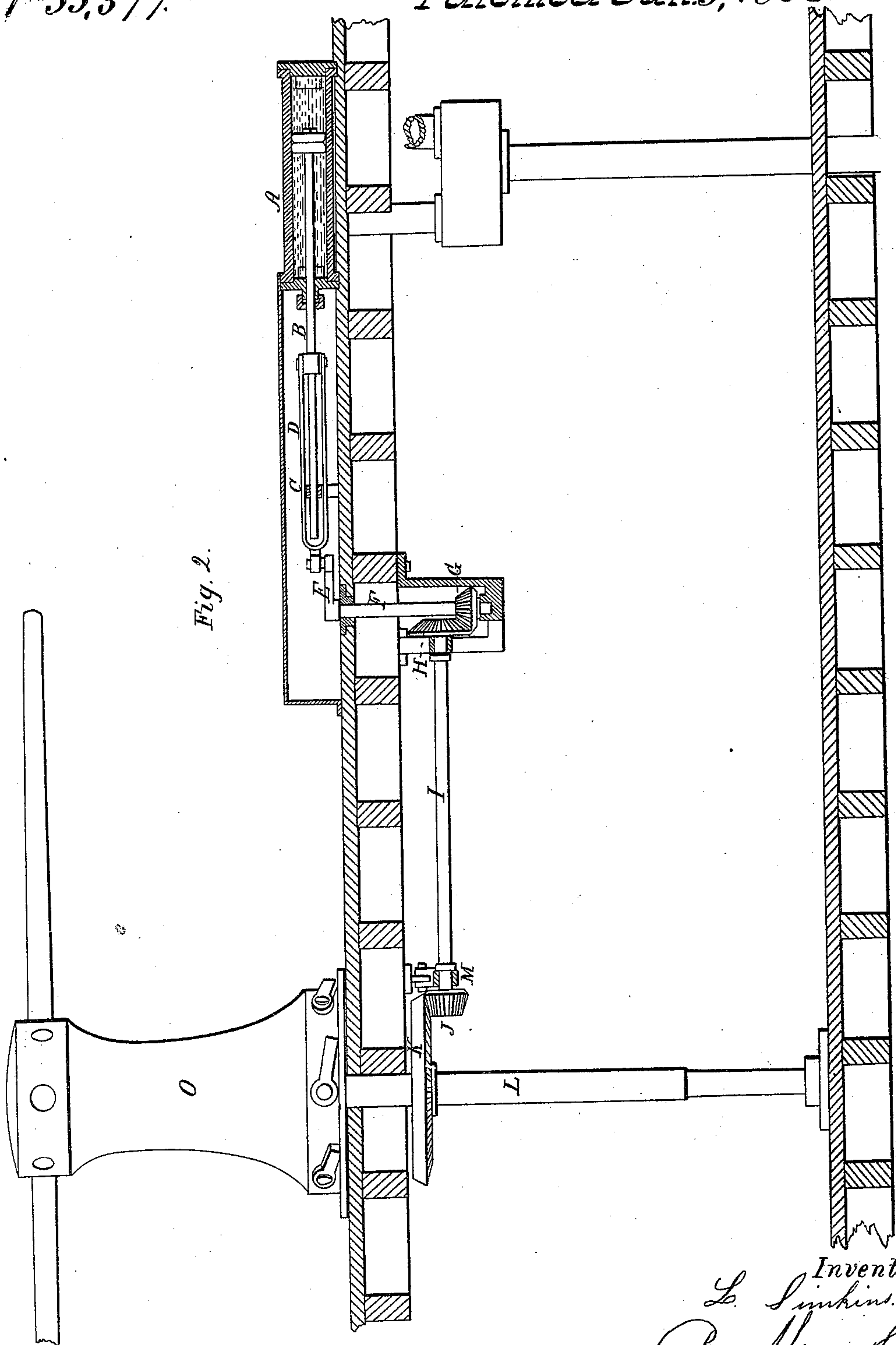


Fig. 2.

Witnesses.

Jas. A. Service.
Alex. F. Roberts.

Inventor.
L. Simkins.
Per. *[Signature]*
Attorney.

UNITED STATES PATENT OFFICE.

LEBBEUS SIMKINS, OF BROOKLYN, NEW YORK.

IMPROVED MEANS FOR WORKING SHIPS' PUMPS.

Specification forming part of Letters Patent No. 55,377, dated June 5, 1866.

To all whom it may concern:

Be it known that I, LEBBEUS SIMKINS, of the city of Brooklyn, county of Kings, State of New York, have invented a new and useful Improvement in Ships' Pumps; and I do hereby declare that the following is a full, clear, and exact description thereof, which will enable others skilled in the art to make and use the same, reference being had to the accompanying drawings, forming part of this specification, in which—

Figure 1 represents a plan or top view of this invention. Fig. 2 is a longitudinal vertical section of the same. Fig. 3 is a transverse section of the same.

Similar letters of reference indicate corresponding parts.

This invention relates to a ship's pump which connects by suitable gear-wheels and shafts with the capstan in such a manner that motion can be imparted to the plunger of the pump by turning the capstan, and the operation of the pump is materially facilitated. The gearing which serves to transmit motion from the capstan to the pump is so arranged that the capstan and the pump can be readily thrown in or out of gear, and that the pump can be operated in the usual manner, if it should be desirable.

A represents a ship's pump of any suitable construction. The plunger-rod B of this pump is guided in a suitable bracket, C, and it connects by a pitman, D, with a crank, F. A bevel-pinion, G, mounted at or near the lower end of this arbor, gears in a bevel-wheel, H, which is secured to a horizontal shaft, I, and another bevel-pinion, J, mounted on the shaft I, gears in a large bevel-wheel, K, on the vertical arbor L.

The shaft I has its bearing at one end, near the pinion J, in a lever, M, which is hinged to

the under part of the deck or to any convenient portion of the vessel, and from which extends a rod, N, up through a mortise in the deck, so that it can be fastened by passing through it a pin, a. (See Fig. 3.) By withdrawing this pin the lever M is made to sink down and the pinion J is thrown out of gear with the bevel-wheel K.

The arbor L is secured to the barrel of the capstan O, so that by turning said capstan the desired reciprocating motion is imparted to the plunger of the pump, provided the pinion J is not thrown out of gear with the wheel K.

By this arrangement the operation of a ship's pump is rendered easy. A large number of men can be made to turn the capstan, and no great exertion is required from each individual to impart to the plunger the requisite speed. By throwing the pinion J out of gear with the wheel K the capstan is disconnected from the pump, and it can be used in the ordinary manner; and, if desired, the pump may also be so arranged that it can be readily disconnected from the gearing and made to operate in the usual manner.

What I claim as new, and desire to secure by Letters Patent, is—

The arrangement of a suitable connection, such as the shafts F F I L and bevel-wheels H J K, or any other equivalent means, in combination with the pump A and capstan O, constructed and operating substantially as and for the purpose described.

The above specification of my invention signed by me this 26th day of March, 1866.

LEBBEUS SIMKINS.

Witnesses:

WM. F. MCNAMARA,
ALEX. F. ROBERTS.