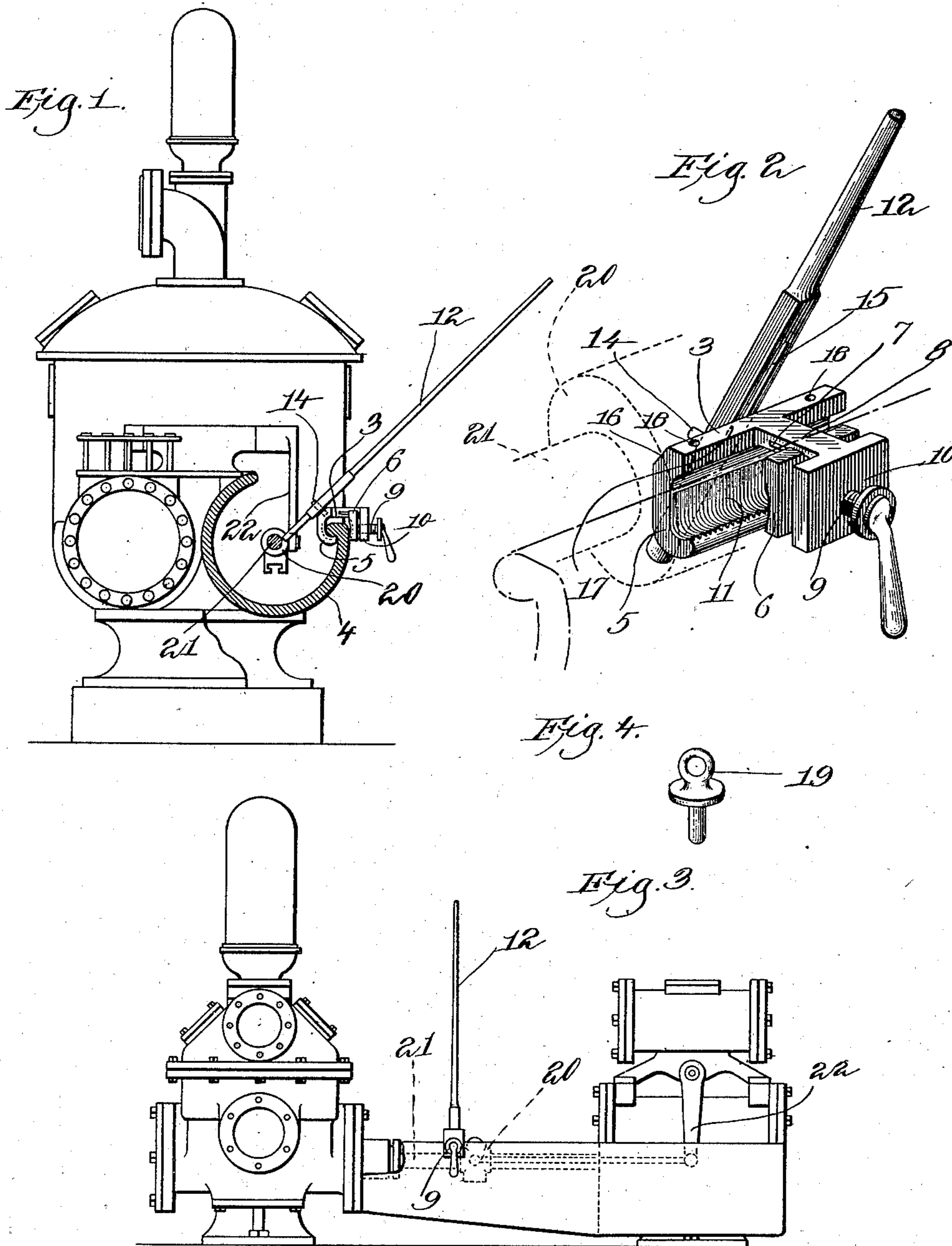


No. 749,797.

PATENTED JAN. 19, 1904.

E. F. KIMBALL.
PUMP ATTACHMENT.
APPLICATION FILED JUNE 8, 1903.

NO MODEL.



Witnesses.
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UNITED STATES PATENT OFFICE.

EARLE F. KIMBALL, OF CHELSEA, MASSACHUSETTS, ASSIGNOR OF ONE-HALF TO CHARLES W. FULLER, OF CHELSEA, MASSACHUSETTS.

PUMP ATTACHMENT.

SPECIFICATION forming part of Letters Patent No. 749,797, dated January 19, 1904.

Application filed June 8, 1903. Serial No. 160,503. (No model.)

To all whom it may concern:

Be it known that I, EARLE F. KIMBALL, a citizen of the United States, residing at Chelsea, in the county of Suffolk and State of Massachusetts, have invented an Improvement in Pump Attachments, of which the following description, in connection with the accompanying drawings, is a specification, like numerals on the drawings representing like parts.

10 This invention relates to a device which is designed to facilitate the operation of packing the piston-rods of steam-pumps and similar devices.

When the piston-rod of a steam-pump needs 15 repacking, it becomes necessary to shift the position of said rod so as to carry any nuts, collars, or other connecting devices on the piston-rod far enough away from the stuffing-box which is to be repacked to permit the collar or sleeve of the stuffing-box to be removed. This is sometimes a rather difficult operation, owing to the lack of proper tools.

My invention is designed to provide a simple device which can be easily attached to the 25 pump and by means of which the position of the pump-piston may be readily shifted.

The invention comprises a fulcrum-block which is adapted to be clamped to the frame of the pump and a bar or lever fulcrumed on 30 said block and which is adapted to engage either the collar or nut on the pump-piston or to engage the rocker-arm or any other part connected to the piston for the purpose of shifting the position of the piston.

35 In the drawings, Figure 1 is a view of a pump, showing my attachment applied thereto, the portion of the pump having the attachment applied being shown in section. Fig. 2 is a perspective view of my improved attachment, showing part of the pump-frame and part of the piston-rod of the pump in dotted lines. Fig. 3 is a side elevation of a pump having my improvement applied thereto. Fig. 4 is a modified form of fulcrum-pin.

45 My attachment is adapted to be used in connection with any steam-pump, and in Fig. 1 of the drawings I have illustrated a duplex

pump. The invention is not limited in its use to this character of pump, however.

The fulcrum-block is designated by 3 and 50 is made in the form of a clamp, which is adapted to be clamped in any suitable position upon the frame 4 of the pump. The form of block herein illustrated has the fixed clamping-jaw 5 and the movable clamping-jaw 6, which 55 plays back and forth in suitable guides 7 in the stem 8 of the block. The jaw 6 is given its movement by means of an adjusting-screw 9, which operates in a plate or head 10, integral with the stem 8. The active faces of 60 the jaws 5 and 6 may be roughened or corrugated, as at 11, in order to afford a better grip upon the pump-frame.

Fulcrumed to the fulcrum-block is a lever or bar 12, by means of which the piston is 65 given its desired movement. Any suitable means for fulcruming the lever on the fulcrum-block may be employed.

In the form of my invention shown in Figs. 1 and 2 I have illustrated a fulcrum-pin 14, 70 carried by the block, which pin extends into or through a slot 15 in the lever or bar 12, said pin forming a fulcrum for the lever.

To adapt the attachment for use with different styles and constructions of pump, I make 75 the pin 14 adjustable in the fulcrum-block. As herein shown, the fulcrum-block is provided with the bevel-face 16 and with the horizontal face 17 and in each of said faces will be formed one or more holes or sockets 18, into 80 which the pin 14 may be inserted. In Figs. 1 and 2 I have illustrated the pin as being inserted in the holes in the inclined surface 16. If the portion of the pump-frame to which the clamp was secured stood lower with refer- 85 ence to the piston-rod than is shown in Fig. 1, the pin could be placed in the apertures in the horizontal face 17.

In Fig. 4 I have illustrated a different form of pin, which has an eye or loop 19, through 90 which any ordinary round bar may be inserted. This construction has the advantage that no special form of bar is necessary.

In using my invention the fulcrum-block

may be clamped to the pump-frame in the proper position, as illustrated in Fig. 1, and the fulcrum-pin 14 inserted in that aperture 18 which will enable the lever 12 to operate
5 most efficiently. Thereafter the lever is fulcrumed on the pin, and the end of the lever brought to bear either against the collar or nut 20 on the piston-rod 21 or against the rocker-arm 22 or against any other part of the
10 pump which is connected to the piston-rod and through which motion can be communicated to said piston-rod.

Since the fulcrum-block for the time being furnishes a fixed fulcrum for the lever, the
15 piston-rod may be readily shifted into a position which will permit the stuffing-box to be properly packed. The nature of the fulcrum-block is such that it may be clamped to the pump-frame of any style of pump, and by
20 providing it with a plurality of holes in different relative positions the lever 12 may be adjusted to operate on any pump.

While I have herein shown one particular form of fulcrum-block, I wish it understood
25 that the shape of this block may be varied in many ways without departing from the invention, as it may be necessary to vary the shape in some particulars to accommodate certain styles of pump. The essential feature of the
30 invention, however, is a fulcrum-block which is adapted to be clamped to the frame of the pump and a lever fulcrumed on said block.

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

1. In a device of the class described, a fulcrum-block adapted to be clamped to the frame of a pump, and a lever fulcrumed on said block and adapted to engage the piston-rod of the pump whereby the position of said rod
40 may be shifted.

2. In a device of the class described, a fulcrum-block, means to adjustably clamp said block to the frame of the pump, and a lever to engage and move the piston-rod fulcrumed
45 on said block.

3. In a device of the class described, a fulcrum-block, a fulcrum-pin carried by said block, means to adjustably clamp said block to the frame of the pump, and a lever fulcrumed on said pin.
50

4. In a device of the class described, a fulcrum-block, a fulcrum-pin adjustably carried thereby, means to adjustably clamp said block to the frame of the pump, and a piston-rod-
55 moving lever fulcrumed on said pin.

In testimony whereof I have signed my name to this specification in the presence of two subscribing witnesses.

EARLE F. KIMBALL.

Witnesses:

LOUIS C. SMITH,
JOHN C. EDWARDS.