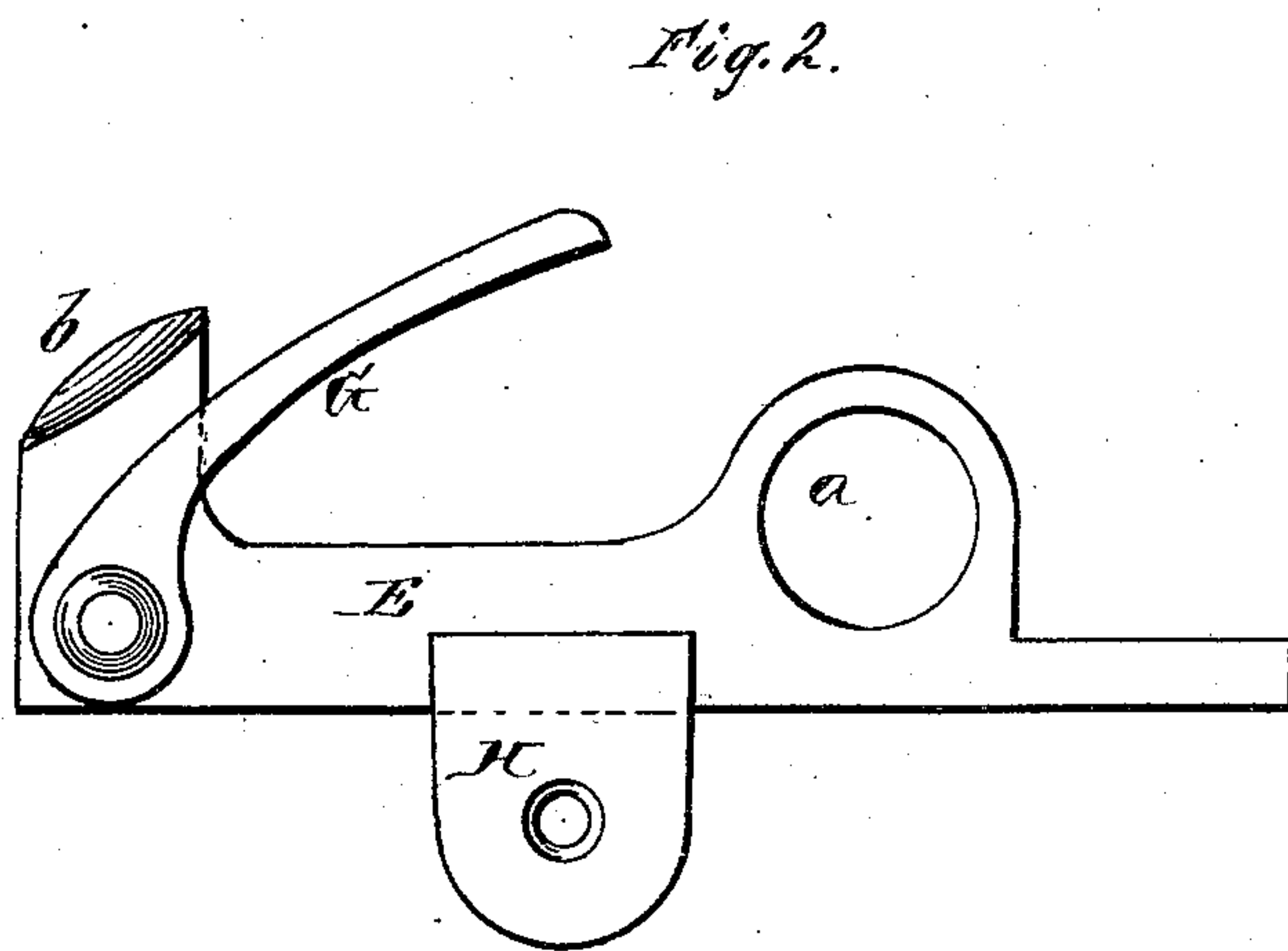
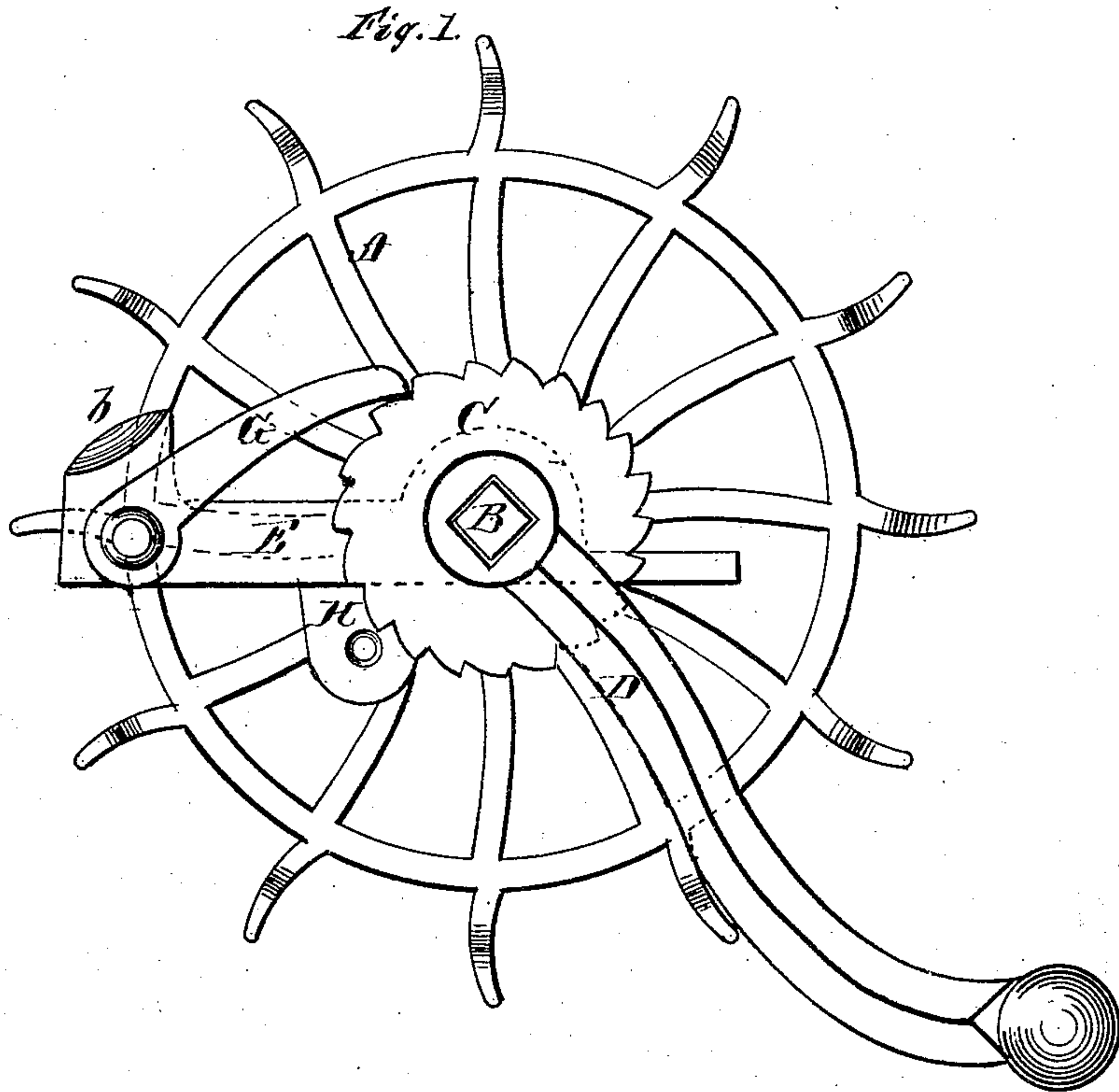


E. A. PARKER.
Chain-Pump Attachments.

No. 153,108.

Patented July 14, 1874.



WITNESSES:

P. C. Dietrich
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UNITED STATES PATENT OFFICE.

EDWIN A. PARKER, OF HORSEHEADS, NEW YORK.

IMPROVEMENT IN CHAIN-PUMP ATTACHMENTS.

Specification forming part of Letters Patent No. **153,108**, dated July 14, 1874; application filed June 2, 1874.

To all whom it may concern :

Be it known that I, EDWIN A. PARKER, of Horseheads, in the county of Chemung and State of New York, have invented certain new and useful Improvements in Chain-Pump Attachments; and I do hereby declare that the following is a full, clear, and exact description thereof, reference being had to the accompanying drawings, and to the letters of reference marked thereon, which form part of this specification.

My invention relates particularly to wheels for chain-pumps; and the nature of my invention consists in the construction and arrangement of the pawl which engages in the ratchet-wheel to prevent the backward motion of the wheel, as will be hereinafter more fully set forth.

In order to enable others skilled in the art to which my invention appertains to make and use the same, I will now proceed to describe its construction and operation, referring to the annexed drawing, in which—

Figure 1 is a side elevation of a chain-pump wheel, with its ratchet-wheel and the pawl connected therewith; and Fig. 2 is an enlarged side view of the pawl and the frame to which it is pivoted.

A represents an ordinary wheel, such as are used in chain-pumps, said wheel being secured on a shaft, B, upon one end of which the ratchet-wheel C and crank D are placed. E represents a metal bar, having a flange at its upper edge, on one side, through which screws pass to secure the bar to the frame or curb of the well. This bar is formed with a hub or box, *a*, through which the end of the shaft B passes, and which forms a bearing for the shaft, the ratchet-wheel and crank being placed on the shaft immediately on the outer side of said bar. G represents the pawl which is to engage in the ratchet-wheel C and prevent the back-

ward movement of the wheel A. This pawl is pivoted to the slide at one end of the bar E, as shown.

In the working of pumps of this description, it often happens that the pawl is thrown away from the ratchet wheel, and does not remain in its proper place to perform the work for which it is intended. To obviate this difficulty, I form an inclined projection, *b*, at the end of the bar E, directly above the pivoted end of the pawl G, which will hold the pawl down to its work and prevent its being thrown away from the ratchet-wheel, but at the same time allows all necessary motion of the pawl on its pivot.

Another very serious objection to pumps of this class is that the bar E will soon work loose, from the fact that both the screws which fasten it to the curb pass in the same direction into the wood. To overcome this difficulty, I provide the bar E with one or more downward-projecting ears, H H, through which one or more screws are to pass into the curb of the well. These screws running into the wood at right angles with the others make the fastening perfectly firm and secure, and such that it cannot work loose.

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

The bar E, constructed to fit upon shaft B, and provided with projection *b* and ears H, in combination with pawl G and ratchet-wheel C, as and for the purpose set forth.

In testimony that I claim the foregoing as my own I affix my signature in presence of two witnesses.

E. A. PARKER.

Witnesses:

J. TYLER POWELL,
T. H. ALEXANDER.