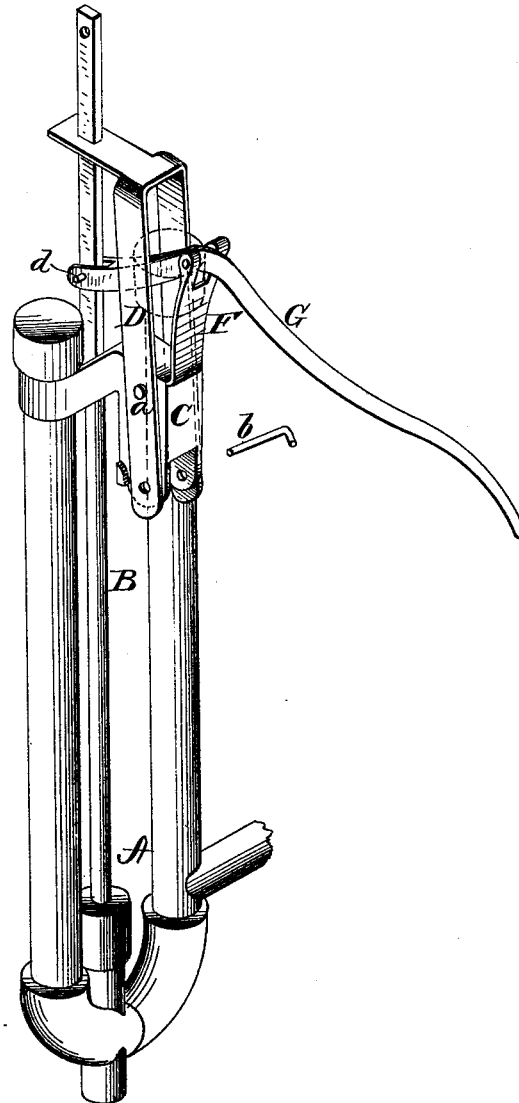


J. & R. BEAN.
Pump.

No. 220,789.

Patented Oct. 21, 1879.



WITNESSES

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UNITED STATES PATENT OFFICE.

JOHN BEAN AND ROSCOE BEAN, OF SPRINGFIELD, OHIO.

IMPROVEMENT IN PUMPS.

Specification forming part of Letters Patent No. **220,789**, dated October 21, 1879; application filed September 9, 1879.

To all whom it may concern:

Be it known that we, JOHN BEAN and ROSCOE BEAN, of Springfield, in the county of Clarke, and in the State of Ohio, have invented certain new and useful Improvements in Pumps, and 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, making a part of this specification.

The nature of our invention consists in a guide or slide for the actuating-rod of a pump so arranged as to be rigid when windmill or other power is applied to the upper end of the rod, but will swing or oscillate when a handle mounted on a stationary fulcrum is attached to the rod.

The annexed drawing represents a perspective view of a pump embodying our invention.

A represents a pump of any suitable construction. B is the pump-rod; C, the pump-head, and D the guide for the pump-rod. This guide is made in the form of a stirrup, and pivoted at *a* to the head C.

b is a pin, to be passed through the guide into the head, for holding the guide rigid or stationary.

In pumps now in use there is great friction, caused by an oscillating fulcrum swinging back and forth out of center by each movement of the handle crowding the rod against the rigid guide each time the oscillating fulcrum moves out of center.

Now, to obviate this friction when used for hand purposes, we have a stationary fulcrum or standard, F, with a movable or oscillating guide or slide, D, so arranged as to conform to the movement of the actuating-rod.

G is the handle, connected to the rod B by a pin, *d*. When the handle is thus connected to the rod the pin *b* cannot be inserted in its place, and hence the guide D cannot be made rigid. When the handle is worked on its fulcrum the guide conforms to the swinging movement of the rod without causing friction; but as soon as the handle is detached from the rod, and the pin *b* inserted in place, the guide D becomes rigid or stationary, and guides the rod from any rotary or lateral movement when connected to windmill or other power.

Having thus fully described our invention, what we claim as new, and desire to secure by Letters Patent, is—

In a pump a swinging or oscillating pump-rod guide, provided with devices for holding it rigid when desired, for the purposes set forth.

In testimony that we claim the foregoing we have hereunto set our hands this 25th day of August, 1879.

JOHN BEAN.
ROSCOE BEAN.

Witnesses:

F. W. WILLISS,
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