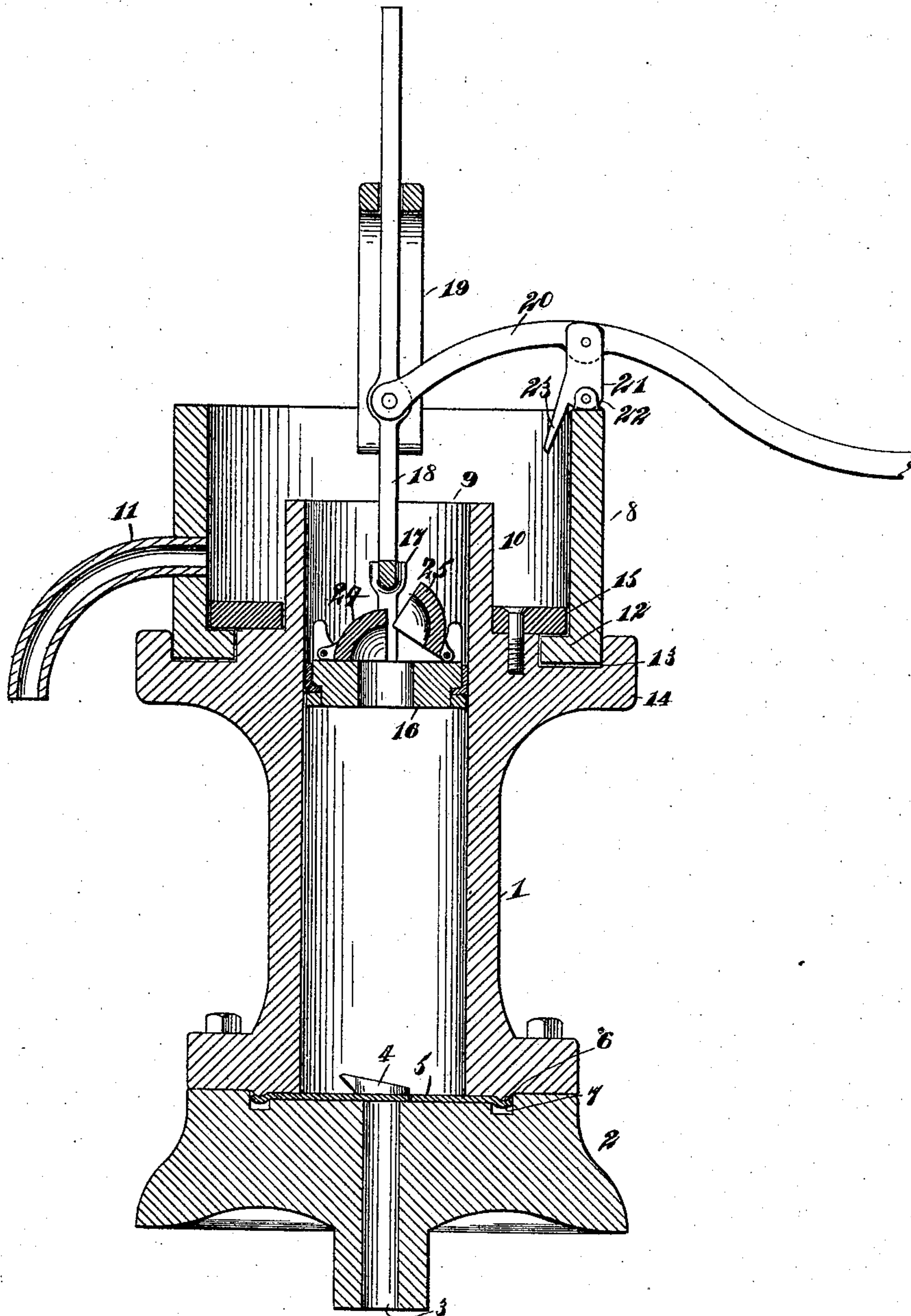


(No Model.)

J. D. WILCOX.
PUMP.

No. 576,929.

Patented Feb. 9, 1897.



WITNESSES:

L. V. Legendre
C. R. Ferguson

INVENTOR

J. D. Wilcox.

BY

munif

ATTORNEYS.

UNITED STATES PATENT OFFICE.

JOHN D. WILCOX, OF GILMAN, ILLINOIS.

PUMP.

SPECIFICATION forming part of Letters Patent No. 576,929, dated February 9, 1897.

Application filed April 14, 1896. Serial No. 587,460. (No model.)

To all whom it may concern:

Be it known that I, JOHN D. WILCOX, of Gilman, in the county of Iroquois and State of Illinois, have invented certain new and useful
5 Improvements in Pumps, of which the following is a full, clear, and exact description.

This invention relates to pumps particularly adapted for pumping sand and water from oil or similar well-tubes during the operation of boring the same into the ground; and the object is to provide a pump so constructed that the pumping operation may continue while the well is being bored.

I will describe a pump embodying my invention, and then point out the novel features in the appended claim.

The drawing shows a vertical section of a pump embodying my invention.

Referring to the drawing, 1 designates the tubular body portion of the pump, mounted on a base 2, having a central opening 3, communicating with the interior of the pump-body. The admission of water through this opening 3 is controlled by a weighted flap-valve 4, formed in a disk of leather or similar material 5, placed on the upper side of the base 2 within the pump-body and held in place by means, as here shown, of an annular bead 6 on the lower end of the pump-body, pressing the edge of the disk into an annular channel 7, formed in the top of the base.

On the upper end of the body portion 1 is mounted a water and dirt receiver 8, and the body portion has an extension 9, projected upward into the receiver 8, forming between it and the receiver a water-space 10. The receiver 8 has an outlet-spout 11 in its lower portion, and there is desired to be a relative rotary motion or swivel connection between
40 the pump-body and receiver, so that the receiver may be held stationary while the body portion is turning with a well-tube in boring. This connection is made by providing the receiver 8 with an inwardly-projecting annular flange 12, seated in an annular channel 13, formed in the upper side of a flange 14 on the upper portion of the pump-body. The receiver is held from vertical movement by means of a ring 15, surrounding the projection
45 9 of the pump-body and engaging over the flange 12 and secured in place by means of screws passing into the pump-body.

It is obvious that the flange 12 might be turned outward and the ring 15, surrounding the receiver, engage with the flange.

Within the pump-body is a suction-plunger 16, having an opening through it for the passage of water and having on its upper side a yoke 17, to which the lower end of the pump-rod 18 is attached. The pump-rod 18 extends
60 upward through a guide-yoke 19, mounted on the receiver 8, and to this pump-rod is pivoted the pump-handle 20. The pump-handle is fulcrumed on a link 21, pivoted to lugs 22 on the receiver 8, and having a downwardly and outwardly extended finger 23, adapted by striking against the inner surface of the receiver to limit the rocking motion of the link. This link provides a shifting fulcrum for the pump-handle, so as to allow its end to move
70 in a direct vertical line with the pump-rod.

Mounted on the plunger 16 is a valve consisting of two sections 24 25, adapted to close the opening through said plunger. The valve-sections are so formed that when in a closed
75 position they will form a hemisphere with the convex side upward. The object in thus forming the valve is to prevent clogging with mud or sand. Each section has a lug extended from it and in pivotal connection with
80 a lug or lugs on the plunger.

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

A pump, comprising the body portion having an annular channel in its upper end, the receiver having a flanged lower end seated in said channel, a ring secured to the body portion and extending over said flange, the upper end of the body portion having an extension in the receiver and forming therewith a water-receiving compartment 10 having an outlet near the bottom of the receiver, a suction-plunger in the body portion and having an opening and hemispherical valves pivoted
95 to lugs on the plunger to close the opening, a yoke 17 to which the lower end of the pump-rod is connected, a guide-yoke for said rod, a link pivoted on said receiver and having a downwardly-extending finger arranged to
100 strike against the receiver and limit the movement of the link, and the pump-handle pivoted to said rod and fulcrumed on said link, as and for the purpose set forth.

JOHN D. WILCOX.

Witnesses:

A. E. MERRITT,
W. A. SHELDON.