No. 813,613. PATENTED FEB. 27, 1906.

J. R. BOALS.

PUMP ROD COUPLING.

APPLICATION FILED MAY 2, 1905.

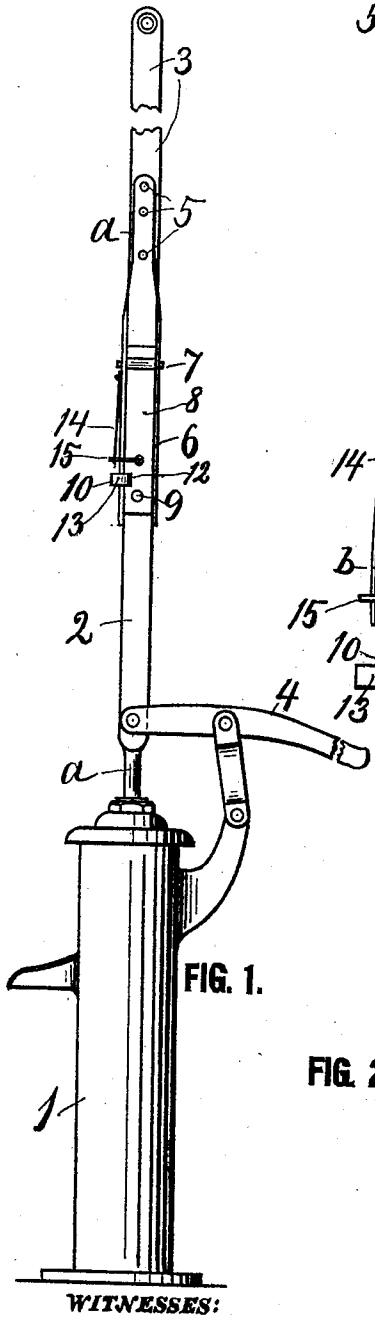

FIG. 1.

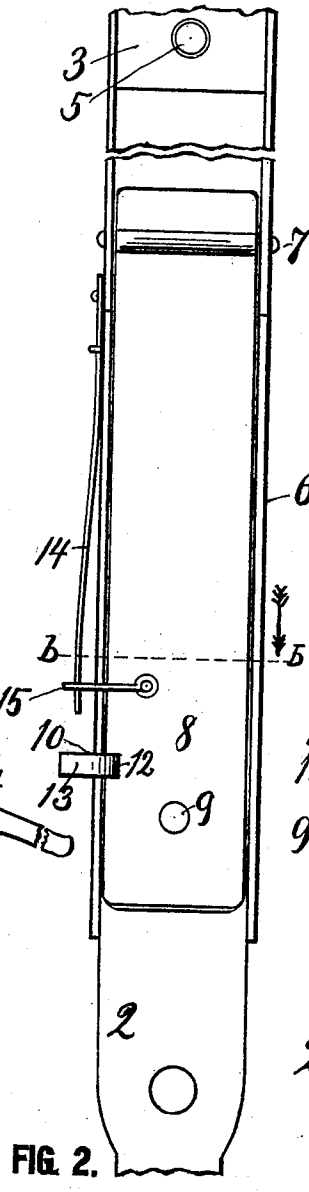

FIG. 2.

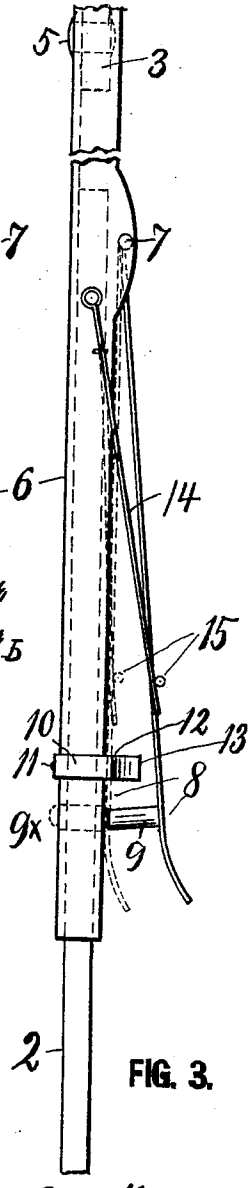

FIG. 3.

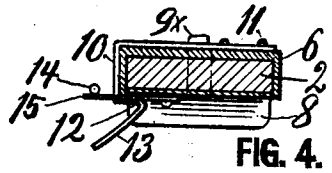

FIG. 4.

WITNESSES:

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PUMP-ROD COUPLING.

No. 813,613. Specification of Letters Patent. Patented Feb. 27, 1906.

Application filed May 2, 1905. Serial No. 258,513.

To all whom it may concern:

Be it known that I, JOHN R. BOALS, a citizen of the United States, residing at River Falls, in the county of Pierce and State of Wisconsin, have invented certain new and useful Improvements in Pump-Rod Couplings; and I do declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same, reference being had to the accompanying drawings, and to the figures of reference marked thereon, which form a part of this specification.

My invention relates to pump-couplings; and the object is to provide a coupling by which a pump may be attached to a windmill in such a manner that it may be uncoupled therefrom with the least possible trouble and in an instant set the pump free so it can be operated by hand when there is no wind to operate the mill and may as easily and quickly be again connected with the pump. This object I attain by the novel construction and arrangement of parts illustrated in the accompanying drawings, in which—

Figure 1 is a side elevation of a pump coupled to the pumping-rod of a windmill by my improved coupling device. Fig. 2 is an enlargement of the portion between marks *a* and *a* in Fig. 1. Fig. 3 is an edge view of Fig. 2 with the coupling detached from the pump. Fig. 4 is a cross-section on the line *b b* in Fig. 2.

Referring to the drawings by reference-numerals, 1 designates a pump connected with a well or other source of water and having its rod 2 connected to the pitman or pumping-rod 3 of a windmill (not shown) and has also a common pump-handle 4, always operatively connected with the pump-rod 2. To the end of the pitman 3 I secure by bolts 5 an elongated channel-shaped iron 6, fitting loosely over the two edges and what may be termed the "rear" side of the pump-rod, while at the front side of the rod is suspended from a pivot-joint 7 a plate or apron 8, carrying near its free end a fixed pin 9, adapted to pass into a hole in the pump-rod and in the channel-piece 6, as indicated at $9^{\times}$, when the apron is closed to a perpendicular position, in which position it is held by a spring-clasp 10, secured at 11 and having its end formed into a clasping-hook 12, engaging over the edge of the apron until it is desired to use the pump by hand. Then the clasp is touched by a finger at the point or arm 13, so that the clasp springs out over and disengages the apron, which is at once thrown open, as in Fig. 3, by a spring-arm 14, secured upon the pitman 6 and acting against a projecting finger or pin 15 of the apron. The rod 2 is thus set free or uncoupled instantly by a pressure on the arm 13 of the clasp, and when it is desired to couple the pump again to the windmill a pressure against the apron 8 causes it to act along the inclined arm 13, and thus open the clasp 12 and let it engage over the edge of the apron.

When the spring 14 holds the apron with the pin 9 disengaged, the pump-rod slides up and down in the pitman 6, fully retained in place by the upper part of the apron and its pivot-joint, so that the two rods cannot separate or get out of position for ready coupling, when so desired.

Having thus described the invention, what I claim, and desire to secure by Letters Patent, is—

1. A pump-rod coupling comprising a pitman having one open side, an apron pivoted in the open side and provided on its inner side with a pin normally projecting across the pitman and into the side of the pitman opposite the apron, a spring-clasp secured on the pitman and adapted to take over the edge of the apron and hold it parallel with the pitman.

2. A pump-rod coupling comprising a pitman having one open or grooved side, an apron pivoted in the open side and provided on its inner side with a pin normally projecting across the groove and into the side of the pitman opposite the apron, a spring-clasp secured on the pitman and adapted to take over the edge of the apron and hold it parallel with the pitman, and a spring-arm arranged to throw the apron outward when disengaged from the clasp.

3. A pump-rod coupling comprising a pitman having one open or grooved side, an apron pivoted in the open side and provided on its inner side with a pin normally projecting across the groove and into the side of the pitman opposite the apron, a spring-clasp secured on the pitman and adapted to take over the edge of the apron and hold it parallel with the pitman, and a spring-arm arranged to throw the apron outward when disengaged from the clasp, said clasp having an inclined operating-arm adapted to be operated by the

finger in opening the apron and by the edge of the apron in closing the apron, substantially as and for the purpose set forth.

4. The combination with the pumping-rods of a windmill and a pump, of a coupling comprising a grooved member secured on one of the rods and guidingly embracing the other rod, there being a transverse hole in said other rod, said grooved member having in its groove a pivoted flap, latch or apron, a pin in said apron for engaging the hole in the rod, a spring-clasp holding the apron closed, and a spring-arm throwing the apron open when released from the clasp.

In testimony whereof I affix my signature in presence of two witnesses.

JOHN R. BOALS.

Witnesses:
D. E. SANDERS,
CHARLES WILCOX.