W. RICHARDS. VALVE.

APPLICATION FILED MAR. 28, 1904.

NO MODEL.

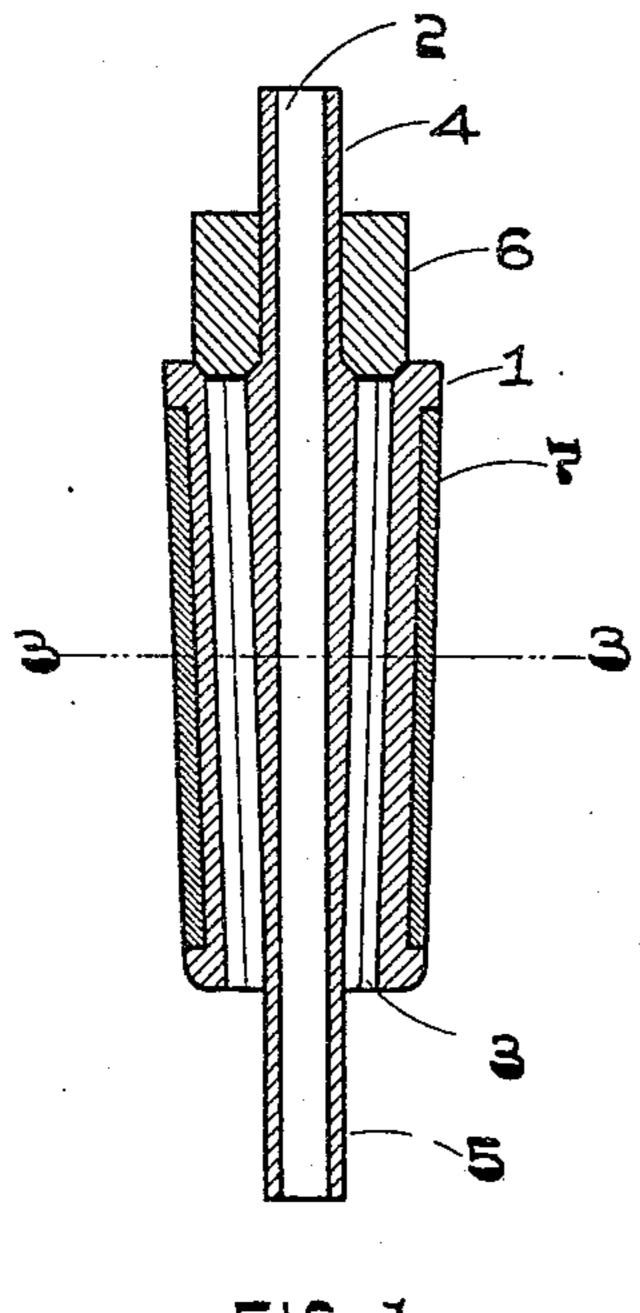


FIG.I

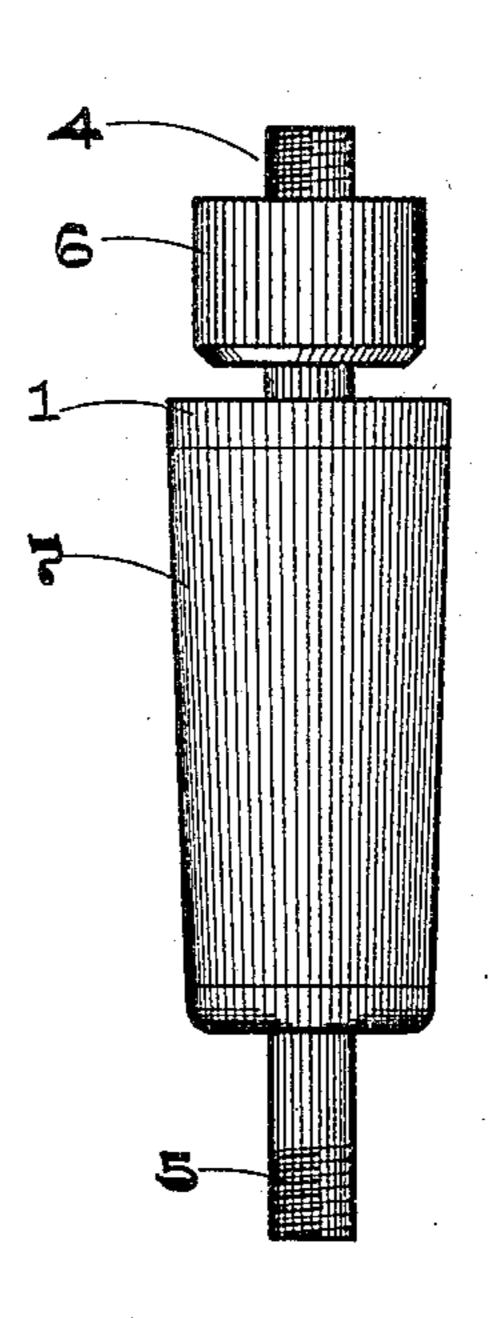
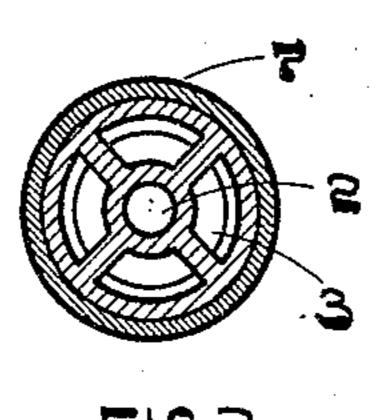


FIG.2



Inventor

WILLIAM RICHARDS

Doward R. Annan

attorney

Witnesses Wen Banflen Of Kare

United States Patent Office.

WILLIAM RICHARDS, OF MAYBURG, PENNSYLVANIA.

VALVE.

SPECIFICATION forming part of Letters Patent No. 774,455, dated November 8, 1904.

Application filed March 28, 1904. Serial No. 200,475. (No model.)

To all whom it may concern:

Be it known that I, William Richards, a citizen of the United States, residing at Mayburg, in the county of Forest and State of Pennsylvania, have invented certain new and useful Improvements in Valves, of which the following is a specification, reference being had therein to the accompanying drawings.

My invention relates to an improved valve, the construction, object, and operation of which will be fully understood from the following specification, reference being had to the accompanying drawings, which form a part hereof, and in which—

Figure 1 is a longitudinal section. Fig. 2 is a side elevation, the drop being here shown in a raised position. Fig. 3 is a transverse section on line 3 3.

My valve is designed particularly to be used in connection with my device for raising liquids from wells, which device is fully shown and described in an application for Letters Patent of the United States filed February 3, 1904, Serial No. 191,841; but as my valve is adaptable to other uses than that specified in said application I seek to secure the same by separate Letters Patent.

My valve consists of an elongated tapered cylindrical body 1, having two passages 2 and 3° 3 extending through the same. The passage 2 is centrally located, and the passage 3 is concentric therewith and extends around said passage 2. The metal about the passage 2 is continued beyond the body of the valve at both 35 ends, and the extremities of said extensions 4 and 5 are adapted as pipe connections. About the upper extension is fitted the drop 6, which is slidingly mounted upon the extension 4 and is provided with a seat in the upper portion of the passage 3, to which it serves as a check against any downward flow of liquid, but freely admits of liquid passing upward through said

Around the body 1 of the valve is placed a coating 7, of soft lead or other comparatively yieldable material, which is for the purpose

of adapting said body to more effectually seat in a surrounding framework. In the application for Letters Patent above referred to my valve is shown seated in a bridge at the 50 top of an oil-reservoir, which reservoir is an element of said device for raising liquids from wells, and therein the passage 2 is adapted to the purpose of admitting air to said reservoir, and passage 3 is adapted to the outlet of oil 55 from said reservoir, while the ends 4 and 5 serve as pipe connections.

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

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1. A valve having an elongated, cylindrical body, there being a central passage extending through said body and an outer concentric passage also extending through said body and a drop adapted to seat in the upper end 65 of said outer passage.

2. A valve having an elongated, cylindrical body, there being a central passage and an outer concentric passage through said body, the metal about said central passage being ex- 70 tended at both ends of said body, said extensions being adapted as pipe connections, a valve-drop slidingly mounted on the upper extension.

3. A valve having an elongated, tapered 75 body, there being a central passage and an outer concentric passage through said body, the metal about said central passage being extended at both ends of said body, a drop slidingly mounted on the upper extension, the 80 lower face of said drop being adapted to seat in a seat provided therefor in the upper end of said outer passage, a covering of comparatively soft metal incasing the greater part of said body, substantially as and for the purpose specified.

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

WILLIAM RICHARDS.

Witnesses:

LEWIS D. HUNTER, N. L. SPENCER.