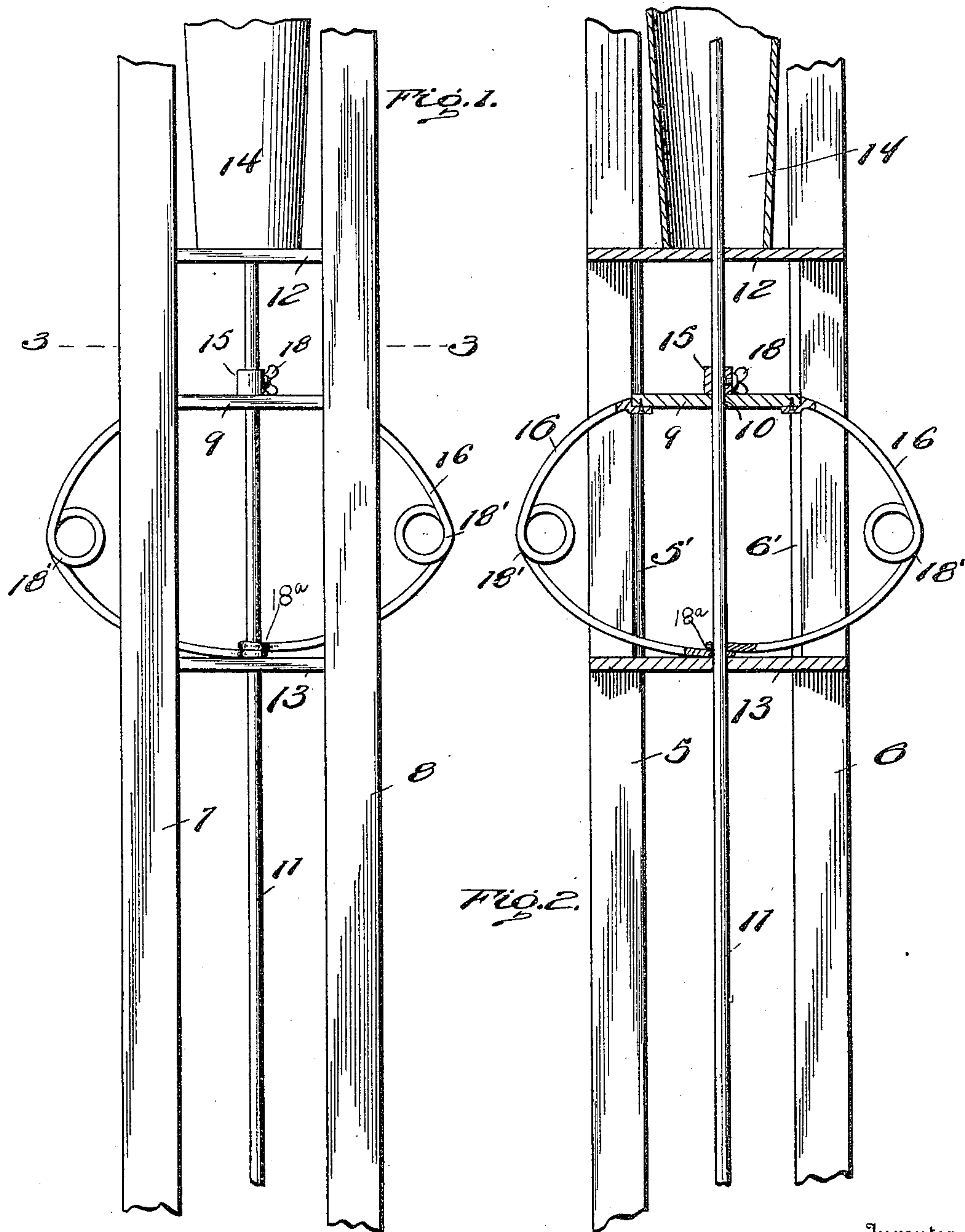


No. 816,586.

PATENTED APR. 3, 1906.

J. LUECK.
WINDMILL PUMP ROD.
APPLICATION FILED JUNE 1, 1905.

2 SHEETS—SHEET 1.



Inventor

J. Lueck

Witnesses

G. R. Thomas
E. M. Dalford.

By

Charles Chandler

Attorneys

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2 SHEETS—SHEET 2.

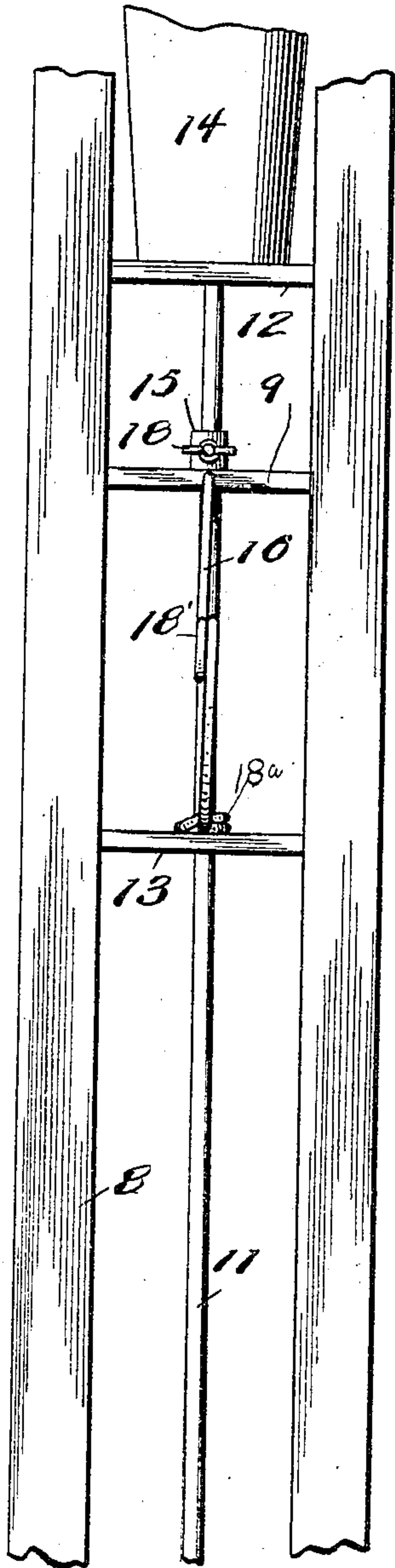


FIG. 4.

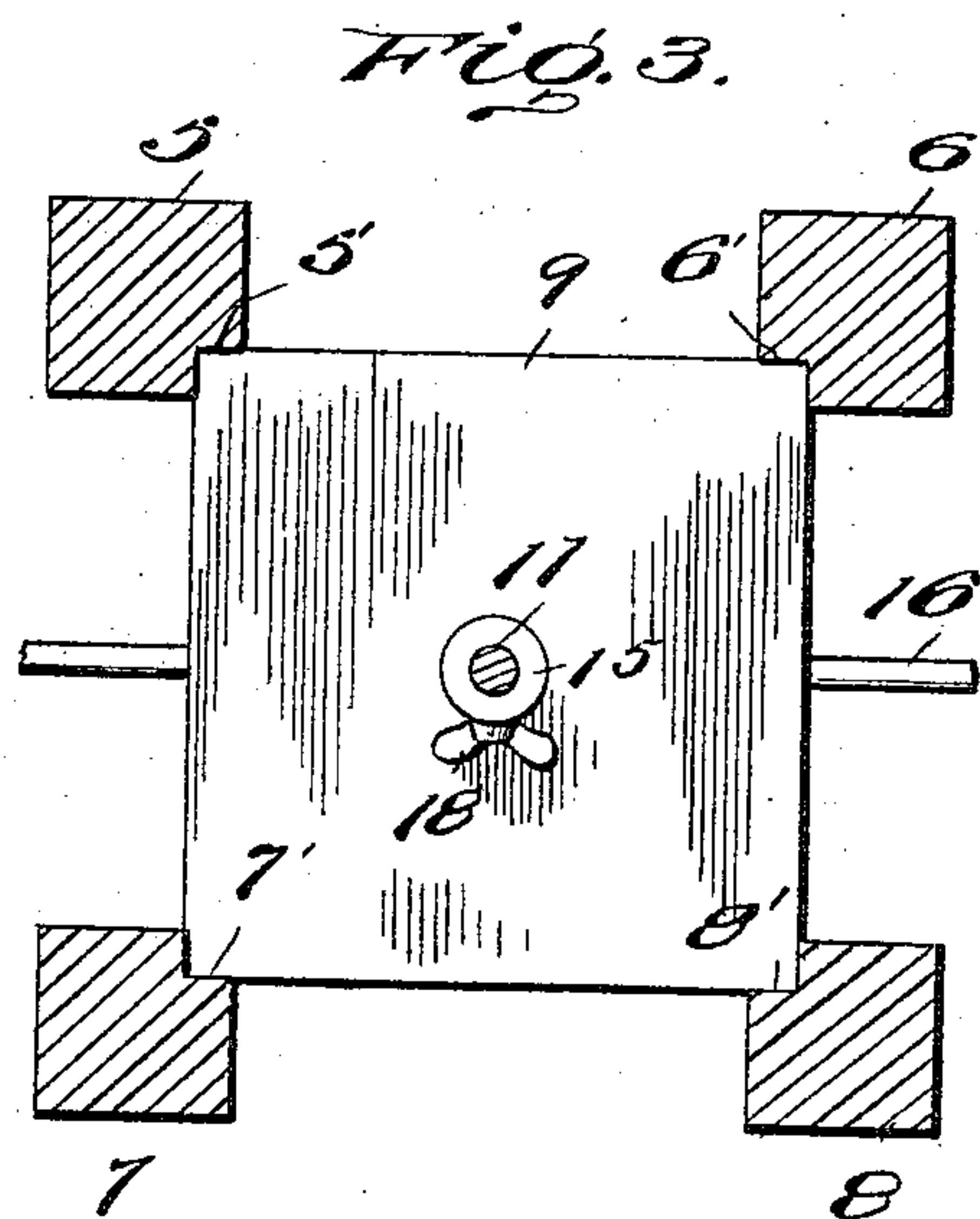


FIG. 3.

Witnesses

G. R. Thomas
E. M. Dalford

J. Lueck Inventor

By *Handwritten Signature*

Attorneys

UNITED STATES PATENT OFFICE.

JOHN LUECK, OF FAIRBURY, NEBRASKA.

WINDMILL PUMP-ROD.

No. 816,586.

Specification of Letters Patent.

Patented April 3, 1906.

Application filed June 1, 1905. Serial No. 263,354.

To all whom it may concern:

Be it known that I, JOHN LUECK, a citizen of the United States, residing at Fairbury, in the county of Jefferson, State of Nebraska, have invented certain new and useful Improvements in Windmill Pump-Rods; and I do hereby 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.

This invention relates to windmills, and has for its object to provide a windmill provided with a spring device which will assist in raising the pump-rod and which will be so arranged that it will be energized by the downstroke of the rod, the device also acting to prevent pounding of the rod.

Other objects and advantages will be apparent from the following description, and it will be understood that changes in the specific construction shown and described may be made within the scope of the claim and that any suitable materials may be used without departing from the spirit of the invention.

In the drawings forming a portion of this specification, and in which like numerals of reference indicate similar parts in the several views, Figure 1 is a side elevation of a pump-rod of a windmill embodying the present invention. Fig. 2 is a central longitudinal section of Fig. 1 taken through the rod. Fig. 3 is a horizontal section on line 3 3 of Fig. 1. Fig. 4 is a view looking at right angles at Fig. 1.

Referring now to the drawings, the present invention comprises corner-uprights 5, 6, 7, and 8, disposed in spaced relation. The uprights 5 and 7 have coöperating vertical guides 5' and 7', respectively, in their mutually-adjacent faces, while the uprights 6 and 8 are provided, respectively, with similar guides 6' and 8'. The ends of a horizontally-extending plate 9 are engaged in the guides 5' and 7' and 6' and 8', respectively, and this plate has a central perforation 10, in which is slidably engaged a vertically-extending pump-rod 11, and this rod is slidably engaged in a transverse platform 12, located above the plate 9 and secured to the corner-uprights, the rod being also slidably engaged in a horizontal platform 13, mounted in the uprights

below the plate 9, the two platforms being sufficiently spaced to permit of the movement of the plate 9 therebetween throughout the full stroke of the rod. The platform 12 has mounted thereupon a casting 14, in which is journaled the shaft and other portions of the mill proper.

A collar 15 is slidably engaged with the rod 11 above the plate 9 and has a set-screw 18 therein, which may be operated to hold the collar at different points of its movement upon the rod. A spring-rod 16 is secured at its upper ends to the ends of the plate 9 and extends outwardly in opposite directions between the uprights 5 and 7 and the uprights 6 and 8 and then downwardly and rests with its central portion 17 upon the platform 13, the spring-rod having convolutions 18' at its outermost points.

From the above it will be seen that downward movement of the pump-rod will place the spring-rod under tension to assist in raising the pump-rod during the upstroke of the latter, and it will also be seen that adjustment may be made by shifting the position of the collar 15 upon the rod 11.

What is claimed is—

In an apparatus of the class described the combination with corner-uprights having guides at their innermost portions, of a rectangular plate disposed with its corners in the guides for sliding vertical movement of the plate, a support secured to the uprights below the plate, a pump-rod slidably engaged in the support and in the plate, a collar slidably engaged with the rod above the plate, a set-screw engaged in the collar and arranged for operation to impinge against the rod to hold the collar at different points upon the rod, and a spring-rod having a convolution at its center in which the pump-rod is slidably engaged, said spring-rod lying with its convolution upon the support and extending outwardly and then inwardly and having its ends secured to the plate, said spring-rod having convolutions at its outermost points.

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

JOHN LUECK.

Witnesses:

E. A. YONTZ,
D. B. CROSEY.