

No. 667,283.

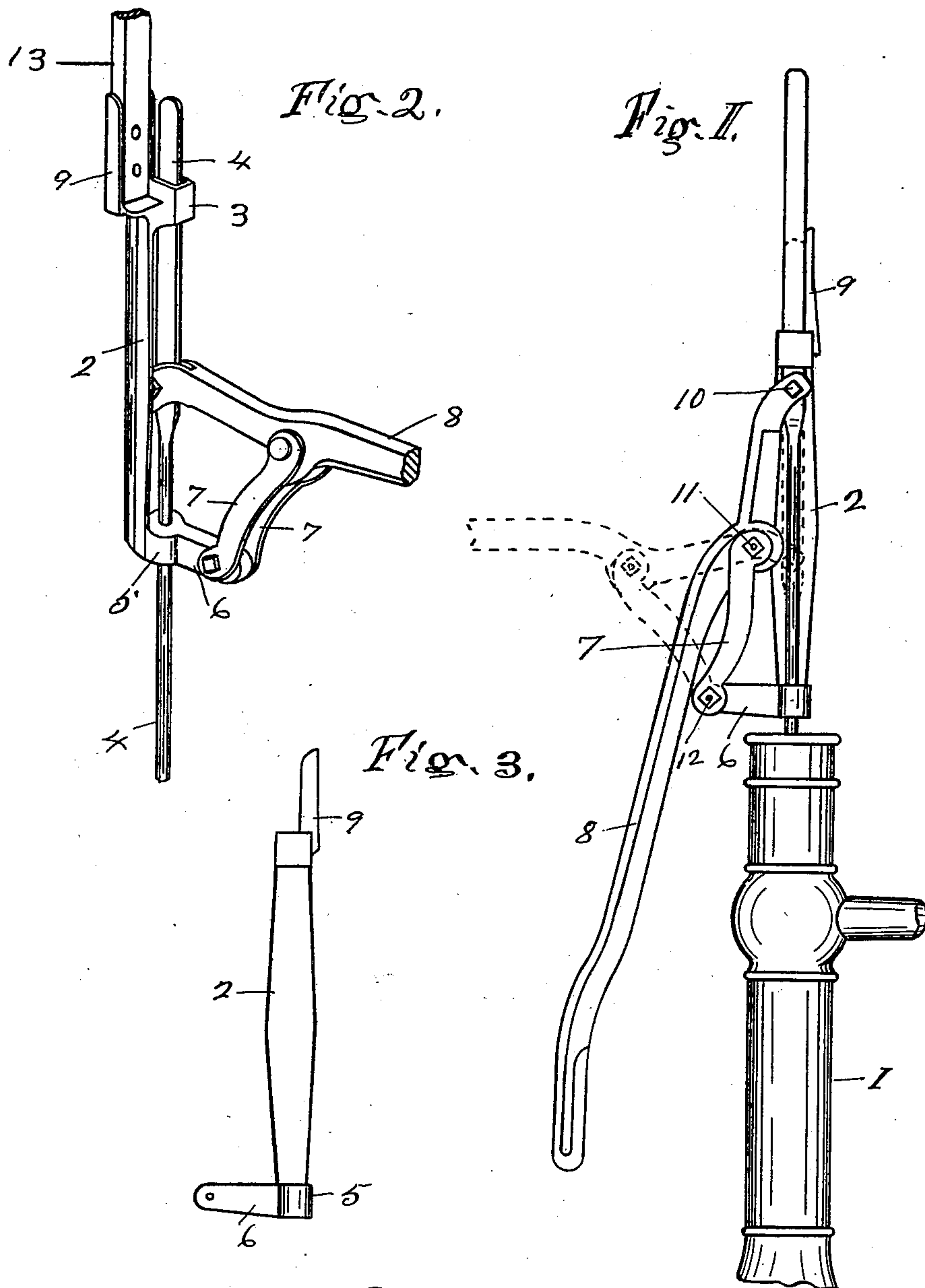
Patented Feb. 5, 1901.

J. AMSTUTZ, JR. & E. AMSTUTZ.

COUPLING FOR PUMP RODS.

(Application filed Oct. 16, 1900.)

(No Model.)



WITNESSES:

Adelaide Kearns.

Augusta Viberg.

John Amstutz Jr. and Elias Amstutz - INVENTORS.

By Chapin Denny

Their ATTORNEYS.

UNITED STATES PATENT OFFICE.

JOHN AMSTUTZ, JR., AND ELIAS AMSTUTZ, OF LEO, INDIANA.

COUPLING FOR PUMP-RODS.

SPECIFICATION forming part of Letters Patent No. 667,283, dated February 5, 1901.

Application filed October 15, 1900. Serial No. 33,026. (No model.)

To all whom it may concern:

Be it known that we, JOHN AMSTUTZ, Jr., and ELIAS AMSTUTZ, citizens of the United States, residing at Leo, in the county of Allen, in the State of Indiana, have invented certain new and useful Improvements in Couplings for Pump-Rods; and we do hereby declare that the following is a full, clear, and exact description of the invention, which will enable others skilled in the art to which it appertains to make and use the same, reference being had to the accompanying drawings, which form part of this specification.

Our invention relates to improvements in couplings for pump-rods which are operated by wind or other motive power.

The object of our invention is to provide a cheap, efficient, and convenient pump-rod coupling by means of which an attached pump-handle can at all times be conveniently operated independently of the wind-motor or other mechanical power without the necessity of making any connection or adjustment whatever between the pump-handle and the pump-rod.

The novel feature of our improvement is the means by which the pump can readily and conveniently be operated by hand while the pump-rod is being actuated by a wind-engine or other motor without the necessity for making any adjustments or attachments whatever.

Our invention consists of a vertical guide-casting rigidly secured to the lower end of the windmill-rod, provided with alined guiding-lugs for the vertically-reciprocating pump-rod and having upon its lower extremity a lateral arm, to which the pump-handle is fulcrumed, and a pair of pivoted links or levers in parallel arrangement connecting the said pump-handle with its fulcrum.

Similar reference-numerals in the accompanying drawings indicate like parts throughout the several views, in which—

Figure 1 is a view in elevation of our improvement in position on a pump-rod in connection with an ordinary pump, broken away in part and also showing in dotted outline the relative position of the operative parts when the pump-handle is in a horizontal position. Fig. 2 is a perspective view of our invention, showing the relative arrangement

of the pump-rod and pump-handle thereon, broken away in part, and also showing the lower end of the windmill-rod connected to the upper end of the guide-bracket. Fig. 3 is a detail side view of the vertical guide casting or bracket, on which the pump-handle is fulcrumed.

Referring now particularly to Fig. 1, the pump-stock 1, of ordinary or any proper construction, has no pump-handle or fixed upright guide-bracket for the pump-rod.

Our improved guide-bracket 2, of proper material and suitable dimensions, is provided upon its upper end with an integral socket 9, of ordinary or other proper form, to which the lower end of the windmill coupling-rod 13 is secured in any proper manner. The upper end of the said bracket 2 is also provided upon its inner face with an apertured guide-lug 3 for the upper end of the pump-rod 4. The lower end of the said bracket 2 is also provided with an apertured guide-lug 5 in vertical alinement with the said lug 3. This lug 5 is provided with a right-angular arm or lateral extension 6, to the outer or free end of which are pivotally connected the lower ends of the parallel links or levers 7, whose upper ends are pivotally connected to the pump-handle 8 near its forward end, as shown. The forward extremity of the said pump-handle is bifurcated and pivotally connected with the said pump-rod 4, as best seen in Fig. 2, whereby the said pump-handle is fulcrumed on the said integral arm 6 of the guide-bracket 2 instead of on the pump-stock, the usual location of the pump-rod guide-bracket.

The operation of our improved pump-rod coupling thus described is substantially as follows: The pump-handle 8 when not in use will assume by gravity its normal position, as shown by full lines in Fig. 1, in which position the three pivotal points 10, 11, and 12 of the forward end of the pump-handle and the links 7, respectively, will be in alinement, as shown, whereby the vertical movement of the pump-rod by the operation of the windmill-rod 13 will not disturb this normal position of the pump-handle, because all the strain incident to such operation will be at the pivotal point 10, at which point the said pump-rod and the windmill-rod are connected.

When it is desired to operate the pump-handle independently, it can readily be done whether the wind-engine is in operation or not, because the guide-bracket 2, to which the wind-engine is connected, will in either case be stationary relative to the independent movements of the pump-handle, whereby the operator can operate the pump-handle at any desired speed without interfering in the least with the slower but regular movements of the said guide-bracket. It is obvious, therefore, that when our improved coupling is employed an operative connection between the pump-rod and the pump-handle is at all times maintained, whereby no connections or adjustments for the independent operation of the pump-handle are required.

It is evident that the links 7 may be made in one piece, if desired, with bifurcated ends, without departing from the spirit and scope of our invention.

Having thus described our invention, what we desire to secure by Letters Patent is—

1. In a pump-rod coupling the combination of a guide-bracket having alined guide-lugs for the upper end of the pump-rod, and having a lateral arm for the purpose specified; a pump-handle whose inner or upper extremity is pivotally connected to the said pump-

rod; and a pair of links or levers pivotally connecting the said pump-handle with the said arm.

2. A pump-rod coupling consisting of a vertical guide-bracket having alined lateral guide-lugs for the adjacent end of the pump-rod, and provided at its lower end with a fixed arm on which the pump-handle is fulcrumed; and a pump-handle pivotally connected to the pump-rod, and also pivotally fulcrumed on the said fixed arm.

3. A pump-rod coupling consisting of a vertical guide-bracket for the pump-rod, having a lateral fixed arm on its lower end adapted to form a fulcrum for the pump-handle; a pump-handle pivoted to the pump-rod, and also pivotally connected to its said fulcrum by connecting link or links whereby when the said handle is in its normal position the pivotal points of said handle and said links will be in alinement, for the purpose specified.

Signed by us at Fort Wayne, Allen county, State of Indiana, this 10th day of October, A.D. 1900.

JOHN AMSTUTZ, JR.
ELIAS AMSTUTZ.

Witnesses:

ADELAIDE KEARNS,
AUGUSTA VIBERG.