No. 649,890. Patented May 15, 1900.

M. N. CRARY.

COUPLING FOR WINDMILLS.

(Application filed July 25, 1899.)

(No Model.)

Fig. 1.

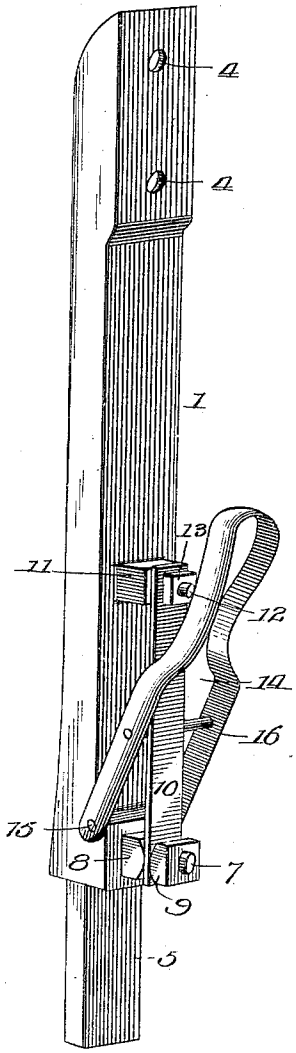


Fig. 2.

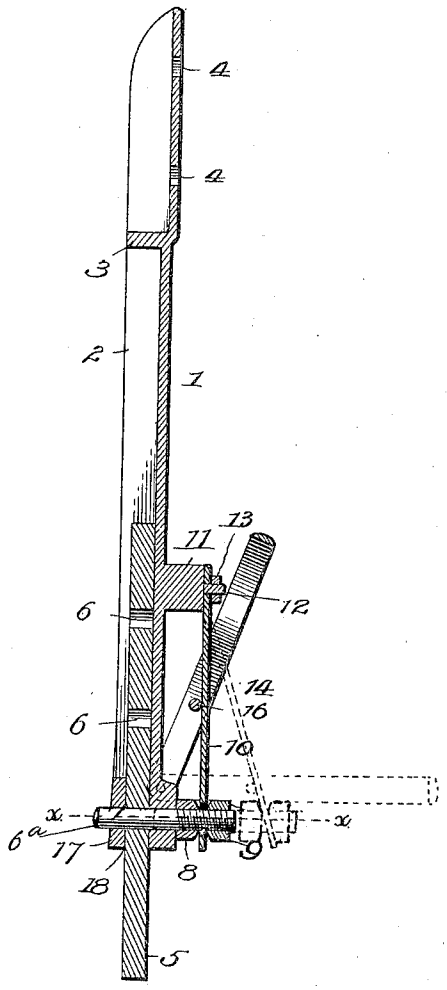
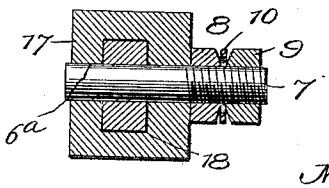


Fig. 3.



Witnesses
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THE NORRIS PETERS CO., PHOTO-LITHO., WASHINGTON, D. C.

UNITED STATES PATENT OFFICE.

MADISON N. CRARY, OF HICKSVILLE, OHIO, ASSIGNOR TO THE CRARY COUPLER COMPANY, OF SAME PLACE.

COUPLING FOR WINDMILLS.

SPECIFICATION forming part of Letters Patent No. 649,890, dated May 15, 1900.

Application filed July 25, 1899. Serial No. 725,074. (No model.)

To all whom it may concern:

Be it known that I, MADISON N. CRARY, a citizen of the United States, residing at Hicksville, in the county of Defiance and State of Ohio, have invented certain new and useful Improvements in Couplings for Windmills, of which the following is a specification, reference being had therein to the accompanying drawings.

My invention relates to couplings for windmills; and its purpose is to provide a coupling which may be quickly manipulated to connect or disconnect a windmill-rod and a pump sucker-rod.

The features of the invention will be fully described hereinafter and defined in the appended claims.

In the accompanying drawings, Figure 1 is a perspective view of a coupling device embodying the invention. Fig. 2 is a central longitudinal section of the frame, and Fig. 3 is a transverse section on the line $x\,x$ of Fig. 2.

The reference-numeral 1 designates a bar or casting formed on one side with a continuous longitudinal recess 2. The upper portion of the recess 2 above the cross-lug 3 is designed to receive the lower end of the windmill-rod, the bolt-holes 4 being provided for the reception of the bolts which secure the casting to the windmill-rod. The portion of the recess below the cross-lug 3 constitutes a seat or space for the upper end of the pump-rod 5. The rod 5 is formed with a series of holes 6, adapted to register with an opening 6^a in the casting 1 to receive a coupling-pin 7. The outer end of this pin is screw-threaded to receive oppositely-disposed nuts 8 and 9, between which is secured one end of a flat spring 10, the latter being formed with a slightly-enlarged opening, through which the threaded end of the pin 7 extends. The upper end of the spring 10 is secured to a block or lug 11, projecting from the casting 1, by means of a screw-bolt 12 and nut 13.

14 designates a yoke or bail the arms of which embrace the lower end of the casting and are pivoted thereto by a cross-rod 15, which extends through a bearing formed in the lower end portion of the casting. The arms of the yoke or bail are connected by a cross-rod 16, which rests between the casting 1 and spring 10, so that the spring may be forced outwardly by the contact therewith of the cross-rod 16. When the yoke or bail is in the position shown by dotted lines in Fig. 2, the cross-rod 16 rests upon the top of the nut 8, thus holding the spring distended and the pin withdrawn. By restoring the bail to the position shown in full lines, Fig. 1, the pin again enters the openings, as will be clear from the illustration.

The lower end of the casting 1 is provided with a cross-bar 17, having a pin-opening 18 and serving as a guide for the sucker-rod.

It will be apparent that by lowering and raising the yoke or bail the pump connection can be adjusted or the parts entirely disconnected to permit the pump to be operated by hand.

If desired, the channel in casting 1 may be formed round in cross-section to adapt it to receive a round pump-rod instead of one of the rectangular form shown in the drawings.

I claim—

1. A pump-coupling comprising an apertured bar, a spring carried thereby, a pin, means for adjustably securing the pin to the spring, and means for retracting the pin against the resistance of the spring.

2. A pump-coupling comprising a bar formed with a pin-opening, a spring secured at one end to the bar, a pin, means for securing the pin to the opposite end of the spring, and a bail pivotally secured to the bar and having a cross-bar bearing against the spring.

3. A pump-coupling comprising an apertured bar, a spring secured at one end thereto, a transverse pin at its opposite end, means on the pin for retaining the spring, and a bail pivotally secured to the bar and having a cross-bar bearing against the spring.

4. A pump-coupling comprising a bar formed with a recess, a pump-rod within said recess, and provided with a pin-opening, a spring carried by the bar, a transverse pin at the free end of the spring, adjustable means on the pin for retaining the spring, and a bail pivoted upon the bar and having a cross-bar bearing against the spring.

5. In a coupling for pumps, the combination with a bar or casting formed with a pin-hole, of a sucker-rod also formed with pin-

openings, a spring secured at one end to the bar or casting, and formed at its opposite end with a pin-opening, a pin, screw-threaded at one end and extending through the spring, nuts on said pin for securing the spring thereon, and a pivotally-secured yoke or bail provided with a cross-bar adapted to bear against the spring to withdraw the pin when the bail is operated.

6. A pump-coupling comprising an apertured bar, a spring carried thereby, a pin, adjustable means carried by the pin for adjustably securing the spring thereto, and means for retracting the pin against the resistance of the spring.

7. A pump-coupling comprising an apertured bar, a spring secured at one end to the bar and provided with an opening at its opposite end, a pin passed through the opening in the spring, spring-securing members, as for instance, nuts, adjustably carried by the pin at opposite sides of the spring, and means for retracting the pin against the resistance of the spring.

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

MADISON N. CRARY.

Witnesses:
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GUY D. WILSON.