C. PAETZ.

PUMP CONNECTION.

APPLICATION FILED JULY 8, 1910.

988,807. Patented Apr. 4, 1911.

Fig. 1.

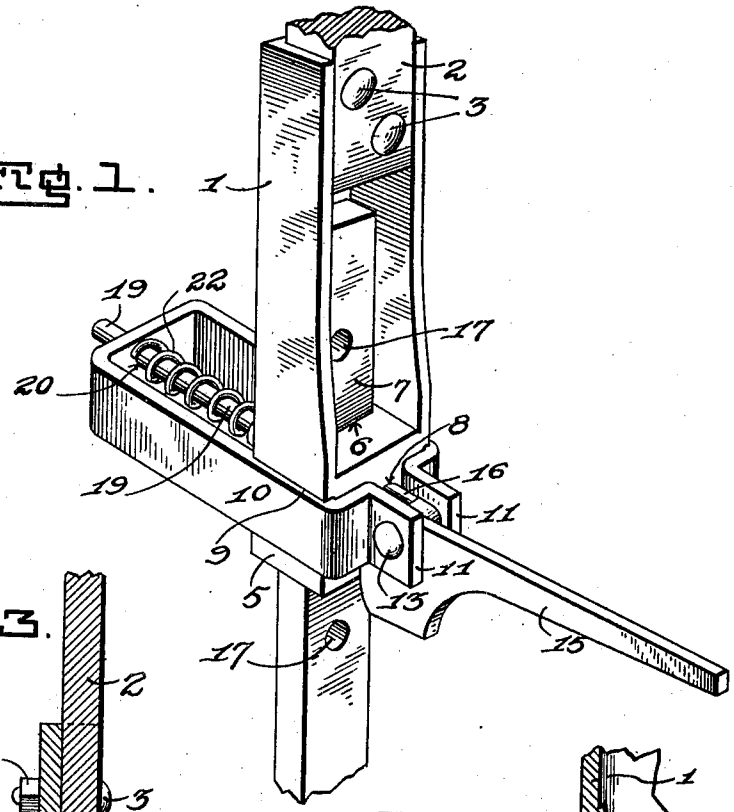



Fig. 3.

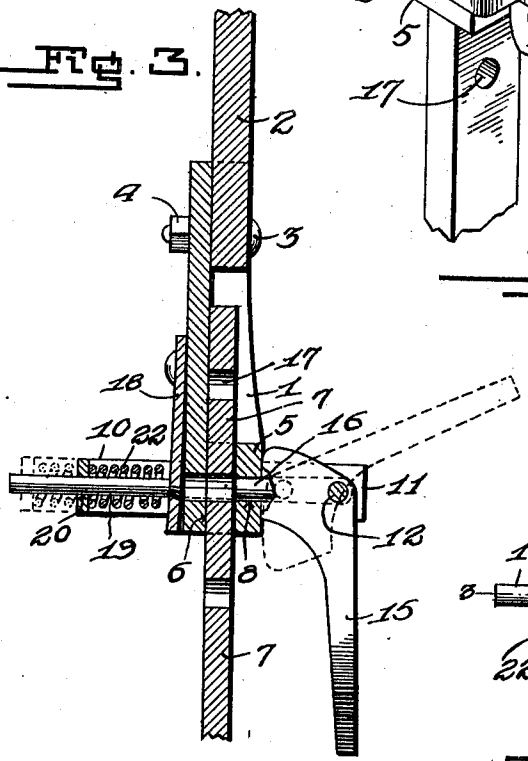



Fig. 4.

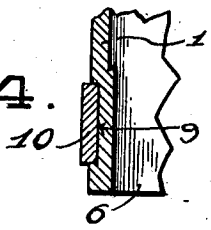
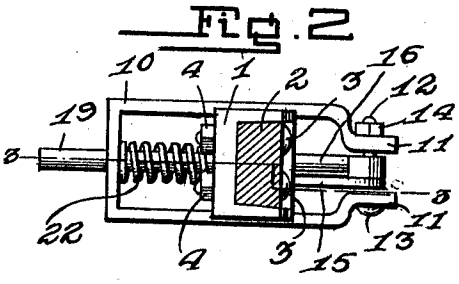



Fig. 2

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# UNITED STATES PATENT OFFICE.

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## PUMP CONNECTION.

988,807. Specification of Letters Patent. Patented Apr. 4, 1911.

Application filed July 8, 1910. Serial No. 570,960.

*To all whom it may concern:*

Be it known that I, CARL PAETZ, a citizen of the United States of America, residing at Algona, in the county of Kossuth and State of Iowa, have invented certain new and useful Improvements in Pump Connections, of which the following is a specification, reference being had therein to the accompanying drawing.

This invention relates to couplings for use in connecting a windmill or other motor to a pump, and the principal object of the same is to provide a device of the character described which may be readily manipulated to make the connection between the motor and the pump a rigid one so that the motor will operate the pump, or to make the connection a loose one so that the pump can be operated independent of the motor.

In carrying out the objects of the invention generally stated above it will be understood, of course, that the essential features thereof are necessarily susceptible of changes in details and structural arrangements, one preferred and practical embodiment of which is shown in the accompanying drawings, wherein:—

Figure 1 is a perspective view of the improved coupling. Fig. 2 is a top plan view. Fig. 3 is a vertical sectional view taken on the line 3—3, Fig. 2. Fig. 4 is a fragmentary sectional view of the coupling showing the slidable connection of the locking frame with the housing.

Referring to the accompanying drawings by numerals, 1 designates the housing of the improved coupling into the open upper portion of which the windmill or other motor rod 2 extends and which is detachably locked in rigid relation therewith by the bolts 3 and nuts 4, or other type of fastening means. The base 5 of the housing 1 is provided with a central vertical opening 6 through which the pump rod 7 is slidable. Said base 5 is also provided with a central horizontal opening 8 that insersects opening 6. Externally each side of the housing is provided with a transverse guiding groove 9, said grooves being adjacent the lower end of said housing.

A locking frame 10, preferably formed of a single length of metal bent into a substantially rectangular open frame, has the side members thereof slidably mounted in grooves 9, said frame being arranged at right angles to housing 1 and surrounding the base thereof. The forward end of the frame 10 terminates in the parallel spaced ears 11 which are connected by the shaft 12. Said shaft is preferably a bolt that is held in engagement with the ears 11 by the head 13 and nut 14.

A cam lever 15 is carried by shaft 12 and is adapted to slide frame 10 transversely of housing 1 when rocked in one direction. Said shaft 12 is also provided with a locking bolt 16 that is slidable through the opening 8 of base 5 to engage one of the openings 17 of pump rod 7 to lock said rod to the housing 1.

Housing 1 has one end of a plate 18 fastened to the rear surface, the free end of said plate extending through frame 10 and across the rear end of opening 8. Said plate carries a laterally projecting bar 19 the free end portion of which is slidable through a transverse guide opening 20 formed through the rear end of frame 10. A spring 22 is coiled about bar 19, one end of said spring bearing against plate 18 and the other end bearing against the rear end of frame 10, so that plate 18 is normally held in contact with the rear surface of housing 1.

As is shown in Fig. 1 of the accompanying drawings, the pump rod 7 is locked to the housing 1 by means of the bolt 16 which projects through the opening 6 of the base 5 of said housing, the locking operation being performed when the cam head of rocking lever 15 is clear of base 5 and the tension of spring 22 projects frame 10 rearwardly and carries with it the said locking bolt. To release the pump rod 7, the cam lever is rocked to a position parallel to housing 1, which causes the head of said lever to contact with base 5 of housing 1 so that frame 10 will slide forward against the tension of spring 22, and remove bolt 16 from engagement with rod 7.

It will be seen from the foregoing that the invention provides simple means whereby the lever 16 is manually operated to engage the pump rod to, or release the same from, the motor.

What I claim as my invention is:—

1. A coupling comprising a housing having an opening in its base for the reception of a pump rod, said base provided with a transverse opening, a plate fastened to the rear of said housing and extending over the said transverse opening, a locking frame embracing the base of said housing and

slidable transversely thereof, a guide bar carried by the said plate and extending through the rear of said frame, a spring coiled about said bar for projecting said frame rearwardly, a shaft carried by the forward end of said frame, a locking bolt carried by said shaft and slidable in the base opening of the housing, and a cam lever carried by said shaft for moving said frame transversely of the housing against the tension of said spring.

2. A coupling comprising a housing provided with a transverse opening, a frame slidable transversely of said housing, said frame being provided with a transverse rear opening, a plate fastened to the rear of said housing and having a free end overlapping the opening therein, a locking bolt carried by the forward end of said frame and adapted for engagement with the opening in the housing, a bar projecting laterally from the plate and slidable in the opening of said frame, a spring coiled about said bar for normally holding the frame in position to retain the locking bolt in engagement with the opening of the housing, and means for moving said frame against the tension of said spring to release the locking bolt from the housing opening.

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

CARL PAETZ.

Witnesses:
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CARRIE STALEY.