

No. 718,306.

PATENTED JAN. 13, 1903.

A. E. BORING.  
COUPLING FOR PUMP RODS.  
APPLICATION FILED SEPT. 8, 1902.

NO MODEL.

Fig-1

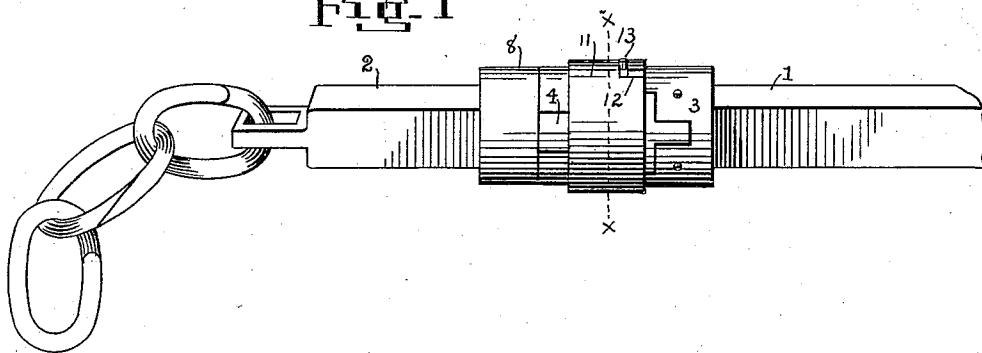


Fig-2

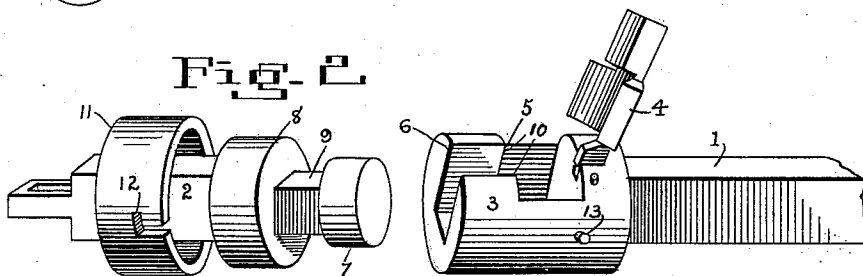


Fig-3

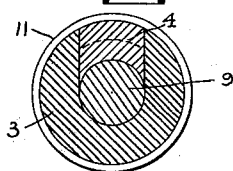
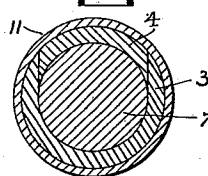


Fig-4



WITNESSES:

*W. H. Stough*  
*J. R. Bond*

INVENTOR

*Amos E. Boring*

BY

*J. R. Bond*

ATTORNEY

# UNITED STATES PATENT OFFICE.

AMOS E. BORING, OF CANTON, OHIO.

## COUPLING FOR PUMP-RODS.

SPECIFICATION forming part of Letters Patent No. 718,306, dated January 13, 1903.

Application filed September 8, 1902. Serial No. 122,522. (No model.)

*To all whom it may concern:*

Be it known that I, AMOS E. BORING, a citizen of the United States, residing at Canton, in the county of Stark and State of Ohio, have invented certain new and useful Improvements in Couplings for Pump-Rods; and I do hereby declare that the following is a full, clear, and exact description of the same, reference being had to the annexed drawings, making a part of this specification, and to the figures of reference marked thereon, in which—

Figure 1 is a side elevation showing two sections of rods coupled together and one of these sections having connected thereto a chain. Fig. 2 is a view showing the different parts of the coupler detached. Fig. 3 is a sectional view showing a swivel connection. Fig. 4 is a transverse section through line *xx*, Fig. 1. The present invention has relation to couplers for pump-rods and the like; and it consists in the novel arrangement hereinafter described, and particularly pointed out in the claims.

Similar numerals of reference indicate corresponding parts in all the figures of the drawings.

In the accompanying drawings, 1 and 2 represent the rod-sections, which of course may be of any desired length and of any desired shape in cross-section.

To the section 1 is attached or formed integral the socket-head 3, which socket-head is provided with the hinged section 4, which hinged section is for the purpose of closing the opening 5 and also filling the recess 6, which recess is a continuation of the opening 5.

Within the opening or chamber 5 is located the head 7, which head is formed of a size and shape to correspond substantially with the size and shape of the opening or chamber 5, said head being formed upon the extreme end of the rod-section 2.

Upon the section 2 is located the head 8, said head being spaced from the head 7, by which arrangement a neck 9 is provided, which neck fits in the bottom of the recess 6, said neck being formed of a length to correspond with the distance between the shoulders 10 and the end of the socket-head 3, by which arrangement there is comparatively little rel-

ative movement between the two sections 1 and 2 when coupled together, as illustrated in Fig. 1.

When it is desired to provide a coupling that there will be no rotary movement as between the rod-sections 1 and 2, the neck 9 is formed angular and the bottom of the recess 6 formed of an angle to correspond with the angularity of the neck 9; but when it is desired to form a joint as between the two rod-sections 1 and 2 the neck 9 may be formed round, as illustrated in Fig. 3, in which event a swiveled coupling is provided.

In pump-rod couplings it is frequently desirable to connect a number of wells, so that they may be pumped from one source of power, and in order to do this it is necessary to employ horizontal reciprocating rods as well as vertical reciprocating ones, and when it is desired to connect the rods designed for horizontal reciprocation the hinge-section should be held against displacement or in contact with the head 6, and in order to accomplish this a ring or band 11 is provided, which ring or band is formed of a size to fit over the socket-head 3, as illustrated in Fig. 1, and for the purpose of holding the ring against accidental displacement said ring is provided with bayonet-slots 12, which bayonet-slots receive the pins 13, said pins being for the purpose of preventing the ring being accidentally displaced.

I do not desire to be confined to the ring 11, as its use is not absolutely necessary in the coupling of vertical pump-rod sections together, as the hinged section 4 is connected at its upper end and of course is held in proper position by gravity. However, the ring may be employed, if desired.

It will be understood that by my improved device any two sections or more can be easily detached one from the other. This is an important object in instances where a number of wells are to be operated by a given source of power and long rods are employed, owing to the fact that it frequently happens that in connecting a number of wells located at different points the rods must be located over private driveways high enough to allow teams to pass; but by my particular arrangement it is not necessary to locate the rods any great distance above the ground, owing to the fact

that a section or sections can be quickly and easily removed to provide gaps for the passage of teams. It will be understood that when the rods are to be detached for this purpose the operation of pumping must be suspended for the time being.

I have not illustrated the various devices used for making the connections to various wells, as that particular feature forms no part of the present invention, inasmuch as any well-known means may be employed.

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

1. As an improved article of manufacture, a coupling for pump-rods consisting of rod-sections, one of said sections provided with a socket-head, and the other with a head to be received into the socket-head, a recess leading from the socket of the socket-head, and a neck normally located in the recess, and a hinged section adapted to close the opening of the socket-head, substantially as and for the purpose specified.

2. Rod-sections, one of said sections provided with a socket-head and recess, and the other section provided with a head, and a collar or flange, a neck located between the head and collar, a hinged section hinged to the socket-head, and a ring adapted to inclose the socket-head and the hinge-section, substantially as and for the purposes specified.

3. In a coupling for pump-rods, rod-sections, one of said sections provided with a socket-head, and the other a head adapted to be received into the socket, a hinged section connected to the socket-head, a band normally located around the socket-head, and the hinged section, pins located upon the socket-head and bayonet-slots formed in the band, substantially as and for the purpose specified.

In testimony that I claim the above I have hereunto subscribed my name in the presence of two witnesses.

AMOS E. BORING.

Witnesses:

F. W. HAYS,  
JNO. L. HAYS.