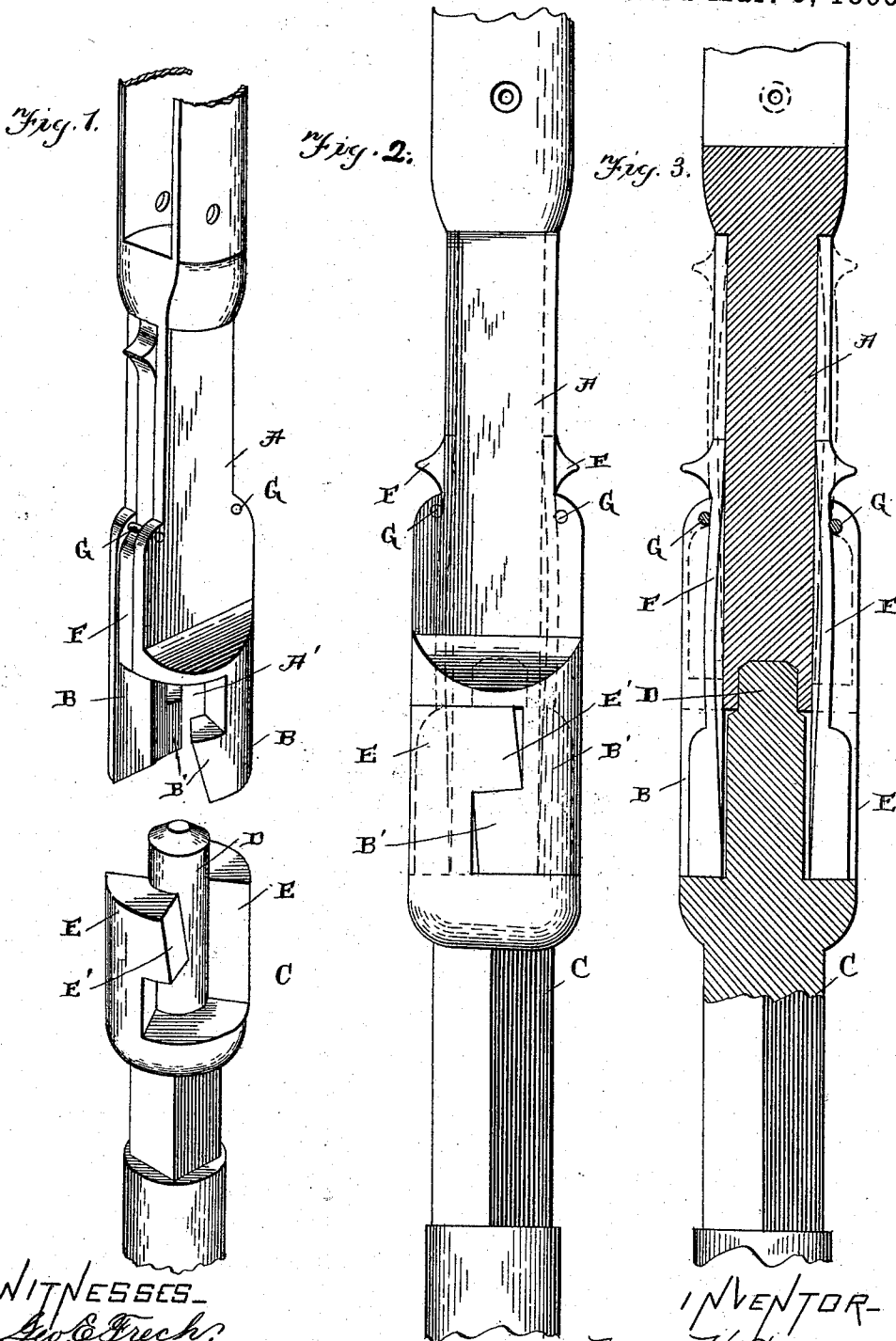


(No Model.)

W. H. DOWNING.
SUCKER ROD COUPLING.

No. 535,278.

Patented Mar. 5, 1895.



WITNESSES.
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WILLIAM H. DOWNING, OF GOODELL, PENNSYLVANIA.

SUCKER-ROD COUPLING.

SPECIFICATION forming part of Letters Patent No. 535,278, dated March 5, 1895.

Application filed June 21, 1894. Serial No. 515,296. (No model.)

To all whom it may concern:

Be it known that I, WILLIAM H. DOWNING, of Goodell, in the county of McKean and State of Pennsylvania, have invented certain new and useful Improvements in Sucker-Rod Couplings; 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 pertains to make and use it, reference being had to the accompanying drawings, which form part of this specification.

My invention relates to an improved sucker rod coupling; and the object of the same is to provide a coupling which will make the sucker rod quickly and easily detachable thus simplifying the arrangement and avoiding the tedious screwing and unscrewing incident to the couplings now in general use.

The invention consists in the novel features of construction hereinafter fully described and claimed and illustrated in the accompanying drawings, in which—

Figure 1 is a perspective view of my improved coupling with the parts detached. Fig. 2 is an elevation of the same when coupled. Fig. 3 is a vertical sectional view of Fig. 2.

A designates the section of the coupling which is secured to the elevator and which is hollowed at its lower end as shown at A', and extended vertically from opposite sides of said openings are metal projections B having oppositely extended horizontal flanges B' on opposite sides as shown.

C is the lower section of the coupling having the projected core D which is adapted to fit recess A' and upon opposite sides of this core are the segmental projections E having the oppositely arranged flanges E', and the said projections B and E are concentric with the socket and core D respectively. The projections E along with the flanges E' are adapted to pass upward between the projections B and flanges B', and when the sections of the coupling are moved far enough together they are turned so as to bring the flanges of the upper section beneath the flanges of the

lower section thus leaving longitudinal spaces between the vertical edges of extensions B and D. A continuation of these recesses is formed in section A and confined therein are the vertical movable bolts F which are adapted to be moved downward in the said spaces thus holding the sections locked together. The bolts are bowed outward slightly in longitudinal directions and being held in position by pins G which pass thereover it will be seen that the bowed portion of the bolts pressing outward against the pins will serve to clamp and hold the bolts in any position in which they may be moved. They are thus prevented from moving from the locking position. It will be observed by referring to Fig. 2 that the meeting or bearing surfaces of the flanges on the upper and lower coupling sections are inclined upward slightly in the direction in which the device is moved when uncoupled for the purpose of affording a slight turning strain against the bolt so as to prevent any possible withdrawal of the latter while the rod with the coupling is in operation.

A coupling constructed as herein shown and described is very simple and easily and quickly adjusted to position thus avoiding the tedious operation of screwing and unscrewing which is incident to the use of the ordinary coupler.

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

1. A coupler for sucker rods, a coupler section having the separated longitudinal projections E which are formed with the overhanging flanges E' the other coupler section having the projections B flanged at B', the last named flanged projections being adapted to pass between the flanged projections E and interlock by a partial turn, thus leaving vertical spaces between projections E and B, and the bolts movable vertically to fill said space to prevent the sections from turning backward and uncoupling, substantially as shown and described.

2. An improved coupling comprising coup-

ler sections having longitudinal projections at their ends, the projections being straight on one side and flanged on their opposite sides, the flanged sides of the projections
5 being brought together and interlocked by turning, longitudinal channels in one section, and bolts movable therefrom in the spaces between the straight edges of the projections of the respective sections, substantially as shown and described. 10
In testimony whereof I affix my signature in presence of two witnesses.
WILLIAM H. DOWNING.
Witnesses:
JAMES GEORGE,
L. L. MITCHELL.