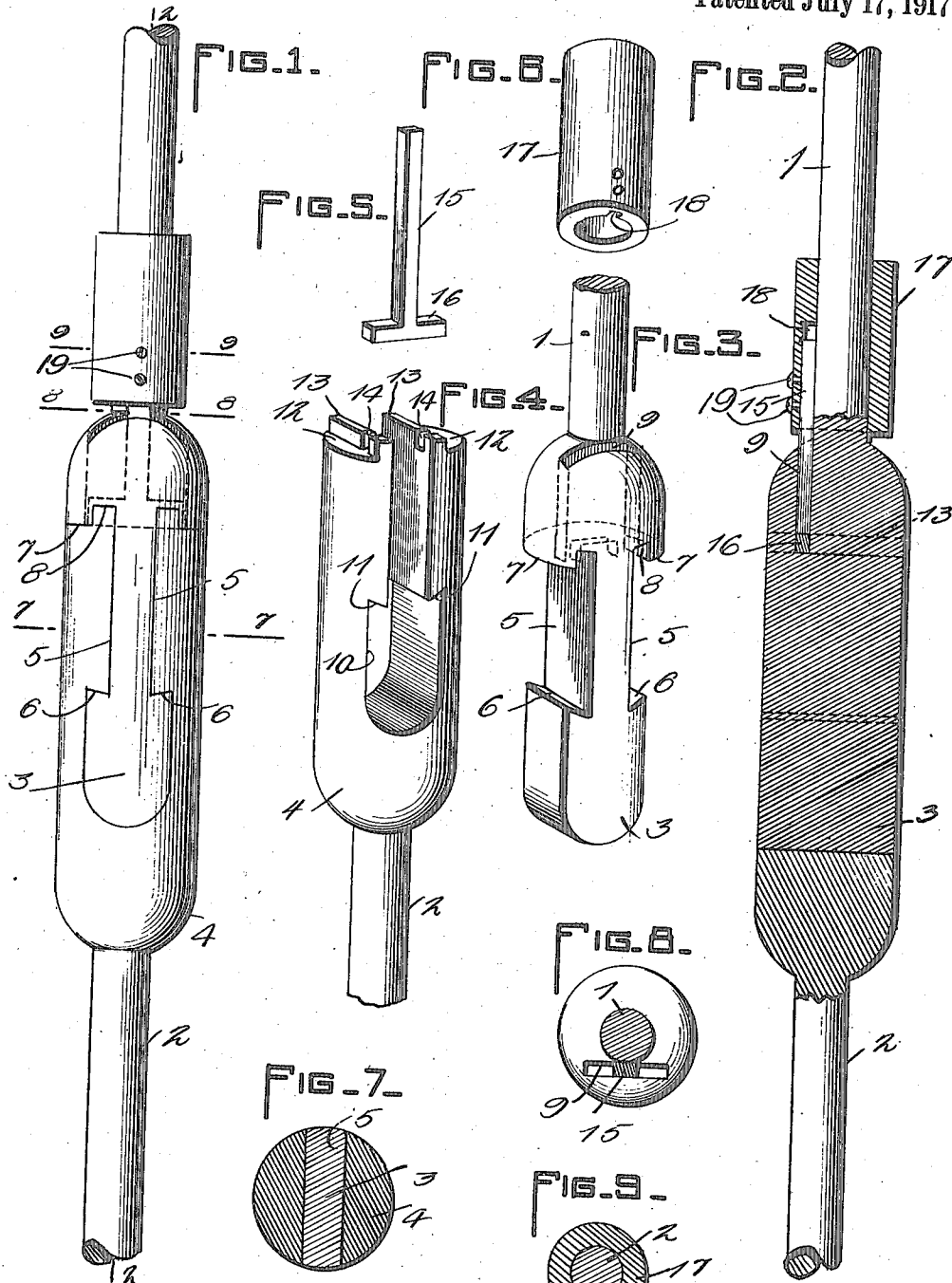


R. H. SWARTSFAGER.
 ROD COUPLING.
 APPLICATION FILED NOV. 24, 1916.

1,233,933.

Patented July 17, 1917.



WITNESSES

John F. Phillips
W. E. Beck

INVENTOR

ROY H. SWARTSFAGER

BY *Wm. H. Co.*
 ATTORNEYS

UNITED STATES PATENT OFFICE.

ROY H. SWARTSFAGER, OF DRUMRIGHT, OKLAHOMA.

ROD-COUPLING.

1,233,933.

Specification of Letters Patent.

Patented July 17, 1917.

Application filed November 24, 1916. Serial No. 133,191.

To all whom it may concern:

Be it known that I, ROY H. SWARTSFAGER, a citizen of the United States, and a resident of Drumright, in the county of Creek and State of Oklahoma, have invented an Improvement in Rod-Couplings, of which the following is a specification.

My invention is an improvement in rod couplings, and has for its object to provide a coupling of the character specified, for connecting sucker or pumping rods for oil wells and the like, in such manner that they may be quickly and easily coupled and uncoupled, and wherein a releasable locking means is provided for preventing disengagement of the coupling.

In the drawings:

Figure 1 is a front view of the improved coupling.

Figs. 2, 7, 8 and 9 are sections on the lines 2-2, 7-7, 8-8, and 9-9, respectively, of Fig. 1.

Fig. 3 is a perspective view of the upper portion of the coupling.

Fig. 4 is a similar view of the lower portion.

Fig. 5 is a perspective view of the locking key.

Fig. 6 is a similar view of the locking sleeve.

In the present embodiment of the invention an upper coupling section 1 and a lower coupling section 2 are provided, the said sections having integral heads 3 and 4, respectively, for forming the coupling.

The head 3 of the coupling section 1 is reduced intermediate its ends on opposite sides, as indicated at 5, and undercut shoulders 6 are formed at the lower ends of the said portions shoulders 7 are provided, and each of the said shoulders is cut away adjacent to the face 5 as indicated at 8. The said head is also provided with a recess 9 in its upper end, the recess extending from the said upper end of the head into the cut away portions 8.

The head 4 of the coupling section has a transverse recess 10, for receiving that portion of the head 3 below the shoulders 7, and the said recess is shaped to fit the said portion, having undercut shoulders 11 for engaging the undercut shoulders 6 of the head 3. That portion of the upper end 12 of the head 4 on each side of the recess 10 is

shaped to fit against the shoulders 7, and ribs 13 are provided for engaging within the cut away portions 8. These ribs have transverse notches 14 at the recess 9, and the said recess 9 and the notches 14 are for the purpose of receiving the locking member shown in Fig. 5.

This locking member is inverted T-shape, comprising a body 15 and a cross head 16, and the cross head engages within the notches 14, the body extending upwardly through the recess 9. A sleeve 17 is fitted onto the coupling section 2 above the head, and this sleeve has a longitudinally extending groove 18 for receiving the body or stem of the locking key or member. Screws 19 may be passed through the sleeve and into engagement with the locking key to prevent upward movement of the sleeve, and it will be evident that when the locking key is in place and the sleeve is secured thereto, there is no possibility of disengagement of the parts.

I claim:

1. A rod coupling comprising in combination with the sections of the rod a head on each section, one of the heads having a transverse longitudinally extending slot or recess provided near its inner end with inwardly facing undercut shoulders, the other head having a reduced portion fitting within the slot or recess and having shoulders for engaging the shoulders of the first-named head, and having other shoulders abutting against the end of the first-named head at opposite sides of the slot or recess, said last-named shoulders having grooves at their inner sides and the first-named head having ribs fitting the grooves, the last-named head having a longitudinally extending recess extending to the shoulders, and the ribs of the first-named head having transverse grooves registering with the recess, a T-shaped locking key fitting within the recess and engaging the grooves, and a collar mounted to slide on the rod section of the last-named head and having a groove for receiving the key, and means for securing the collar to the key.

2. A rod coupling comprising in combination rod sections, one having a transverse longitudinally extending slot or recess provided intermediate its ends with inwardly facing shoulders, the other section having a reduced portion fitting within the slot or

recess and provided with shoulders for engaging the first named shoulders and having other shoulders abutting against the end of the first named section at opposite sides of the slot or recess, said last named shoulders having grooves at their inner side and the first named section having ribs fitting the

grooves, and means for preventing lateral movement of the sections with respect to each other.

ROY H. SWARTSFAGER.

Witnesses:

L. JAS. MAAKS,
CHAS. L. HOGG.