

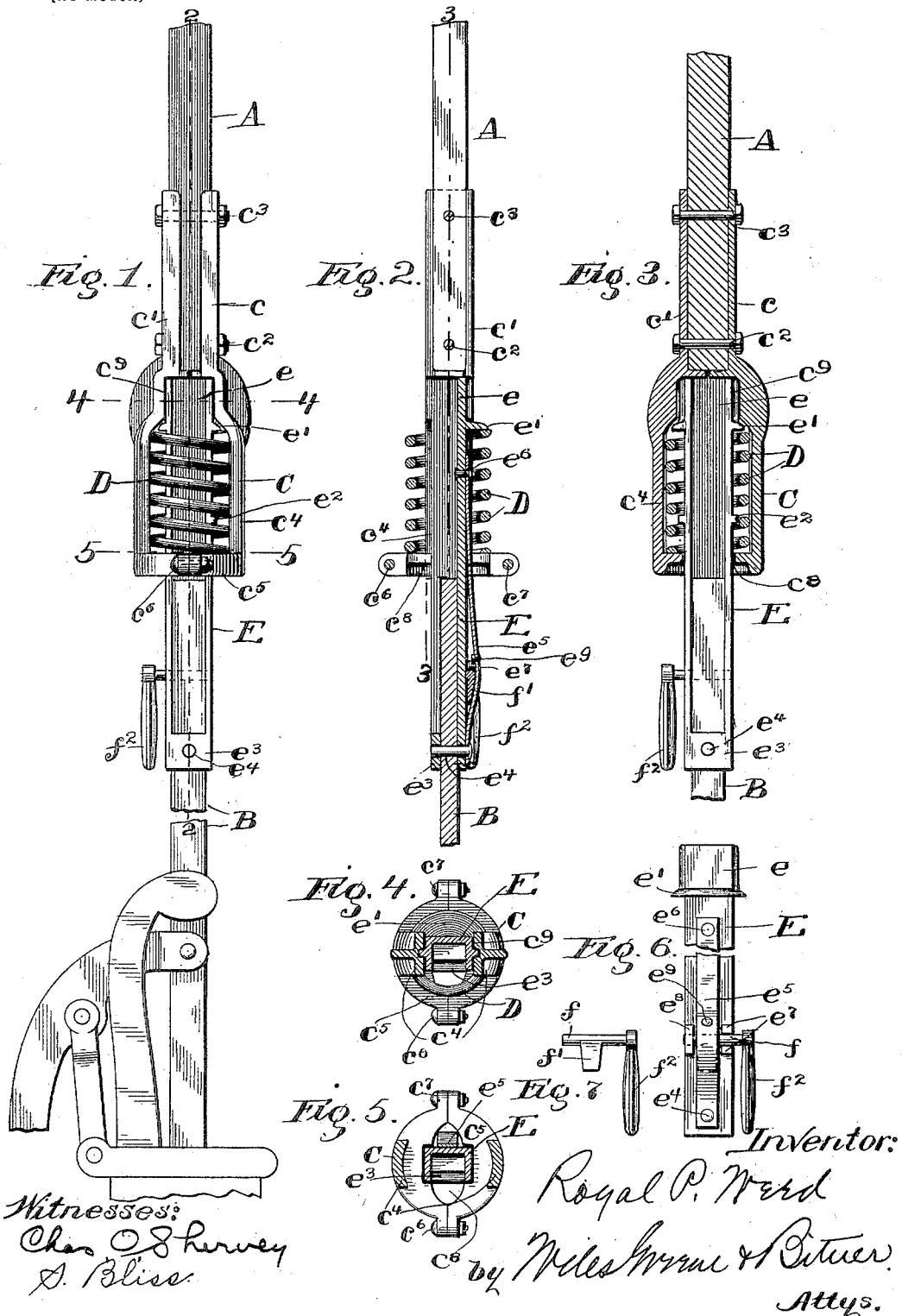
No. 649,882.

Patented May 15, 1900.

R. P. WEED.  
ATTACHMENT FOR PUMP RODS.

(Application filed Sept. 1, 1899.)

(No Model.)



# UNITED STATES PATENT OFFICE.

ROYAL P. WEED, OF LANARK, ILLINOIS.

## ATTACHMENT FOR PUMP-RODS.

SPECIFICATION forming part of Letters Patent No. 649,882, dated May 15, 1900.

Application filed September 1, 1899. Serial No. 729,191. (No model.)

*To all whom it may concern:*

Be it known that I, ROYAL P. WEED, a citizen of the United States of America, residing at Lanark, in the county of Carroll and State of Illinois, have invented certain new and useful Improvements in Attachments for Pump-Rods, of which the following is a specification.

My invention relates to certain improvements in attachments for pump-rods, the object of which is to relieve the pump and the driving mechanism from the great strain caused by the effort to start the column of water upon the upstroke. It is particularly valuable in connection with windmills and has been used most extensively for that purpose.

The drawings illustrate the preferred construction, showing a side elevation in Figure 1, a central vertical section in line 2 2 of Fig. 1 in Fig. 2, a similar section at right angles thereto in Fig. 3, a horizontal section looking downward from the line 4 4 of Fig. 1 in Fig. 4, a similar section in line 5 5 of the same figure in Fig. 5, a side elevation of the detail in Fig. 6, and a similar elevation of a part thereof in Fig. 7.

In the drawings, A is the windmill-rod, and B the pump-rod. The pump-rod is provided with a downward extension C, composed of two parts  $c\ c'$ , secured upon opposite sides of the windmill-rod by means of bolts  $c^2\ c^3$  and extending below the rod in the form of a yoke  $c^4$ , terminating at the bottom in a horizontal disk-shaped plate  $c^5$ , formed by the union of the two parts  $c\ c'$  by means of bolts  $c^6\ c^7$ . In this housing is arranged a coiled spring D, its lower end resting upon the plate  $c^5$ , and a sliding block E is guided vertically at its upper end  $e$  in a socket  $c^9$  and extends at its lower end through an opening  $c^8$  in the disk-shaped plate  $c^5$ . A projecting ear or rib  $e'$  rests upon the top of the spring D, and a similar rib  $e^2$  acts as a stop to check the downward movement of the block in the yoke by striking against the disk-shaped plate  $c^5$ . The block E is made in the shape of a trough bridged at the bottom  $e^3$  to receive the pump-

rod B. A pin  $e^4$  is let into the block to engage the pump-rod, said pin being forced inward by a flat spring  $e^5$ , secured to the block at  $e^6$ . The block is provided with a socket  $e^7$  and a perforated ear  $e^8$ , furnishing a bearing for a key, having a spindle  $f$  fitted to the ear and bearing a wing  $f'$ , arranged behind the spring, and a handle  $f^2$ , in convenient position for manipulation. By drawing the handle forward in Fig. 6 the spring is lifted to withdraw the coupling-pin  $e^4$  from the pump-rod. A rivet  $e^9$  furnishes a stop to limit the movements of the key in this direction, sufficient movement being permitted to enable the wing to swing past the dead-center, so as to lock the spring in an open position.

I do not limit myself to the exact construction herein shown and described, as considerable variation is possible without departing from the principle of the invention.

I claim as new and desire to secure by Letters Patent—

1. The combination with the yoke, C, made up of the two pieces,  $c\ c'$ , adapted to be attached to opposite sides of the windmill-rod and terminating at the bottom in a disk-shaped plate,  $c^5$ , formed by securing the two pieces together at  $c^6\ c^7$ , of the trough-shaped block, E, guided in the yoke and provided with a shoulder and the spring, D, interposed between the disk-shaped plate and said shoulder; substantially as described.

2. The combination with the yoke, C, of the spring, D, supported therein; the block, E, guided in the yoke and bearing the ribs,  $e'\ e^2$ , the former resting upon the top of the spring and the latter arranged to engage the yoke and limit the movement of the block with respect thereto; substantially as described.

In witness whereof I have hereunto set my hand, at Lanark, in the county of Carroll and State of Illinois, this 15th day of August, A. D. 1899.

ROYAL P. WEED.

Witnesses:

B. F. PUTERBAUGH,  
GEO. W. REDLINE.