

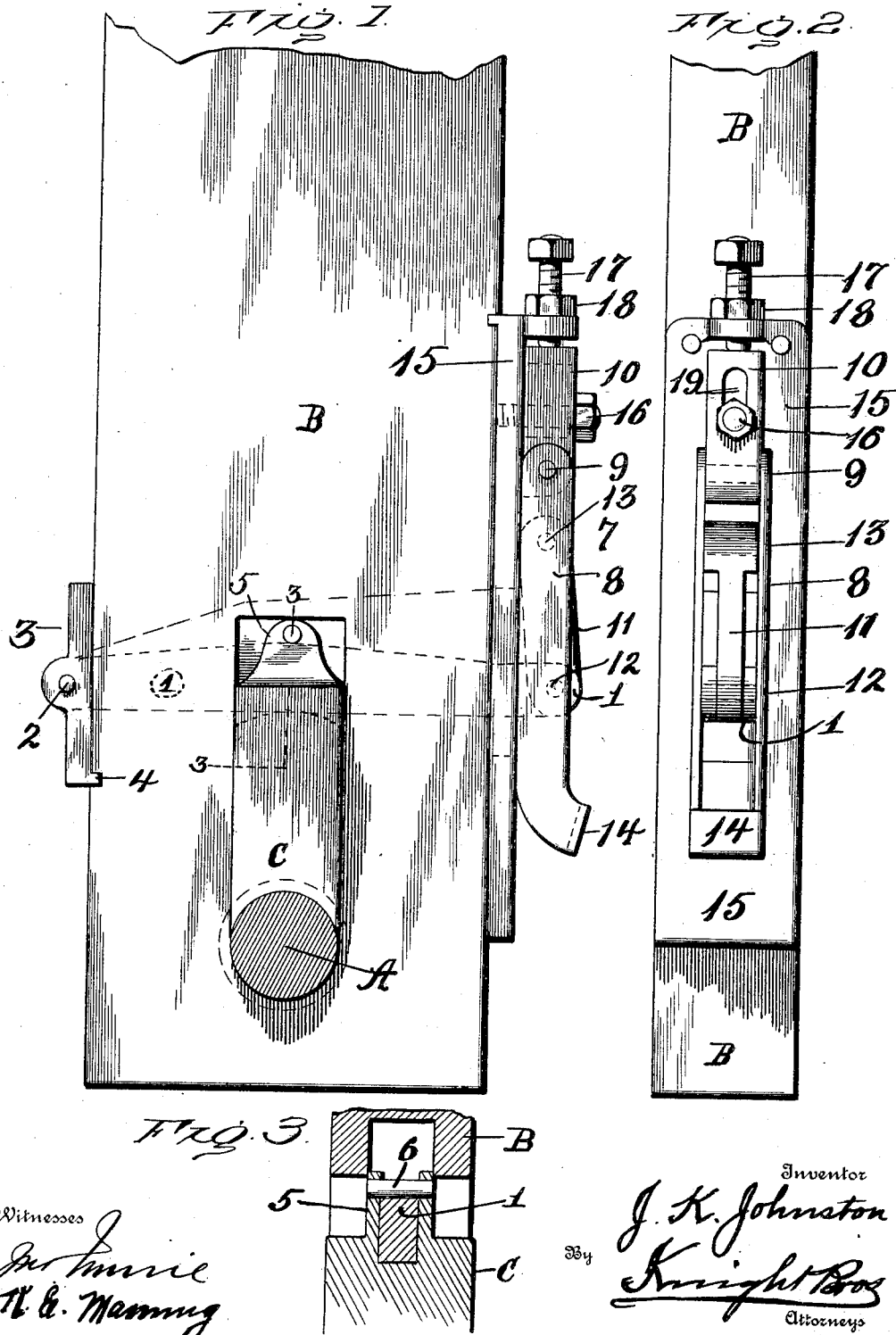
No. 676,750.

Patented June 18, 1901.

J. K. JOHNSTON.  
PITMAN.

(Application filed Feb. 27, 1901.)

(No Model.)



Witnesses  
*James M. Murre*  
*W. E. Manning*

Inventor  
*J. K. Johnston*  
By *Knight Bros*  
Attorneys

# UNITED STATES PATENT OFFICE.

JOSEPH K. JOHNSTON, OF ANDERSON, INDIANA.

## PITMAN.

SPECIFICATION forming part of Letters Patent No. 676,750, dated June 18, 1901.

Application filed February 27, 1901. Serial No. 49,137. (No model.)

*To all whom it may concern:*

Be it known that I, JOSEPH K. JOHNSTON, a citizen of the United States, and a resident of Anderson, in the county of Madison and State of Indiana, have invented a new and useful Pitman, of which the following is a specification.

My invention has for its object to provide effective means for readily securing and releasing the key or follower-block forming part of a wrist-pin bearing in a pitman or other driving connection with a crank-shaft, driving-wheel, or the like, my invention being particularly adapted for use in connection with the pitman of oil and gas well machinery, where it is necessary to frequently attach and detach the pitman.

My invention employs a key-lever working in a transverse recess in the pitman, fulcrumed on one side thereof, having suitable connection with the key for raising and depressing it, and provided at its opposite free end with a specially-constructed securing toggle-lever by which it may be locked in depressed position; and my invention consists in certain novel features of construction, which are hereinafter fully described, and particularly pointed out in the claims, reference being had to the drawings forming part of this specification, in which—

Figure 1 is a side view of a portion of a pitman with a wrist-pin in section and its key, together with my improved means for securing the key in position. Fig. 2 is an edge view of the pitman with the locking toggle-levers for holding the key-lever. Fig. 3 is a sectional view showing one construction of the upper end of the key that may be employed for establishing the lifting and depressing connection between the key and its controlling-lever.

A represents a wrist, B a pitman to be connected thereto, and C a key or follower-block that forms a portion of the wrist-bearing in the pitman. My invention provides means for effectively forcing and locking the key against the wrist to secure the pitman to it and for conveniently unlocking and raising the key away from the wrist to permit detachment of the pitman, which means is constructed as follows: A key-lever 1 is fulcrumed at 2 in a fulcrum-plate 3; having a retain-

ing-toe 4, and projects through the bifurcated end 5 of the key C beneath a pin 6, whereby it may depress or lift the key. The opposite free end of key-lever 1 projects beyond the edge of the pitman and is there connected with its controlling and locking toggle-lever 7 in such a manner that when the toggle-lever is drawn out the key-lever and the key will be raised and the wrist released, while forcing the toggle-lever in depresses the key-lever and its key and causes the toggle-lever to pass a dead-center and securely lock the parts in position. The toggle-lever comprises a main manipulating-lever 8, fulcrumed at 9 upon a fulcrum-block 10, and a link 11, connected to the key-lever 1 at 12 and to the main manipulating-lever 8 at 13. The lever 8 may be drawn outward or depressed by its free end 14, and when pressed in the relative positions of the connecting-points 12, 13, and 9 are such that the point 3 passes beyond the straight line between the other two, and the main controlling-lever is securely held in locked position.

The fulcrum-block 10 is secured to a base-plate 15 by a fixing-screw 16 and may be adjusted at will in the plane of movement of key-lever 1, so as to regulate the pressure imposed by the latter upon the key. A set-screw 17, having jam-nut 18, facilitates adjustment of the fulcrum-plate, and such adjustment is permitted by the slot 19.

In practice my new lever-controlled wrist-key affords very convenient means for securely locking the pitman on the wrist and for readily unlocking it therefrom, it being simply necessary to move the free end of lever 8 inward or outward. There are no detached parts to become lost, and the bearing will remain open when the lever is pulled out and avoid the necessity for handling the key at the time of applying or removing the pitman.

Having thus described my invention, the following is what I claim as new therein and desire to secure by Letters Patent:

1. In combination with a wrist-key, a fulcrumed key-lever having connection with said key, and a toggle-lever lock connected to the free end of said key-lever.

2. In combination with a wrist-key, a fulcrumed key-lever having connection with said

key, and a toggle-lever lock connected to the free end of said key-lever, comprising the fulcrum-block 10, the main lever 8, and the link 11 connecting the main lever with the key-lever.

3. In combination with a wrist-key, a fulcrumed key-lever having connection with said key, and a toggle-lever lock connected to the free end of said key-lever, comprising the fulcrum-block 10, the main lever 8, and the link 11 connecting the main lever with the key-lever, the connection between the link and the main lever being movable inward beyond a line between its connection with the key-lever and the main lever's fulcrum.

4. In combination with a wrist-key, a fulcrumed key-lever having connection with said key, and a toggle-lever lock connected to the free end of said key-lever, comprising the fulcrum-block 10, adjustable in the plane of the key-lever's movement, the main lever 8, and the link 11 connecting the main lever with the key-lever.

5. In combination with a wrist-key, a fulcrumed key-lever having connection with said

key, and a toggle-lever lock connected to the free end of said key-lever, comprising the base-plate 15, fulcrum-block 10 secured to said block by locking-screw 16 and having adjusting-screw 17, main lever 8 fulcrumed on said block, and having the free manipulating end 14, and link 11 connecting the key-lever 1 to the main lever 8.

6. In combination with a pitman and its wrist-key, the plate 3, a key-lever 1 fulcrumed on said plate 3 on one edge of the pitman, working on the fulcrum in a recess in the pitman, having controlling connection with the key and projecting beyond the opposite edge of the pitman and a toggle-lever lock, comprising the base-plate 15, fulcrum-block 10, secured to said block by locking-screw 16 and having adjusting-screw 17, main lever 8 fulcrumed on said block, and having the free manipulating end 14, and link 11 connecting the key-lever 1 to the main lever 8.

JOSEPH K. JOHNSTON.

Witnesses:

JOHN R. THORNBURGH,  
DAVID L. BISHOPP.