No. 838,999. PATENTED DEC. 18, 1906.

J. P. HYLANDER.

MULTIPLE DRILL SOCKET.

APPLICATION FILED APR. 7, 1905.

Fig. 1.

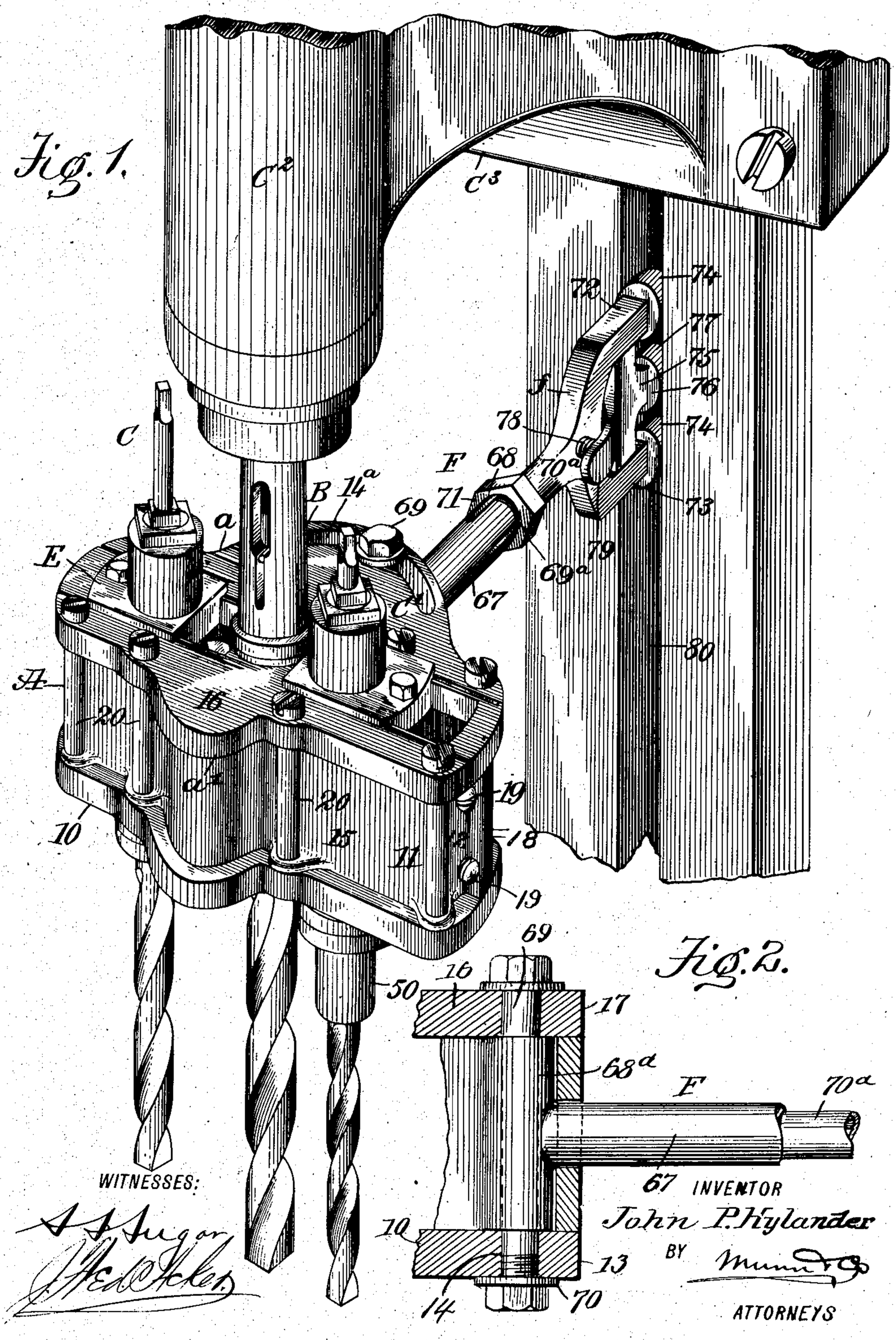


Fig. 2.

WITNESSES:

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# UNITED STATES PATENT OFFICE.

JOHN PETER HYLANDER, OF PORTLAND, OREGON.

## MULTIPLE-DRILL SOCKET.

No. 838,999. Specification of Letters Patent. Patented Dec. 18, 1906.

Application filed April 7, 1905. Serial No. 254,407.

*To all whom it may concern:*

Be it known that I, JOHN PETER HYLANDER, a citizen of the United States, and a resident of Portland, in the county of Multnomah and State of Oregon, have invented a new and Improved Multiple-Drill Socket, of which the following is a full, clear, and exact description.

My invention is an improvement in multiple-drill sockets; and it consists in certain novel constructions and combinations of parts hereinafter described and claimed.

Referring to the drawings forming a part thereof, Figure 1 is a perspective view of the drill-socket applied to a drill-press, and Fig. 2 is a detail sectional view of a part of the drill-socket.

The frame A of the drill-socket is adapted to accommodate three drills, and to that end it is fitted with a spindle B, which is adapted to be placed in the head $C^2$ of a drill-press $C^3$ in any suitable or approved manner, and two sockets C and C′ are located at opposite sides of the spindle B, as shown in Fig. 1. The sockets C and C′ are laterally adjustable with reference to centers and are likewise vertically adjustable in order that they may accommodate a long or short drill; but the spindle B is not adjustable, being simply mounted to turn. The frame A is made in two sections *a* and *a′* and consists of a bottom plate 10, from which side and end framings 11 and 12 extend upward, and a top plate 16. At one side of the top plate a segmental extension 17 is formed, having a segmental slot $14^a$ produced therein, as shown in Fig. 1, and at the outer side of the said framing 11 apertured lugs 15 are provided integral with the said framing. The bottom plate 10 is a duplicate of the top plate 16, the said bottom plate being provided with an extension 13, corresponding to the extension 17 from the top plate, and with a slot 14, corresponding to the segmental slot $14^a$ of the top plate. The two plates 10 and 16 are bolted together by screws 20, which are passed through suitable apertures in the top plate and into the lugs 15 of the side frame.

At the end framings 12 or where the sections of the frame are brought together lugs 18 are formed, which extend from the bottom to the top plate, and these lugs are secured together by means of horizontally-located screws or bolts 19 or the like. The arm F (shown in Fig. 1) consists of a tube 67, having one end provided with slots 68 and threads $69^a$ at the slotted end, while at the other end of the tube 67 a tubular head $68^a$ is formed, the said tubular head being arranged between the top and bottom plates of the frame A in alinement with the slots 14 and $14^a$ of the said plates. The arm is adjustably held with relation to the frame by means of a suitable bolt 69, provided with a nut 70, the said bolt being passed down through the said slots and through the head $68^a$, as shown in Fig. 2.

The tube 67, just referred to, is that part of the supporting device F which is directly connected with the frame of the socket and which extends horizontally out therefrom. The support is completed by the addition of a body portion *f*, adjustably secured in the tube 67, so that the supporting device F may be adjusted to accommodate the drill-socket to drill-presses having different lengths of arms $C^2$. This body member *f* comprises a bar or rod $70^a$, which is made to slide in the tube 67 and is adjustably secured therein by means of a nut 71 on the threaded portion of the tube 67. When the body member *f* has been adjusted relative to the tube 67, the nut is screwed upon the threaded portion $69^a$ of the tube, thus contracting the tube upon the body member to hold the parts in their adjusted position.

The body of the supporting device F, in addition to the bar $70^a$, just referred to, consists of a forked head, the two tine members 72 and 73 whereof are one above the other, and friction-rollers 74, mounted to turn at the outer ends of the said tine members, as is clearly shown in Fig. 1. A bar 75 is pivoted between the tine members 72 and 73 of the supporting device F, and the bar member is provided with an outwardly-extending arm 75, which carries the friction-roller 76, located between the friction-rollers 74 on the tine members. The friction-roller 77 is normally carried out of vertical alinement with the roller 75′ by means of a spring 78, which bears against the body of the supporting device F at one side and against the thumb-piece 79, which extends from the bar 76. The friction-rollers 74 and 75 are made to enter the usual guide-slot 80, provided in the upright of the drill-press adjacent to the head, and while the supporting device F may have guided movement in the slot 80 it is firmly held in position relative to the drill-press and to the drill-socket, by reason of the roller 74 having strong frictional engagement with one side of the guide-slot 80, while the c -

tral roller 77 has an equally strong frictional engagement with the opposite side of the said slot, due to the tension exerted on the bar 75, carrying the central roller 77.

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

1. In a multiple-drill socket, a frame, a standard for supporting the frame, an arm comprising a tube having one end slotted and externally screw-threaded, a rod telescoping within the tube and having a nut for engaging the screw-threads of the tube, the end of the rod being provided with tines for engaging the groove of the standard.

2. In a multiple-drill socket, a frame, a standard for supporting the frame, an arm adjustably connected with the frame, a body adjustably connected with the arm, a forked extension from the body, the tines thereof engaging a groove in the standard, and a tension-controlled pivoted member between the tines of the fork extension and also engaging the groove.

3. In drill-sockets, a frame and a support for the frame, the said support consisting of an arm adjustably connected with the frame, a body adjustably connected with the arm, a forked extension from the body, a tension-controlled pivoted member between the tines of the fork extension, friction-rollers carried at the outer extremities of the tine members of the fork, and a friction-roller carried by the said member, pivoted between the tine members of the fork, the intermediate roller being normally out of alinement with the outside rollers, but all the rollers being practically in alinement when the support is in operation.

4. In a drill and in combination, a standard provided with a vertical groove, a frame supported by the standard and comprising upper and lower plates each having an arc-shaped slot parallel and in alinement with the slot in the opposite plate, a tube having one end slotted and internally screw-threaded, and having a tubular head on the opposite end arranged between the plates of the frame, a bolt traversing the head and the arc-shaped slots, a rod telescoped within the tube and provided with a nut for engaging the screw-threads on the bolt, a forked head on the outer end of the bar, friction-rollers on the tines of the forks for engaging the groove of the standard, a bar pivoted between the tines and provided on its outer end with a friction-roller also engaging the groove, and a spring normally maintaining the roller on the bar out of alinement with the rollers on the tines.

In testimony whereof I have signed my name to this specification in the presence of two subscribing witnesses.

JOHN PETER HYLANDER.

Witnesses:
M. C. STERNTOFT,
CARL M. MILLER.