No. 682,566. Patented Sept. 10, 1901.

# W. S. PACA.

## MECHANISM FOR REMOVING OR REPLACING SWITCHBOARD JACKS.

(Application filed Dec. 26, 1900.)

(No Model.)

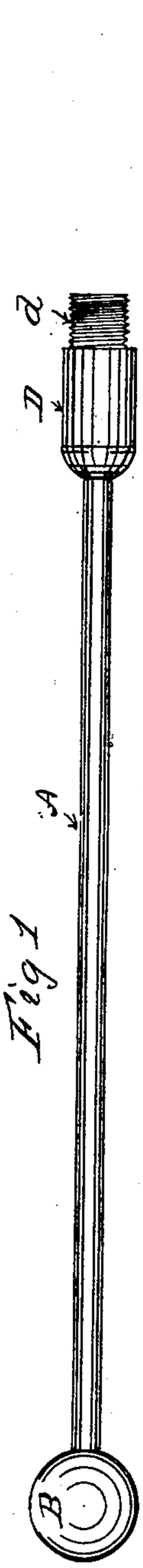

Fig. 1.

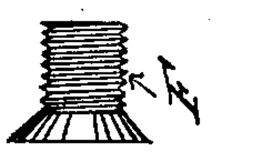

Fig. 3.

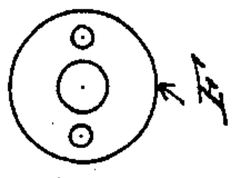

Fig. 4.



Fig. 2.

Witnesses.
F. J. Barrett
H. M. Sturgeon.

Inventor.
William S. Paca
By L. B. Sturgeon
atty.

# UNITED STATES PATENT OFFICE.

WILLIAM S. PACA, OF ERIE, PENNSYLVANIA, ASSIGNOR OF ONE-HALF TO PETER H. ADAMS, OF SAME PLACE.

## MECHANISM FOR REMOVING OR REPLACING SWITCHBOARD-JACKS.

SPECIFICATION forming part of Letters Patent No. 682,566, dated September 10, 1901.

Application filed December 26, 1900. Serial No. 41,061. (No model.)

*To all whom it may concern:*

Be it known that I, WILLIAM S. PACA, a citizen of the United States, residing at Erie, in the county of Erie and State of Pennsylvania, have invented certain new and useful Improvements in Mechanism for Removing or Replacing Switchboard-Jacks; 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 appertains to make and use the same, reference being had to the accompanying drawings, and to letters of reference marked thereon, forming part of this specification.

My invention relates to mechanism for removing and replacing telephone-switchboard jacks; and it consists, substantially, in the mechanism hereinafter set forth and described, and illustrated in the accompanying drawings, in which—

Figure 1 shows a view in elevation of my improved jack removing and replacing tool. Fig. 2 shows a vertical section of a portion of a telephone-switchboard illustrating the operation of the tool. Fig. 3 is a side view in elevation of the screw for securing the jack in the switchboard. Fig. 4 is an end view of the same.

In the construction of telephone-switchboards, particularly of the multiple type, the large number of cables behind the jacks carrying the wires leading thereto so obstruct access to the jacks from the back of the board that it is extremely difficult to repair them when necessary, as the mass of cables have to be separated by means of a wedge or wedges and the work done through the narrow opening so made between the cables. To overcome this difficulty, I make a rod A, having a handle B on one end and an enlarged end D on the other, provided with a screw-thread *d*, adapted to screw into the thread *e* of the jack E when the screw F is removed therefrom. The jack E can then be pushed out of the back of the board G and carried back on said rod A through the opening formed by inserting the wedge H between the cables I I and either held thereby or removed therefrom until the necessary repairs are made, when it can be drawn back into its place by means of the rod A, which is then removed and the securing-screw F replaced.

In the drawings I have shown convenient means for connecting the rod A to the jack E. It is obvious, however, that the rod A can be secured to the jack in other ways—for example, by making the end thereof so as to enter the jack in the same manner as the switch-plug does. Therefore I do not desire to limit myself to the exact construction of the rod A shown and described.

What I claim as new, and desire to secure by Letters Patent of the United States, is—

1. A tool for removing and replacing telephone-switchboard jacks consisting substantially of a rod adapted to engage and hold the jack, substantially as and for the purpose set forth.

2. A tool for removing jacks from telephone-switchboards comprising substantially a rod screw-threaded on one end so as to screw into a jack from the front of the switchboard and the jack be moved back thereby through the opening between the switchboard-cables, and returned through said opening to its place in the board, substantially as set forth.

In testimony whereof I affix my signature in presence of two witnesses.

WILLIAM S. PACA.

Witnesses:
H. M. STURGEON,
HENRY A. CLARK.