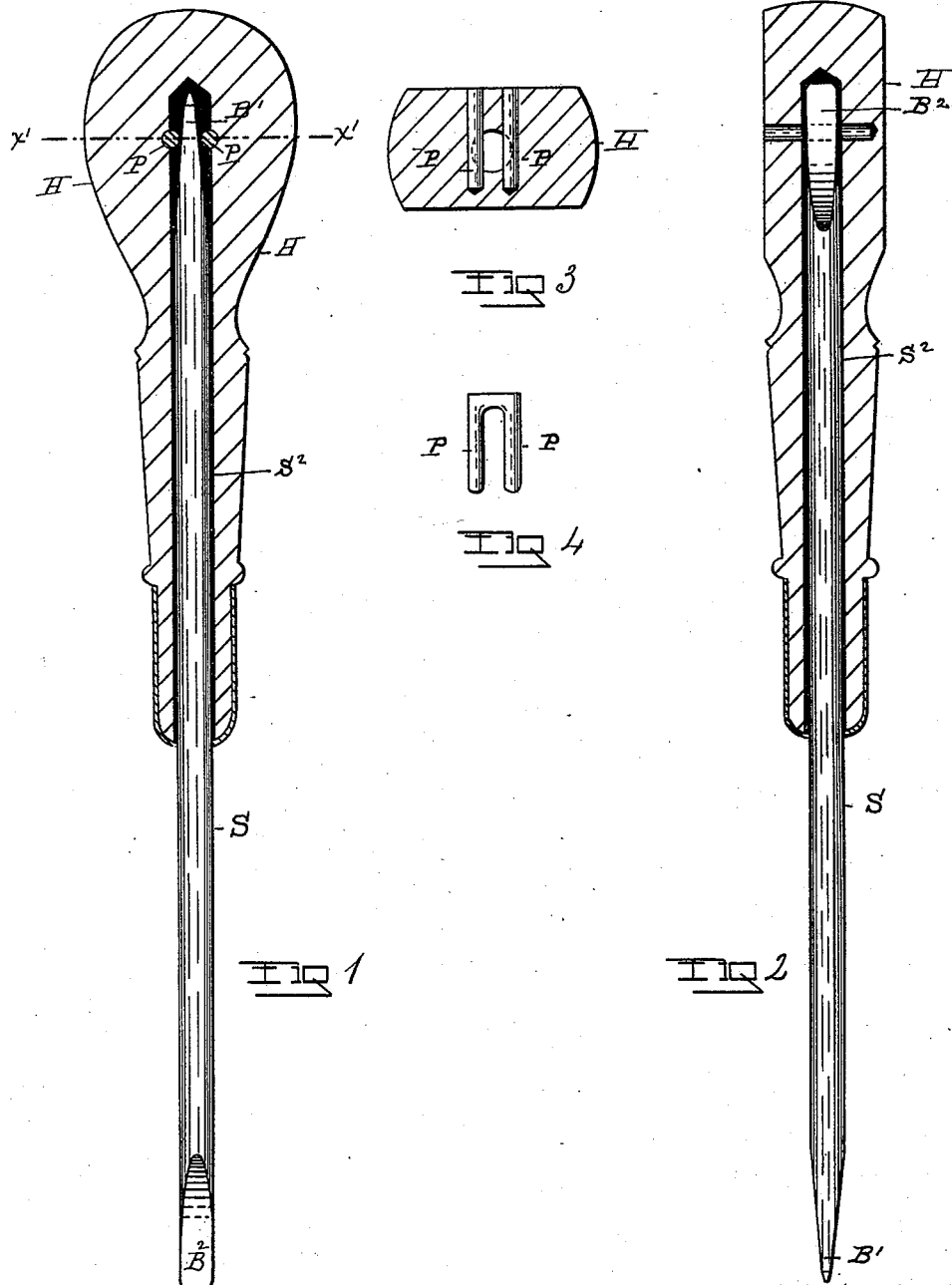


(No Model.)

J. REID, Jr.
REVERSIBLE SCREW DRIVER.

No. 456,341.

Patented July 21, 1891.



WITNESSES

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JAMES REID, JR., OF SEYMOUR, CONNECTICUT, ASSIGNOR OF ONE-HALF TO
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REVERSIBLE SCREW-DRIVER.

SPECIFICATION forming part of Letters Patent No. 456,341, dated July 21, 1891.

Application filed July 3, 1890. Serial No. 357,612. (No model.)

To all whom it may concern:

Be it known that I, JAMES REID, Jr., of the village of Seymour, county of New Haven, and State of Connecticut, have invented a new and useful Improvement in Reversible Screw-Drivers, of which the following is a specification.

My invention relates to screw-drivers and a construction thereof by which the screw-driver proper is made reversible in the handle, so that two sizes of the implement are adapted to be used in connection with the same handle, so that one tool may answer the uses and purposes of two.

Accompanying this specification to form a part of it there is a sheet of drawings containing four figures, illustrating my invention, with the same designation of parts by letter reference used in all of them.

Of the illustrations, Figure 1 is a section taken centrally and longitudinally through the handle and socket and wedging-pins, with the screw-driver proper shown inverted therein and in side elevation. Fig. 2 is another section taken through the handle and socket at right angles to the section shown at Fig. 1, and with the screw-driver proper shown in side elevation and the wedging-pins removed. Fig. 3 is a cross-section taken on the line $x' x'$ of Fig. 2 with the wedging-pins removed. Fig. 4 is a side elevation of the wedging-pins.

The parts of the implement thus illustrated are designated by letter reference, and the function of the parts is described as follows:

The letter S designates the screw-driver proper, which at each end is made with a screw-slot engaging-blade edge of differing sizes. As designated at B' and B² these blades are arranged, preferably, at right angles to each other, although, if desired, they may be made parallel to each other.

The letter H designates the handle, which is made with the socket S², adapted to receive either end of the screw-driver proper.

The letters P designate wedging-pins arranged in the handle, so that there will one of them be on each side of the socket nearest

to the grasping end of the handle. These pins are arranged to be parallel to each other, and a sufficient distance apart for the entrance between them of the tapering wedge-form faces of either end of the screw-driver proper, and so that when re-entered the screw-driver proper will be firmly held therein so far as to prevent the turning of the screw-driver proper within the handle when the outer end is being used. Preferably these pins are made to connect at one of each of their adjacent ends in a stirrup form, as shown at Fig. 4, although, if desired, they may be made separately and driven into the handle, their function in forming a socket-grip upon the entered end of the screw-driver proper being the same whether made in a stirrup form or used as two separately made and inserted pins.

The device as thus constructed and arranged is adapted to be used for screws of different sizes by reversing the end position of the screw-driver proper, and by tapping the handle end sufficiently to wedge the entered end between the pins. This engagement is easily released by tapping the side of the handle, when the screw-driver proper is freed from the grip of the pins.

I am aware of the fact that file-handles have been made with a socket that had a small inner end into which the point of the file could be inserted when reversed in the socket, and I disclaim the same. This older application differs from mine in the fact that in the former the end of the file, where within the handle, was held within a part of the socket thereof, while in my improvement the inserted end of the screw-driver is held within a slot produced by two pins inserted so as to pass through the handle and socket.

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

The combination, with a screw-driver having a blade at each end for differing sizes of screw-slots, of a handle made with a socket adapted to receive either end of the screw-driver, said socket being made at its inner

end with a grip-slot produced by two pins
passed through the socket and handle, into
which slot either of the differing ends of the
screw-driver may be driven to be secured
5 therein, substantially in the manner as and
for the purposes set forth.

Signed at Seymour, Connecticut, this 7th

day of April, 1890, and in the presence of the
two witnesses whose names are hereto written.

JAMES REID, JR.

Witnesses:

W. E. COLT,

S. HART CULVER.