R. S. GLADDING.
Screw-Driver

No. 204,812. Patented June 11, 1878.

Fig 1

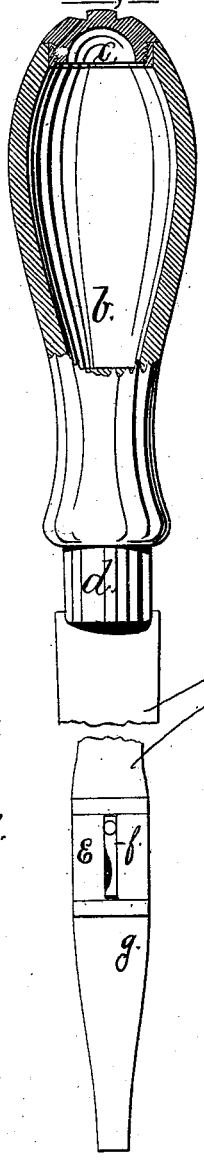

Fig 3

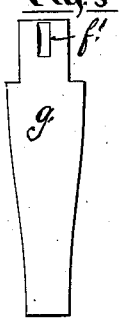

Fig 4

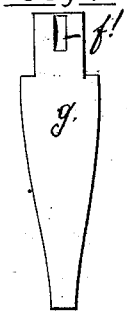

Fig 2

WITNESSES

William L. Coats

Joseph A. Miller Jr.

INVENTOR

Richard S. Gladding

by Joseph A. Miller
Attorney

UNITED STATES PATENT OFFICE.

RICHARD S. GLADDING, OF BRISTOL, RHODE ISLAND.

IMPROVEMENT IN SCREW-DRIVERS.

Specification forming part of Letters Patent No. **204,812**, dated June 11, 1878; application filed November 7, 1877.

To all whom it may concern:

Be it known that I, RICHARD S. GLADDING, of Bristol, in the county of Bristol and State of Rhode Island, have invented certain new and useful Improvements in Screw-Drivers; and I do hereby declare that the following is a full, clear, and exact description thereof, which will enable others skilled in the art to which it appertains to make and use the same, reference being had to the accompanying drawing, and to the letters of reference marked thereon, which form a part of this specification.

This invention has reference to improvements in screw-drivers; and consists in the arrangement, with the shank of a screw-driver, of a hollow handle, in which a number of interchangeable screw-driver points are contained, and a stock arranged to receive and retain the driver-points, as will be more fully set forth hereinafter.

Figure 1 is a view of my improved screw-driver, the shank being shown with the central portion broken away and the handle partly in section. Fig. 2 is a sectional view of the stock provided with a spring to retain the driver-point which is inserted in the stock. Figs. 3 and 4 are views of the driver-points, which differ only in the width and thickness of the point which enters the slot of the screw.

In the drawing, *a* represents the usual shank of a screw-driver. *b* is the hollow handle arranged to hold a number of the driver-points *g*, so that the same screw-driver may be used for a large variety of screws, and also so that, when in use one of the points has been injured, another can be readily substituted without loss of time.

The handle is closed by a cap or similar device, *c*. *d* is the usual ferrule, provided with a slot, into which the shank *a* enters, so as to prevent its turning in the handle. *e* is the stock formed on the end of the shank *a*, arranged to receive the driver-points *g g*. *f* is a convex spring, arranged to enter a concave recess, *f'*, in the driver-points, so as to firmly hold them in the stock by friction, the whole forming a convenient tool, having the usual long shank or blade and a number of interchangeable points. It is therefore adapted for all kinds of screws, and one tool answers the purpose of three, four, or more, as heretofore made. For private use or for jobbing-work it is very useful, and can be sold for less than the number of screw-drivers required to answer the same purpose.

In an efficient screw-driver the shank or blade *a* is required to be of some considerable length, so that a screw may be reached not otherwise accessible, and also so that both hands may be used to start the screw.

In tool-handles where the shank of the tool must be rigidly held for the purpose of withdrawing the tool from the work by means of the handle, it is necessary to hold the tool by more than frictional bearings. In screw-drivers it is necessary sometimes to remove the bit or point *g* to insert another one very speedily, when a simple pull will effect the result; hence I have used a convex spring to fit into a corresponding concave slot in the shank of the blade or point *g*.

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

The combination, with the shank or blade *a*, of the hollow handle *b*, arranged to contain the points *g g* of the stock *e*, provided with the convex spring *f*, and the points *g*, provided with the concave recess *f'*, arranged substantially as and for the purpose set forth.

In testimony that I claim the foregoing I have affixed my signature in presence of two witnesses.

R. S. GLADDING.

Witnesses:
JOSEPH A. MILLER,
JOSEPH A. MILLER, Jr.