Otis Dean. Screw Driver.

72463

Fig. 1.

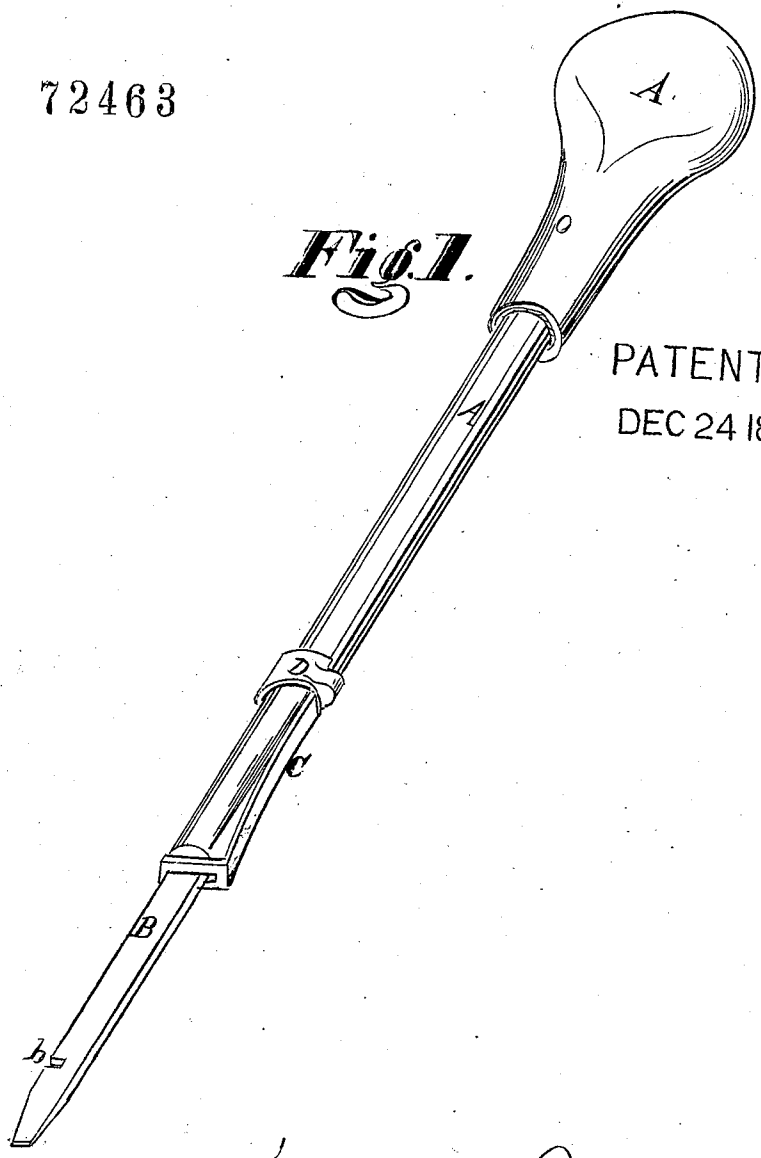
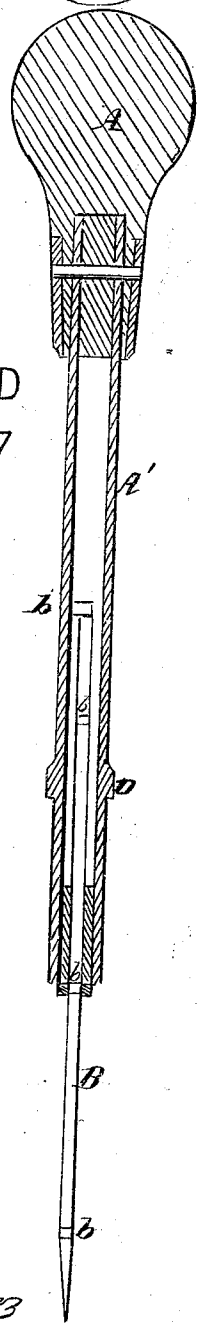


Fig. 2.



PATENTED
DEC 24 1867

Witnesses:
Chas. D. Smith
D. E. M. Bowen.

Otis Dean
By Knight Bros
Attys

United States Patent Office.

OTIS DEAN, OF RICHMOND, VIRGINIA, ASSIGNOR TO DR. R. W. YOUNG, OF SAME PLACE.

Letters Patent No. 72,463, *dated December* 24, 1867.

IMPROVEMENT IN SCREW-DRIVERS.

The Schedule referred to in these Letters Patent and making part of the same.

TO ALL WHOM IT MAY CONCERN:

Be it known that I, OTIS DEAN, of Richmond, in the county of Henrico, and State of Virginia, have invented a new and useful Improvement in Screw-Drivers; and I do hereby declare the following to be a full, clear, and exact description of the same, reference being had to the accompanying drawings, which are made a part of this specification.

This invention consists of a screw-driver, in which provision is made for the adjustment of the blade within the handle or haft, so that the instrument may be extended or shortened in length, to adapt it for the most convenient and effective use under different circumstances.

Figure 1 is a perspective view of a screw-driver illustrating my invention.

Figure 2 is a longitudinal sectional elevation of the same.

Similar letters of reference indicate corresponding parts in the two figures.

In the drawings, A A′ may represent a handle or haft, and B a blade or bit, fitted to slide in the tubular or hollow portion A′ of the handle, as shown in fig. 2. The blade B may be snugly embraced by the parts at the open end of A′, and has a disk or guide, *b′*, upon its inner end, fitting snugly within A′, in order to prevent any lateral movement of said blade within the handle. C is a spring, fastened to the handle by means of a collar, D, or otherwise, and having its forward end bent at a right angle, so as to extend across the front end of the handle, the spring being slotted to permit the blade B to pass through it, as shown. *b b b* are notches, cut in the edge of the blade B, and adapted to engage with the slotted end of the spring C. Any number of notches, situated at the desired distance from each other, may be employed. The engagement of the notches *b* with the spring C enables the blade B to be firmly held in such positions as it may be made to assume by sliding it in and out within the handle. In this way the blade can be adjusted so as to lengthen or shorten the instrument to any desired extent.

A short screw-driver is often desirable, on account of the limited space in which it may be manipulated. A long screw-driver enables the turning of screws which are inaccessible to the short instrument; and the long driver is also preferable under some circumstances, from the fact that vibrations or lateral movements of the hand are not liable to dislodge the end of its blade from the screw-head nick, the reverse being a cause of serious objection to a short instrument. This instrument combines the advantages of both the long and the short screw-driver.

I do not confine myself to the particular construction herein described, as the invention may be carried into effect under modifications which may be made without departing from the essential principle of this invention.

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

1. I claim a screw-driver, capable of being varied in length, substantially in the manner set forth.

2. I claim the combination of the notched blade B and locking-spring C, constructed and arranged to operate as and for the purpose specified.

To the above specification of my improvements in screw-drivers I have signed my hand, this 16th day of September, A. D. 1867.

OTIS DEAN.

Witnesses:

T. W. YOUNG,

E. A. J. CLOPTON.