

UNITED STATES PATENT OFFICE.

RUSSEL S. BARNUM, OF CHICAGO, ILL., ASSIGNOR TO HARRY C. GOODRICH,
OF SAME PLACE.

IMPROVEMENT IN SET-SCREWS.

Specification forming part of Letters Patent No. **181,763**, dated September 5, 1876; application filed
July 27, 1876.

To all whom it may concern:

Be it known that I, RUSSEL S. BARNUM, of the city of Chicago, Cook county, State of Illinois, have invented a new and useful Improvement in Set-Screws, of which the following is a full description, reference being had to the accompanying drawings, in which—

Figure 1 is an elevation, showing the screw proper and the washer separated; Fig. 2, an elevation, a part being in section, representing the parts together; Fig. 3, a detail, showing the head in section.

This invention relates to that class of set-screws which have a loose washer; and it consists in a new mode of constructing the washer and holding it in place.

In the drawings, *a* represents the head of the screw, which is provided with a chamber or recess, *b*, at the lower end. The head may be made solid and the chamber made therein afterward. *c* is the screw proper, which is secured to the head in any suitable manner. *d* is a washer, the upper end of which is adapted to enter the chamber *b* in the head, and

this portion is provided with a neck or contraction, *e*. The hole through the washer is large enough to permit it to pass over the screw *c*.

The smaller portion of the washer *d* is inserted into the chamber *b*, and the edge of the wall of the chamber is then turned down into the neck *e*, in such a manner that the head and screw can turn without turning the washer. By this means the washer is held in its place.

I am aware that set-screws have been made with washers connected therewith, and do not claim, broadly, such a device; but

What I do claim as new, and desire to secure by Letters Patent, is as follows:

A set-screw the head *a* of which is provided with a chamber, *b*, in combination with a loose washer, *d*, having a neck, *e*, into which the edge of the chamber is turned, substantially as specified.

RUSSEL S. BARNUM.

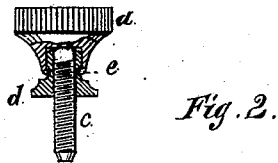
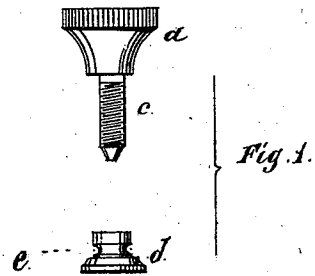
Witnesses:

E. A. WEST,
O. W. BOND.

R. S. BARNUM.
SET-SCREWS.

No. 181,763.

Patented Sept. 5, 1876.



Witnesses:
Heinrich J. Bruns.
O. W. Bond

Inventor:
Russel S. Barnum