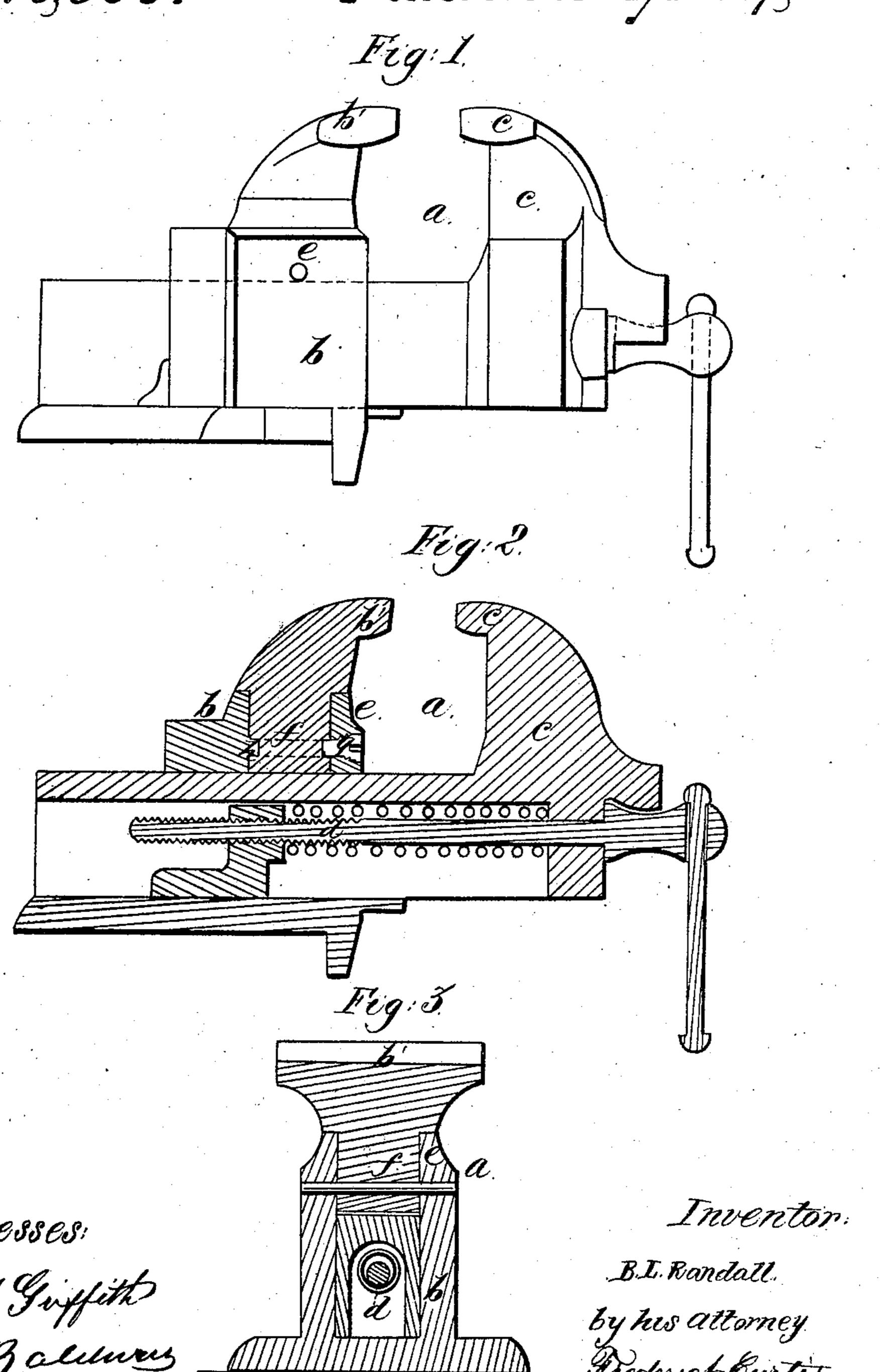
# B. L. Pandall,

N 76,656.

Patente at Anz.14, 1868.



Witnesses:

## Anited States Patent Pffice.

## BELLVILL L. RANDALL, OF ROXBURY, MASSACHUSETTS.

Letters Patent No. 76,656, dated April 14, 1868.

#### IMPROVEMENT IN VISES.

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

### TO ALL TO WHOM THESE PRESENTS SHALL COME:

Be it known that I, BELLVILL L. RANDALL, of Roxbury, in the county of Suffolk, and State of Massachusetts, have invented a new and useful Improvement in Mechanics' or Machinists Bench-Vises; and do hereby declare the following to be a full, clear, and exact description thereof, due reference being had to the accompanying drawings, making part of this specification, and in which-

Figure 1 is a side elevation.

Figure 2, a vertical, central, and longitudinal section; and

Figure 3, a vertical and transverse section of a vise constructed in accordance with my invention.

The object of this invention is to produce a vise which shall possess the power, when required, of adapting itself to objects with irregular or tapering sides, as well as those with parallel sides, and to accomplish the object sought in a simple and economical manner.

The invention consists in applying or swivelling one of the jaws of a vise, otherwise of ordinary construction, in such manner as to allow of its turning upon an axis at an angle to the face of the opposite jaw, when a tapering object is to be confined in the vise, or of being confined securely in position parallel to that of the opposite jaw, when employed as an ordinary vise, or in the same manner as with ordinary vises.

In the drawings, before mentioned, the vise is shown at a as constructed substantially in the ordinary manner of machinists' bench-vises, and of which b is the stationary portion, or that affixed to the bench H, while

the movable jaw is shown at c; its operating-screw at d.

In carrying out my invention, I apply to one of the jaws, (being, in this present instance, the inner one,) or that shown at b', to its base or abutment, e, by a tenon, f, formed upon such jaw, and extending into a circular mortise or recess made in the base, the tenon being retained within the mortise by a pin or bolt, g, screwed into the base, and extending into an annular groove, h, cut in the periphery of the tenon, which allows of partial rotation of the jaw with respect to its base.

It will be evident that upon placing a tapering or irregular object between the two jaws b and c, and forcing them tightly toward each other, the jaw b will partially turn upon its tenon, and accommodate itself

to the shape of the object confined by it.

Should it be desirable to secure the jaw b in a position parallel to the opposite jaw, it may be done by extending a bolt into a hole bored through the base, and into the tenon of such jaw, as shown in fig. 3 of the drawings.

I claim as my invention, and desire to secure by Letters Patent of the United States of America-The combination of the jaw b' and annularly-grooved tenon, f with the base e and pin g, the said parts being constructed and arranged as herein described, and both base and tenou being perforated to receive a pin or bolt for rendering the said jaw immovable when desired, as and for the purposes shown and set forth.

BELLYILL L. RANDALL.

Witnesses:

FRED. CURTIS, EDWARD GRIFFITH.