

E. SCHLENKER.
Vises.

No. 156,066.

Patented Oct. 20, 1874.

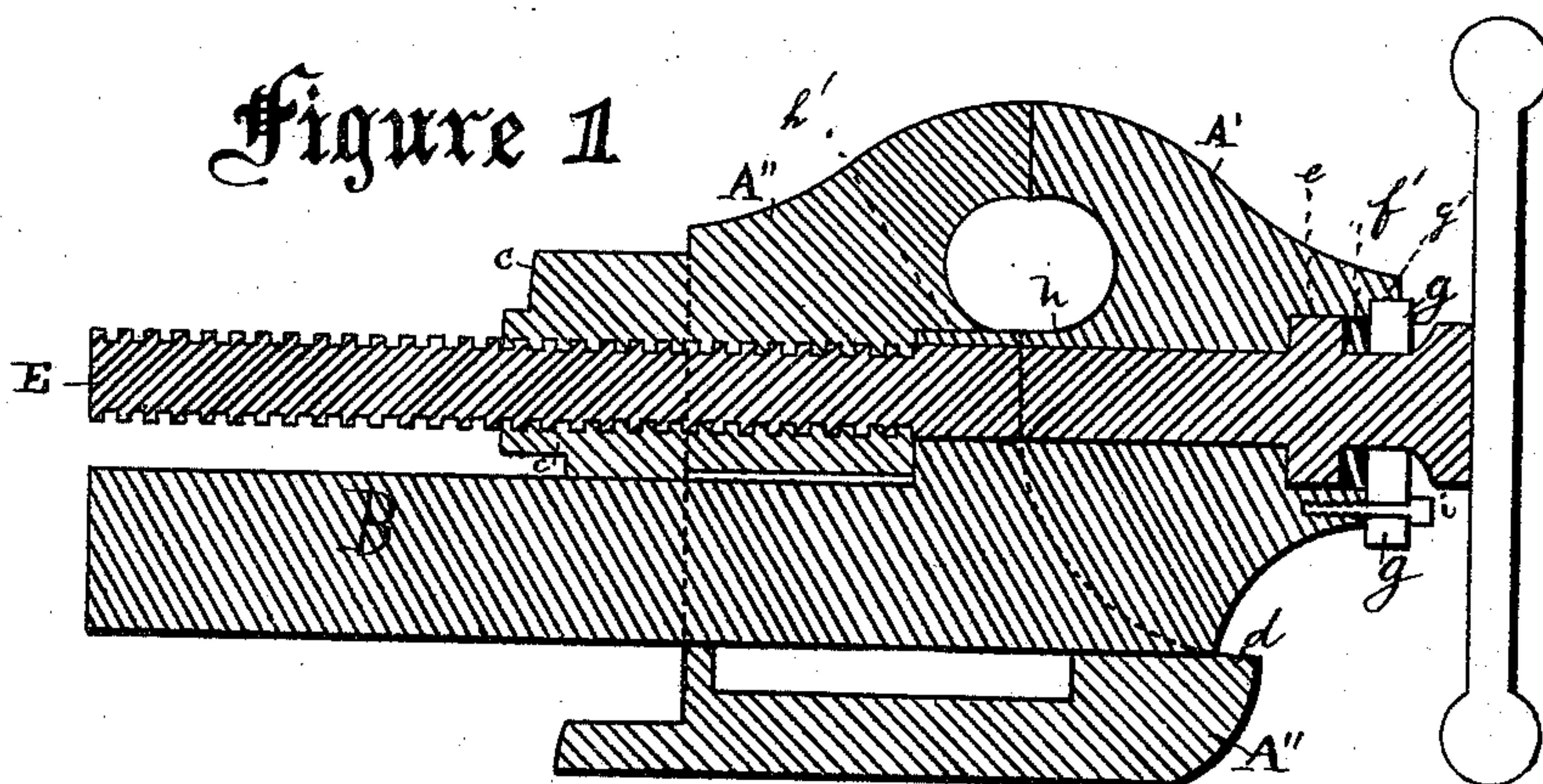


Figure 2

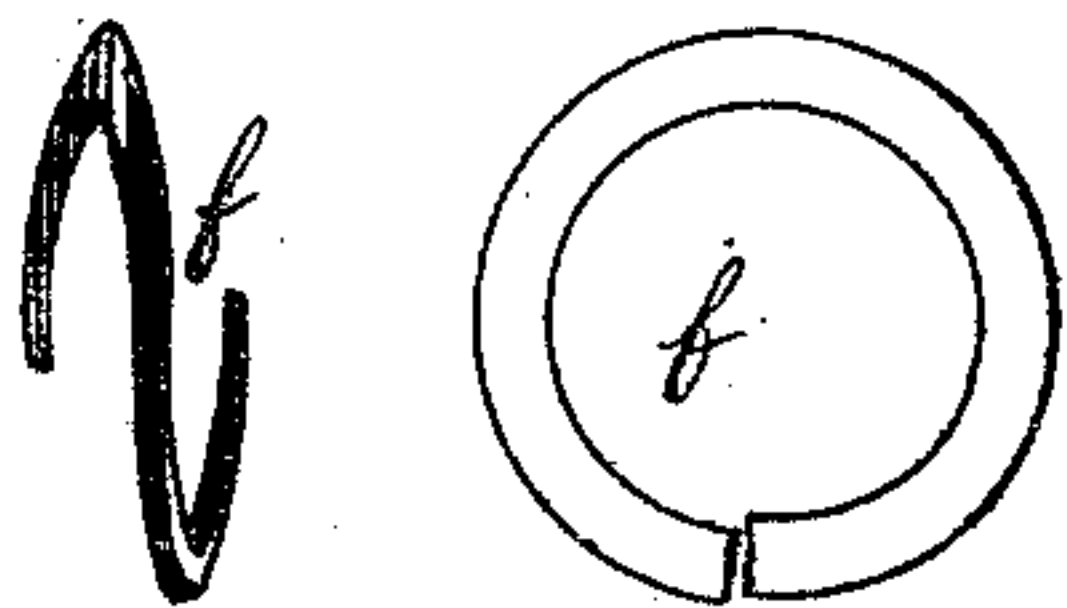
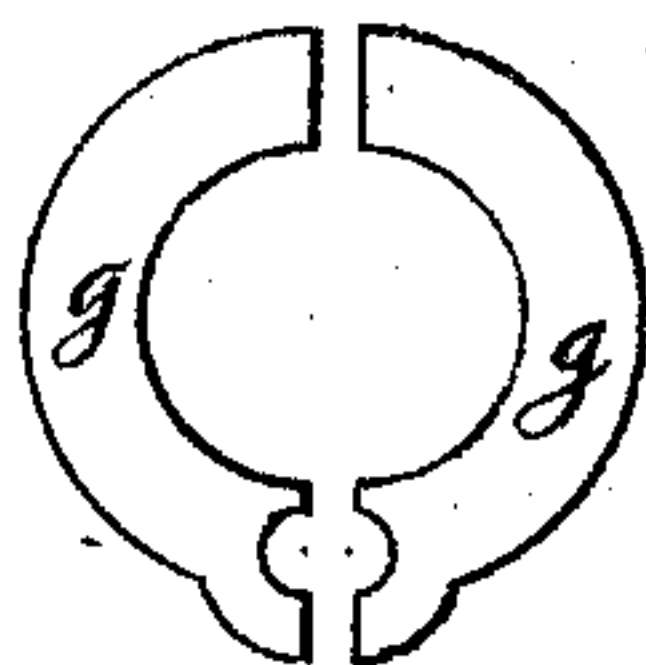


Figure 3



Witnesses,

O. O. Curtis
Solomon Finley

Inventor.
Erhard Schlenker

UNITED STATES PATENT OFFICE.

ERHARD SCHLENKER, OF BUFFALO, NEW YORK, ASSIGNOR OF ONE-HALF HIS RIGHT TO RUFUS L. HOWARD AND GIBSON F. HOWARD, OF SAME PLACE.

IMPROVEMENT IN VISES.

Specification forming part of Letters Patent No. **156,066**, dated October 20, 1874; application filed June 16, 1874.

To all whom it may concern:

Be it known that I, ERHARD SCHLENKER, of Buffalo, in the county of Erie and State of New York, have invented certain Improvements in Vises, of which the following is a specification:

My invention relates to improvements in vises; and the invention consists in a new and improved combination of devices, whereby the operation of the vise is rendered more perfect, all as hereinafter more fully set forth.

In the accompanying drawing, Figure 1 is a longitudinal vertical section of a vise having my improvement applied thereto. Figs. 2 and 3 are detached views of the spring and the collar, which confines the spring in position.

Referring to the parts by letters, A represents a vice consisting of a fixed jaw, A'', and movable jaw A', the latter having a sliding bar, B, which passes through the jaw A'' in suitable bearings. E is the screw passing in suitable bearings through the jaw A', and also through the jaw A''. e is a collar on the screw E, which fits a suitable recess formed in the front or outer end of the jaw A', as shown in the drawings. f' represents the por-

tion of this recess outside of the collar e, in which a spring, f, is inserted. This spring is clearly shown in Fig. 4 of the drawings. g is a collar fitted around the stem of screw E on the outside of spring f, a recess, g', being formed in the jaw A' for its reception. i is a screw passed longitudinally through the collar g into the jaw A'.

The spring f is thus held and slightly compressed between the collars e and g, and with a vise of this construction it will be obvious to those skilled in the art that the spring f will take up the slack between the screw-stem collar and the movable jaw, and thereby prevent any play or movement at this point.

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

The spring f inserted between the collar g and the collar e of the screw E, and operating in combination therewith, substantially as and for the purpose specified.

ERHARD SCHLENKER.

Witnesses:

P. P. BURTIS,
SOLOMON FINLEY.