

J. JOHNSON.

Parallel Vice.

No. 7,262.

Patented April 9, 1850.

Fig. 1.

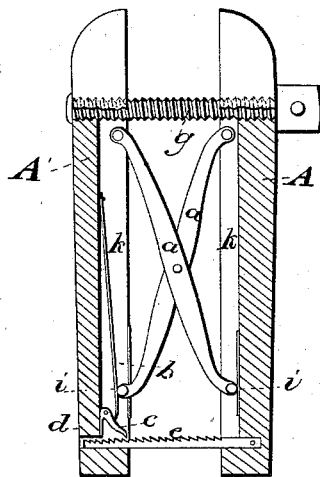
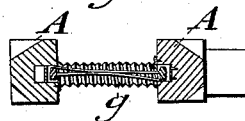


Fig. 2.



UNITED STATES PATENT OFFICE.

JASPER JOHNSON, OF GENESEO, NEW YORK.

METHOD OF WORKING THE PAWL IN PARALLEL VISES.

Specification of Letters Patent No. 7,262, dated April 9, 1850.

To all whom it may concern:

Be it known that I, JASPER JOHNSON, of Geneseo, in the county of Livingston and State of New York, have invented a new and
5 useful Improvement in Parallel Vises; and I do hereby declare the following to be a full and exact description thereof, reference being had to the accompanying drawings, making a part of this specification.

10 A, A', in the accompanying drawings are two vertical bars, the upper ends of which form the clamping jaws, of the vise, that are operated by the screw *g*, in the usual manner. Grooves *k, k*, are formed in the
15 inner surfaces of the vise bars (A, A') into the upper ends of which the upper ends of the crossed levers *a, a*, are secured by joint pins: the levers *a, a*, are united at their centers by a fulcrum joint, and the ears *i, i*, at
20 their lower extremities play freely in the lower portions of the grooves *k, k*; in which grooves they (the ears *i, i*,) are retained by the plates *j, j*, that are confined to the inner
25 sides of the vise bars and project over the edges of the said grooves.

Near the lower end of the movable vise bar A, one end of the rack bar *e*, is confined, which passes thence rearward through a
30 mortise in the stationary bar A'. A pawl *c*, is located at the lower end of the groove in the bar A', which has a spring leg *d*, descending from its fulcrum pin, that bears against the bottom of the groove and elevates the extremity of the pawl above the
35 teeth of the rack *e*.

b, is a metallic plate, the upper end of which is secured near the upper end of the groove in A', and its lower end bears against the front side of the pawl *c*: when the screw
40 *g*, is turned, the jointed levers *a, a*, will cause

the bar A, as it moves out and in, to retain a position parallel to the stationary bar A'; and when any pressure is exerted upon any substance placed in the jaws of the vise, the inward movement that will thereby be im-
45 parted to the lower end of A, will throw the lower ends of both the levers *a, a*, to the rear, and thus cause one of them to bear against the plate *b*, and force the pawl *c*, down upon the teeth of the rack *e*; by which
50 means a very slight movement of the lower end of A, will actuate the pawl *c*, and cause it to firmly hold the lower end of the movable vise bar (A,) and prevent any injurious strain from being exerted upon the jointed
55 levers and the screw.

Having thus fully described my improvement in parallel vise, I would observe that I do not claim the placing the crossed jointed
60 levers *a, a*, between the parallel vise bars A, A', nor the rack *e*, made fast to the lower portion of the movable bar A, and extending thence through a mortise in the stationary bar A', as these have been made use of
65 before; but

What I do claim as my invention and desire to secure by Letters Patent, is—

The within described combination of the spring pawl *c*, and the metallic plate (or lever) *b*, with the foot of one of the crossed
70 levers *a*, by which the spring pawl is made to act upon and retain the rack bar *e*, when any article is grasped between the jaws of the vise, substantially as herein set forth.

The above specification signed and witnessed this 28th day of September 1849.

JASPER JOHNSON.

Witnesses:

I. H. VAIL,
W. H. KELSEY.