J. Chavanne,

Vise.

NO. 107,873. Patented Oct. 4. 1870.

Fig. 1.

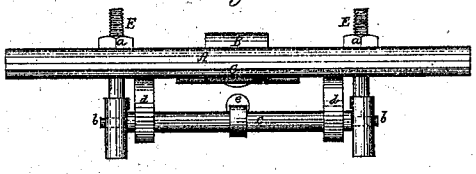


Fig. 2.

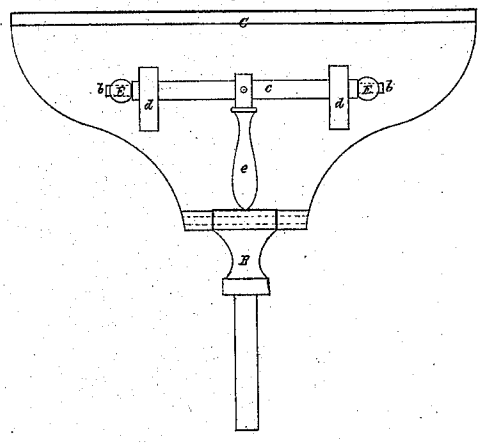
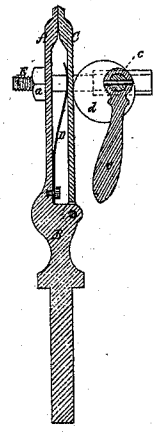


Fig. 3.



Witnesses.

S. N. Piper

L. N. Miller

J. Chavanne

by his attorney

N. Wright

N. PETERS, PHOTO-LITHOGRAPHER, WASHINGTON, D. C.

UNITED STATES PATENT OFFICE.

JULIUS CHAVANNE, OF PORRENTRAY, SWITZERLAND.

IMPROVEMENT IN VISES.

Specification forming part of Letters Patent No. **107,873**, dated October 4, 1870.

To all whom it may concern:

Be it known that I, JULIUS CHAVANNE, a citizen of Porrentray, of the Canton of Berne, of the Republic of Switzerland, have invented an Improved Vise; and I do hereby declare the same to be described as follows, reference being had to the accompanying drawings, making part of my specification.

Of such drawings, Figure 1 denotes a top view, Fig. 2 a front elevation, and Fig. 3 a transverse section, of the vise.

In the drawings, A denotes the stationary vise-jaw, extended from a standard or supporter, B, having a movable jaw, C, pivoted or hinged to its top. A spring, D, is arranged between the two jaws, and applied so as to operate to press one jaw apart from the other. Two screw-bolts, E E, go through the two jaws, and are arranged and provided with nuts *a a*, as represented, the heads of such bolts being elongated and bored transversely to serve as bearings for the reception of the journals *b b* of a shaft, *c*, which is furnished with two eccentrics, *d d*, and a handle or lever, *e*, the whole being formed and arranged as shown in the drawings. By pressing the handle downward the shaft will be partially revolved, so as to turn the eccentrics against the movable jaw, and thereby move it toward the other jaw.

This vise is intended for holding very thin stuff—such as a saw-blade or metal plate, for instance—the nuts and screws serving to adjust the jaw-closing mechanism and jaws to the material or article to be clamped between the jaws—that is, so that it may be properly clamped by them when the eccentrics at or near their greatest eccentricities bear upon the movable jaw. The vise is also intended for expeditiously effecting the clamping of an article, which is effected by one downward movement of the handle.

I am aware of the vise shown and described in the United States Patent No. 28,382, dated May 22, 1860, and granted to Thomas B. Lamb, and make no claim thereto, it differing materially from my vise and being for holding "short" work, whereas my vise is intended more especially for holding long and thin work where one face may be a little out of parallelism with the other, in which case I am enabled, by means of the two adjusting nuts and screws, operating with two eccentrics, to bring the jaws to a fair bearing along the entire work. It will thus be seen that with the two eccentrics and the screws and nuts arranged and combined with the two jaws, as set forth, I have more than what is exhibited in the vise of Lamb, my vise, by its construction, being adapted to a different use, as the two screws and nuts enable the jaws to be sprung by the eccentrics, so as to fit to work of uneven thickness, which is not the case with the vise of Lamb. Consequently

I claim—

The vise constructed as described—viz., with the adjusting screw-bolts E E and nuts *a a*, the rotary shaft *c*, the eccentrics *d d*, or such and the handle *e*, and the jaws A C, arranged and combined substantially in manner and so as to operate as set forth.

JULIUS CHAVANNE.

Witnesses:
R. H. EDDY,
J. R. SNOW.