

No. 857,007.

PATENTED JUNE 11, 1907.

C. MARKMANN.

WISE.

APPLICATION FILED JULY 9, 1906.

FIG. 1.

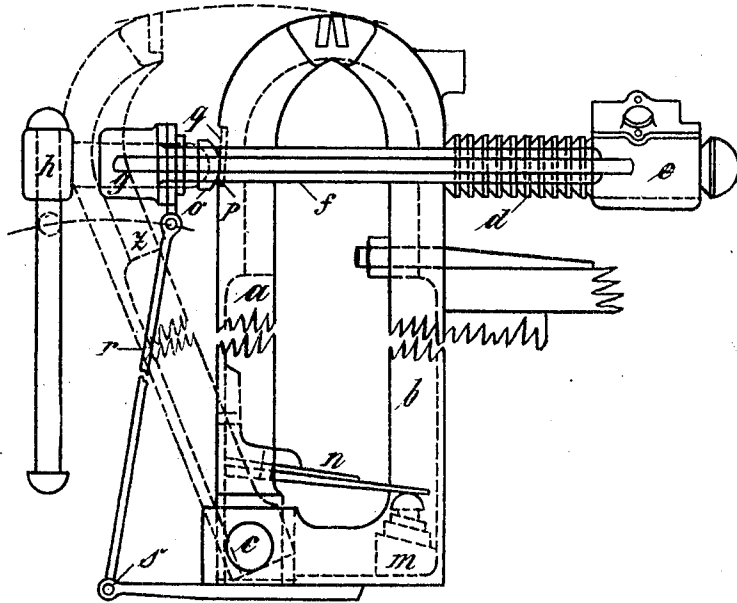


FIG. 2.

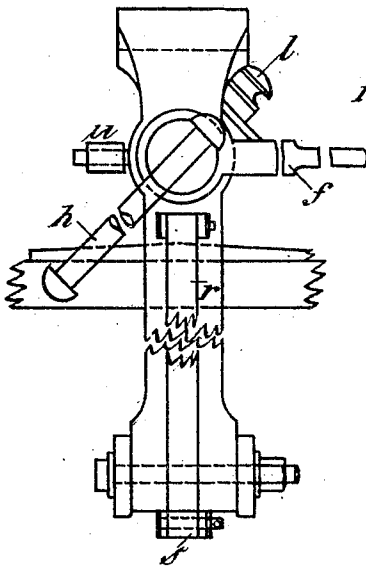


FIG. 3.

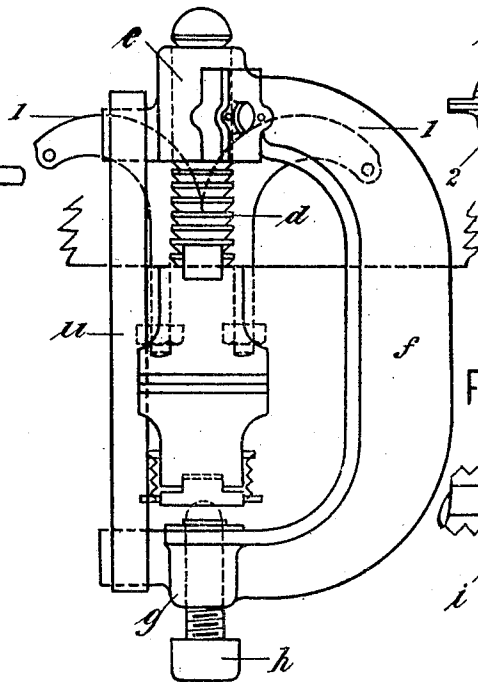


FIG. 4.

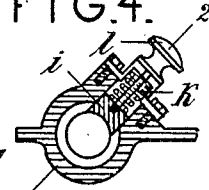
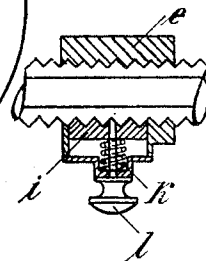


FIG. 5.



Witnesses:
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UNITED STATES PATENT OFFICE.

CARL MARKMANN, OF UNNA, GERMANY.

WISE.

No. 857,007.

Specification of Letters Patent.

Patented June 11, 1907.

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To all whom it may concern:

Be it known that I, CARL MARKMANN, a citizen of the German Empire, and a resident of Unna, Germany, have invented certain new and useful Improvements in Vises, of which the following is a specification.

This invention relates to a vise the two jaws of which are connected by a yoke which transfers the movement of the one jaw to the other one. This improved vise differs from vises of known construction, in which yokes are used, by the adjustable arrangement of the yoke which permits to put into the vise working-pieces of the most various dimensions even long and large iron-plates.

In the accompanying drawings the improved vise is shown by way of example.

Figure 1 is a side view, Fig. 2 a front view and Fig. 3 is a ground plan of the vise. Fig. 4 is a section on line 1—1 of Fig. 3 and Fig. 5 is a section on line 2—2 of Fig. 4.

The vise consists of two arms *a*, *b* which at their upper ends form the jaws of the vise. Arm *b*, as usual, is to be fixed to the lathe by clamping screws and bent to a right angle at its lower end. To this bent part of arm *b*, the arm *a* is pivoted by pivot *c*. At the upper end of arm *b* a cylindrical projection *d* is provided which has circular grooves. A sleeve *e* is movably mounted on said lateral cylindrical projection *d* and to this sleeve one end of the yoke *f* is fixed the other end of which bears against arm *a* by means of an adjusting screw *h* which is screwed into the screwthreaded boring *g* of said yoke. Jaw *a* of the vise has a laterally projecting arm *n* which is under the influence of a strong spring *m* which continually tends to open the vise. The vise is locked by means of the detent-pin *i* of sleeve *e* which detent-pin is adapted to be lifted by handle *l* against the pressure of a spring *k*. The adjusting-screw acts upon a disk *o* which bears against a

washer *q* located in a hollow *p* of jaw *a*. The yoke *f* is guided by rods *r*, *s* hinged to it at *z*.

The vise is used after it has been fixed to the lathe, in the following manner. When the detent-pin *i* has been lifted sleeve *e* can be adjusted on lateral arm *d* whereby the width of the opening of the jaws is determined, jaw *a* being automatically moved away from jaw *b* by the action of spring *m* on arm *n*. When the detent-pin *i* is released it is automatically pressed against the yoke by spiral spring *k*, thus securing the vise in its position. The working piece is placed in the vise and fixed by means of clamping screw *h* in the well known manner.

I am well aware that vises have become known in which the jaws are connected by a yoke, and I therefore do not claim the arrangement in its totality but

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

An improved vise comprising in combination with the adjustable jaws a strong spring fixed to the fixed jaw and an arm laterally projecting from the adjustable jaw acted upon by said spring, a yoke for determining the width of the opening of the jaws, an arm having circular grooves laterally projecting from the fixed jaw, a sleeve at the one end of the yoke adjustable on said lateral arm, a detent-pin in said sleeve for securing the same in its position on the grooved arm, the clamping screw in the other end of the yoke and rods for securely guiding said yoke in its movement, substantially as described and shown and for the purpose set forth.

In witness whereof I have hereunto set my hand in presence of two witnesses.

CARL MARKMANN.

Witnesses:

BESSIE F. DUNLAP,
LOUIS VANDOR.