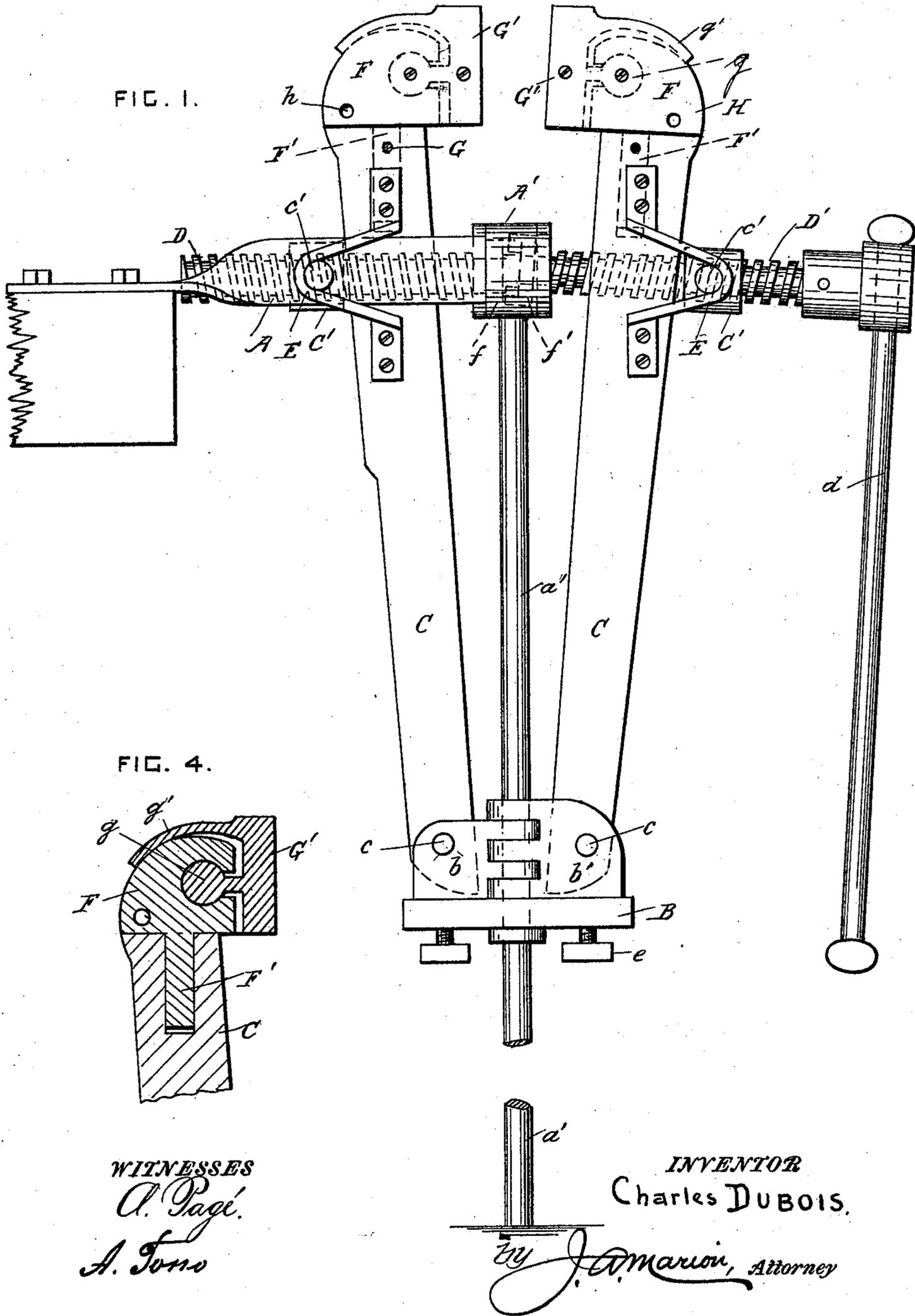


C. DUBOIS.  
VISE.

No. 582,347.

Patented May 11, 1897.



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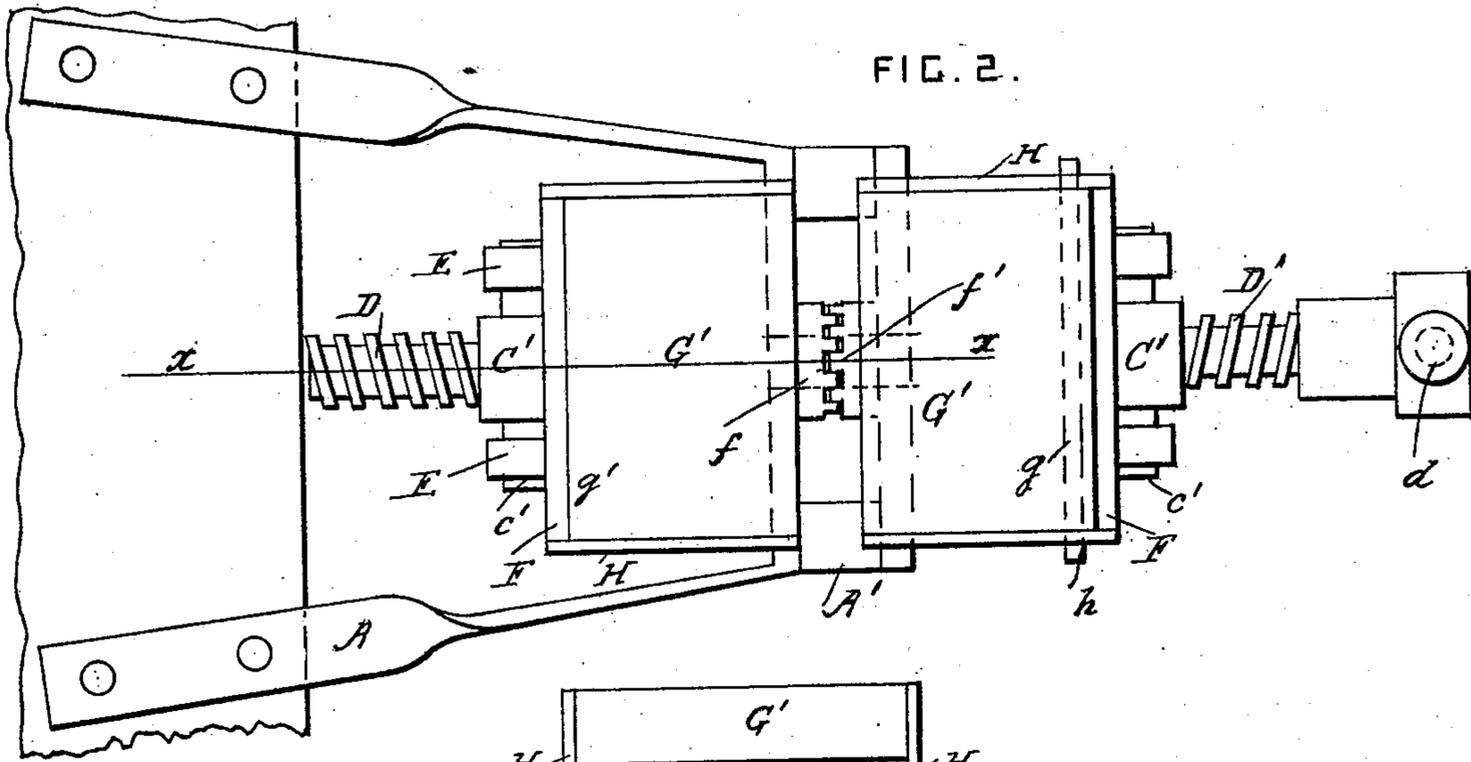


FIG. 2.

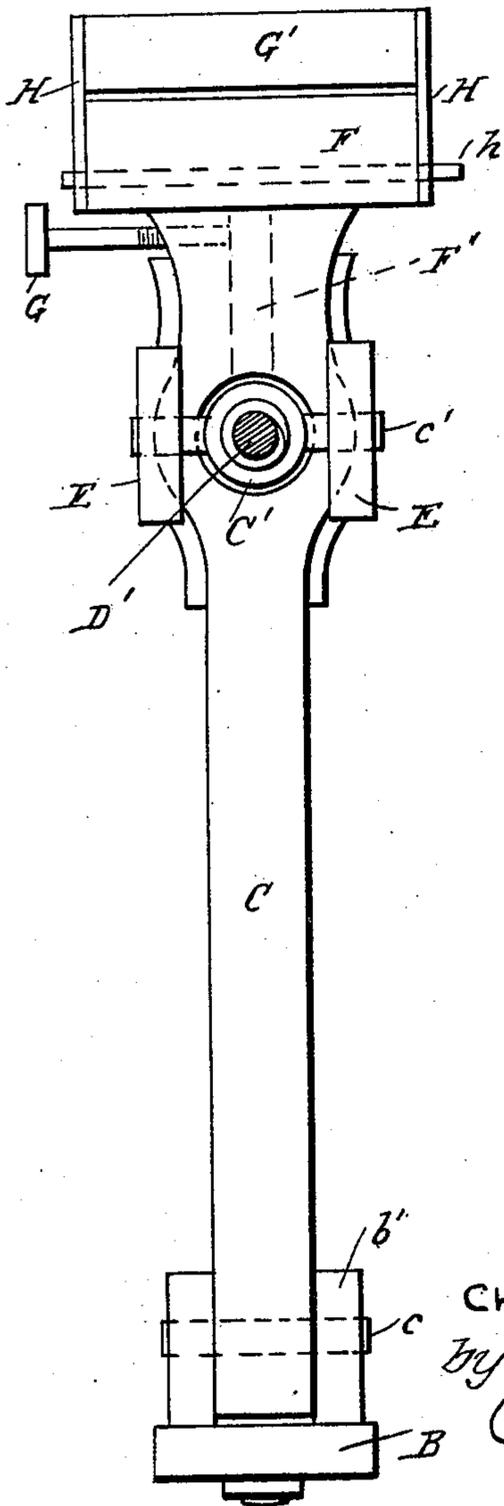


FIG. 3.

WITNESSES  
*A. Page!*  
*A. Jones*

INVENTOR  
 Charles DUBOIS,  
 by *J. Marion*  
 Attorney

# UNITED STATES PATENT OFFICE.

CHARLES DUBOIS, OF SÉGRIE, FRANCE.

## WISE.

SPECIFICATION forming part of Letters Patent No. 582,347, dated May 11, 1897.

Application filed February 8, 1897. Serial No. 622,466. (No model.) Patented in France March 4, 1896, No. 254,508, and in Belgium October 9, 1896, No. 123,916:

*To all whom it may concern:*

Be it known that I, CHARLES DUBOIS, a citizen of the French Republic, residing at Ségrie, Sarthe, France, have invented certain new and useful Improvements in Vises, (for which I have obtained French Patent No. 254,508, dated March 4, 1896, and Belgian Patent No. 123,916, dated October 9, 1896;) and I do hereby declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same.

This invention relates to vises; and it consists in the novel construction and combination of the parts hereinafter fully described and claimed.

In the drawings, Figure 1 is a side view of the vise. Fig. 2 is a plan view of the same. Fig. 3 is a front view of the vise. Fig. 4 is a vertical section of the upper part of the vise, taken on the line  $x x$  in Fig. 2.

A is a bracket secured to any stationary support, such as a work-bench, and A' is a box secured to the said bracket and provided with a vertical rod  $a'$ , the bottom end of which rests on the floor.

B is a bracket secured on the lower part of the rod  $a'$ , and  $b b'$  are hinges pivoted on the said rod and resting on the bracket B. These hinges are free to oscillate on the rod, but they may be secured to the bracket B by set-screws  $e$  when desired.

C are two similar levers pivoted on the pins  $c$ , carried by the hinges  $b b'$ . Each lever C has a nut C', provided with laterally-projecting pins  $c'$ , which are journaled in bearings E, secured to the said levers.

D D' are right and left hand screws, which engage with the respective nuts C'. One of these screws D' is provided with a head and a handle-bar  $d$  for revolving it. The adjacent end portions of the screws are provided with intergearing toothed clutch members  $f f'$ , which are journaled in the box A'. These clutch members fit loosely into each other and form a universal joint or coupling between the two screws.

F are similar heads, each provided with a

stem F', which is journaled in the upper end portion of a lever C. G are set-screws for clamping the stems to the levers when it is desirable to prevent them from revolving.

G' are the vise-jaws, provided with cylindrical pivots  $g$ , which are journaled in sockets formed in the upper parts of the levers C or heads F, so that the said jaws may have a rocking motion. The upper parts of the vise-jaws are provided with curved flanges  $g'$ , which extend over the tops of the heads C.

H are plates secured to the end portions of the jaws and bearing against the sides of the heads F. The jaws can be secured to the heads, so as to prevent them from rocking, by passing pins  $h$  through holes in the said plates H and the heads.

The construction of this vise is such as to permit objects of any shape to be gripped between its jaws securely and without the use of packing, as the jaws, the levers C, the heads F, and the screws all turn about and adapt themselves to the shape of the object. The connection of the screws by a universal joint and their pivotal connection with the levers C permits the vise to be operated in any position.

What I claim is—

1. In a vise, the combination, with pivoted levers carrying vise-jaws, of right and left hand screws operatively connected with the said levers, and a universal joint coupling the adjacent end portions of the said screws, substantially as set forth.

2. In a vise, the combination, with pivoted levers carrying vise-jaws, of nuts provided with laterally-projecting pivots supported from the said levers, right and left hand screws engaging with the said nuts, and a universal joint coupling the adjacent end portions of the said screws, substantially as set forth.

3. In a vise, the combination, with a stationary bracket provided with a box, and a vertical rod secured to the box; of levers having their lower end portions pivotally supported on the said rod, right and left hand screws operatively connected with the said levers, and a universal joint journaled in the

said box and coupling the adjacent end portions of the said screws, substantially as set forth.

5 4. In a vise, the combination, with a vertical rod, of levers pivotally supported thereon, heads provided with vertical stems journaled in the upper parts of the said levers, jaws provided with horizontal pivots engaging with the said heads, and right and left

hand screws coupled together by a universal joint, for operating the said levers, substantially as set forth.

In testimony whereof I affix my signature in presence of two witnesses.

CHARLES DUBOIS.

Witnesses:

P. MINIGHELLY,  
E. THIBAULT.