(No Model.)

C. C. WRIGHT & W. HUNT.

ADJUSTABLE VISE SUPPORT.

No. 599,087. Patented Feb. 15, 1898.

Fig. 1.

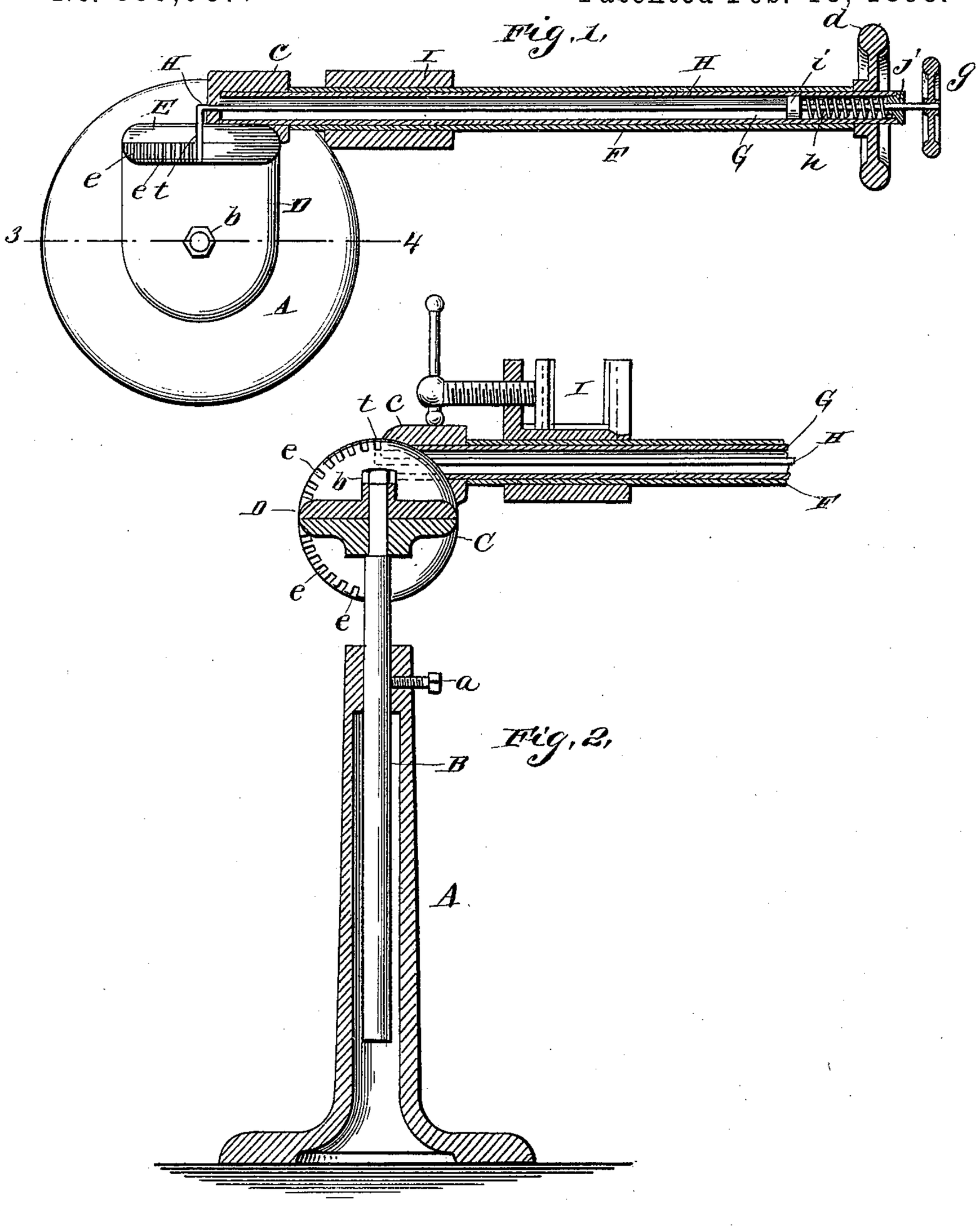
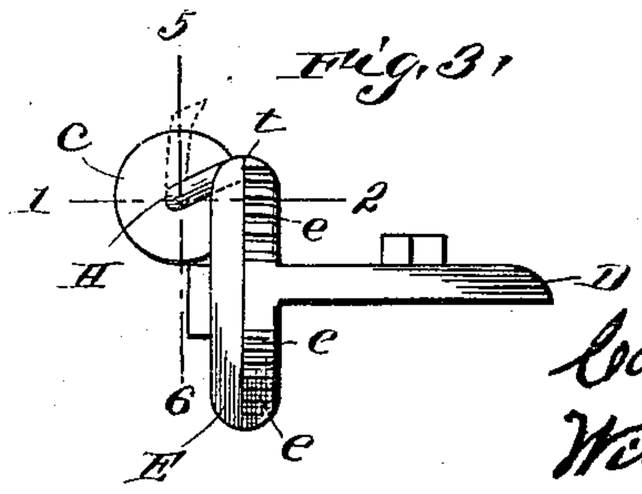


Fig. 2.

Fig. 3.



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UNITED STATES PATENT OFFICE.

CORNELIUS C. WRIGHT AND WILLIAM HUNT, OF TITUSVILLE, PENNSYLVANIA, ASSIGNORS OF ONE-THIRD TO WILLIAM H. McDONALD, OF SAME PLACE.

ADJUSTABLE VISE-SUPPORT.

SPECIFICATION forming part of Letters Patent No. 599,087, dated February 15, 1898.

Application filed September 9, 1897. Serial No. 651,074. (No model.)

To all whom it may concern:

Be it known that we, CORNELIUS C. WRIGHT and WILLIAM HUNT, citizens of the United States, residing at Titusville, in the county of Crawford and State of Pennsylvania, have invented a new and useful Adjustable Vise-Support, of which the following is a specification.

Our invention is intended to supply to mechanics a support for a vise for holding any piece of work which it may be desirable to place in various positions while work is being performed upon it, but principally for holding pieces of furniture while being upholstered. We attain these objects by the mechanism illustrated in the accompanying drawings, in which—

Figure 1 is a top view, part in section, on the line 1 2, Fig. 3. Fig. 2 is a vertical section on the line 3 4, Fig. 1, also a vertical section through the center of the arm on the line 5 6, Fig. 3, the arm shown partially broken away. Fig. 3 is a back view of the upper part only.

Similar letters refer to like parts throughout the drawings.

The stand A is intended to be fastened rigidly to the floor. It is constructed to receive the shaft B, which is adjustable vertically, and is secured in any desired position by the set-screw *a* or other desirable fastening. The upper end of the shaft B is constructed to receive the flanges C and D, the flange C being fast to the shaft B and the angle of flange D fitting loosely, so as to revolve freely, the face in contact with the face of the flange C. The flange D should be held in position by the nut *b* or other effective means. The face of flange E is held in contact with the face of flange D by a stud and nut in like manner and revolves against the face of the flange D in a vertical direction.

The projection *c* on the flange E is constructed to receive the tubular shaft G, which it holds firmly, also so as to permit the rod H to pass through and revolve freely. For our purpose a thread is cut on the projecting end of the shaft G to receive the hand-wheel *d*, though a nut may be used instead of the hand-wheel *d* or a cam used in place of either, in which case no thread is necessary as for the hand-wheel or nut.

The tube F passes freely over the outside of the tubular shaft G, and the one end comes in frictional contact with the projection *c*, against which it is made to impinge by the action of the hand-wheel *d* or other device for that purpose.

The vise I, of whatever form used, is intended to be fastened firmly to the tube F, but in such manner as to be easily released and shifted lengthwise of the tube at the pleasure of the operator.

The vise can be moved to any position radially with the shaft by releasing the tube F by a movement of hand-wheel *d* and revolving on the shaft G until the vise is in the desired position, and then securing the tube F by tightening the hand-wheel, thus holding the tube F rigidly in any desired position by the friction on the ends. This arrangement of tubes, in combination with the rod H, we call the "vise-arm," which can be moved in a vertical direction to any desired position within a semicircle by the rotation of the flange E. To hold it firmly in a desired position, there are notches *e e e* in the edge of the flange D and a single notch *f* in the edge of the flange E. The end of the rod H is bent at an angle in such a manner (see H, dotted lines, Fig. 3) as to fall in the notches *e e e* when they come opposite the notch *f*. The rod after passing through the projection *c* and the shaft G is fitted with a small hand-wheel *g*, by means of which it is rotated.

A spiral spring *h* is shown, one end of which is held by a disk *i*, which is fastened inside of the tube G. The other end is held by a small collar *j*, which is fastened to the rod H. The other end of the rod H, which drops in the notches and which we call the "dog," is lifted out of the notches by the rotation of the rod H by means of the hand-wheel *g* and drops back by the reaction of the spring *h*.

By this construction a piece of work which is held in a vise which is secured to the vise-arm can be placed in any position around the central shaft A by the rotation of the flange D on the flange C, so that advantage can be taken of light or for any other reason, and that

also while being held at any vertical angle by the rotation of the vertical flange E and the action of the dog H, while at the same time it can be placed in any desired position radially with the arm by the rotating movement of the tube F.

We claim as our invention and desire to secure by Letters Patent—

1. In an adjustable vise-support, a vertical shaft B held by the stand A or its equivalent in such a way as to be adjustable vertically, supporting a construction of which an arm for holding a vise forms a part, and by means of which construction the arm can be moved to any desired position radially with the shaft B, either vertically or horizontally, and held firmly in such position, while at the same time the vise can be adjusted lengthwise or radially with the arm, independent of the other movements as shown and described.

2. In an adjustable vise-support, a stand holding a vertical shaft B in combination with the flanges C, D, E, and the arm F, the arm adjustable radially, horizontally, by the action of the flange D, in connection with the flange C, and the shaft B, and radially vertically by the action of the flange E in combination with the flange D and the operation of the dog H, substantially as shown and described.

3. In an adjustable vise-support, a stand A, and shaft B in combination with rotating flanges C, D, E, and the arm composed of the annular tube G, secured in the flange E, and the outer annular tube F, the hand-wheel *d* for securing the tube F in position, the rod H extending through the tubular arm G, operating as a dog in the notches *e*, *e*, *e*, in the flanges D, E, in combination with the spring *h*, the disk *i*, the collar *j* and the hand-wheel *g*, all substantially as shown and described.

In witness whereof we have hereunto signed our names in the presence of two subscribing witnesses.

CORNELIUS C. WRIGHT.
WILLIAM HUNT.

Witnesses:
ROGER SHERMAN,
GEO. BRYAN.