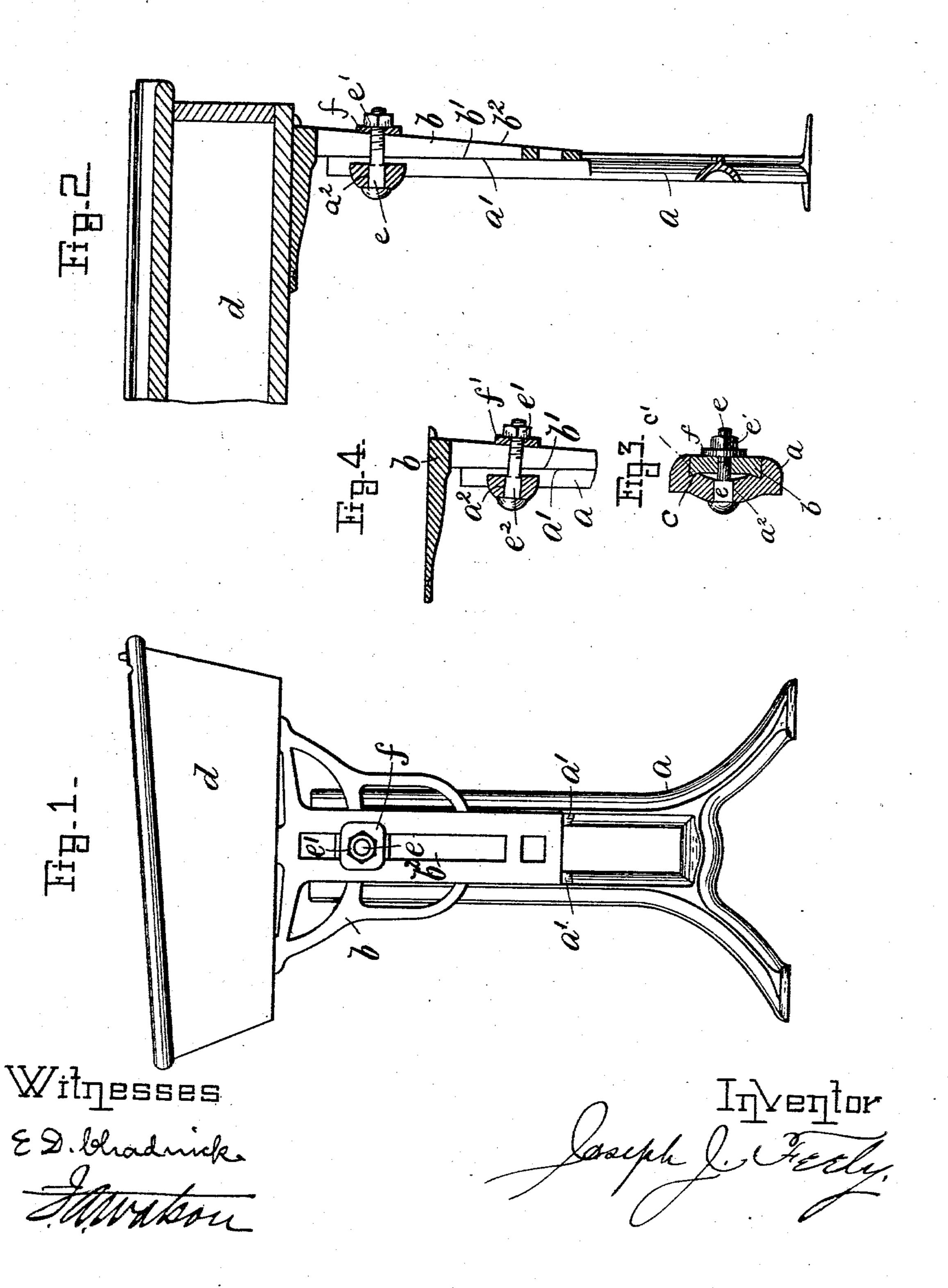
(No Model.)

J. J. FEELY. SCHOOL DESK.

No. 561,779.

Patented June 9, 1896.



United States Patent Office.

JOSEPH J. FEELY, OF WALPOLE, MASSACHUSETTS, ASSIGNOR TO THE CHANDLER ADJUSTABLE CHAIR AND DESK COMPANY, OF BOSTON, MASSACHUSETTS.

SCHOOL-DESK.

SPECIFICATION forming part of Letters Patent No. 561,779, dated June 9, 1896.

Application filed April 5, 1895. Serial No. 544,618. (No model.)

To all whom it may concern:

Be it known that I, Joseph J. Feely, a citizen of the United States, residing at Walpole, in the county of Norfolk and State of Massachusetts, have invented certain new and useful Improvements in Adjustable Standards for School Desks and Chairs, of which the fol-

lowing is a specification.

My invention relates to standards for school 10 desks and chairs, and more particularly to vertically-adjustable standards. I am aware that prior to my invention standards have been made comprising upper and lower portions adjustable with reference to each other 15 and provided with means for clamping them together, and also that such upper and lower portions have been made wedge-shaped in such manner as to be adjustable upon the inclined faces of the wedges, as shown in Pat-20 ent No. 508,557 to T. R. Roulstone, dated November 14, 1893. The objection to such standards when applied in pairs to desks lies in the fact that when the desk is raised or lowered during adjustment the inclined faces above 25 referred to tend to move out of alinement with each other for the reason that they are not parallel to the direction of adjustment of the desk, and in order to secure the desk in its new position by drawing the inclined faces 30 together again a lateral strain is brought to bear on either the upper or the lower portions of the standards, or on both, which tends to loosen the fastening devices whereby they are secured to the desk and to the floor, respec-35 tively.

The objects of my invention are to provide an adjustable standard which when applied in pairs to desks shall retain the advantages resulting from the use of wedge-shaped portions and at the same time be free from the objection referred to above, and to otherwise improve the construction of adjustable standards in certain details, as will fully appear from the following description and accompanying drawings, which set forth a preferred form of standard embodying my invention.

In said drawings, Figure 1 represents a side elevation of a desk provided with my improved standards. Fig. 2 is a vertical central section of one end of the desk and its

standard. Fig. 3 is a transverse section of the standard, taken through the clamping-bolt. Fig. 4 is a view similar to Fig. 2, show-

ing a slight modification.

The letter d represents a desk to which the 55 upper portions b of a pair of standards are rigidly secured, the lower or base portions athereof being rigidly fastened to the floor in the usual manner. These parts a and b are arranged to slide one upon the other, one of 60 them, as b, preferably being guided between flanges formed on the other in a well-known manner. The adjacent or sliding faces a' and b' of the parts a and b, respectively, are parallel to the direction of adjustment of the 65 desk-i.e., are vertical—while the outer face of one of the portions is inclined to said direction of adjustment, thus giving to this portion a tapering or wedge-shaped form. This tapering form may be given to either portion 70 of the standard. In the drawings it is given to the upper portion b. The tapering portion is locked in any desired position of adjustment by its wedging itself between the sliding faces of the other portion and a clamp- 75 ing device secured to said latter portion.

My preferred form of clamping device is the one shown in the drawings, consisting of a bolt e, secured, as at a^2 , to the upper part of the base portion a and passing through a suit- 80 able slot b^2 , formed in the portion b, the outer end of the bolt e being screw-threaded and provided with a nut e'. A beveled washer fmay be provided to compensate for the slant of the outer face of the portion b, or, if de- 85sired, the bolt may be set at a slight angle, so as to be perpendicular to said outer face, as shown at e^2 in Fig. 4, in which case a flat washer f' may be used, or it may be omitted entirely. Obviously the position of adjust- 90 ment in which the desk will remain depends upon the position of the nut e' on the bolt e. After the desk has been adjusted it may be firmly clamped and kept from being raised as well as lowered by simply tightening the nut. 95

With the construction above described, since the sliding faces of the portions a and b are parallel to the direction of adjustment of the desk, there is no tendency for said portions a and b to separate during adjustment, 100

and consequently when the nuts e' are tightened there is no lateral strain produced tending to loosen the screws whereby the standards are secured to the desk and to the floor.

I prefer to provide two sliding faces b', located at the edges of the portion b and inclined toward each other, as shown at c' in Fig. 3, instead of being in the same plane, the sliding faces a' being formed to correspond 10 on the portion a, as shown at c. This construction effectually prevents any lateral wabbling of the upper portion of the standard and distributes the clamping action of the bolt and nut to the best advantage. By 15 reason of this feature my standard may be applied advantageously to a school-chair or to other articles of furniture where the need for the other feature of my invention namely, the parallelism of the sliding faces 20 with the direction of adjustment of the article supported—does not exist.

I claim as my invention—

1. In combination with a desk or its equivalent and with a floor or other support, two adjustable standards each comprising a lower portion rigidly secured to the floor, an upper portion rigidly secured to the desk and sliding on said lower portion, the adjacent faces of said portions being parallel to the direction of adjustment of the desk, and a clamping device for one or both standards, between which device and the portion of the standard to which it is secured the other portion of the standard is locked, this latter portion being wedge-shaped, all substantially as described.

2. In combination with a desk or its equivalent and with a floor or other support, two adjustable standards each comprising a lower portion rigidly secured to the floor, an upper portion rigidly secured to the desk and sliding on said lower portion, the adjacent faces of said portions being parallel to the direction

of adjustment of the desk, and a clamping device for one or both standards, consisting of a bolt secured to one portion of the stand- 45 ard and passing through a suitable slot in the other portion, and a nut on said bolt, the slotted portion of the standard being wedge-shaped, all substantially as described.

3. An adjustable standard comprising in 50 combination an upper and a lower portion arranged to slide one upon the other, each of said portions having two faces located at or near the edges thereof and inclined toward each other, said faces being parallel to the 55 direction of adjustment of the standard and one of the portions of the standard being wedge-shaped, and a clamping device secured to the other of said portions, between the sliding faces of which latter portion and said 60 clamping device the wedge-shaped portion is locked, all substantially as described.

4. An adjustable standard comprising an upper and a lower portion arranged to slide one upon the other, on faces located at or 65 near the edges of each of said portions and inclined toward each other, said faces being parallel to the direction of adjustment of the standard and one of the portions of the standard being wedge-shaped, in combination with 70 a clamping device consisting of a bolt provided with a nut and passing through a suitable slot in the wedge-shaped portion of the standard and secured to the other portion, between the sliding faces of which latter por- 75 tion and said clamping device the wedgeshaped portion is locked, all substantially as described.

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

JOSEPH J. FEELY.

Witnesses:

E. D. CHADWICK, W. C. DUVALL.