

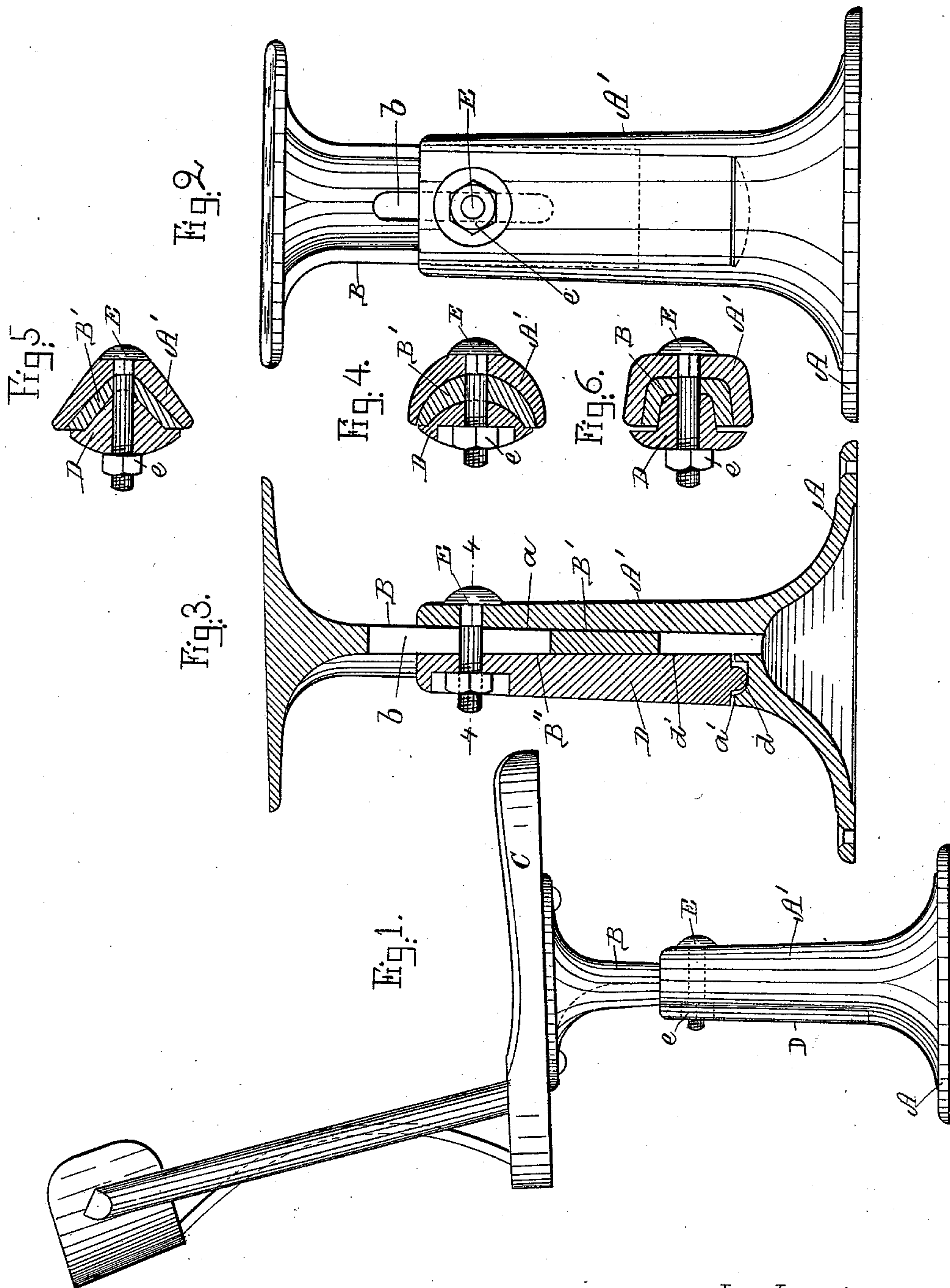
(No Model.)

A. ANDRÉN.

ADJUSTABLE SUPPORT FOR SCHOOL FURNITURE.

No. 540,531.

Patented June 4, 1895.



Witnesses

Lauritz W. Möller.
Henry R. Page

Inventor.

Alvan Andren

UNITED STATES PATENT OFFICE.

ALBAN ANDRÉN, OF BEVERLY, ASSIGNOR TO THE CHANDLER ADJUSTABLE CHAIR AND DESK COMPANY, OF BOSTON, MASSACHUSETTS.

ADJUSTABLE SUPPORT FOR SCHOOL FURNITURE.

SPECIFICATION forming part of Letters Patent No. 540,531, dated June 4, 1895.

Application filed February 11, 1895. Serial No. 537,887. (No model.)

To all whom it may concern:

Be it known that I, ALBAN ANDRÉN, a citizen of the United States, and a resident of Beverly, in the county of Essex and State of Massachusetts, have invented new and useful Improvements in Adjustable Supports for School Furniture, of which the following, taken in connection with the accompanying drawings, is a specification.

10 This invention relates to improvements in adjustable supports for furniture such as desks, chairs, seats, &c., and it is particularly well adapted for school furniture which requires adjustment from time to time relative
15 to the height or size of the scholar for which the chair, seat or desk, &c., is to be used. Adjustable supports for this purpose are principally of two kinds, namely, those depending on interlocking pawls, teeth or corrugations,
20 and those in which the parts are held together by frictional contact.

My invention relates to the latter kind. In frictional holding and adjusting devices for this purpose it is of the greatest importance
25 that the friction holding device should be so perfect and positive as to prevent the parts from moving relative to each other after being adjusted and clamped together and for this purpose I construct my invention as follows, reference being had to the accompanying drawings, wherein—

Figure 1 represents a side elevation of my improved adjustable device, shown as applied to a chair or seat. Fig. 2 represents a rear
35 view. Fig. 3 represents a central vertical section. Fig. 4 represents a cross-section on the line 4 4, shown in Fig. 3; and Figs. 5 and 6 represent modifications of such cross-section.

Similar letters refer to similar parts wherever they occur on the different parts of the drawings.

A represents the flange of the upwardly projecting base portion A' which is preferably made of semi-circular or curved section
45 as shown in Fig. 4, or it may be made of a V shaped or U shaped section or flat or equivalent cross sections as shown respectively in Figs. 5 and 6 without departing from the essence of my invention. The interior portion
50 or surface α of the upright base portion A' is wedge shaped or inclined as shown in Fig. 3.

B is the vertically adjustable shank secured at its upper end to the furniture C in any suitable manner, which shank has a cross-section corresponding to the interior shape of
55 the upright base portion A' as shown in the drawings.

The shank B has a wedge shaped or inclined front surface B' adapted to fit against the inclined or wedge shaped interior surface
60 α of the upright base portion A' as shown. The rear portion B'' of the seat or furniture shank B is also made inclined or wedge shaped, and against it is fitted a clamping wedge or inclined bar D the lower end d' of
65 which is preferably pivoted or made to rest in a cavity α' in the base portion as shown in Fig. 3.

b is a vertical slot in the seat or furniture shank B as shown.

E is a headed screw threaded fastening bolt passing through a notch or perforation in the upright base portion A' and through the slot
70 b in the seat or furniture shank B, as well as through a perforation in the clamping wedge
75 D, and provided with a nut e or other suitable fastening device as shown.

The clamping wedge D has an inclined surface d' adapted to fit against the inclined or wedge shaped rear portion B'' of the furniture shank B as shown.

From the above it will be seen that four inclined or wedge shaped frictional surfaces are employed in my improved device, namely, the interior wedge shaped or inclined surface
85 α of the upright base portion A', the front inclined or wedge shaped surface B' of the shank B, the rear inclined or wedge shaped surface B'' of said shank, and the interior inclined or wedge shaped surface d' of the
90 clamping wedge D as fully shown in Fig. 3. It will thus be seen that I do not depend on simply two inclined faces to secure the furniture shank to the base portion, but depend on twice the number, or four, inclined or
95 wedge shaped surfaces to effect the result of positively securing the furniture shank to the upright of the base portion by which I am enabled to secure the parts together without danger of sagging when a downward pressure
100 is brought to bear on the seat or other furniture. In this manner I obtain a most strong

and positive frictional holding device which is capable of a most nice vertical adjustment to any desired height without the need of cogs, grooved bars, pawls or other interlocking devices.

Having thus fully described the nature, construction, and operation of my invention, I wish to secure by Letters Patent and claim—

1. An adjustable support for school or other furniture consisting of a base portion having an interior inclined or wedge shaped surface, a vertically slotted and vertically adjustable furniture shank having on one side an inclined or wedge shaped surface adapted to fit the said interior inclined surface of the base portion and provided on its opposite side with a similar inclined or wedge shaped surface, a movable outer wedge or clamping bar having an inclined or wedge shaped surface adapted to fit against the adjacent inclined surface of the shank opposite the point where said shank bears against the base, and a screw bolt passed through said wedge and base and through the vertical slot of the intermediate furniture shank and provided on one end with a head and on the other end with a nut, substantially as and for the purpose set forth.

2. An adjustable support for school or other furniture, consisting of a base portion having an interior inclined or wedge shaped surface, a vertically adjustable furniture shank provided with a vertically elongated slot, the opposite sides of said shank being formed with inclined or wedge shaped surfaces one of which is adapted to fit against the said interior inclined surface of the base portion, a movable outer wedge or clamping bar having its lower end pivotally supported on one side of the base portion and the inner surface of said wedge or bar being inclined or wedge shaped to fit against the adjacent inclined surface of the furniture shank, and a headed screw bolt passed through said movable wedge and through the base portion and the vertical slot of the furniture shank and provided with a nut, substantially as shown and described.

In testimony whereof I have signed my name to this specification, in the presence of two subscribing witnesses, on this 6th day of February, A. D. 1895.

ALBAN ANDRÉN.

Witnesses:

WINTHROP L. MALOON,
HOLTEN B. PERKINS.