

No. 756,486.

PATENTED APR. 5, 1904.

A. FLEMING.
ADJUSTABLE SUPPORT.
APPLICATION FILED AUG. 15, 1902.

NO MODEL.

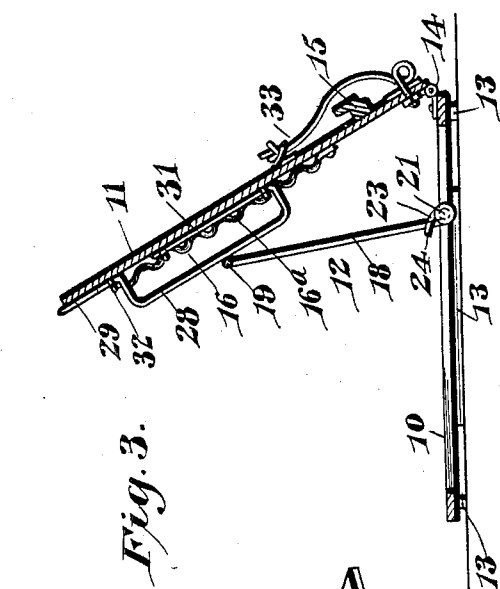


Fig. 3.

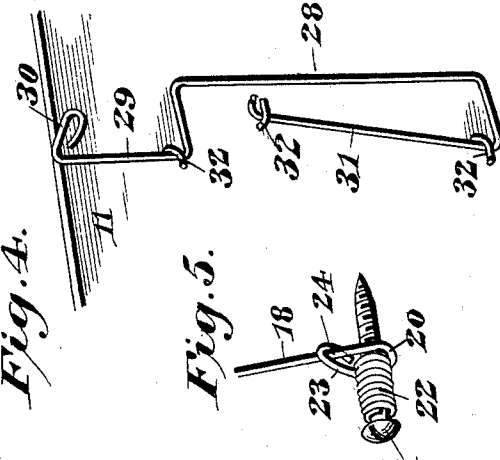


Fig. 4.

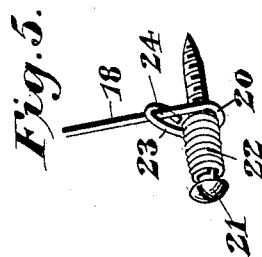


Fig. 5.

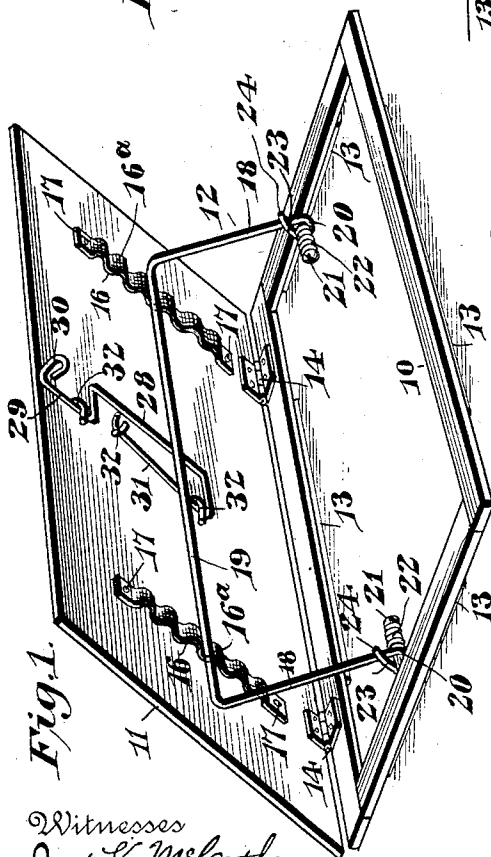


Fig. 1.

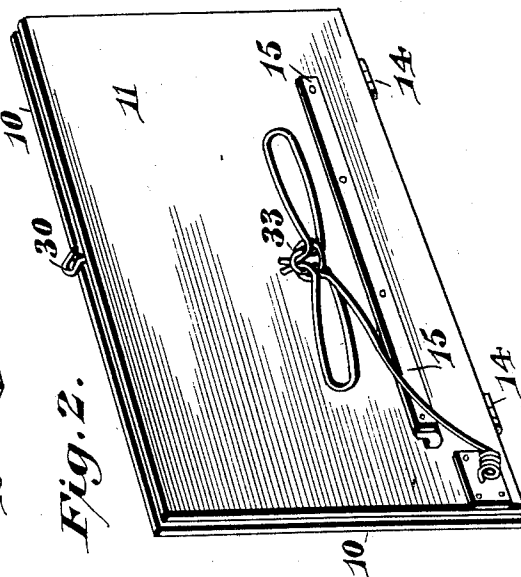


Fig. 2.

Witnesses
Jas. E. McLaughlin
Bl. Leter

Andrew Fleming, Inventor

By

E. G. Siggers

Attorney

UNITED STATES PATENT OFFICE.

ANDREW FLEMING, OF BROOKLYN, NEW YORK.

ADJUSTABLE SUPPORT.

SPECIFICATION forming part of Letters Patent No. 756,486, dated April 5, 1904.

Application filed August 15, 1902. Serial No. 119,784. (No model.)

To all whom it may concern:

Be it known that I, ANDREW FLEMING, a citizen of the United States, residing at Brooklyn, in the county of Kings and State of New York, have invented a new and useful Adjustable Support, of which the following is a specification.

In a patent granted to me on August 5, 1902, and numbered 706,228 there is illustrated and described a novel adjustable support for books, papers, and the like and a clamp or leaf-holder for fastening said books and papers thereon. The claims in the aforesaid patent cover only the construction of the leaf-holder, and the claims upon the adjustable support were required to be divided out.

The present invention relates to the adjustable support set forth and claimed in the original application, the object being to provide novel means whereby a platform, rack, or the like support may be adjusted to different inclinations and automatically locked and held in the desired position and without the necessity of manually operating the holding device.

An additional feature is also incorporated in the present case—namely, means of a simple character for moving the locking device to an inoperative position, so that the adjustment of the support is made much more easily and is noiseless.

A construction embodying these several features is illustrated in the accompanying drawings and described in the following specification; but it will be apparent upon an inspection of the claims hereto appended that this construction is open to various changes and modifications.

In the drawings, Figure 1 is a perspective view of the rear of the support. Fig. 2 is also a perspective view showing the support when folded. Fig. 3 is a vertical sectional view through the structure when in the position shown in Fig. 1, the holding device, however, being moved to an inoperative position. Fig. 4 is a detail perspective view, on an enlarged scale, of the actuating means for the holding device. Fig. 5 is a detail perspective view of one of the pivots.

Similar numerals of reference designate cor-

responding parts in all the figures of the drawings.

The device as shown comprises a base member 10, to which is pivotally connected a supporting member 11, that is arranged to be held at different inclinations with respect to the base member by means of a holding device, designated as a whole by the reference-numeral 12. The base member 10 is preferably in the form of an open rectangular frame, which may be supported upon rubber feet 13. One edge of this frame is pivoted, by means of the hinges 14, to the supporting member 11. This supporting member in the present instance consists of a rectangular platform, having a ledge 15 extending longitudinally of the same contiguous to its lower end. It is provided upon its rear face with a series of transversely-disposed shoulders, which are preferably formed by means of a pair of rack-bars 16, that are corrugated and secured at their ends by pins 17. If desired, these bars may be covered with sound-deadening material 16^a. Coacting with the shoulders is the holding device 12, secured to the base member, and preferably constructed in the following manner: A rectangular bail consisting of side arms 18, connected by a cross-bar 19, is provided at its ends with eyes 20, through which are passed stationary pivot-pins 21, that engage in the opposing inner edges of the end bars of the base. The cross-bar 19 is arranged to engage in the corrugations of the rack-bar 16, as clearly shown in Fig. 1. For the purpose of urging said bar into such engagement coiled springs 22 surround the pivot-pins 21 and have offset arms 23, the terminals of which are provided with hooks 24, that engage the side arms 18 of the bail and urge said bail in the direction of the platform, and thus into engagement with the rack-bar. This bail is made of suitable size, so that it can be folded snugly within the base-frame, and thus permit the compact folding of the device. Means are also employed for moving the cross-bar 19 of the bail to an inoperative position. This means consists of a single wire journaled upon the central portion of the rear face of the supporting member 11. This wire has an offset

portion 28, forming a slide-bar, that is arranged to engage the cross-bar 19 when elevated. One end of the wire extends to the upper edge of the member 11, constituting an actuating-stem 29, the outer terminal being bent at right angles thereto and constituting a finger 30. This finger is arranged in a plane at right angles to the offset portion 28 and forms a latch arranged to engage over the free edge of the base member when the two are folded together, as shown in Fig. 2. The other end of the wire is bent within the offset portion and is secured out of alinement with the journals, forming a spring-arm 31, which normally holds the offset portion flat against the under face of the platform 11, and consequently maintains the latch 30 in its projected or operative position. The journals for the wire are in the form of hooks 32, as is also the securing device for the free end of the spring-arm, this arm maintaining the wire in the journals, as will be readily understood. Upon the front portion of the platform is arranged a leaf-holder 33, which is shown as secured to one of the lower corners of the platform, though it may be arranged in any manner desired. This leaf-holder forms the subject-matter of the above-mentioned Patent No. 706,228, and no detailed description is considered necessary regarding the same.

The operation of the device will be readily apparent. Assuming that it is in folded position, it is only necessary to disengage the base from the latch, place it upon a desk, table, or other support, and draw upwardly upon the platform. As said platform is raised from the base the springs bearing against the holding device will keep the same in engagement with the rack, which will ride over and drop behind the shoulder. When the desired adjustment has been reached, said springs will hold the device behind the proper shoulders and there is no danger of retrograde movement on the part of the platform. To lower the platform, it is only necessary to grasp the finger or latch 30 and turn the same, thus raising the slide-bar, which in turn will disengage the bail from the shoulders. With the bail in this position the platform may be freely moved in either direction and again locked by permitting the slide-bar to assume its inoperative position. There are distinct advantages for the construction set forth. In the first place the means for holding the bail or locking device in its operative position is very simple and is so arranged that the two members may be folded compactly together. Then, again, the means for moving the holding device to an inoperative position is a very important feature, as it permits the noiseless adjustment of the parts, and it is apparent that it can be manufactured at a very slight expense.

From the foregoing it is thought that the construction, operation, and many advantages

of the herein-described invention will be apparent to those skilled in the art without further description; and it will be understood that various changes in the size, shape, proportion, and minor details of construction may be resorted to without departing from the spirit or sacrificing any of the advantages of the invention.

Having thus described my invention, what I claim as new, and desire to secure by Letters Patent, is—

1. In a support of the class described, the combination with a base comprising a rectangular open frame, of a supporting-platform pivoted to the frame, a rack-bar secured to the rear face of the platform, a pair of stationary pivot-pins located upon the opposing inner edges of the base-frame, a holding device comprising a pair of side arms journaled upon the pins and connected by a cross-bar that engages the rack, said holding device fitting within the base-frame, and coiled springs surrounding and supported by the stationary pivot-pins, said springs having offset arms that bear against the arms of the holding device to maintain the cross-bar in engagement with the rack.

2. In a support of the class described, the combination with relatively movable members, one of which is provided with a shoulder, of a holding device mounted upon the other member and arranged to engage the shoulder, and actuating means separate from the holding device and mounted upon the member having the shoulder, said means being movable into and out of engagement with the holding device to move the same out of engagement with the shoulder.

3. In a support of the class described, the combination with members hinged together, one of which is provided with a shoulder, of a holding device pivoted upon the other member and arranged to engage the shoulder, and an actuating device separate from the holding device and pivoted to the member having the shoulder, said actuating device being movable into engagement with the holding device to move the latter out of engagement with the shoulder.

4. In a support of the class described, the combination with relatively movable members, one of which is provided with a rack, of a holding device pivotally mounted upon the other member and engaging the rack, and a slide-bar journaled at its ends upon the member having the rack and movable into a position to engage the holding device and maintain it out of engagement with the rack, said slide-bar being movable upon the holding device.

5. In a support of the class described, the combination with relatively movable members, of a holding device movably mounted on one of the members for securing said members against relative movement in one direc-

tion, and a slide-bar journaled upon one of the members and mounted to swing into engagement with the holding device to move the same to an inoperative position, said holding device being slidable upon the bar.

6. In a support of the class described, the combination with relatively swinging members, one of which has a plurality of shoulders, of a holding device hinged to the other member and movable into engagement with the shoulders to hold the members against relative movement in one direction, and a slide-bar journaled upon one of the members and arranged to swing into engagement with the holding device to move the same into inoperative position with relation to the shoulders, said holding device being slidable on the bar.

7. In a support of the class described, the combination with relatively movable members, of a holding device arranged to hold the members against movement, and means for moving the holding device, said means comprising a single wire one portion of which is offset to form a slide-bar, said wire being journaled at the opposite ends of the offset portion to one of the members, one end constituting a handle, the other end being bent within the offset portion and secured out of alignment with the journals thereof.

8. In a support of the class described, the combination with relatively movable members, of a rack carried by one member, a holding device carried by the other member and movable into engagement with the rack, a slide-bar mounted upon one of the members and arranged to move the holding device out of engagement with the rack, and an offset finger secured to the slide-bar and constituting a latch to hold the members together.

9. In a support of the class described, the combination with relatively swinging members hinged together, of a holding device for maintaining the members in angular relation, means secured to one of the members for moving the holding device to an inoperative position to permit the swinging of the members, said means including a handle portion that projects from the free edge of one member and is arranged to engage over the corresponding edge of the other member to fasten said members together.

In testimony that I claim the foregoing as my own I have hereto affixed my signature in the presence of two witnesses.

ANDREW FLEMING.

Witnesses:

C. A. WACHTER,
ALBERT S. BLAKELEY.