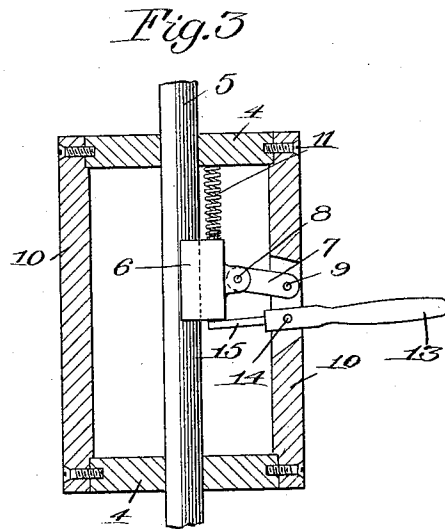
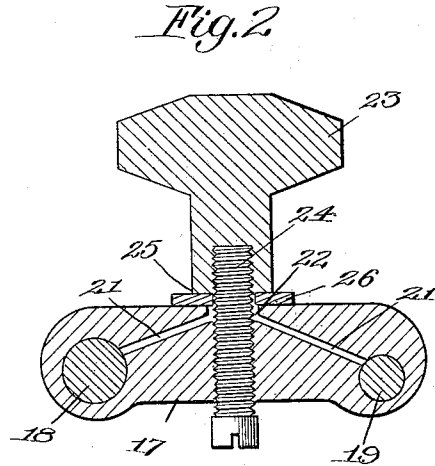
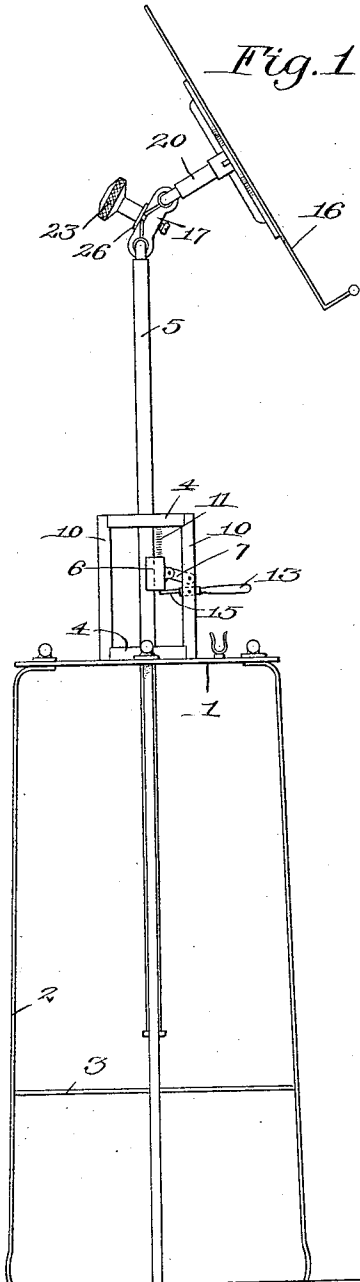


C. J. MILLER.
SUPPORTING STAND.
APPLICATION FILED MAR. 28, 1912.

1,052,741.

Patented Feb. 11, 1913.



Witnesses

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CHRISTOPHER JOHN MILLER, OF ROCHESTER, NEW YORK.

SUPPORTING-STAND.

1,052,741.

Specification of Letters Patent.

Patented Feb. 11, 1913.

Application filed March 28, 1912. Serial No. 686,781.

To all whom it may concern:

Be it known that I, CHRISTOPHER J. MILLER, of Rochester, in the county of Monroe and State of New York, have invented a new and useful Improvement in Supporting-Stands, which improvement is fully set forth in the following specification and shown in the accompanying drawings.

The present invention relates to supporting stands for sheet music, books and other articles which are required to be supported at different heights and at different angles, and an object of the invention is to provide a construction in which the supported part may be raised or lowered and adjusted angularly by the manipulation of a single controlling member without interfering with the rough adjusting device for vertical adjustment.

Another object of the invention is to provide a device for effecting the vertical adjustment but permitting the supported part to be rotated.

Still other objects of the invention are to provide simple and inexpensive adjusting means for effecting the above results.

To these and other ends the invention consists in certain parts and combinations of parts all of which will be hereinafter described, the novel features being pointed out in the appended claims.

In the drawings: Figure 1 is a side view of the present invention embodied in a music stand; Fig. 2 is a sectional view of the device for effecting the angular and vertical adjustment of the supported part; and Fig. 3 is a vertical section of the device for effecting a rough vertical adjustment and permitting the rotation of the supported part.

According to this invention, there may be provided a base member comprising a platform 1 having three or more legs 2 connected by tie pieces 3. The platform 1 may be provided with a guide member in the form of an uprighted rectangle, the opposite or upper and lower arms 4 of which are provided with alined guide openings through which operates a supporting rod 5 which preferably is of circular cross section.

Between the guided parts 4 operates a gripping member 6 preferably in the form of a clutch block having a concave gripping face conforming to the surface of the rod 5. This block is preferably supported by a link 7 which is pivoted at 8 to the block 6 and at 9 to the upright 10 of the guide member, the

link being mounted in such a manner that when the block 6 swings downwardly it is forced against the rod 5 and in turn forces the latter against the walls of its guide openings, thus frictionally holding the rod 5 against downward vertical movement. This gripping action is materially increased owing to the fact that the gripping member 6 coöperates with the guide rod between the two guide openings which in turn provide two spaced gripping surfaces. Preferably a helical spring 11 is arranged between the block 6 and the upper guide 4 in order to hold normally the block 6 in engagement with the rod 5. Disengagement of the block 6 may be effected by a hand lever 13 which is pivoted at 14 to the upright 10 and has its inner end 15 loosely coöperating with the under side of the block 6. The spring serves to over-balance the action of the outer end of the lever 13 as the latter would otherwise have a lifting action on the block 6.

Arranged at the upper end of the rod 5 is the supported part 16 which, in this instance, is in the form of a music holder having a forwardly-turned flange at its lower end to act as a rest. The lower adjusting device serves for the rough vertical adjustment of the supported part 16, and between the supported part 16 and the rod 5, there may be provided an adjusting device which has the dual function of effecting the angular adjustment of the supported part and also the fine vertical adjustment, both of the adjustments being effected by the operation of a single controlling member. In this instance, this device comprises a link member 17 preferably formed from a single piece of metal having more or less resiliency. This link is provided at opposite ends thereof with circular openings or bearings receiving respectively a laterally-turned pivot 18 on the rod 5 and a laterally turned pivot 19 projecting from a post 20 on the rear or underside of the supported part 16. The link 17 may also be provided with two slots 21 opening at a common point 22 at one side of the link and each extending through and communicating with the circular openings or bearings in which the pivots 18 and 19 turn. This construction forms out of the link 17 a pair of clamping devices, the portions of the link on opposite sides of the slots 21 providing spring clamping jaws. These jaws have a common controlling member preferably in the form of a hand piece 23

provided with a screw portion 24 which operates within an internally threaded bore extending transversely of the link 17 between the pivots 18 and 19, one end of the
 5 bore opening at the point 22 between the ends of the jaws. The common controlling member may also be provided with an annular shoulder 25 which directly, or through the medium of a washer 26, controls the position of the clamps by engagement with
 10 those portions of the link 17 in proximity to the point 22 or, in other words, by engagement with the free ends of the movable clamping jaws of the link.

15 In the use of this device, the supporting part 16 is elevated or depressed approximately to the proper height by pressing downwardly on the outer end of the lever 13, causing the raising of the block 6 thus
 20 freeing the rod 5. Then the hand piece 23 of the controller is operated to reduce the frictional engagement between the link 17 and the pivots 18 and 19, after which the supported part 16 may be adjusted angularly and raised or lowered by a slight degree for fine adjustment. When the proper
 25 position of the support 16 is obtained, the hand piece 23 is manipulated to operate the link clamps and hold such supported part in its adjusted position.

30 The rough adjusting device for vertical adjustment is of simple construction and it permits the guide members 4 to be utilized in the clamping action, owing to the fact
 35 that the clamping or clutch block 6 operates between them. The clutch block also permits the standard 5 to be rotated without any manipulation of said block as the surfaces of the supporting rod and the block
 40 conform one to the other and thus permit such rotation while preventing the lowering

of the rod. The combined angular and fine adjusting device is of simple construction and requires but a single controlling member.

What I claim as my invention and desire to secure by Letters Patent is:

1. In a stand of the class described, the combination with two bars having openings therein, of a clutch block arranged between
 50 the bars to engage the rod, and a link pivoted at one end to a fixed part and at the other end to the clutch block.

2. In a stand of the class described, the combination with an upright provided with
 55 a cylindrical pivot, a supported member provided with a cylindrical pivot, and integral metallic member having cylindrical bearings cooperating with the pivots and also having a slot leading from each of
 60 said bearings to one side of the member to provide integral spring clamps, and a controller having connection with said member and cooperating with the ends of the clamps.

3. In a stand of the class described, the combination with an upright provided with
 65 a pivot and a supported member provided with a pivot, of an integral metallic member having two bearings cooperating with the pivots and also having slots each leading
 70 from one of said pivots to one side of the member to provide two integral spring arms, and a controller having screw threaded engagement with the member between
 75 the ends of the arms and having a surrounding shoulder for cooperating with both arms to clamp the pivots.

CHRISTOPHER JOHN MILLER.

Witnesses:

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