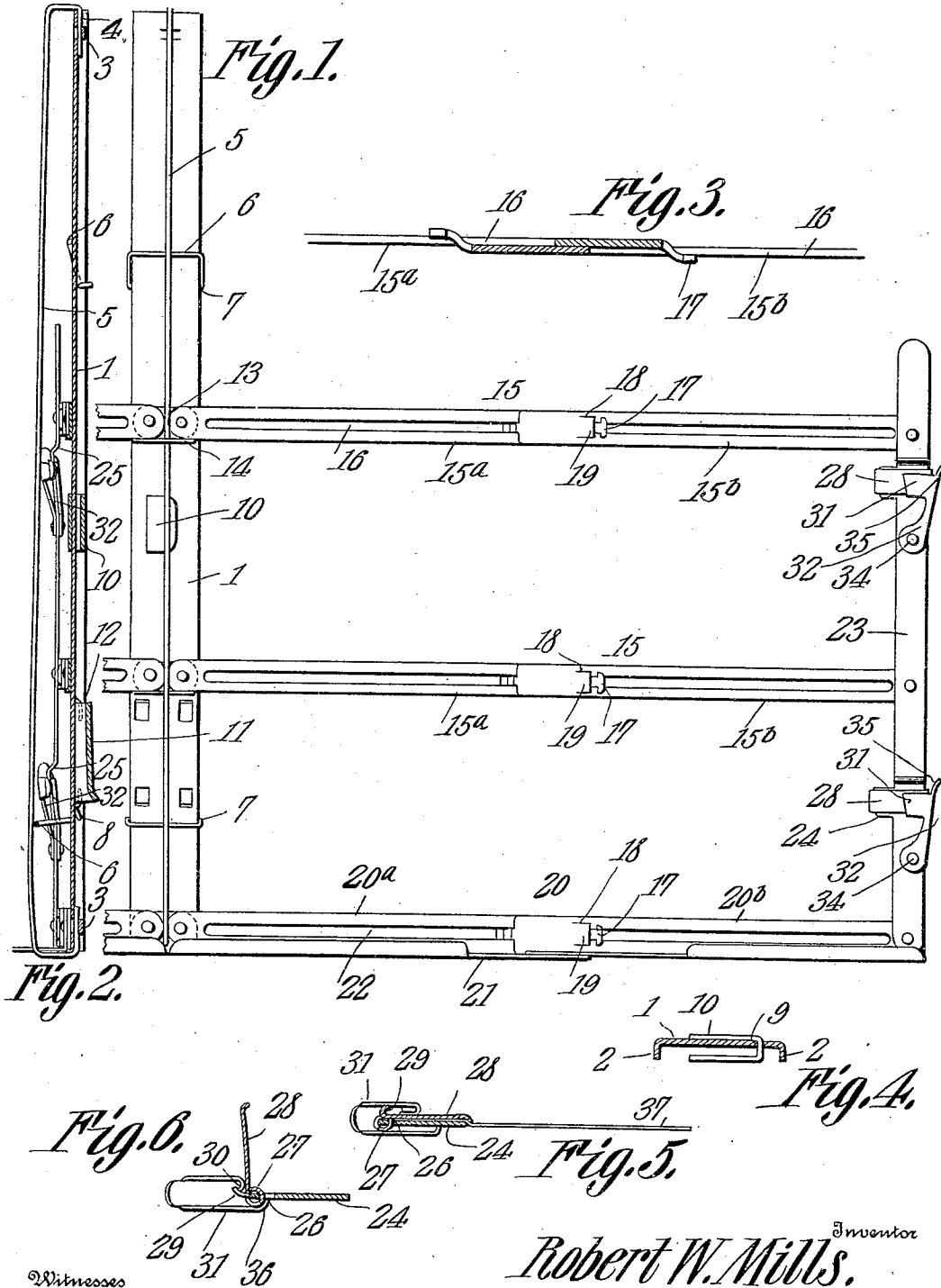


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MUSIC RACK.
APPLICATION FILED MAR. 8, 1909.

943,091.

Patented Dec. 14, 1909.



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MUSIC-RACK.

943,091.

Specification of Letters Patent.

Patented Dec. 14, 1909.

Application filed March 8, 1909. Serial No. 482,028.

To all whom it may concern:

Be it known that I, ROBERT W. MILLS, a citizen of the United States, residing at Chicago, in the county of Cook and State of Illinois, have invented a new and useful Music-Rack; of which the following is a specification.

This invention relates to music racks of that type designed to be folded, and it is more particularly an improvement upon the rack described and claimed in Patent No. 696,993, issued to me on April 8th, 1902.

The object of the invention is to provide a rack consisting of pivotally connected main and transverse strips, said transverse strips being adjustable or extensible longitudinally and each consisting of slidably connected sections assembled in a novel manner.

Another object is to provide a rack having a music-supporting ledge designed to fold therewith, there being clips of novel form for securing music sheets upon the rack, said clips being capable of use in connection with either quarto or octavo sheets of music.

Another object is to provide a rack which can be folded into a compact bundle and the parts of which cannot become accidentally disconnected and which does not require the use of any special tools for the purpose of locking or unlocking the parts.

With these and other objects in view the invention consists of certain novel details of construction and combinations of parts hereinafter more fully described and pointed out in the claims.

In the accompanying drawings the preferred form of the invention has been shown.

In said drawings:—Figure 1 is a front elevation of a portion of a rack embodying the present improvement. Fig. 2 is a central longitudinal section through the middle main member of the rack. Fig. 3 is a longitudinal section through the interlocking portion of the two sections of one of the transverse portions. Fig. 4 is a transverse section through the main strip of the rack and showing the U-shaped clip carried thereby. Fig. 5 is an enlarged longitudinal section through the clip used at the side of the rack. Fig. 6 is a similar view showing the clip open.

Referring to the figures by characters of reference 1 designates the central main strip of the rack, the same being provided with longitudinal flanges 2 extending rearwardly

from the edges thereof. Loops 3 are struck rearwardly from the end portions of the strip 1 and constitute retainers for the intumed terminal portions 4 of a retaining wire 5. This wire extends longitudinally along the front portion of the strip 1 and is spaced therefrom, there being bail-shaped clips 6 cooperating with the wire for securing sheets of music in position upon the rack. Each of these clips 6 embraces the strip 1 and has intumed portions 7, the terminals of which extend at angles to the planes occupied by the clips as indicated at 8 in Fig. 2, these terminals constituting stops for limiting the swinging movement of the clips with relation to the strip 1. It will be seen, by referring to Fig. 2, that these terminal portions 8 bear against the rear face of the strip 1 when the clip 6 assumes a position substantially perpendicular to the strip 1 and in frictional engagement with the wire 5. Preferably two of these clips are utilized, one being arranged adjacent each end of the strip 1.

At a point between the clips 6 a longitudinal slot 9 may be formed, said slot holding a substantially U-shaped plate 10, also constituting a clip, the intermediate or crown portion of the plate being slidably mounted within the slot and the front portion of said plate normally resting by gravity upon the corresponding face of the strip 1. This clip has been shown in Figs. 1, 2 and 4.

An arched plate 11 may be secured to the back face of strip 1 near the bottom thereof, the same being preferably retained by means of ears 12 struck rearwardly from the strip 1 and lapping opposite ends of the plate 11. This plate is designed to receive the upper end of a stand used for supporting the rack.

Secured to the front face of strip 1 are bearing plates 13, each of which is provided at its lower edge with a supporting ledge 14. Pivotally mounted upon each of these bearing plates are oppositely extending rack members 15, each of which consists of an inner strip 15^a and an outer strip 15^b. Each of these strips has a longitudinal slot 16 designed to receive a T head 17 formed at one end of the other strip. In order to permit the insertion of these heads into the slots, each slot has an enlarged end 18 formed by striking a tongue 19 outwardly from the strip. The heads 17 can therefore be inserted through these enlarged portions of the slots and then shifted into the smaller

or contracted portions thereof, after which the tongues 19 can be pressed backward into the openings 18 and separation of the two strips 15^a and 15^b is thus positively prevented. The lower oppositely extending rack members 20 are similar in construction to the members 15 with the exception that the two strips 20^a and 20^b of each of said members 20 are provided with integral forwardly extending ledges 21, having at their front edges upstanding flanges 22. These ledges are designed, when the rack is extended, to support the sheets of music. These ledges do not extend throughout the length of the respective strips 20^a and 20^b, but are so proportioned as to permit the strips to be slid together, the ledge of one strip assuming a position upon the ledge of the other strip.

The outer ends of the strips 15^b and 20^b are pivotally connected to end main strips 23, provided, at points between said strips 15^b and 20^b, with inwardly extending ears 24, those portions of the strips 23 from which the ears extend being preferably struck forward as indicated particularly at 25 in Fig. 2. A slot 26 is formed within the strip 23 adjacent each ear 24, and pivotally mounted within this slot is a rolled ear 27 formed at one end with a clamping plate 28. This clamping plate is slightly longer than the ear 24 so as to lap the end thereof as shown in Fig. 5, and a hooked stud 29 is struck forwardly from the plate 28 adjacent the pivot end thereof. This stud is disposed in the path of an ear 30 extending inwardly from one terminal of a U-shaped clip 31, so proportioned as to embrace and slide upon the strip 23 and the plate 28. This clip is formed at one end of a lever 32 which is pivotally mounted upon the strip 23 as indicated at 34, and a finger-piece 35 extends upwardly from the lever to facilitate the actuation thereof.

As shown especially in Figs. 5 and 6, an ear 36 is preferably extended inwardly from the clip and toward the ear 30, said ear 36 constituting a stop designed to move against the rolled ear 27 to limit the swinging movement of the clip in an outward direction. In Fig. 6 the positions of the parts when the clip is open have been illustrated.

It is of course to be understood that when the rack is not in use the same can be folded into a compact bundle by sliding the strips 15^b and 20^b toward the central main strip 1, so as to reduce the length of the rack portions 15 and 20 to approximately one half of the length assumed by them when the rack is extended. Said members 15 and 20 can then be swung upwardly on to the central main strip 1.

When it is desired to use the rack the foregoing operation is reversed and the members 15 and 20 will be supported at right angles

to the strip 1 by the ledges 14. If large, or quarto sheets of music are placed on the rack the middle or creased portions thereof are placed beneath the wire 5 and the clips 6 are swung upwardly so as to press the sheets against the wire. In Fig. 2 the lower clip 6 has been shown in such position. The end strips 23 are then adjusted toward or away from the corresponding edges of the sheet and the levers 32 are swung outwardly so as to cause the ears 30 thereof to engage and pull backwardly on the stud 29 extending from the plates 28. Said plates will therefore be swung open as shown in Fig. 6, and the edges of the sheet can be caused to assume positions upon the ears 24. The plates 28 may then be clamped upon the edge portions of the sheet by reversing the movement of lever 32 so as to cause the ear 30 to push the plates 28 back into position upon the sheet, so as to clamp said sheet against the ears 24 as indicated in Fig. 5. In said figure a sheet of music has been indicated at 37.

Should it be desired to secure an octavo sheet or a sheet of band size upon the rack one edge of the sheet may be secured between the clip 6 and the wire 5 in the manner hereinbefore described, or, if preferred, the clips 6 can be folded against the strip 1 and said edge inserted under the outer portion of the U-shaped clip 10. The other or opposite edge of the sheet can then be placed in engagement with the clips mounted on the end strips 23, it of course being necessary to adjust the said strip 23 toward the sheet, to permit the edge of the sheet to assume a position between the ears 24 and the plates 28.

It is of course to be understood that various changes may be made in the construction and arrangement of the parts without departing from the spirit or sacrificing the advantages of the invention.

What is claimed is:—

1. In a music rack the combination with main strips, of rack members connected thereto and each consisting of longitudinally slotted strips, each strip having a head at one end and slidably mounted in the slot of the other strip, each slot having an enlarged end portion for the reception of the head, there being a tongue integral with the strip for normally closing the enlarged portion of the slot.

2. In a music rack the combination with central and end main strips and collapsible pivoted connections there-between; of a longitudinally extending retaining device carried by the central strip, and a clip pivotally mounted upon said central strip and shiftable into contact with the retaining device, said clip having means integral therewith and cooperating with the main strips to limit the movement of the clip.

3. In a music rack the combination with central and end main strips and pivoted extensible connections there-between, of a longitudinally extending yieldable retaining member carried by the central strips, a bail-like clip straddling and pivotally engaging the central strips and movable against the retaining device, and means integral with said clip and cooperating with the main strip for limiting the swinging movement of the clip with relation to the main strip.

4. In a music rack the combination with central and end main strips and connections there-between, of a clamping plate pivotally mounted upon the end strip and having an outstanding portion, a lever pivotally mounted upon the end strip, and a U-shaped clip embracing said strip and plate and having an inwardly directed portion in the path of said projection and cooperating therewith to transmit motion to the clamping plate.

5. In a music rack the combination with central and end strips and extensible pivoted connections there-between; of a clamping plate pivotally mounted upon the end strip and having an outstanding projection, a lever pivotally mounted upon the end strip, and a U-shaped clip carried by the lever and having inturned terminal portions, said portions cooperating with the projecting device to swing the clamping plate upon its lever, the pivot end of said plate projecting into the path of the other end portion of the clip and constituting a stop therefor.

6. In a music rack the combination with central and end strips and extensible pivoted connections there-between, of a longitudinally extending yieldable retaining device upon the central strip, bail-like clamping devices pivotally mounted upon said strip and shiftable against the retaining device, and means upon the end strip and cooperating with said retaining and clamping devices for holding a sheet upon the strips, said means comprising a pivoted clamping plate, a lever, a clip movable with the lever and having inturned terminal portions, and means upon the plate and projecting into the path of one of said terminal portions for transmitting motion from the clip to the plate.

7. In a music rack the combination with central and end strips and connections there-between, of a clamping plate pivotally mounted upon the end strip, a lever upon said strip, a U-shaped clip carried by the lever for straddling the strip and clamping plate, said clip having an inturned terminal, and means upon the clamping plate and projecting into the path of said terminal for transmitting motion to the plate from the clip.

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

ROBERT W. MILLS.

Witnesses:

A. N. FIELDS,
A. L. WILLIAMS.