No. 696,993. Patented Apr. 8, 1902.

R. W. MILLS.

MUSIC RACK.

Application filed Feb. 6, 1900.

(No Model.) 2 Sheets—Sheet 1.

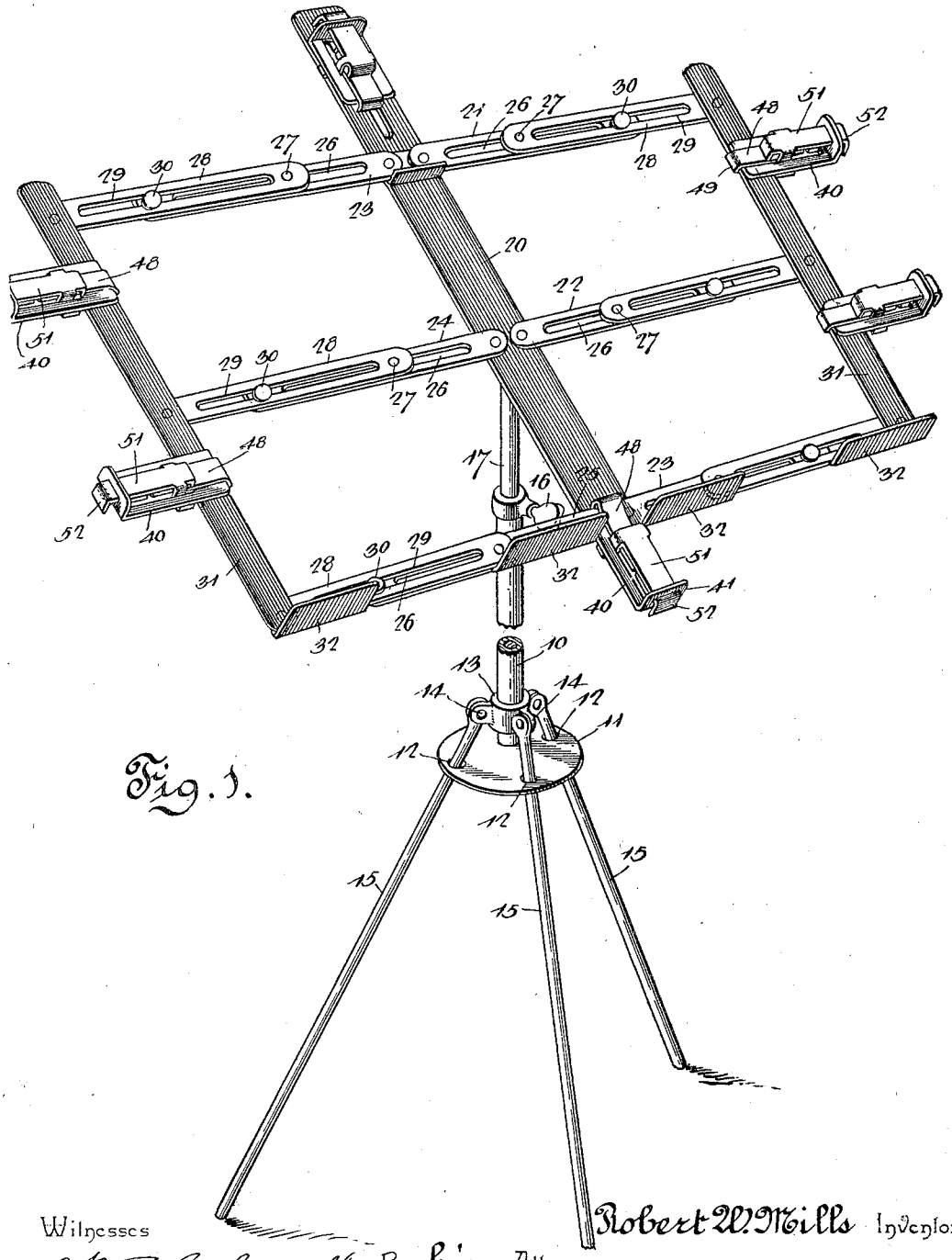


Fig. 1.

Witnesses
J. Faufelenwell.
Geo. H. Chamelee.

Robert W. Mills Inventor
By his Attorneys,
C. A. Snow & Co.

THE NORRIS PETERS CO., PHOTO-LITHO., WASHINGTON, D. C.

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R. W. MILLS.

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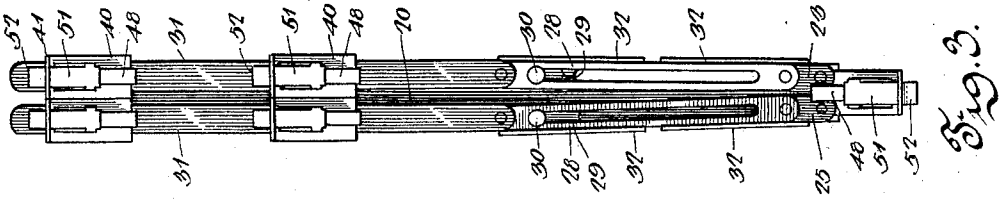


Fig. 3.

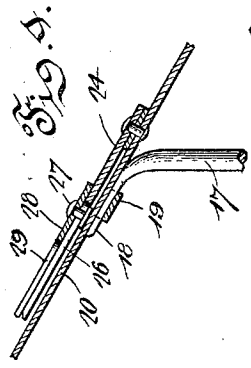


Fig. 4.

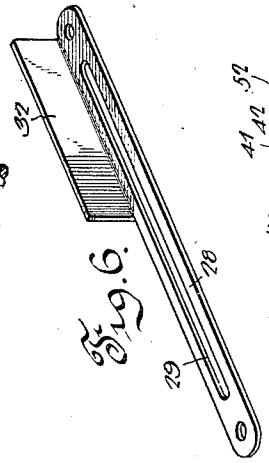


Fig. 6.

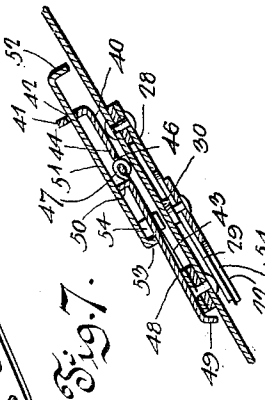


Fig. 7.

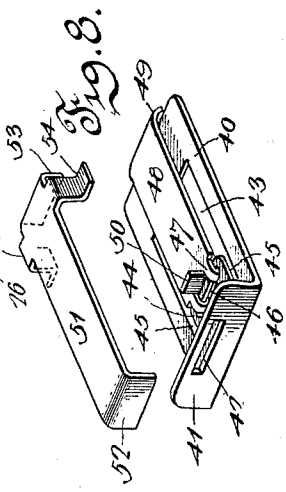


Fig. 8.

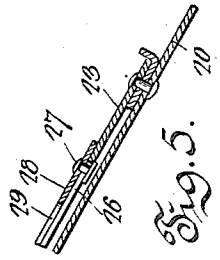


Fig. 5.

Fig. 2.

Witnesses
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THE NORRIS PETERS CO., PHOTO-LITHO., WASHINGTON, D. C.

UNITED STATES PATENT OFFICE.

ROBERT WILLIAM MILLS, OF BENTON HARBOR, MICHIGAN.

MUSIC-RACK.

SPECIFICATION forming part of Letters Patent No. 696,993, dated April 8, 1902.

Application filed February 6, 1900. Serial No. 4,230. (No model.)

To all whom it may concern:

Be it known that I, ROBERT WILLIAM MILLS, a citizen of the United States, residing at Benton Harbor, in the county of Berrien and State of Michigan, have invented a new and useful Music-Rack, of which the following is a specification.

This invention relates to music-racks in general, and more particularly to the class of portable racks.

The object of the invention is to provide a structure which may be readily and quickly folded and unfolded and which when folded will occupy a small space and when unfolded or set up will be rigid.

A further object of the invention is to overcome the necessity of the numerous set-screws usually employed for holding the parts in their adjusted positions and also to provide means for holding the music upon the rack and for permitting adjustment of the holding portion of the rack to receive sheets of various sizes.

In the drawings forming a portion of this specification, and in which similar numerals of reference designate like and corresponding parts in the several views, Figure 1 is a perspective view of the complete music-rack in its operative position, a portion of the stand being broken away. Fig. 2 is a plan view showing the music-holding portion of the rack with its slidable sections moved inwardly and one of the side parts moved in the direction to fold it against the central portion. Fig. 3 is an elevation showing the music-holder in its folded position. Fig. 4 is a detail sectional view of a portion of the central plate or part of the music-holder and illustrating the attachment of a slidable member thereto and the mutual engagement of the slidable members. Fig. 5 is a detail sectional view showing the attachment of one of the slidable elements to the central plate at a different point thereof. Fig. 6 is a perspective view showing one of the slidable elements of the music-holder having a support thereon. Fig. 7 is a detail longitudinal section taken through one of the music-clips in its folded position and through the parts folded therebeneath. Fig. 8 is a perspective view showing the parts of the music-clip disassembled.

Referring now to the drawings, the present structure comprises, primarily, a stand and a music-holder attached removably thereto, said stand including a tubular stem 10, to the lower end of which is fixed a disk 11, having three or more mutually-equidistant perforations 12 adjacent its periphery. Upon the stem 10 and above the disk 11 is a collar 13, having radially-extending ears 14, to which are pivoted rods 15, passed downwardly and through the perforations 12. The radius of the circle including the pivotal connections of the rods 15 with the ears 14 is much less than the radius of the circle including the perforations 12, and thus as the collar 13 is reciprocated upon the stem 10 the rods 15 will be similarly moved through the perforations 12 and the lower ends or feet of the rod will be moved toward and away from each other.

When the collar 13 is moved downwardly of the stem 10, the rods 15 are moved through the perforations and their lower ends are moved from each other, the result being that the outer edges of the perforations will impinge the outer faces of the rods, and if downward pressure be then applied to the stem the displacement of the lower ends of the rods will be such as to prevent inward movement thereof, and in consequence the stem will be supported. If, however, the collar 13 is moved upwardly to a sufficient extent, the stem may then be pressed downwardly and the lower ends of the rods will move inwardly to permit the disk 11 to move downwardly thereof, and thus fold the stand.

The stem 10 has a set-screw 16 engaged with its upper portion, and which set-screw is adapted to impinge a rod 17, slidably disposed in the stem 10. This rod 17 has its upper end 18 flattened and turned at an angle to enter beneath a strap 19 upon the rear face of the central plate 20 of the music-holding portion of the rack.

The music-holder of the rack comprises similar members 21, 22, 23, 24, and 25, that are pivoted to the plate 20 at suitable points thereof, and which members are oppositely disposed in pairs, the members 21 and 23, 22 and 24, and 23 and 25 being adapted to alternately aline transversely of the plate 20 and to lie upon said plate. Each of these pivoted members has a longitudinal slot 26, with which is engaged a pin 27 at one end of a

similar member 28, having also a longitudinal slot 29, with which is engaged a headed pin 30 upon the outer end of its respective first-named member, whereby these members that are thus slidably connected may be distended or drawn inwardly under conditions hereinafter explained.

To the outer ends of the members 28 at each side of the plate 20 is pivoted a second plate 31, these plates 31 being adapted to lie at all times parallel and to hold the pairs of slidably-connected members in similar mutual relation, these plates 31 being also adapted to lie above the plate 20 when the holder is folded.

In order to support the sheets of music upon the holder, the members 23 and 25, as also the members 28, which are slidably connected therewith, are provided with outwardly-extending flanges 32 at their lower edges, these flanges having the same functions as the ordinary and similar flanges upon the usual music-racks.

In order to prevent displacement of the music-sheets from the flanges 32, a number of clips are mounted upon the plates 20 and 31, these clips upon the plates 31 having any suitable number, while the clips upon the plates 20 are arranged one at the lower end, which extends below the members 23 and 25, and one at the upper end, which extends beyond the members 21 and 23 and is slidably mounted in a manner and for a purpose that will be hereinafter explained. The clips in question are similar in construction, and each consists of a plate 40, having an upturned end 41, provided with a transverse slot 42 adjacent its upper edge. A rectangular opening 43 is formed centrally of the plate 40, and from the end of the slot 43 adjacent the upturned end 41 there extends a tongue 44, which lies in the plane of the body portion of the plate 40 and is separated at its sides from the side walls of the slot by interspaces 45. A slot 46 is formed transversely of the tongue 44, and in this slot 46 are engaged hook-fingers 47 upon the end of a clamping-finger 48, which lies above the plate 40 and has its opposite end extended beyond said plate and curved downwardly, as illustrated at 49. Between the fingers 47 the adjacent end of the plate 48 is bent upwardly, as shown at 50, through the medium of which said plate is moved into and out of its operative position.

In order to raise the plate 48 from its clamping position, a slide-plate 51 is disposed in the slot 42 and has one end 52 bent downwardly to form a finger-piece, while its opposite end 53 is similarly bent for movement over the face of the plate 48 and longitudinally thereof into and out of engagement with the portion 50, this portion or lug 50 when engaged by the end 53 being rocked in the direction of the upturned end 41 of the plate 40, with the result that the downturned end 49 of the plate 48 is raised. To prevent outward movement of the plate 51 at its end 53, integral portions 54 are bent downwardly through the slot 43 at the sides of the plate 48 and have their extremities turned outwardly to lie against the under side of the plate 40. The plate 40 is pivoted directly to the plate 31 to permit movement thereof to lie transversely of its respective plate 31, so that the clip may be operated to hold the music-sheet, this pivotal connection also permitting movement of the clip to lie upon its plate 31 in the position illustrated in Fig. 2 when the holder is to be folded.

When the plate 51 is moved forwardly, the edge of the downturned end 53 thereof slidably engages the face of the clamping-plate 48 and moves it downwardly against the plate 40 and into its gripping position.

The plate 40 of the clip that is attached to the lower end of the plate 20 is rigidly mounted, as there is no necessity for its pivotal movement, as will be readily understood, while the plate 40 of the clip that is mounted upon the upper portion of the plate 20 is held in place by means of a headed pin, which slidably engages a longitudinal slot 55 therein and may be removed when the rack is to be folded.

The method of employing this rack will be readily understood, and it will be seen that by manipulating the slidably-connected members of the holder the holder may be adjusted to receive music-sheets of various sizes and that after the sheet is in place one or more of the clips may be engaged therewith to hold it in position. Furthermore, when desired the entire device may be folded to occupy a small space and may be readily and quickly unfolded or set up for use. Furthermore, it will be understood that in the manufacture of the device various modifications may be made and that any suitable materials and proportions may be used for the various parts without departing from the spirit of the invention.

What is claimed is—

1. A music-rack comprising a central plate having members pivoted thereto and spaced inwardly from the ends thereof, additional members slidably connected with the first members for movement to lie thereover to fold therewith over the central plate, plates pivoted to the outer ends of the second members for movement therewith to lie over the central plate, flanges upon the lower members, the flanges of the inner members terminating short of the central plate, and clips mounted upon the end portions of the central plate beyond the pivoted members, the lower clip being adapted for movement inwardly between the flanges and beyond the members to engage music upon the members, the upper clip being slidably mounted for movement toward and away from the flanges.

2. A music-rack comprising a central plate having arms pivoted thereto for movement to lie thereupon, additional arms slidably connected with the first arms to lie thereon, and plates pivoted to the outer ends of the second arms for movement therewith to lie over the

central plate, and music-holding clips pivoted upon the outer plates for movement to project therebeyond or to fold to lie thereon and longitudinally thereof.

3. A music-rack comprising a central plate, arms pivoted to the plate for movement to lie thereon, and the lower arms having supporting-flanges, said plate extending beyond the upper arms, and means connected with the extension of the plate for holding music upon the rack, said holding means being adjustable toward and away from the supporting-flanges.

4. A music-rack comprising a central plate having supporting-arms pivoted thereto for movement to lie thereon, said plate extending beyond the arms and having a slot therein, and a music-holding clip slidably engaged with the slot of the extension to hold music upon the rack.

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

ROBERT WILLIAM MILLS.

Witnesses:
ROBERT G. LAMOREAUX,
L. A. WILSON.