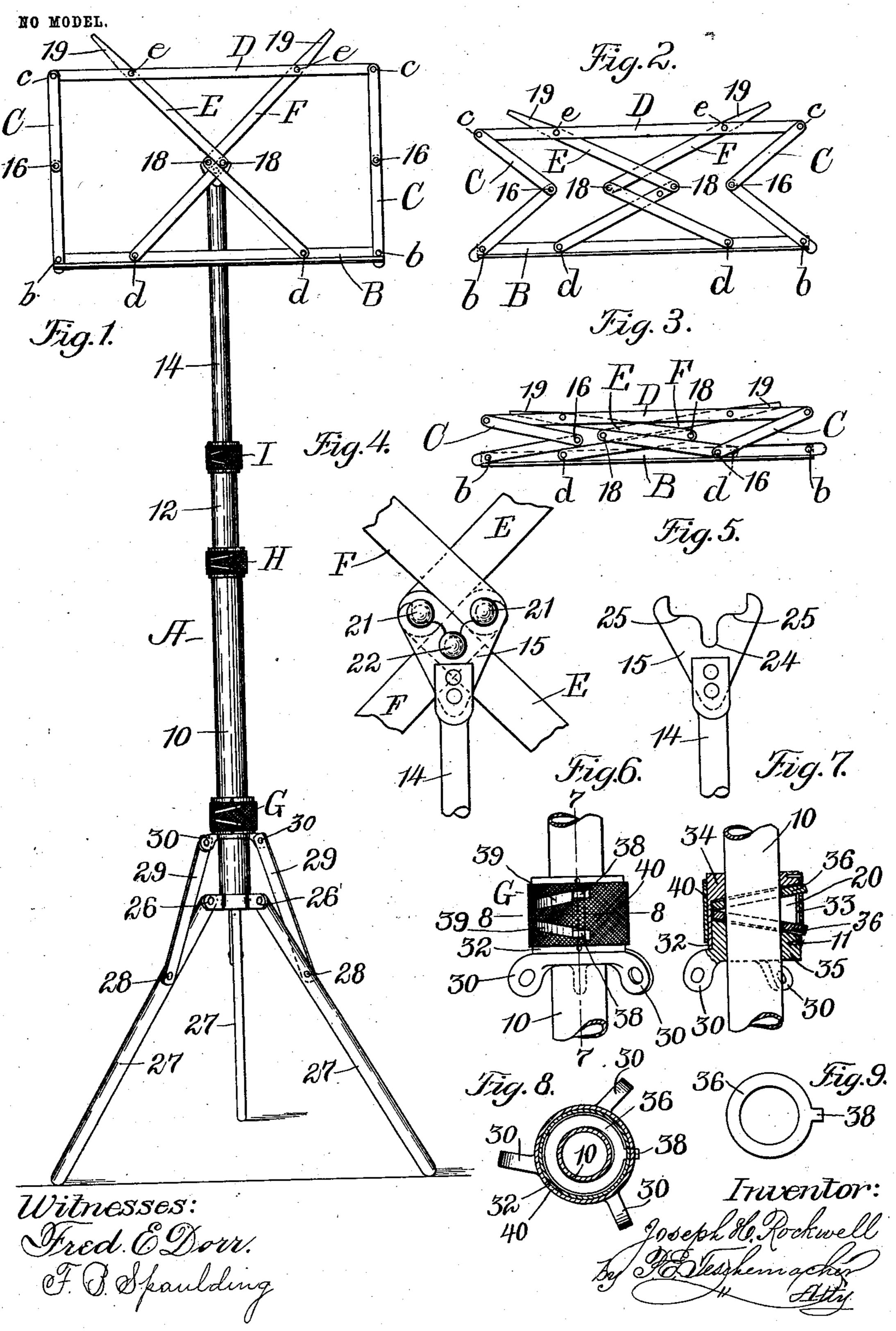
J. H. ROCKWELL. FOLDING MUSIC RACK. APPLICATION FILED JULY 25, 1903.



United States Patent Office.

JOSEPH H. ROCKWELL, OF PROVIDENCE, RHODE ISLAND.

FOLDING MUSIC-RACK.

SPECIFICATION forming part of Letters Patent No. 754,502, dated March 15, 1904.

Application filed July 25, 1903. Serial No. 167,036. (No model.)

To all whom it may concern:

Be it known that I, Joseph H. Rockwell, a citizen of the United States, residing at Providence, in the county of Providence and State of Rhode Island, have invented certain new and useful Improvements in Folding Music-Racks, of which the following is a specification.

My invention has for its object to provide a strong and durable folding music rack and stand of simple construction which can be easily opened and closed and which will occupy a minimum of space when folded up for transportation.

To this end my invention consists in certain novel features of construction and combinations of parts hereinafter described and claimed.

In the accompanying drawings, Figure 1 is a front elevation of a music rack and stand embodying my invention. Fig. 2 is a front elevation of the rack partially folded up. Fig. 3 is a view of the same completely folded up. Fig. 4 is an enlarged detail of the device for detachably securing the rack to its stand.

25 Fig. 5 is a detail view of the upper end of the supporting-stand. Fig. 6 is an enlarged front view of one of the clamping devices of the supporting-stand. Fig. 7 is a vertical section of the same on the line 7 7 of Fig. 6. Fig. 8

30 is a horizontal section of the same on the line 8 8 of Fig. 6. Fig. 9 is a plan view of one of the clamping-rings.

In the said drawings my improved folding rack is shown supported by a stand A, com-35 posed of sections 10, 12, and 14, sliding telescopically one within the other to adapt the rack for use when standing or sitting down, the upper section 14 of the stand being provided at its top with an inclined plate 15, to 4° which the rack is detachably secured in a manner which will be hereinafter described. The rack is composed of the base-bar B, made of a single piece of sheet metal of L shape in cross-section, to the opposite ends of which | 45 are pivoted at b b the two side bars CC, each of which is jointed at 16 and pivoted at its upper end at c to one end of a horizontal bar D, which forms the top of the rack. To the bars B D are pivoted at d d e e two bars E F, each 5° of which is jointed at or near the center at 18 |

and bent into V shape, as shown, the said two bars being hooked together, as shown, so as to interlock with each other at the center of the rack when the latter is opened or unfolded, and thus form a solid stop at the center of the 55 rack, which in connection with the jointed side bars C C serves to support the bar D and limit its distance from the base-bar B and at the same time keep the parts in their proper relative positions when in use. The bars EF form 60 the central portion of the rack for supporting the music, and when the rack is open, as shown in Fig. 1, the upper ends of these bars project above the top of the bar D, forming extensions 19 for supporting large sheets of 65 music in such manner as to prevent their upper portions from falling over to the rear. The several bars when extended form a rectangular rack, as shown in Fig. 1, and when the rack is to be folded up the jointed side 70 bars C C are first turned inward at the center, as shown in Fig. 2, when the rack can be closed by a single downward pressure of the hand, the parts then assuming the compact form shown in Fig. 3 ready to be carried in the 75 pocket, if desired. The pivot-pins 18 extend rearwardly beyond the bars EF and are formed into headed studs 21, as shown in Fig. 4, while the lower member of the bar E is provided with a second headed stud 22, the three 80 studs when the rack is fully opened being arranged in a triangle, the lower one entering a vertical slot 24 in the inclined plate 15 at the top of the stand A, while the two upper studs rest firmly on shoulders 25 25 at the up- 85 per corners of the plate 15, the rack being thus securely held in place and prevented from being collapsed when in use, as any pressure upon the top bar D would tend to force the upper studs 21 21 still farther apart, which 90 would be resisted by the outer sides of the notches in which they rest,

The lower section 10 of the stand A is provided at its bottom with lugs 26, to which are pivoted the folding legs 27, to each of 95 which is pivoted at 28 a brace 29, pivoted at its upper end to a lug 30, projecting from a clamping device G, which when loosened is adapted to slide on the section 10 to permit the legs to be adjusted at the proper distance 100

apart for firmly supporting the stand A or to permit said legs to be turned over and folded upward against the stand when the latter is to be closed up for convenience of transporta-5 tion, the stand and rack being adapted to be placed together in a box which can be carried

in the hand or pocket, if desired.

The clamping device G is composed of a tubular casing 32, which is adapted to slide 10 upon the lower section 10 of the stand A and is provided with a longitudinal slot 33. Within the opposite ends of this casing are heads 34 35, having their inner faces inclined in opposite directions, as shown in Fig. 7, the head 15 35 being made removable and being secured in place by means of a pin.11 or in other suitable manner. Within the chamber 20, Fig. 7, formed between the diverging inner faces of the heads 34 35, are arranged two flat steel 20 clamping - rings 36 36, resembling washers, which loosely encircle the rod or section 10, which passes through the casing 32, and each of these rings is provided with a lug 38, which projects out through the vertical slot 33 of 25 the casing 32 and into a transverse slot 39 in an exteriorly-roughened sleeve 40, which encircles and is axially movable around the casing 32. These slots 39 diverge, as shown in Fig. 6, so that when the sleeve is turned by 30 the hand to the right the lugs 38 will be caused to approach each other, and thus bring the clamping-rings 36 36 into parallelism, in which position they will slide freely upon the rod or section 10. When, however, the sleeve 40 35 is turned to the left, the lugs 36 will be forced away from each other, causing the clampingrings to be tilted in opposite directions, as shown in Fig. 7, when the sharp edges of their inner peripheries will engage and bind 40 upon the rod 10, thus clamping the casing tightly thereupon in such manner that any strain exerted either upwardly or downwardly will tend to increase the bite of one of the rings upon the rod passing through them, and 45 thus clamp the casing upon the rod with additional force.

The sections 10 12 of the stand are provided at their upper ends with clamping devices H I for holding the rod-sections which 50 slide within them when adjusted at the desired heights. These clamping devices are constructed exactly like that G above described, the latter sliding upon the rod, while the clamping devices H I are stationary, the rods

55 being adapted to slide through them.

What I claim as my invention, and desire to

secure by Letters Patent, is—

1. In a folding music-rack, the combination with the base-bar, the top bar and the jointed 60 side bars pivoted at their opposite ends to said base and top bars, of a pair of jointed V-

shaped bars crossed and hooked together and adapted to interlock with each other at their joints when the rack is opened and form a stop therefor, said V-shaped bars being piv- 65 oted to the base and top bars and forming the

central portion of the rack.

2. The combination with a supportingstand, of a folding music-rack composed of base and top bars, jointed side bars pivoted at 70 their opposite ends to said base and top bars, a pair of jointed V-shaped bars pivoted to said base and top bars and hooked together and adapted to interlock with each other at their joints when the rack is opened, headed 75 studs projecting rearwardly from said Vshaped bars at the interlocking-point, and an inclined plate secured to the upper end of the supporting-stand and provided with a vertical slot and notches at its upper corners for the 80 reception of said headed studs when the rack

is fully opened for use.

3. In a folding music-rack, a clamping device for the supporting-stand comprising a tubular casing having a longitudinal slot and 85 provided at its ends with heads or flanges forming between them a chamber, a pair of clamping-rings or washers arranged within said chamber and adapted to loosely encircle the rod passing through said casing, said rings 90 having lugs adapted to pass through the longitudinal slot of the casing, and a sleeve encircling and axially movable upon said casing and provided with transverse diverging slots with which said ring-lugs engage, whereby 95 said rings may be held in parallelism or tilted or inclined in opposite directions to cause them to engage and clamp the rod encircled thereby.

4. In a folding music-rack, the combination 100 with the supporting-stand, of a clamping device comprising a tubular casing provided with a longitudinal slot and at its opposite end with heads or flanges having their opposing inner faces inclined in opposite directions, a 105 pair of tilting clamping-rings arranged within the casing between said heads and adapted to loosely encircle the rod passing through said casing, said rings being provided with lugs extending through said longitudinal slot, and a 110 sleeve encircling and axially movable on said casing and provided with transverse diverging slots with which said ring-lugs engage, whereby said clamping-rings may be tilted or inclined at an angle to each other to cause them to en- 115 gage and clamp the rod encircled thereby.

Witness my hand this 24th day of July, A. D.

1903.

JOSEPH H. ROCKWELL.

In presence of—

P. E. TESCHEMACHER,

J. E. MALONEY.