

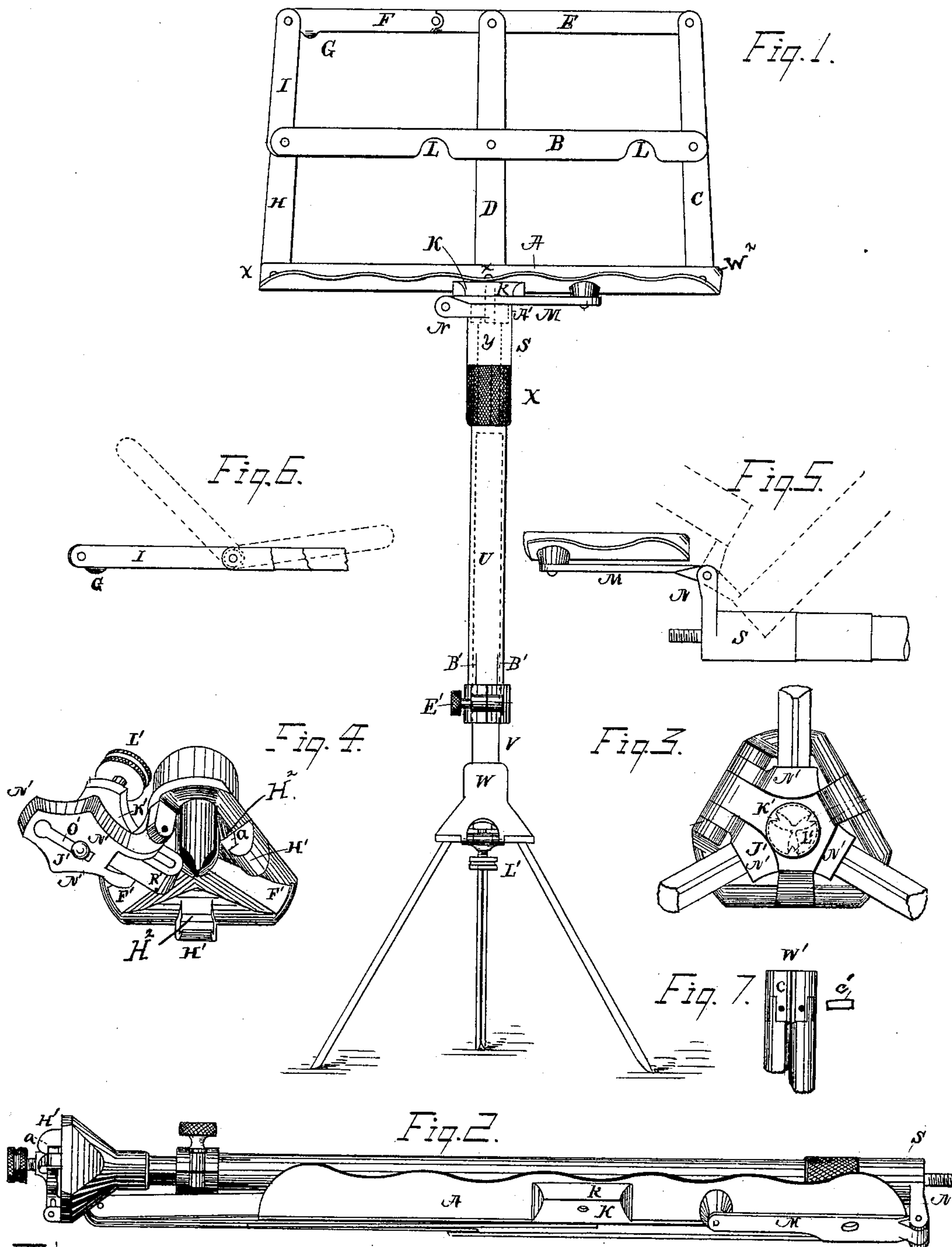
(Model.)

2 Sheets—Sheet 1.

F. P. PFLEGHAR.  
FOLDING MUSIC STAND.

No. 329,593.

Patented Nov. 3, 1885.



Witnesses:

J. Edward Ludington  
Stephen B. Warren.

Inventor.

Frank P. Plegghar  
per Geo. Perry  
Atty

(Model.)

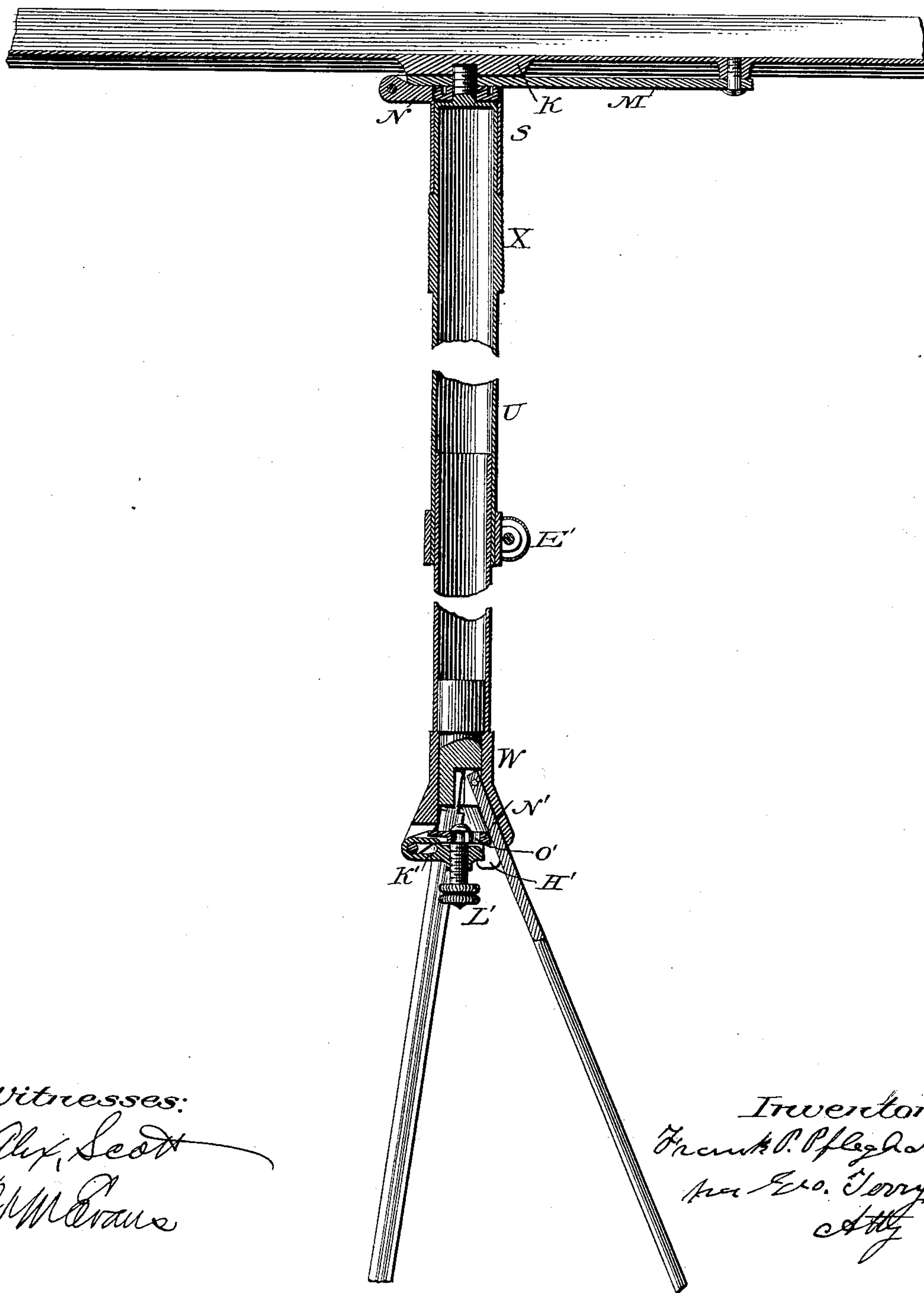
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*Fig. 9.*



Witnesses:

*Alex. Scott*  
*W. M. Evans*

Inventor:

*Frank P. Pleghar*  
*per Geo. Terry*  
*att'y*



# UNITED STATES PATENT OFFICE.

FRANK P. PFLEGHAR, OF NEW HAVEN, CONNECTICUT.

## FOLDING MUSIC-STAND.

SPECIFICATION forming part of Letters Patent No. 329,593, dated November 3, 1885.

Application filed March 28, 1885. Serial No. 160,490. (Model.)

*To all whom it may concern:*

Be it known that I, FRANK P. PFLEGHAR, a citizen of the United States, residing at New Haven, in the county of New Haven and State

5 of Connecticut, have invented certain new and useful Improvements in Folding Music-Stands, of which the following is a specification, reference being had therein to the accompanying drawings, in which—  
10 Figure 1 is a perspective view of the stand. Fig. 2 is a perspective view of the stand folded together. Fig. 3 is a plan view of the under side of the lower end of the post, and shows portions of the legs and the device for hold-  
15 ing them spread. Fig. 4 is a perspective view of the same parts, and shows the device turned over for holding the legs in the tube, and spread. Fig. 5 is a view of the upper portion of the post and the parts connecting it with the rack.  
20 Fig. 6 is a view of an end of the rack with the bars in line. Fig. 7 is a view of the cylindrical piece to which the legs are attached, and of portions of the legs. Fig. 8 represents a detail edge view of portions of the top bar  
25 section, showing their abutting edges.

My invention belongs to that class of music-stands which are called "folding," the object being to so proportion and construct the several parts of the stand that it will be as light  
30 and compact as possible consistent with the height and strength required.

To this end the invention consists in new parts and novel combinations, as is hereinafter more fully described, and explained with the  
35 help of the drawings.

To enable others to make and use my improved stand, I will give a detailed description of the same.

The rack is made of six thin flat bars of  
40 metal. The lower bar, A, is wider than the other bars, and is turned up throughout its length, forming a right angle to hold the sheets of music on the rack, as shown in Figs. 1 and 2. To the under side of the turned-up part  
45 the wedge-shaped piece K, Figs. 1 and 2, is fastened. This piece gives sufficient thickness to the bar for the attachment of the part supporting it, and the greater thickness of its front part, k, gives inclination to the rack.

50 Three of these bars, A, B, and E, are further so arranged as to be parallel and cross or inter-

sect the other three, H, D, and C, which are also parallel, as shown in Fig. 1. Through the intersections rivets pass, which serve as pivots  
55 on which the bars turn. The bars are further so arranged that the lower bar, A, and middle bar, B, are in front of the three bars H, D, and C, and the upper bar, E, is back of the same. This arrangement of the bars is necessary to  
60 allow them to be moved into line, or so that they will be side by side, as shown in Fig. 2, their lower edges distinctly appearing in this figure. In this position of the bars the middle  
65 bar, B, is between the bars H, D, and C and the front bar, A, the rivets  $x$  being long enough to allow sufficient space, or washers of the thickness of the bars may be placed on the  
70 rivets  $x$  between the bars to make room to receive the bar B. The upper bar, E, in this position of the bars, is the back or rear bar. The middle bar, B, is provided on its under  
75 side with two notches, LL, which are arranged to fit over the middle and left-hand rivets  $x$  of bar A, which serve as pivots for bars D and H, respectively. When the bars are in  
80 line or side by side, two of the bars are so made that parts of them may be folded or turned over between the other bars to shorten the rack. These are the top bar, E, and the  
85 end bar, H. The top bar is made in two parts, E and F, which are pivoted together. The lower edges,  $ef$ , of the parts E F near the joint are bent so that the ends of the parts  
90 come together and make a stop, as shown in Fig. 8. The bar H is also made in two parts, as shown, the part I being of the same length as the part F. When the bars are in line, the parts I and F are in the position shown in  
95 Fig. 6, and may be folded or turned over between the bars B and D. The rack will then be in the form shown in Fig. 2. The piece G on the part F is a thumb-piece to take hold  
100 of to unfold these parts, and as they are unfolded the stop on their lower edges (shown in the lower figure) prevents their passing beyond the line of the other bars. This is  
important, for unless these parts are in line with the bars the rack cannot be opened or  
spread. A stop,  $w$ , Fig. 1, formed by turning back the corner of the metal of the lower  
105 bar, A, prevents the moving of the bars in the wrong direction to bring them in line.



The post or upright part for supporting the rack is made of two tubes, U and V, of such size that the tube V will pass into and freely move in the tube U. The lower end of the tube U has the slits B', and around the end a split collar is fastened, which has the thumb-screw E', whereby the length of the post may be varied and the height of the rack adjusted. To the upper end of the tube U the piece X is fastened. Into the lower end of this piece the tube passes, and is soldered or otherwise fastened. Its lower end is milled and its upper end turned down to the size indicated by the dotted lines Y in Fig. 1, and is further turned down and threaded, as shown in Fig. 5. It is free to turn in the part S, and the threaded part extends beyond it. It is held in the part S by the nut A', which is indicated by the broken lines in Fig. 1, the part S being countersunk to receive the nut. The part S is perforated to receive the part Y, and has the elbow N, which is hinged to the arm M. The arm M is a flat bar, and has one of its ends attached to a projection on the rack by means of a bolt, on which it is free to turn. By means of this arm and the part S and its elbow N the post may be swung around to the end of the rack, as shown in Fig. 5, and turned over into the angular space in the lower bar of the rack. By means of the threaded end of the part X, which passes through a hole in the arm M, Figs. 2 and 5, the post is screwed into the wedge-shaped piece K and fastens the post to the rack. The smaller tube V has a hollow enlargement, W, fastened on its lower end. From its lower edge the parts H' project. On the inside of these parts rectangular grooves *a* are made, which are shown in Figs. 2 and 4. On the inside of this enlargement three equidistant grooves, F', are formed, Fig. 4, in which the legs rest when spread, as shown in Fig. 3. To projections from the lower edge the device for holding the legs in the tube is hinged. This device consists of two plates fastened to the projections before mentioned on the enlargement W, and of a thumb-screw. The plate J' is pivoted to the projections on the enlargement, and has the slot O'. Its form is such that when it is turned over against the spread legs, as shown in Fig. 3, its end N' and the parts N' will come against the legs and hold them spread, and when the legs are in the tube will come against projections H<sup>2</sup> (see Fig. 4) on the inside of the enlargement. In other words, the parts N' are equidistant from a point which, when the plate is in the position shown in Fig. 3, will be in a line passing through the center of the tube. The plate K' has the slot R', through which the pin passes which pivots the plate J' to the projections. This slot allows the plate to move back and forth over the plate J' and come into the rectangular grooves *a* in the parts H', as shown in Fig. 2. The thumb-screw L' passes through a threaded hole in the plate, and through the larger end of the slot in

the plate J', and has a groove turned near its lower end, the length of which is equal to the thickness of the plate J'. This groove allows the screw to move back and forth in the slot and holds it in the plate. Thus constructed the plate K' can move back and forth and into the rectangular grooves *a*, and as the thumb-screw is turned will separate the plates, forcing the upper plate against the side of the rectangular grooves and the lower plate against the legs or projections in the enlargement, as the case may be, and fasten the plates.

To the cylindrical block W', which fits into and freely moves in the tube V, the legs are pivoted, as shown in Fig. 7. The form of these legs is such that when they are together they will pass into the tube V. A longitudinal groove, *c*, is made in the block, for the purpose of receiving a relatively-fixed guide-pin, *c'*. (Shown separately in Fig. 7.)

Constructed and arranged as above described and as shown, when the bars are moved into line, or so that they will be side by side, or, more correctly, point in the same direction, and the parts of the bars most remote from the lower bar are turned over between the bars, the post unscrewed from the rack, swung around to the end of the same, and turned over into the angular space in the lower bar, the device for holding the legs spread unscrewed and turned over, the legs brought together and shoved into the tube, and the device turned back to hold the legs in the tube, the stand will be in the form shown in Fig. 2.

I am aware that it is not broadly new to provide a music-stand with folding arms which constitute a leaf-supporting frame, and with telescoping extensible supporting rods and tubes. These constructions, therefore, I do not broadly claim; but,

Having described my improved stand and the way it is folded, what I claim as new, and desire to secure by Letters Patent, is—

1. In a music-stand, a rack composed of flat bars of metal pivoted together for allowing them to be folded into line, and having the terminal parts F I of the bars G H pivoted to turn back between the bars thus folded in line, substantially as set forth.

2. The arm M, pivoted to the rack, and the part S, held to the post by the nut A', and provided with the elbow N, hinged to the arm, in combination, to allow the folding of the connected rack and post, as set forth.

3. In a music-stand, the upper tube of the post, in combination with the lower tube, which is telescoped therein, a series of legs which fold within said lower tube, and a hinged plate which holds said legs spread apart when they are protruded for supporting the stand, substantially as set forth.

4. A tubular post for a music-stand provided with an inwardly-extending stud or pin near its lower end, in combination with a block which is grooved to receive said pin and prevented from turning thereby, and a



series of legs pivoted to said block, the latter, with said legs, being movable up into said post, substantially as set forth.

5 5. The hollow post provided with an enlargement at its lower end, in combination with the pivoted legs, the plate J', which holds the legs against said enlargement and is slotted at O', the plate K', having the slot R', through which the pivot of the plate J' passes, and the  
10 thumb-screw, which passes through a threaded hole in plate K' and into the slot in plate J', allowing plate K' to be moved into grooves a and the plate J' to be thereby locked for hold-

ing the legs spread, substantially as set forth.

6. In combination with a set of spreading 15 legs, a hinged plate fitting between them to hold them spread and a movable plate and grooved lugs engaging therewith to hold said hinged plate in position, substantially as set forth. 20

In testimony whereof I affix my signature in presence of two witnesses.

FRANK P. PFLEGHAR.

Witnesses:

EDWARD LUDINGTON,  
GEORGE TERRY.