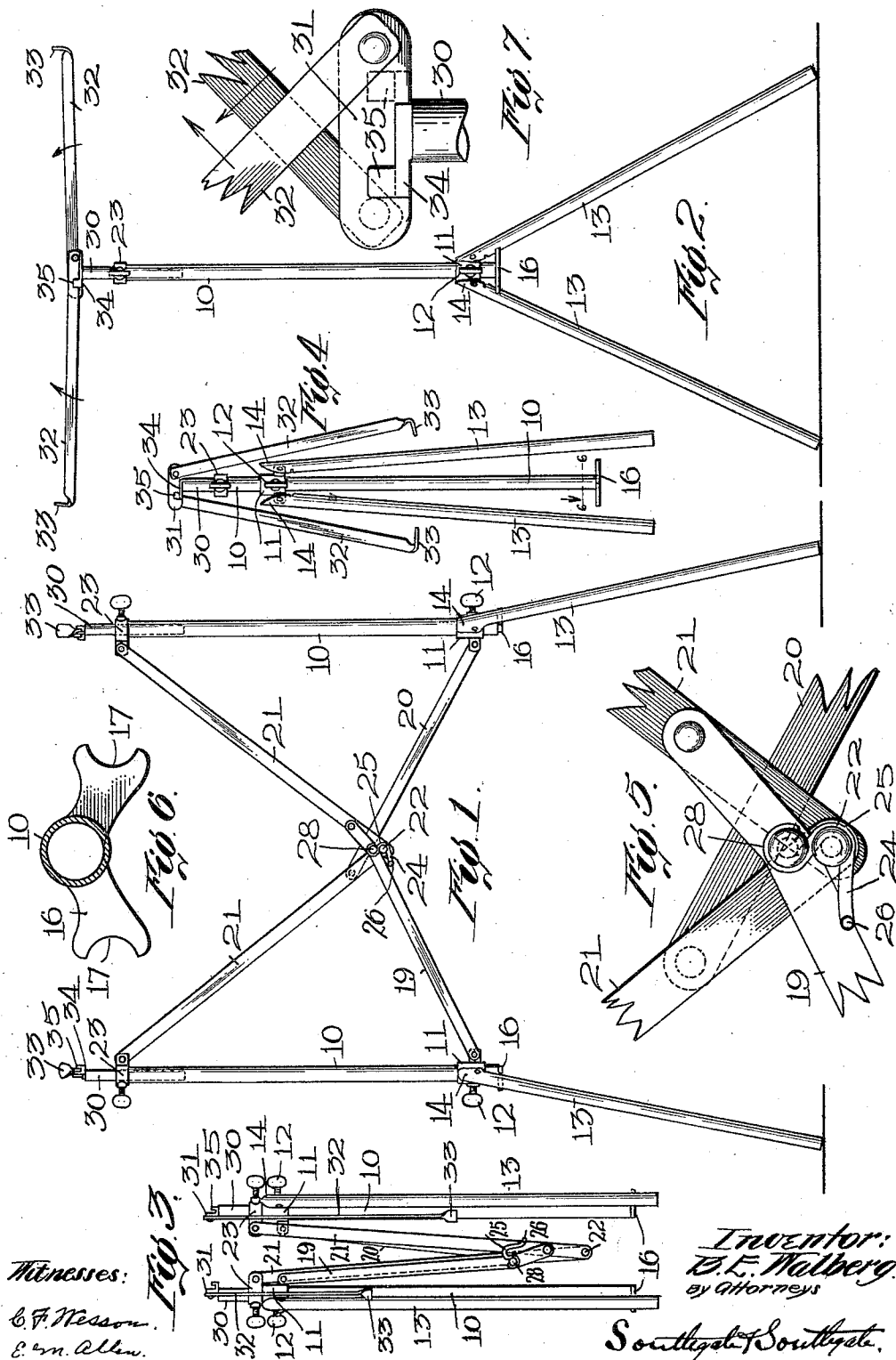


B. E. WALBERG.
FOLDING STAND.
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1,006,155.

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UNITED STATES PATENT OFFICE.

BERNARD E. WALBERG, OF WORCESTER, MASSACHUSETTS.

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Specification of Letters Patent.

Patented Oct. 17, 1911.

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To all whom it may concern:

Be it known that I, BERNARD E. WALBERG, a citizen of the United States, residing at Worcester, in the county of Worcester and State of Massachusetts, have invented a new and useful Folding Stand, of which the following is a specification.

This invention relates to a foldable stand, capable of use for several purposes, but particularly adapted for use as a xylophone support.

The principal objects of the invention are to provide a foldable stand of this character which can be folded up in a very small compass without detaching any of the parts; to provide a construction in which the folding and unfolding can be done readily and rapidly, in which the parts can be locked rigidly in expanded position in an extremely simple way, and in which the height may be varied; and also to provide for efficiently holding the feet in their expanded position and for conveniently holding the xylophone or other article to be supported, in a simplified manner.

The invention also involves certain improvements in details of construction as will appear hereinafter.

Reference is to be had to the accompanying drawings in which—

Figure 1 is a side elevation of a folding stand constructed in accordance with this invention in expanded position. Fig. 2 is an end view of the same. Fig. 3 is a side view showing the parts folded up. Fig. 4 is an end view of the same. Fig. 5 is an enlarged side view of certain details shown in Fig. 1. Fig. 6 is a sectional view on enlarged scale on the line 6—6 of Fig. 4, and Fig. 7 is an end view on enlarged scale of the upper part of the device showing how the xylophone supporting arms are moved from expanded to folded position.

The invention is shown as comprising two uprights or standards held together in a manner to be described hereinafter and each comprising a vertical rod 10 preferably hollow. On this rod slides a collar 11 provided with a thumb screw 12 or the like for holding it in adjusted positions thereon. On this collar are pivotally mounted a plurality of opposite, but outwardly slanting, legs or feet 13 each having an upwardly projecting end 14 for engaging the collar when

swung outwardly on the pivot so as to form a stop. On the bottom of each upright 10 is a transverse plate 16 having two opposite depressions 17 for receiving the adjacent surfaces of the legs or feet. When the collar is moved down as far as it will go these depressions engage the surfaces of the feet and force them out until the projections 14 come firmly against the top of the collar, thus holding the feet securely in expanded position after the screw 12 is tightened. This forces the feet to take a diverging position, as shown in Fig. 2, so that the four feet on the two uprights will securely support the stand. When only one upright is used it can be provided with four feet instead of two. In folding the device, these collars are raised on the uprights so that the feet are free to swing downwardly and they are adapted to rest near their ends in the depressions 17 so that there is no danger of being twisted out of place.

To the two collars 11 are pivoted links 19 and 20, respectively. These two links extend inwardly toward the center of the stand and pass each other at their ends and each is pivotally connected with a link 21. Thus these links 19, 20 and 21 are all pivotally connected. The two links 21 are substantially identical and are pivoted together at their lower ends by a pin 22. They extend upwardly and outwardly from this point and are pivotally connected at their upper ends with projections or collars 23 on the tops of the uprights 10. It will be noted that the pin 22 is located below the links 19 and 20 and that each extends outwardly at right angles to the planes of these links. The link 19 is bent slightly downwardly at a point near the pin 22 and at the bend is provided with a pivot pin 28 on which is pivoted a locking member 24. This locking member is of a general S-shaped form having a loop 25 adapted to receive the shank of the pin 22 and having a projecting end 26 for operating it. When these parts are expanded, they assume the position shown in Figs. 1 and 5 and the locking member is swung downwardly on its pivot until it passes over the shank on the pin 22 and holds the same firmly in position. By this simple device the whole frame work is securely locked in position. It is to be observed, also, that on account of the fact that the

link 20 is entirely free from all the other links except at its point of pivotal connection with the opposite link 21, the feet on one end can be adjusted somewhat higher than the feet on the other end if desired and yet the frame can be locked in expanded position.

In order to fold the device, the locking member is loosened and the collars 11 are simply raised on the uprights. This operation, as has been described, provides for folding the feet and it also automatically results in folding the links 19, 20 and 21 into the position shown in Figs. 3 and 4. It will be observed that this folding operation automatically brings the uprights near together at the top and also swings the bottom ends inwardly toward each other.

It will be seen from this that the expanding operation is very simple. All that is necessary is to draw apart the upper ends of the uprights and thus automatically bring the collars 11 down part way, then the pushing of the collars clear to the bottom of the uprights will bring them into expanded position ready to be locked.

On the tops of the uprights are located means for holding the xylophone or other object to be supported. This is shown as consisting of a pair of vertically sliding rods 30, each telescoping into the top of one of the uprights 10 and each of which has a thumb screw for holding it in adjusted positions. On the top of each of these rods is a cross piece 31 having pivoted to opposite ends thereof a pair of bars 32. Each of these bars is shown as provided with an upwardly twisted transverse end 33 for engaging the sides of the xylophone or other article to be supported. In folded position, these bars extend downwardly, as shown in Fig. 4. When the device is to be used, however, they are swung around about 180 degrees until they pass the vertical and come over to the horizontal where they rest on integral lugs 34 on the member 31. These lugs preferably also have upright extensions 35 spaced from the vertical wall of the cross piece 31 to receive these bars and keep them in proper position. The expanding and folding of these elements will be obvious from consideration of Figs. 2, 4 and 7.

In view of what has been said, it will be obvious that the device is exceedingly simple, consists of few parts, can be readily folded into very small compass, and can be as readily unfolded and locked in expanded position so as to constitute a safe and rigid frame for the purpose intended.

While I have illustrated and described a preferred embodiment of the invention, I am aware that many modifications can be made therein by any person skilled in the art without departing from the scope of the invention as expressed in the claims. There-

fore, I do not wish to be limited to all the details of construction herein shown and described, but—

What I do claim is:—

1. As an article of manufacture, a device of the character described comprising two upright members, a collar slidable along each, legs pivotally mounted in said collars and extending downwardly therefrom, a plate on each upright member having recesses for receiving the legs located beyond the walls of the upright member, whereby when the collar is lowered on the upright member the plate will force the legs outwardly, means for engaging the upright member and holding the collar in a fixed position thereon, and a folding framework for connecting said uprights.

2. In a device of the character described, the combination of a pair of opposite standards or upright members, a collar slidably mounted on each one, a pair of supporting legs connected with each collar and adapted to be operated thereby, a link pivotally connected with each collar, a link pivotally connected with the upper portion of each standard, the latter two links being pivoted together and each one being pivotally connected with the link which is connected with the opposite collar.

3. As an article of manufacture, a folding stand comprising an upright member, a link pivoted near the top thereof and extending angularly therefrom, a slidable collar on the upright member, a second link pivoted thereto, means for movably connecting said links, and legs supporting said movable collar.

4. As an article of manufacture, a folding stand comprising a pair of standards or uprights, a collar slidably mounted on each one, a link pivotally connected with each collar, and a link pivotally connected with the upper part of each standard, the latter two links being pivoted together at their ends between the two standards and each pivotally connected at a point above their common pivot with the link extending from the opposite collar.

5. As an article of manufacture, a folding stand comprising a pair of uprights or standards, a collar slidably mounted on each, a link connected with each of said collars and extending inwardly between the standards, a pair of links, one connected with the top of each of said uprights of standards, and extending inwardly and connected with each other at their ends, each of the first named links being connected with one of said pair of links on the opposite side of the center of the device at a point near the inner end thereof, a fixed pin extending from the common pivot of the said pair of links, and a locking device mounted on one of the other links for engaging said pin.

6. As an article of manufacture, a folding stand comprising two pairs of links, two of said links being pivoted together at their inner ends and extending upwardly from their pivotal point and having a transverse pin projecting from said pivotal point, the other pair of links each being connected with one of the links of the first pair and extending therefrom across the other link of the first pair, and a locking loop pivoted on one of the links in position to engage the pin to lock the members in fixed position.

7. As an article of manufacture, a folding stand comprising a pair of uprights or standards, a collar slidably mounted on each, a folding framework connecting said uprights and collars, a member vertically movable on the top of each of said uprights and having a transverse plate on the top thereof, a pair of arms pivoted at the outer ends of said plate and adapted to swing inwardly along the plate so as to cross each other, and means for holding said arms in horizontal position.

8. In a device of the character described, the combination of a pair of uprights, means

for supporting them, means for connecting the uprights, a member vertically movable on each upright and having a top plate, and an arm pivotally connected with each of the outer ends of said plate and adapted to swing on its pivot in a vertical plane, said plate having projections on its opposite sides for holding said arms in horizontal position.

9. As an article of manufacture, a folding stand comprising an upright, a transverse plate supported thereby, and having two stops projecting from opposite sides and opposite ends thereof, and two arms one pivoted on each side and on each end of said plate and each adapted to swing over so as to rest in horizontal position on the stop on the same side and opposite end of the plate.

In testimony whereof I have hereunto set my hand, in the presence of two subscribing witnesses.

BERNARD E. WALBERG.

Witnesses:

ALBERT E. FAY,
J. ELMER HALL.