March 12, 1957 F. J. TROPPE 2,784,635

DRUMMER'S FOOT PEDAL

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Fig. 1

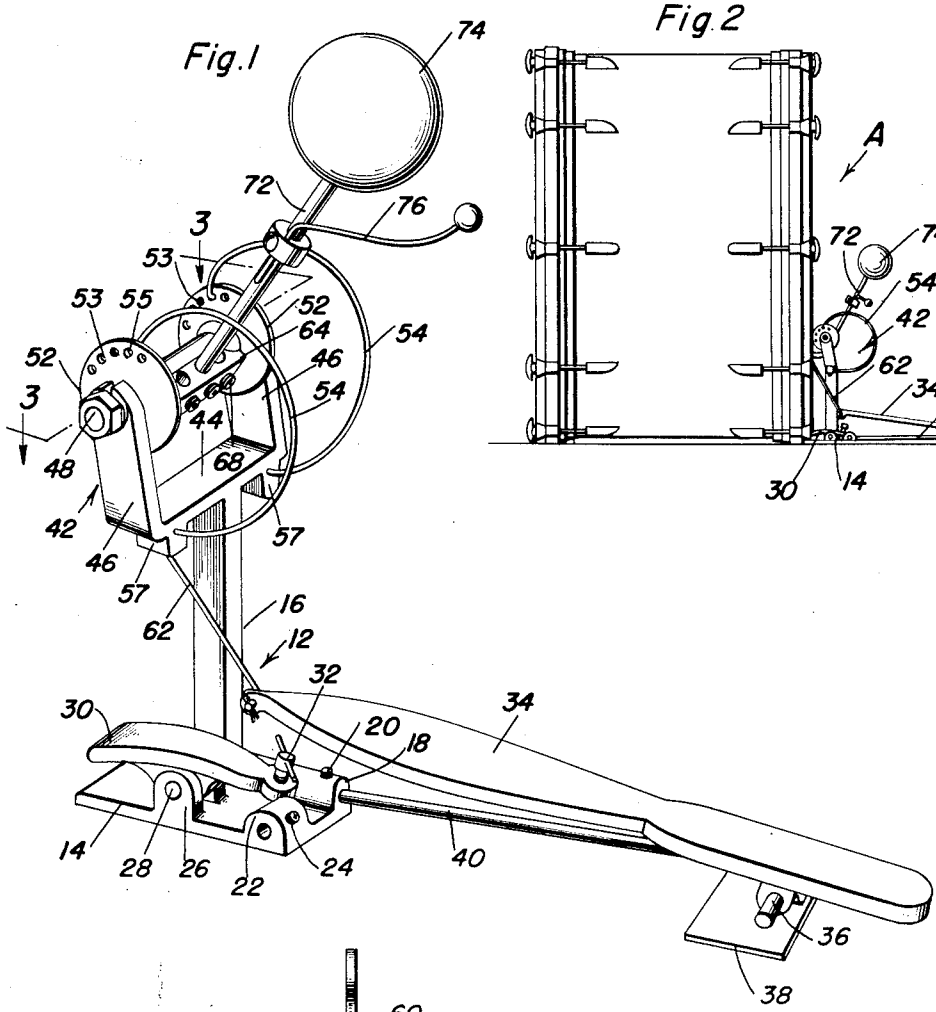

Fig. 2

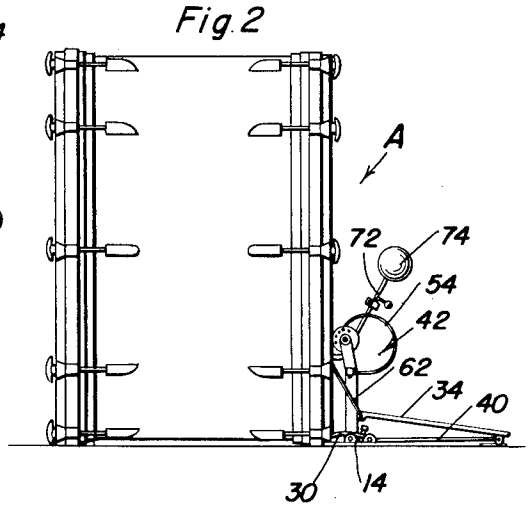

Fig. 3

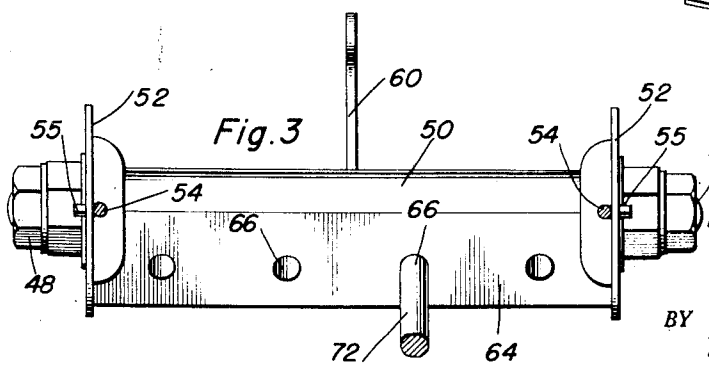

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Fig. 4

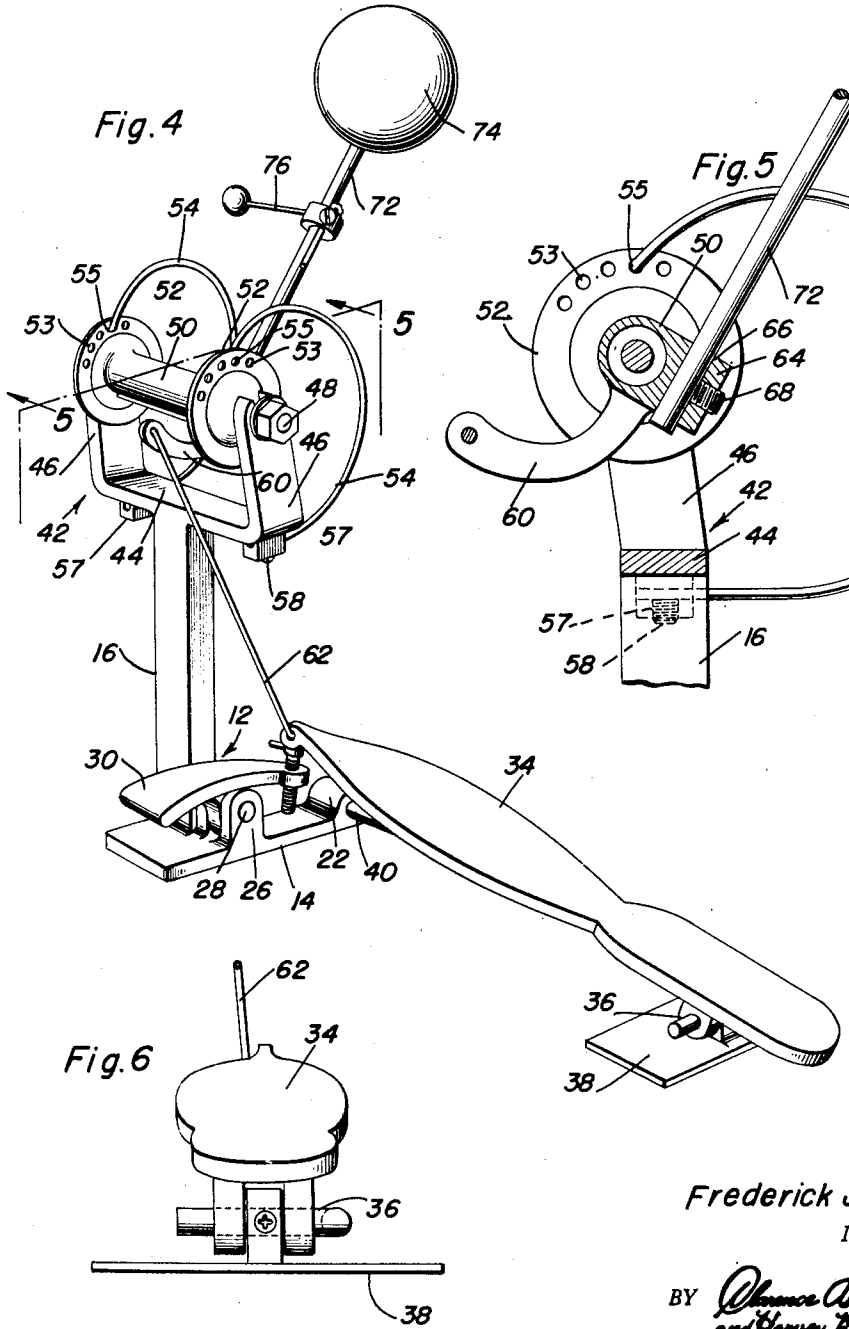

Fig. 5

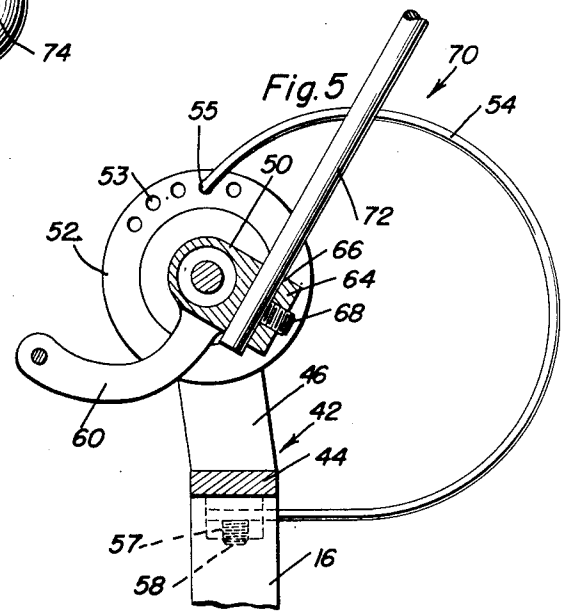

Fig. 6

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DRUMMER'S FOOT PEDAL

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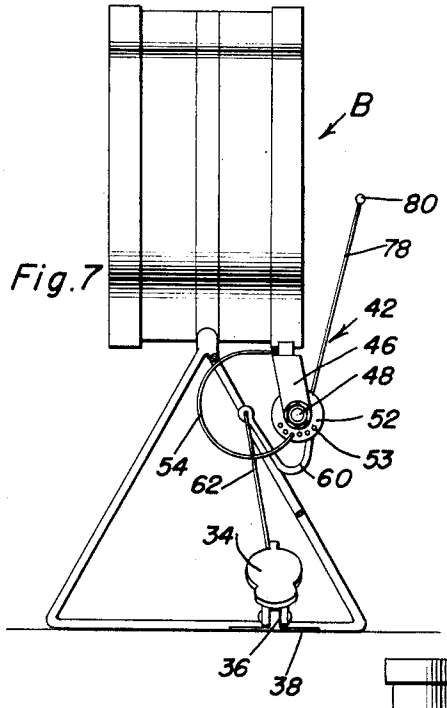

Fig.7

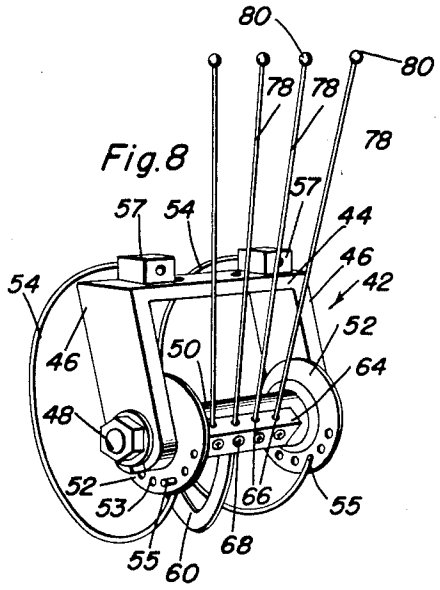

Fig.8

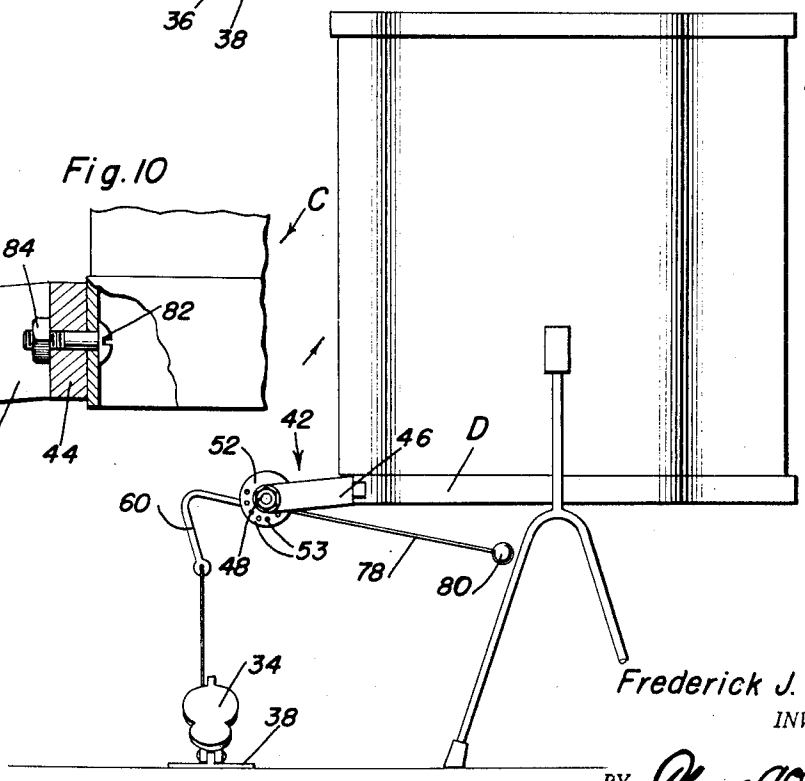

Fig.9

Fig.10

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DRUMMER'S FOOT PEDAL

Frederick J. Troppe, Joliet, Ill.

Application August 27, 1954, Serial No. 452,528

5 Claims. (Cl. 84—422)

The present invention relates to certain new and useful improvements in a drummer's foot pedal construction and has to do, generally speaking, with a novel structural adaptation, the facilities of which make it handily possible to utilize the essential structural portions thereof with a bass drum, snare drum and, if desired, a tom-tom.

In carrying out the principles of the invention, structural means is provided whereby the basic structural devices may be handily and expeditiously used with efficiency and reliability by the drummer who follows the practice of utilizing an extensive array of traps and who finds it expedient and practicable to selectively use the aforementioned several types of drums to obtain the desired supporting effects for large orchestra and band use, and especially for showmanship when the performance of the drummer is to be, as is often the case, demonstrated.

One object of the invention is to provide a pedal which is pivotally mounted on a hold-down and basing plate wherein said plate is provided with a rod which extends therefrom in a plane beneath the pedal and which has a free outer end which is selectively connectable with socket members on a base of an associated stand whereby it is possible to utilize the pedal in positions at right angles to each other, that is, where the pedal is at right angles to the position of the drum, or, alternatively, is disposed in a position which may be treated as parallel to the plane of the head of the drum.

Another object of the invention is to provide an improved stand which is characterized by a base, a standard attached to and rising from the base, and a U-shaped yoke or head atop the standard which serves as an appropriate means to support an oscillatory rocker shaft and which shaft is provided with one or more suitably headed beaters.

More specifically, novelty is predicated on the provision of a substantially U-shaped yoke which may be mounted atop the standard or which may be independently made up and is provided with screws or other clamping devices for securing it to the rim of a drum and which has its arms constructed to accommodate the aforementioned oscillatory rocker shaft, the latter having a rocker arm to which a link is connected and said link being operated by a foot pedal.

Further novelty is predicated on the construction stated wherein the rocker shaft is provided at its ends with apertured flanges having holes therein providing keepers for a detent or keeper on an associated end of a simple, substantially C-shaped return spring, the spring serving to return the shaft and beaters to a normal or given position and said spring, either one or two springs, being attached adjustably and detachably at the other end to the bight portion of the yoke.

Other objects, features and advantages will become more readily apparent from the following description and the accompanying sheet of illustrative drawings.

In the drawings:

Figure 1 is a perspective view of a foot pedal construction constructed in accordance with the principles of the present invention;

Figure 2 is a side elevational view of the same on a smaller scale and showing the manner in which it is attached and clamped for use on a conventional bass drum;

Figure 3 is an enlarged fragmentary sectional and detail view taken approximately upon the plane of the horizontal line 3—3 of Figure 1, looking in the direction of the arrows;

Figure 4 is a view in perspective based on Figure 1 and showing the manner in which the foot pedal is shifted and adjusted so that it is at right angles to the lengthwise dimensions of the base of the stand;

Figure 5 is a section on the line 5—5 of Figure 4, looking in the direction of the arrows, the section being on an enlarged scale with parts in elevation;

Figure 6 is a fragmentary enlarged elevational view, looking at the heel end of the foot pedal;

Figure 7 is a side elevational view similar to Figure 2 and showing a slight modification which is used on a stand-supported snare drum;

Figure 8 is a perspective view of the unit which is detachably clamped to the drum in Figure 7;

Figure 9 is an elevational view on a smaller scale showing the manner in which the same pedal construction is used on and in association with a stand-supported tom-tom; and

Figure 10 is an enlarged fragmentary sectional and elevational view showing the fastening means.

Referring now to the drawings, the stand in Figures 1, 2 and 3 is denoted generally by the numeral **12**, and it comprises a rectangular base plate **14** with a vertical upright or standard **16** attached to and rising from the central portion of the base plate. At one end of the base plate, there is what may be called a longitudinally extending socket member **18** with a setscrew **20**. There is a similar selectively or optionally usable right angularly disposed socket member **22** having a setscrew **24**. The lugs **26** and pivot **28** serve to support a clamp **30** having an adjusting and retaining screw which may be called a setscrew **32**. In practice, and as shown in Figure 2 in particular, this clamp **30** is engaged with the rim of a conventional bass drum denoted at A in Figure 2. Before continuing with the stand, attention is called to the foot pedal **34** which has its heel end pivotally mounted at **36** on a hold-down and basing plate **38** which rests on the floor. Attached to this plate and extending therefrom is a rigid rod **40** which has a free end portion which is selectively engageable with the aforementioned socket members **18** and **22** and held in place by the setscrews **20** or **24**, as the case may be. This rod may be adjusted so that the pedal is in longitudinal alignment with the base plate, as shown in Figure 1, or it may be arranged so that the pedal is at right angles to the base plate, as shown in Figure 4.

The upper end of the standard is provided with the beater and beater operating means. This means is the same as that which is usable in direct association with either a snare drum (Figure 7) or a tom-tom (Figure 9), and therefore, it will be conveniently described by using the same numerals for all of the parts. That is to say, the means comprises what may be described as a U-shaped yoke denoted generally by the numeral **42**. It includes a bight portion **44** and arms **46—46** having notched free end portions to accommodate nut-equipped journals **48** on the end portions of an oscillatory rocker shaft **50**. This shaft is provided at its ends with circular heads which may be conveniently described as flanges **52—52** having circumferentially spaced keeper holes **53** therein to accommodate laterally bent hooks or keepers **55** on the cooperating ends of the substantially C-shaped return springs **54—54**. There are two

of these springs, and the other ends are connected with socketed lugs 57 on the bottom of the bight portion and held in place by setscrews 58. These simple return springs are constantly under tension, as is obvious, and both ends are attachable, detachable and also adjustable. Usually, the ends at the bottom are anchored in the lugs 57 and fastened by the setscrews 58 and the other "free" ends are provided with the anchoring hooks 55 which are selectively engageable with the keeper holes 53 in the aforementioned heads or flanges at the ends of the rocker shaft 50. The rocker shaft is provided with a suitably shaped rocker or crank arm 60 to which a link 62 is connected, the opposite end of the link being operatively connected with the aforementioned foot pedal 34, as shown, for example, in Figures 1 and 4. The rocker shaft is also provided with a rectangular or radial enlargement 64 on one side which has a plurality of sockets 66 and associated setscrews 68. These sockets may be utilized as receivers and holders for the drum beaters. A primary or single beater is denoted at 70, and this has a shank or stem 72 fitted into one of the sockets 66 and held in place by the setscrew, the same being provided at the opposite end with an impact ball or head 74. The numeral 76 in Figure 4, for example, denoted an adjustable cymbal beater which is carried by the stem 72.

In some instances, instead of using a single beater, as shown, for example, in Figures 1 and 4, it is desirable to use smaller "fly swatter-type" beaters having small flexible fingers or shafts 78 with equally small impact heads 80. These are fitted in the same sockets except that adapters may be necessary to accommodate the same, as shown in Figure 8, for example.

It will be seen, therefore, that the U-shaped yoke with the rocker arm carrying the beaters or beater may be made a part of the aforementioned stand when it is integral with the upper end of the standard, as shown in Figures 1 and 4; or, it may be an independent yoke unit, as shown in Figures 7, 8, 9 and 10, where the bight portion is fashioned by a bolt 82 and a nut 84 in the manner shown in Figure 10. The snare drum is denoted by the reference character B in Figure 7, and the tom-tom by the reference character C in Figure 9. The rim of the tom-tom is denoted at D in Figure 10.

It will be evident that whether the yoke is on the stand or is clamped directly to the rim of the drum, the operation is the same. That is to say, depressing the foot pedal transfers the foot motion by way of the link to the rocker arm, and the rocker arm oscillates the shaft. The shaft moves or operates the beater or beaters, as the case may be, and the springs, when under proper tension, render the over-all operation highly sensitive and reliable.

From the foregoing, the construction and operation of the device will be readily understood and further explanation is believed to be unnecessary. However, since numerous modifications and changes will readily occur to those skilled in the art, it is not desired to limit the invention to the exact construction shown and described, and accordingly, all suitable modifications and equivalents may be resorted to, falling within the scope of the appended claims.

What is claimed as new is as follows:

1. In a drummer's foot pedal construction, a stand embodying a horizontal base, a standard attached to and rising vertically from said base, a substantially U-shaped yoke mounted atop the upper end of said standard, a rocker shaft mounted for oscillation in the arms of said yoke, at least one drum beater detachably mounted on said rocker shaft, a foot pedal operatively joined with said base, an operating connection between said foot pedal and shaft, and return springs operatively connected with the shaft and yoke, respectively, there being two return springs, each of generally C-shaped form, one end of each spring joined with the rocker shaft and the other end of each spring joined with the bight portion of said yoke.

2. In a drummer's pedal and beater construction, in combination, a substantially U-shaped yoke including a bight portion and arms, said bight portion provided with means whereby the same may be fastened on the rim of a drum to extend either in a horizontal plane or in a vertical plane, as desired, a rocker shaft mounted for oscillation in the arms of said yoke, said rocker shaft being provided with a plurality of sockets having associated setscrews and adapted to accommodate either one or a plurality of drum beaters, at least one C-shaped spring having one end detachably mounted on said bight portion and the other end detachably and adjustably connected with said shaft.

3. In a drummer's pedal and beater construction, in combination, a substantially U-shaped yoke including a bight portion and arms, said bight portion provided with means whereby the same may be fastened on the rim of a drum to extend either in a horizontal plane or in a vertical plane, as desired, a rocker shaft mounted for oscillation in the arms of said yoke, said rocker shaft being provided with a plurality of sockets having associated setscrews and adapted to accommodate either one or a plurality of drum beaters, at least one C-shaped spring having one end detachably mounted on said bight portion and the other end detachably and adjustably connected with said shaft, this by way of a flange on said shaft, said flange having a plurality of circumferentially spaced holes, and the adjacent end of the spring having a laterally directed hook releasably and adjustably connected with said holes.

4. In a drummer's drum beater attachment, a U-shaped yoke having bight portions and arm portions, said bight portions being provided with means whereby the same may be clamped, either vertically or horizontally on the rim of a drum, a rocker shaft having end portions mounted for oscillation in the arms of said yoke, said shaft being provided at its opposite ends with outstanding flanges provided with peripheral holes circumferentially spaced from each other, said shaft being provided with a rocker arm, a foot pedal including basing means and a link connecting the pedal with said rocker arm, a pair of spaced parallel substantially C-shaped springs, said springs having like ends detachably and adjustably anchored on said bight portion, the opposite ends of said springs being laterally bent to form hooks, and said hooks being releasably and selectively engageable with selected ones of the holes in said flanges.

5. In a drum pedal structure, a stand having a base, a standard attached to and rising from said base, and beater means mounted operatively atop said standard, said base being provided with a pair of optionally usable socket members, one member extending longitudinally in respect to the lengthwise dimension of the base, the other socket member being at right angles to the first named socket member, a foot pedal, a basing plate, said pedal being hingedly mounted on said basing plate, a rod rigidly secured to said basing plate at one end, the opposite end of said rod being free and selectively engageable with the aforementioned socket members so that the pedal may be placed to line up longitudinally with the base, or placed to be disposed in a position at right angles to the lengthwise dimension of the base.

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