To all whom it may concern:

Be it known that I, Charles G. Conn, a citizen of the United States, residing at Elkhart, in the county of Elkhart and State of Indiana, have invented a new and useful Drum and Cymbal Beater, of which the following is a specification.

This invention relates to that class of devices known as "drum-traps" or "drum and cymbal traps" and employed for the purpose of sounding a bass-drum and cymbal by the depression of a pedal.

One of the principal objects of the invention is to provide a device of this character which shall be of simple and compact construction and which may be folded up in a very small space and packed in a case for transportation.

A further object of the invention is to provide a device of this class that may be readily attached to bass-drum of different size and firmly held in position without the employment of the usual bass-drum-supporting stand.

A still further object of the invention is to provide a combined drum and cymbal trap in which both the drumstick-head and cymbal-striker are carried by a single operating member, so that both the drum and cymbal may be simultaneously sounded by a single operating means.

A still further object of the invention is to provide a device of this class in which the cymbal-striking hammer is carried by a resilient arm that is arranged to spring forward after the cessation of movement of its carrier in order that a quick blow may be delivered and the hammer instantly retracted in order not to interfere with the vibration of the cymbal.

A still further object of the invention is to provide a device of this type in which the striking-head hammer may be quickly adjusted to operative and inoperative positions as dictated by the composition being played.

A still further object of the invention is to provide a device of this type in which the striking-head may be readily detached from the drum stick or arm in case it is desired to sound the cymbal alone.

A still further object of the invention is to provide a device of this class which may be quickly adjusted to secure any necessary strength of blow and to insure quickness of recovery.

With these and other objects in view, as will more fully hereinafter appear, the invention consists in certain novel features of construction and arrangement of parts hereinafter fully described, illustrated in the accompanying drawings, and particularly pointed out in the appended claims, it being understood that various changes in the form, proportions, size, and minor details of the structure may be made without departing from the spirit or sacrificing any of the advantages of the invention.

In the accompanying drawings, Figure 1 is a perspective view of a combined drum and cymbal beater constructed in accordance with the invention and illustrating the same as applied to a drum, the latter being indicated in dotted lines. Fig. 2 is a side elevation, partly in section, of the principal portion of the mechanism. Fig. 3 is a sectional plan view through the cymbal-carrying clamp and a portion of the cymbal.

Similar numerals of reference are employed to indicate corresponding parts throughout the several figures of the drawings.

In carrying out the invention the main base-plate 10 is arranged in front of the drum and is provided with a pair of lower hook plates or brackets 11 for engaging a front hoop of the drum, and at the rear is placed a bar 12, having a pair of small hook-brackets 13 for engaging the rear hoop. These two parts are connected by a tension-bar formed of two pivotally-connected sections 14 and 15, the section 14 having a number of openings 16, any one of which may be placed over a headed stud 17, carried by the base-plate 10 in accordance with the size of the drum. The strip 15 is provided with a threaded stem 19, which is passed downward through the slot 20 at the center of the bar 12 and carries the washer and thumb-nut 21. By turning the nut 21, the hook-plates 11 and 13 may be firmly engaged with the hoops and the device securely attached to the drum, and the structure is such that the apparatus may be applied to any drum in ordinary use. The base-plate 10 is provided with spaced brackets 22 for the support of a transversely-disposed rock-shaft 23, carrying two rigid rocker-arms 24 and 25, the latter forming part of a socket member 26 and the two being reinforced by a web or flange 27.

Surrounding the shaft is a helical torsion-spring 30, one end of which passes through
an opening 31, formed in the web or flange 27, while the other end bears against the head of an adjusting-screw 32, carried by the base-plate, the turning of this screw in one direction or the other adjusting the stress of the spring. The arm 25 forms a stop for limiting the rearward movement of the socket member 26 and the drum stick or arm 33 carried thereby, the latter when at rest normally occupying a position at an angle of about fifteen degrees from the vertical. The opposite arm 24 has a rounded end portion, on which rests the pedal-bar 34, said bar being hinged or pivoted to a block 35, that is secured to the front end of the base-plate 10.

The drum stick or arm 33 is preferably formed of metal, and its lower end is detachably secured within the socket 26 for convenience in dismounting the parts and packing the same within a small carrying case or box, and said arm may be adjusted vertically to some extent within the socket and locked in adjusted position by a set-screw 37. The upper end of the stick receives a removable head or beater 38, which may be readily removed when worn.

Adjustably secured to the upper portion of the stick 33 is a bracket 39, having a split clamp that surrounds the arm, and the two parts of the clamp are connected by a screw 40 in order to lock said clamp in any position to which it may be adjusted, the construction being such that the clamp may be moved to any position lengthwise of the stick or may be adjusted circumferentially in case the position of the cymbal renders such adjustment necessary.

The outer end of the bracket is provided with a laterally-extended flange 42, to which is pivoted a resilient arm 43, preferably formed of spring-steel and carrying at its free end a cymbal-striking hammer 44. The lower edge of the spring-strip 43 is notched at a point adjacent to the pivot-pin 45, and said notch is adapted to receive a projecting lug 46, that is carried by the flange 42 in order to limit downward movement of the strip.

In order to support the cymbal, a clamp 50 is employed. The clamp is formed of two main sections 51 and 52, each of which is provided with a pair of hooks 53 for engagement with one of the drum-hoops. The section 52 carries a screw 54, having a tool-engaging head 55 of suitable construction, and said screw passes through a threaded orifice formed in the section 51, so that by the employment of a wrench or similar tool the two clamp members may be firmly engaged with the hoop. The clamp member 52 is provided with a threaded stud 57, that passes through an opening formed in the rearwardly-bent portion of a cymbal-carrying arm 58, said arm being locked in place by a thumb-nut 59, screwing on the stud. This arm is provided with an elongated slot for the passage of the head 55 of screw 54 and at its opposite end carries a screw 60 and nut 61, by which the cymbal 3 may be supported.

When the parts have been adjusted to proper position, the depression of the pedal member 34 will cause rocking movement of the arm 24 and shaft 33, and this movement will be transmitted to the drum stick or arm 33, carrying the latter forward in the direction of the head of the drum. The beater head of the drumstick will engage the drumhead, and this will suddenly check the movement of the drumstick, while the resilient arm 43 will be impelled forward until the hammer 44 strikes the cymbal, and the elasticity of the arm is such that the hammer will immediately move from the cymbal, so as not to interfere with the vibrations thereof. As soon as the pressure on the pedal is relieved the spring 50 moves the parts to initial position in readiness for a second operation.

Should it be desired to sound the cymbal without striking the drum, the head 38 may be readily detached, it being merely necessary to lift the same from the upper end of the stick, or if the drum is to be played without the cymbal the arm 43 is adjusted out of alignment with said cymbal, as indicated, for instance, by the dotted lines of Fig. 1. Both of these adjustments can be accomplished instantly, and either member can be restored when desired.

When not in use, the arm 33 is detached from the socket 26, and by loosening the thumb-screw 21 the base members may be detached from the drum and the connecting-rods 14 and 15 folded. The cymbal-carrying arm may be detached from the cymbal, and the clamp and the cymbal-striking arm 43 and its clamp may, if necessary, be detached from the stick 33, so that the device may be packed in a small case or box for transportation.

I claim—

1. In a device of the character described, a pedal-carrying base, a drumstick, a pedal for actuating the same, and a cymbal-hammer supported by the drumstick and possessing greater elasticity than the drumstick.

2. In apparatus of the character described, a pedal-carrying base, a drumstick, a pedal for actuating the same, an arm secured to the drumstick, said arm possessing greater elasticity than the stick and adapted to continue its forward movement after the drumhead is struck, and a cymbal-hammer carried by said arm.

3. A pedal-actuated member, drum and cymbal striking members supported thereby, and either of which may be rendered inoperative at will.

4. In a device of the class specified, a pedal-carrying base, a drumstick, a pedal for actuating the same, drum-hoop hooks on the base.
member, a hook-carrying bar, and a tension-rod connecting the base and bar and clamping the same on the drum.

5. In a device of the class described, the combination with a base member, of a pedal pivoted thereto, a rock-shaft having a pair of rocker-arms disposed at an angle to each other, one arm being engaged by the pedal and the other serving as a stop, a spring for resisting the movement of the pedal, and a drumstick carried by the rock-shaft.

6. In a device of the class specified, the combination with a base, of a rock-shaft mounted in bearings thereon and provided with a pair of rocker-arms, one of which constitutes a stop, a pivoted pedal bearing against the second rocker-arm, a spring encircling the shaft, an adjustable bearing for one end of the spring, a socket member carried by the shaft, and a detachable drumstick insertible in said socket.

7. A knockdown trap of the class described, comprising a base-plate having hooks for engagement with the front drum-hoop, a stud carried by the base-plate, a slotted bar having hooks for engagement with the rear hoop of the drum, a foldable tension-bar having a plurality of openings for engagement with the stud and provided with a threaded stem arranged to extend through the slot of said bar, a tightening-nut on the stem, a rock-shaft mounted in bearings on the base and provided with a pair of arms disposed at an angle to each other, one of said arms forming a stop for limiting movement of the shaft in one direction, a pivotally-mounted pedal bearing on the opposite arm, a torsion-spring encircling the shaft, an adjustable bearing for one end of the torsion-spring, a socket member carried by the shaft, a detachable drumstick insertible in the socket, a removable head for the drumstick, a detachable and adjustable clamp carried by the drumstick, and a yieldable cymbal-hammer arm carried by the clamp and adjustable with respect thereto.

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

CHARLES G. CONN.

Witnesses:

W. J. Grovert,
Gertrude Strego.