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MICROPHONE BOOM

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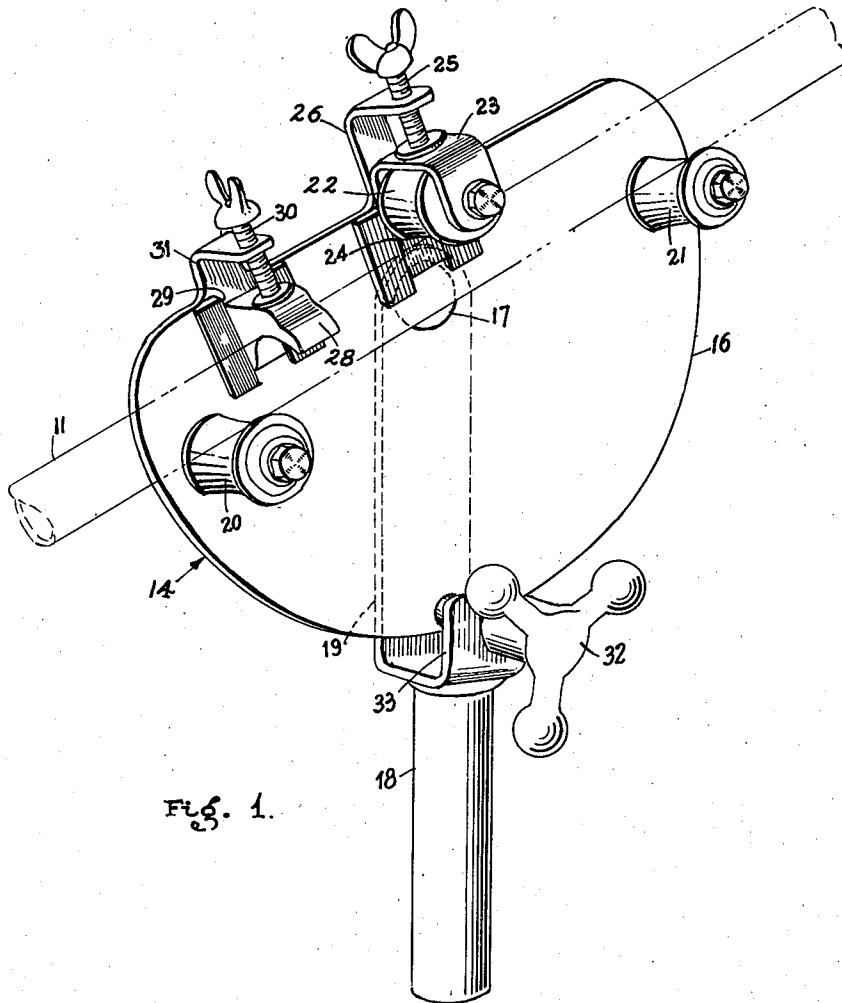


Fig. 1.

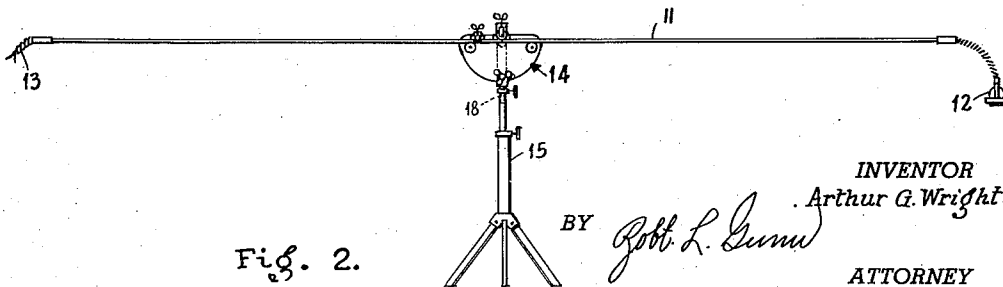


Fig. 2.

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MICROPHONE BOOM

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5 Claims. (Cl. 248-122)

This invention relates to microphone booms such as are used in motion picture studios, broadcasting studios, etc.

The boom to be described hereinafter has been designed especially for use in making motion pictures, but as the description proceeds it will become evident that it may be used advantageously for picking up sound from any source. The primary purpose of the inventor is to provide an extremely light boom that is peculiarly adaptable for operating in close quarters and one that does not require any special support, but can be mounted upon equipment used for other purposes.

In making motion pictures it is oftentimes necessary to pick up the sound in places where it is impossible to operate the ordinary microphone boom. For instance, there are times when a microphone must be placed in a corner of a room, or in a closet, or in a small entry hall, or in other places where it would be impossible to get a large boom with all its undercarriage and equipment and not interfere with the camera sight. For pickups like these the boom man has been forced to work overhead from the light parallels above the set and to attempt to pick up the sound by swinging a microphone on the end of a fishpole or a similar rod. This has necessitated the services of an extra man to manipulate the boom, since it is generally mounted on an improvised support. To eliminate the extra expense and the inconvenience of a makeshift mounting, I conceived of a small rod adapted to carry a microphone and cables which could be easily carried by hand, or could be slidably supported on a novel mount, which mount in turn was adapted to be mounted in sockets formed in the light parallels for supporting the standard light units. The same mount is also adapted to fit into the conventional tripods for supporting the lamps. Under this arrangement the boom could be used in any light socket on a light level, which places the boom overhead so that it can be extended into otherwise inaccessible places, or it could be mounted in a lamp tripod on the set and moved into any position desired. In either setup the boom has all the movements of a larger boom and substantially to the same extent; that is, it may be moved backwards and forwards on its mount, swung on a horizontal pivot and rotated on a vertical pivot.

Briefly stated, the objects of the invention are to provide a small hand-portable boom, that may be carried and manipulated by hand, or may be mounted upon parts of the set or lamp tripods and

provide all the movements of the conventional microphone boom.

Other objects and advantages will become apparent as the description proceeds in connection with the drawing in which:

Figure 1 is a perspective view of my device with a section of the boom rod shown in dotted lines;

Figure 2 is an illustration of the complete microphone boom unit showing the manner in which my device may be used.

Referring to the drawing, and particularly to Figure 2, it will be seen that the complete microphone boom embodying my invention comprises a rod 11 having a microphone 12 suitably mounted on one end thereof and the ordinary conventional light wires 13 extending from the other end. The rod 11 is slidably supported upon a head generally designated 14, which is shown as being mounted upon a tripod 15. Since the head may be mounted upon other supports which will be explained later, it is to be understood that the tripod shown in Figure 2 is not to be considered a part of the invention. It is being used merely for the purpose of illustration and to provide some means of showing the complete microphone setup.

In Figure 1, I have shown an enlarged view of the head 14. Here, it will be observed, that the head 14 comprises a plate 16, which is swingably mounted upon a pivot point 17 that in turn is supported upon a short section of rod 18 by means of a strap 19. Mounted upon the plate 16 are two rollers 20 and 21. These rollers are mounted upon fixed pivots. The other roller 22 is mounted on a sliding pivot which comprises a yoke 23, one side of which is adapted to work in a slideway 24 and is moved in said slideway by means of a wing nut 25 mounted in an extension 26 of the plate 16. Under this arrangement, the roller 22 may be moved upwardly and downwardly and may be set to ride on boom rod 12 shown in dotted line, which for purposes of utility may be of varying diameters. The adjustability of the roller 22 is not only for the purpose of accommodating rods of different diameters, but is also for the purpose of forcing the roller 22 down between the rollers 20 and 21 thereby exerting impedance against the movement of the rod 12. The rod 11 may be clamped in this manner or additional clamping means may be used which is shown as a shoe 28 adapted to bear upon the upper side of the rod. The movement of this shoe is guided in a slideway 29 and is controlled by a wing bolt 30 which is mounted in an extension 31 of the plate 16. In this arrangement the roller

22 may be loosened so that the rod travels freely between the rollers 20, 21 and 22. As soon as the proper position of the rod has been reached, the wingbolt 30 may be tightened and the rod will be clamped in position.

As before stated, the plate 16, is swingably mounted upon a pivot 17 and a means is provided for locking the plate in any desired position. This means comprises a thumbscrew 32 screw-threadedly mounted in an upstanding strap 33 similar to the strap member 19. As previously stated, the head 14 is adapted to be mounted in lamp sockets or any sockets formed on light levels to raise the lamps. For this purpose, the rod 18 has been formed as a part of the support and in operation the head 16 can be carried to any point by hand since it weighs only a few pounds, and can be inserted into any hole into which a light can be inserted, this can be done either with the rod 12 in place or the rod can be mounted after the head is mounted. Once set up, the microphone may be manipulated into any position desired and locked against movement. In addition, if there happens to be a traveling shot, the rod may be raised and lowered on the pivot 17, moved backwards or forwards on the rollers 20, 21 and 22 and rotated on the rod support 18 if needed. From this it will be seen that the microphone support provides a universal movement which is required of all microphones in the motion picture art or a similar art.

Although I have shown my invention as being embodied in a specific form, I do not intend to limit the invention to the construction shown, since there are other structures which will operate satisfactorily for my purpose and I intend this disclosure to cover all those forms that come within the scope of the disclosure and the purview of the appended claims.

I claim:

1. A microphone boom comprising a rod adapted to support a microphone on one end thereof, means for supporting said rod for longitudinal movement, said means including a plate, means for supporting said plate on a horizontal pivot, a pair of rollers for movably supporting said rod mounted on fixed pivots on said plate, another roller mounted on a movable pivot on said plate adapted to engage the side of said rod opposite and between said pair of rollers, and

means for moving the pivot point of said other roller.

2. A support for a microphone boom rod comprising three rollers spacedly mounted on a supporting member, two of which rollers bear on one side of the rod and one of which bears on the opposite side of said rod between the other two side rollers, a brake shoe and means for moving said shoe to frictionally engage said rod and hold same against movement on the rollers.

3. A support for a microphone boom rod comprising three rollers spacedly mounted on a supporting member, two of which rollers bear on one side of the rod and one of which bears on the opposite side of said rod between the other two said rollers, means for moving the pivot point of one of said rollers to accommodate the support for different sized rods, a brake shoe, and means for moving said shoe to frictionally engage said rod and hold the same against movement on the rollers.

4. A microphone boom comprising a rod adapted to support a microphone on one end thereof, means for supporting said rod for longitudinal movement, said means including a plate, means for supporting said plate on a horizontal pivot, means for supporting said horizontal pivot on a vertical pivot, a pair of rollers for movably supporting said rod mounted on fixed pivots on said plate, another roller mounted on a movable pivot on said plate adapted to engage the side of said rod opposite and between said pair of rollers, and means for moving the pivot point of said other roller.

5. A microphone boom comprising a rod adapted to support a microphone on one end thereof, means for supporting said rod for longitudinal movement, said means including a plate, means for supporting said plate on a horizontal pivot, means for supporting said horizontal pivot on a vertical pivot, said last mentioned means including a comparatively short section of rod adapted to fit into tripod sockets or into suitable holes in wood construction, a pair of rollers for movably supporting said rod mounted on fixed pivots on said plate, another roller mounted on a movable pivot on said plate adapted to engage the side of said rod opposite and between said pair of rollers, and means for moving the pivot point of said other roller.

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