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PATENT SPECIFICATION



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COMPLETE SPECIFICATION.

Sound Deadening Casing for Kinematographic View Taking Apparatus.

I, ANDRÉ LÉON VICTOR CLÉMENT DEBRIE, a citizen of the French Republic, of 111, rue Saint Maur, Paris, France do hereby declare the nature of this invention and in what manner the same is to be performed, to be particularly described and ascertained in and by the following statement:—

It is important when recording sounds simultaneously with the taking of kinematograph pictures to obtain a perfectly silent working of the view taking apparatus so as to avoid any noise produced by it disturbing the clearness of the sounds which it is desired to record.

Double-walled sound proof booths enclosing the camera and other different devices have already been proposed to this end, but none has provided complete satisfaction. The present invention accordingly has for its object an improved casing adapted to contain the camera and to eradicate the propagation of any noises due to the working of the apparatus.

This device is essentially constituted by a double-walled casing for the kinematograph camera and associated parts, the casing being made of metal or other suitable material, and the space comprised between the two walls being filled with any suitable sound deadening material. The two walls are completely independent one from the other, i.e. any part secured to the inner wall does not touch or otherwise affect the outer wall and conversely any part secured to the outer wall does not touch or otherwise affect the inner wall.

The kinematograph camera of any common type is disposed inside this casing which is provided with a removable cover, the closing of which is as airtight as possible. The light reaches the film through a glass disposed to the front of the casing in front of the object-glass of the apparatus. The camera is preferably operated through an electric motor within the casing whereby the number of parts passing through the double wall of the casing is reduced to a minimum.

The cover of the casing should open in a manner such as will allow the operator an access as easy as possible to the different parts of the apparatus without

requiring the dismantling of any part of the casing or apparatus. Preferably opening is performed by vertical raising of the cover, so that it remains parallel to itself, under the action of a crank or a motor.

The usual view-finder is transferred from the camera itself to the casing in front of corresponding aligned apertures of the apparatus. Similarly, the control means required for the different levers and/or push-buttons controlling the different parts of the view-taking apparatus are also carried by the casing. Thus the operator may use the camera exactly as if it were not enclosed in the casing.

A form of execution of the invention is shown by way of example in accompanying drawings, wherein:—

Figure 1 is a perspective view of the casing with its cover closed.

Figure 2 is a side view thereof with the cover raised.

Figure 3 is a cross-section through the wall of the casing.

The casing comprises a lower part 1 and an upper part or cover 2.

Each of these two parts comprises an inner wall 3 and an outer wall 4, of sheet iron for instance, separated by a layer 5 of an inert or sound-deadening material having a period of vibration very different from that of the material constituting the walls. The walls of the cover are adapted to pass over the walls of the lower part so as to overlap them (Fig. 3). The material filling the lower part shows a sort of groove 6 engaged when the cover is placed over the lower part, by a rubber flange 7 held in a dovetailed recess 8 provided in the material filling the cover.

The lower part of the casing thus arranged carries on each side a slide 9, for rods 10 carried by the cover 2. To each of these rods is secured a projection 11, engaging a curved slot 12 provided in a part 13 pivoting round a horizontal axis 14 integral with the lower part 1 of the casing; to the end of this axis, is keyed a toothed pinion 15 meshing with a worm 16 controlled by a crank 17. Obviously, this manual control may be

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replaced by a motor control.

It is thus apparent that by rotating the crank in one direction or the other, the cover is caused to rise or fall vertically while remaining parallel to itself. The mechanism should moreover show sufficient play for the cover 2 to rest exactly at the bottom of its travel over the flange of the lower part 1 with a view to ensuring airtightness of the closure. The locking of the cover may be obtained by any suitable means such as that shown at 18—19.

The front part of the cover carries a glass 20, through which the views are taken. This glass may be carried by a ring fitted inside the double wall of the cover. It is also possible to arrange for the ring to be inserted either end first, the glass being secured nearer one end of the ring so that the location may be altered according to the focal length of the object-glass of the apparatus. Thus with near subjects when utilizing a short focus camera lens, the glass may be located more inwardly, thus minimising the passage of noise through the aperture of the casing.

Inside the casing thus constituted, is disposed a box 21 containing the motor 22 which operates through a suitable transmission 23, and the view-taking apparatus placed over the box 21 with its object-glass 25 coaxial with the glass 20. As stated hereinabove, the casing 1—2 carries all the parts necessary for the operation and control of the apparatus 24 which is provided absolutely in the usual manner. I may, if desired, cushion the inside of the casing or the outside of the motor 22 and apparatus 24, but this is not absolutely necessary.

It is apparent that it is possible, without any dismantling, to open the casing so as to reach, without any difficulty, all the parts of the apparatus.

Having now particularly described and ascertained the nature of my said invention and in what manner the same is to be performed, I declare that what I claim is:—

1. A sound deadening casing for cinematograph view taking apparatus, com-

prising a double walled casing adapted to contain the apparatus, the space between the walls containing suitable sound deadening material constituting the sole supporting and spacing connection between the two walls of the casing. 55

2. A sound deadening casing as claimed in Claim 1, containing a view-taking apparatus of any common type with its motor and its control means, the control means of the apparatus being operable externally of the casing. 60

3. A sound deadening casing as claimed in Claim 1 or 2 allowing the views to be taken through a glass provided in one of the walls of the casing. 65

4. A sound deadening casing as claimed in Claim 3 wherein the glass through which the view is taken is secured to and near one end of a removable ring which may be fitted in the wall of the casing, the direction of insertion being changeable if desired according to the focal length of the object-glass of the apparatus. 70

5. A sound deadening casing as claimed in any of the preceding claims wherein the casing is in two parts of which the cover is adapted to extend over the lower part so as to afford a closure as airtight as possible and may be opened and closed without requiring any dismantling. 75

6. A sound deadening casing as claimed in Claim 5 wherein the cover is opened through its displacement parallel to itself, for instance by means of a crank or motor which causes slotted parts secured to the bottom of the casing to rock round a horizontal axis, projections carried by the cover engaging said slotted parts, and ensuring the vertical movement of the cover guided through rods sliding in parts carried by the bottom. 80

7. A sound deadening casing for cinematographic view taking apparatus substantially as described with reference to and as illustrated in accompanying drawings. 85

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[This Drawing is a reproduction of the Original on a reduced scale.]

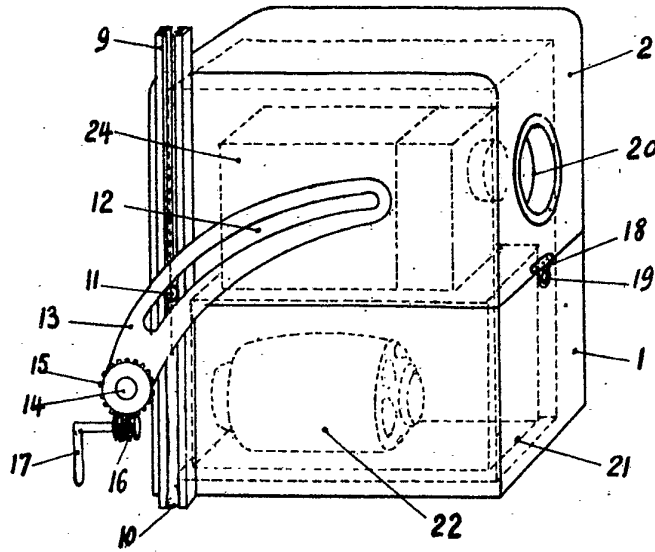


Fig. 1

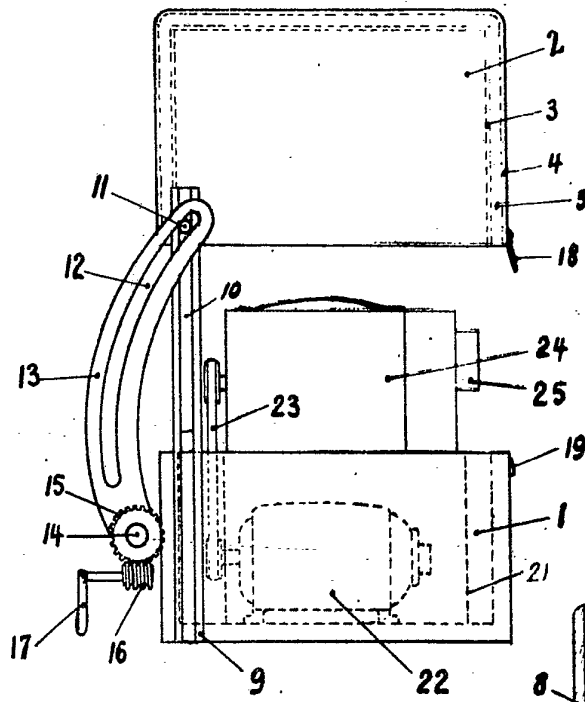


Fig. 2

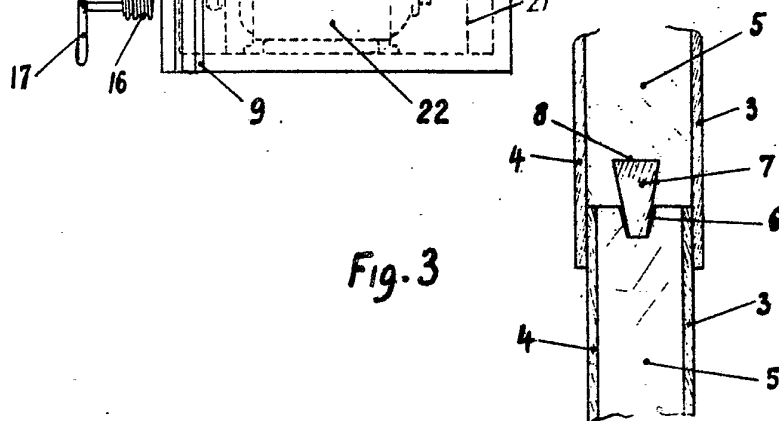


Fig. 3