

## BING BRITISH CINEMATOGRAPHS

(PATENTS APPLIED FOR)







# BING BRITISH CINEMATOGRAPH PROJECTOR

FOR USE WITH STANDARD FILMS.

## PRELIMINARY INSTRUCTIONS FOR THE USE OF THE MACHINES.

This is the simplest efficient type of projector to shew full sized films, and is exceedingly easy to operate. To obtain the best results however, the following instructions should be read carefully, and followed exactly:—

See that the machine is clean and free from packing materials. The lenses particularly must be kept perfectly clean, and must not be touched with the fingers after cleaning. When being cleaned they should be wiped with a soft piece of silk, or soft tissue paper.

When showing, the machine should be placed on a steady table facing the screen, which may be a plain white wall or alternatively, a sheet of white paper weighted at the bottom to keep it flat. The nearer the projector is to the screen the clearer will be the picture, but it will also be smaller, and the farther the projector is away from the screen the larger will be the picture, but less clear will be the detail. A position midway between these two extremes should be taken, in accordance with the table given in another part of these instructions.

Particular care must be given to the lubrication of the machine, a little light sewing machine oil should be applied regularly to all the bearings and the toothed gearing. A little vaseline should be applied to the Maltese cross and cam which drives it. This vaseline should be applied with a small camel hair brush to the cross at regular intervals when the machine is in use.

This lubrication is most essential and must on no account be neglected or wear will take place, and good results can no longer be obtained.

The room in which the demonstration is given should be quite dark, otherwise clear pictures cannot be obtained. In running, a steady speed of about 180-200 revolutions per minute of the crank handle should be aimed at. This speed must be regular and not jerky.

When fitting a the long terminal of the down nearly flat on top the short terminal of the



battery to the projector battery should be bent of the battery case, and battery should be bent to stand straight up vertically, and the battery pushed into the battery case with the flat terminal at the inner end so that this terminal makes contact with the flat base on the reflector cap, and the short vertical terminal will make contact with the stud in the centre of the bulb screw.

Always make certain that the lamp is screwed properly into its holder in the reflector.

Broken films can be repaired with acetic acid, which is obtainable from any chemist. Care should be taken to see that the complete picture is joined together, and it may be necessary to cut off damaged pieces before connecting the two ends together again. The joint must be quite smooth when finished.

Bent and crumpled films may be smoothed out by hanging them from a hook and attaching a weight at the end.

In the three largest size projectors, there is a wire rest fitted in the base of the projector at the front end and when this is pulled forward it forms a convenient rest for the front of the projector and allows full play for the lower film spool.

### MAINS OPERATED TYPE OF MACHINE 28/11/1.

This is the largest projector in the range. It should be lighted by a standard 40 watt lamp operated from the mains. In these cinemas a small flap will be found at the top of the lantern body. This should be opened and the bright nickel rod which protrudes above the lantern body should be pulled upwards. This will raise the lamp holder so that the electric lamp can be fixed on to the holder. The lamp to be used being an ordinary lamp used for the house lighting. As soon as the lamp is in the holder, push the rod downwards as far as it will go and the lamp will then be in its correct position. Connect the flex with the house current by putting the plug into the lamp holder, and raise or lower the rod till the best illumination of the screen is obtained.

Overleaf is the best Projector-to-Screen spacing for these projectors, and the corresponding size of picture which these spacings give, and represent generally the best distances for ordinary work.

On some occasions, such as with a dark film, it may be necessary to decrease the distance from the machine to the screen in order to obtain better illumination, in such cases of course the picture will be correspondingly smaller.

The lengths of film spools is given in the table should these be exceeded, driving gears will be picture will not be



used at one time on the below. On no account otherwise the projector overloaded, and a steady obtained.

| Cinema No.                               | Distance Gate<br>to Screen.                          | Size of Picture<br>shewn.                                                | Maximum amount of Film wound on spool at one time. |
|------------------------------------------|------------------------------------------------------|--------------------------------------------------------------------------|----------------------------------------------------|
| 28/10/0<br>28/10/1<br>28/10/2<br>28/11/1 | 3ft. 0ins.<br>5ft. 0ins.<br>5ft. 3ins.<br>6ft. 0ins. | 16ins. x 12ins.<br>23ins. x 19ins.<br>26ins. x 21ins.<br>31ins. x 22ins. | 30ft.<br>50ft.<br>75ft.<br>100ft.                  |
| Mains lighted type.                      |                                                      |                                                                          |                                                    |

#### TO GIVE A DEMONSTRATION.

Prepare a steady table to carry the projector which should face the screen so that the projector is exactly parallel to the screen. The distance between the projector and the screen should be as the table given above.

The film should be wound on to the top spool with the emulsion side, that is the dull side, outwards, and see that the base of the picture is towards the centre of the spool, that is, in the case of a film with a figure on it, the feet of the figure should be towards the centre of the spool when winding on, and at the same time the emulsion side of the film outwards.

When the film is fully wound on the top spool, open the gate of the projector, bring the free end of the film down behind the spring loop at the top of the gate, then through the gate, pass the end below the bottom spring loop and out on to the bottom spool where it is pushed under the clip on the centre of the spool, and two turns of the bottom spool taken to keep the film in place.

Now push the battery into position so that the light shews through the film opening, and adjust the film itself up or down on the sprocket teeth so that the complete picture is exactly in the centre of the round opening in the body of the projector when looking through the film against the light of the lamp, and the picture itself should be upside down.

Hold the film in this position with the thumb and engage correctly with the sprøcket teeth. Shut the gate, latching the spring latch properly, and turn the handle a few times to make sure that all is running correctly. By sliding the focusing tube in or out. adjust the lens so that a clear picture is obtained, and everything is now ready for the demonstration.

In the smallest there is no spring loop the gate, and in this case slip the film through the the bottom spool.



size of this projector at the top and bottom of it is only necessary to gate direct, and out on to