"KALEE INDOMITABLE' Talkie No. 8 Cinematograph Sunamum Projector manamum Projector

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Sole Makers-

KERSHAW & SON, LEEDS (England).

Brauch of Soho Ltd., 3, Soho Square, W.1.

Sales Agency-

ALBION WALK.

ALBION STREET,

LEED'S.

2, SOMO SQUARE,

LONDON. W.1.

#### The Home of KERSHAW Productions

Where the "Kalee Indomitable" Talkie No. 8. Cinematograph Projectors and Accessories are Manufactured.

All British Capital-

-All British Labour.



SOLE MAKERS——

#### A. KERSHAW & SON, LEEDS (England)

Branch of Soho Ltd., 3 Soho Square, W.1.

SALES AGENCY—

#### Kershaw Projector Company,

Albion Walk, Albion Street, LEEDS.

Telephone 22237.
Telegrams: "Projector, Leeds."

3, Soho Square, LONDON, W.I.

Telephone: Gerrard 2184 (2 lines)

Telegrams:

"Noiram-Westcent-London."

#### Terms and Conditions of Sale.

#### NEW ACCOUNTS.

Satisfactory references, or cash with order.

#### HIRE PURCHASE.

Terms on request.

#### BREAKAGE OR LOSS IN TRANSIT.

All goods are carefully packed and sent F.O.R. Leeds. No claim can be considered by us for damage, breakage, loss or delay in transit. Goods should be signed for after examination, or signed "unexamined," so that purchaser can institute the necessary claim on the carriers within three days from receipt of goods.

#### PACKING and CASES.

If returned in good condition, carriage paid, within 14 days, full allowance will be made.

#### TIME OF DELIVERY.

Promises are always based from the date at which all necessary particulars are in our hands, and are subject to the usual strike and accident clauses. In no case, however, will the Company be responsible for consequential loss or damage due to any cause whatever.

#### ILLUSTRATIONS.

Show generally the appearance of the respective articles, but must not be taken as binding; alterations and improvements are made as occasion arises.

# The "KALEE INDOMITABLE" TALKIE No. 8 Cinematograph Projector.

The "KALEE" TALKIE No. 8 CINEMATOGRAPH PROJECTOR has proved itself beyond doubt, to be the finest Projector in the world for use in conjunction with all the leading sound systems.

This is fully borne out by the sales, which have been phenominal since the advent of sound.

The standard silent "KALEE" No. 8 Projector was so far advanced in design, that the addition of a vertical mechanical drive made it suitable for coupling up to all sound systems.

The vertical drive is arranged by means of a special main oil box cover which carries a swivel housing for the vertical shaft. The housing forms an oil box for a pair of hardened steel spiral gears, which couple the vertical shaft to the cam spindle. Automatic lubrication is provided from the main oil box. The grooved balance wheel is retained, so that it can if necessary be driven by a belt.

The gate is modified to carry a special masking device, a cam lever on the side of the gate frame instantaneously operates the masking, covering or uncovering the sound track.

Two types of "KALEE" No. 8 Talkie Projectors are now supplied:
The FRONT SHUTTER TYPE (pages 4 and 5) and
The REAR SHUTTER TYPE (pages 6 and 7).

The Rear Shutter Type offers many advantages, the Arc beam is only allowed on the film during picture projection, therefore approximately 50% of the heat is dissipated. Further the shape of the shutter forms a fan, blowing air on to the gate mask, so that probably another 10% of the heat is dissipated. The fan shutter revolves in a totally protected aluminium casing formed on the heat shield, also on the rear of the shutter spindle a new large type of automatic light cut off is mounted, robust, positive in action and accessible for adjustment, cleaning, etc.

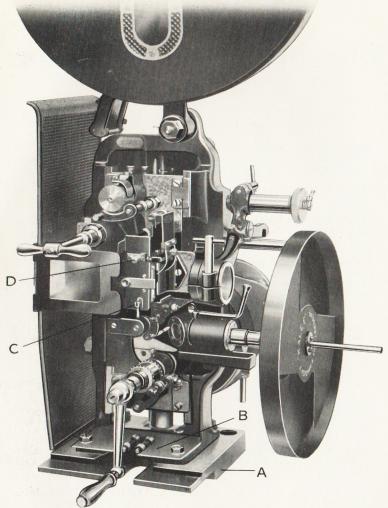
When using lens turrets, variable focus lenses, etc., the operation and manipulation is facilitated.

A further useful addition embodied in this model is a masking lamp holder, located below the observation window in the casting which couples the rear shutter casing to the gate. The wiring of the lamp holder is entirely protected in a flexible metal tube (4 ft. supplied with each projector).

"KALEE" Talkie No. 8 Projectors are adaptable to all sound systems by adapter gears, etc.

## The "KALEE Indomitable"

Talkie No. 8 Cinematograph Projector.



VIEW OF OPERATING SIDE.

A-Adapter plate according to sound system.

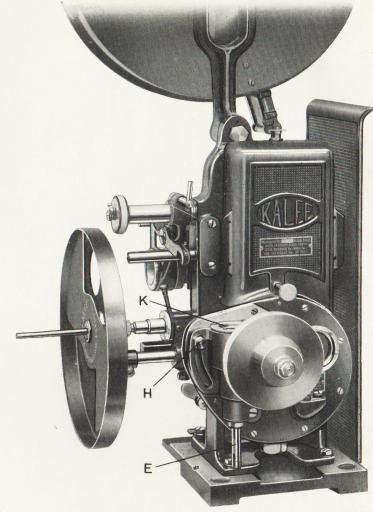
B-Guide Roller Plate.

C—Lever for operating mask; instantaneous change from silent masking to sound on film masking.

D—Release Plate to enable quick removal of auto film guide rollers for cleaning, etc.

## The "KALEE Indomitable"

Talkie No. 8 Cinematograph Projector.



VIEW OF DRIVING SIDE.

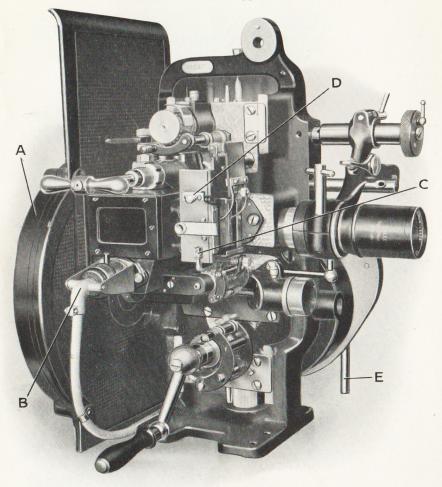
E-Mechanical drive shaft.

H-Bolts clamping swivel housing.

K-Oiling observation window.

## The "KALEE Indomitable"

Talkie No. 8R.S. Cinematograph Projector (Rear Shutter Type).



VIEW OF OPERATING SIDE.

A-Rear Shutter Casing.

B-Masking Lamp Holder.

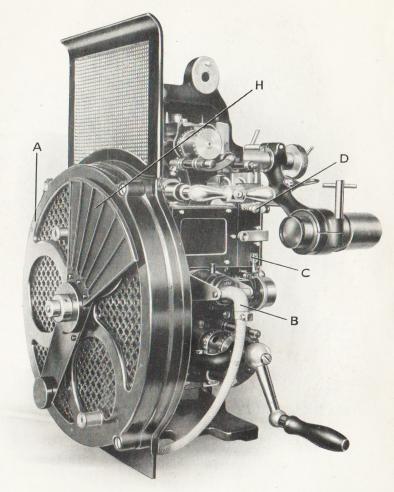
C-Lever for changing from silent to sound on film masking.

D—Release Pin for quickly removing auto-film guide rollers for cleaning, etc.

E-Mechanical Drive Shaft.

# The "KALEE Indomitable"

Talkie No. 8R.S. Cinematograph Projector (Rear Shutter Type).

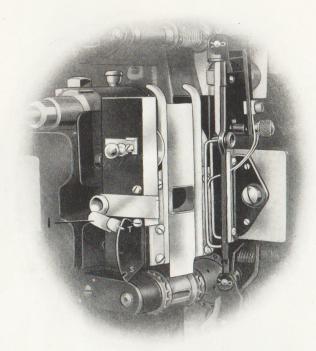


REAR VIEW.

A—Rear Shutter Casing, showing perforated steel inserts which allow free access of air.

H-Automatic Light Cut-off.

# The "KALEE" Proportional Masking Gate.



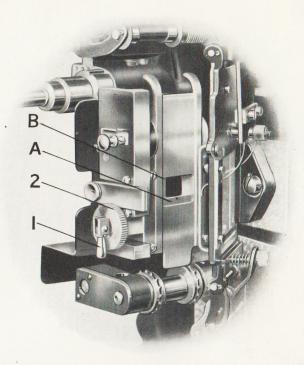
The "KALEE" Proportional Masking Gate is constructed with a sliding mask plate with two mask apertures operated by a lever (1) at the side of the gate frame. One of the mask apertures is standard silent size (0.9062"×0.6796"), and the other mask aperture (0.800"×0.607") is in the same proportion, which is arrived at by covering the sound track and cutting off a small amount of the top and bottom of the picture.

To project the same size picture either two lenses of different focal length and a turret lens arm; or a silent to sound focus lens and single swivel lens arm can be used.

"KALEE" Talkie No. 8 Projectors supplied with Proportional Masking Gate at an extra cost of £3 8s. 0d. each.

# The "KALEE" Variable Masking Gate

(PATENT APPLIED FOR).



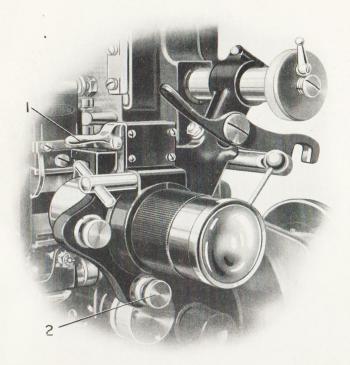
The "KALEE" Variable Masking Gate provides for standard mask aperture, also by lever (1) the sound track (B) can be covered.

A further addition is a graduated knob (2) which reduces the height of the mask as shown at (A).

Used in conjunction with the "KALEE" Single Swivel Lens Arm and a variable focus lens, standard picture projection is provided or by shortening the focus of the lens and reducing the height of the picture by knob (2) wide picture effects can be obtained.

"KALEE" No. 8 Projectors supplied with variable Masking Gate at an extra cost of £6 0s. 0d. each.

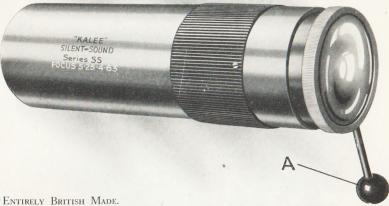
# The "KALEE" Single Swivel Lens Arm.



When using a Silent to Sound, or a variable focus projection lens with a proportional masking gate it is necessary to compensate for the sound track. The "KALEE" Single Swivel Lens Arm provides for projecting both silent and sound pictures in coincidence with the screen mask. The lens is carried in a bracket which swivels on pivot (2), a cam lever (1) moves the optical centre of the lens a distance of half the width of the sound track.

"KALEE" No. 8 Projectors supplied with Single Swivel Lens Arm (without lens) at an extra cost of £8 0s. 0d. each.

## "KERSHAW" Silent-Sound Projection Lenses



Series "S.S." Standard Size Mount 2.07 inches dia. The Series "S.S." Projection Lenses have been designed for use in conjunction with The "KALEE" Proportional Masking Gate and

The "KALEE" Single Swivel Lens Arm.

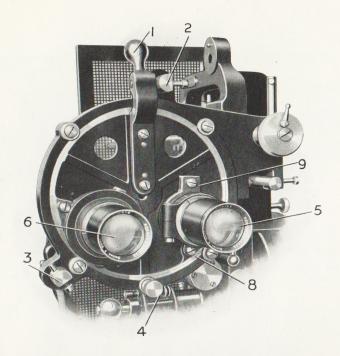
The simple action of turning knob (A) varies the focus so that both mask aperatures can be projected to give the same size of screen picture, and brought into coincidence with the screen mask by means of the swivel lens arm.

Silent Focal Length Inches	Price Each	Code Word
3 3 3 1 3 1 3 3 3 4 4 4 4 4 4 4 4 5 5 1 4 5 5 6 6 6 6 6 6 6 7 7	£16 0 0	SOLAS SOBUT SOCEN SOCEN SODAL SOKIM SOPAZ SOZUN SOWOP SOFER SOHID SONEX SOSIK SOMUP SORIL SOBRY SOTEL SOVOP

When ordering please specify either the focus or the width of projected silent picture

As all the above focal lengths are not stocked, approximately fourteen days should be allowed for delivery. Intermediate focal lengths 40/- each extra. Delivery approximately four weeks.

# The "KALEE" Double Turret Lens Arm.



When it is desired to use two projection lenses in conjunction with the "KALEE" Proportional Masking Gate, the "KALEE" Double Turret Lens Arm can be employed.

The longer focus lens for silent projection is held in holder (6) and is brought into the optical axis by turret handle (1) rotated to stop (3) and clamped by knob (4).

The shorter focus lens for sound on film projection is held in holder (5), As the holder (5) requires to be set out of optical centre by a distance half the width of the sound track, this is provided for by pivoting the holder at (8) and the slot (9) allows of the necessary adjustment.

"KALEE" No. 8 Projectors supplied with Double Turret Lens Arm (without lenses) at an extra cost of £15 0s. 0d. each.

As there are limits to types and focal lengths of lenses that can be used, it is necessary to have full particulars of lenses when ordering Double Turret Lens Arms. Lens holders take tubes 2.07" dia., also by means of adapter bushes, tubes 1.68" dia.

## Table of Proportional Focal Lengths of Silent and Sound Projection Lenses

Silent Mask Aperture 0.9062"×0.6796". Sound Mask Aperture 0.800"×0.607".

Silent Focal Length Inches	Sound Focal Length Inches
3	2.649
$3\frac{1}{4}$	2.869
$3\frac{1}{2}$	3.090
$3\frac{3}{4}$	3.311
4	3.532
41 .	3.752
$4\frac{1}{2}$	3.973
$4\frac{3}{4}$	4.194
5	4.415
$5\frac{1}{4}$	4.635
$5\frac{1}{2}$	4.856
$5\frac{3}{4}$	5.077
6	5.298
$6\frac{1}{4}$	5.518
$6\frac{1}{2}$	5.739
$6\frac{3}{4}$	5.960
7	6.181

For prices of "Super B" Silent Lenses see Page 14.

Prices of "Super B" Sound Proportional Lenses are 20/-each extra. All focal lengths are not stocked, approximately 7 days should be allowed for delivery.

# "KERSHAW" Cinematograph Projection Lenses



#### ENTIRELY BRITISH MADE.

Series "Super B."

Standard Size Mount 1.68 inches dia.

An entirely new optical system, constructed on original principles.

The design allows the back element to collect the maximum amount of light and project it through the larger front element, giving even illumination on the screen. The definition throughout the whole series is of a high order.

Focal Length Inches	F Value	Price Each	Code Word
3 1 4 3 2 3 4 4 4 4 4 2 3 4 4 4 4 4 2 3 4 5 5 4 4 1 1 4 4 4 5 5 5 4 4 1 1 6 6 6 6 6 6 6 6 6 7 7	F 1.7 F 1.8 F 2.0 F 2.1 F 2.2 F 2.4 F 2.5 F 2.7 F 2.8 F 2.9 F 3.1 F 3.2 F 3.3 F 3.5 F 3.7 F 3.8 F 4.0	£10 10s. 0d.	BACAH BADEK BAFIL BAGOM BICEK BIDIL BIFOM BIGUM BUCIL BODOM BOFUN BOGAM BUCOM BULOM

Intermediate focal lengths

**20**/- extra

