

WAR  
135  
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VARDOUR  
LONDON, W.1.

# LES

*Bauer* SOUND HEAD



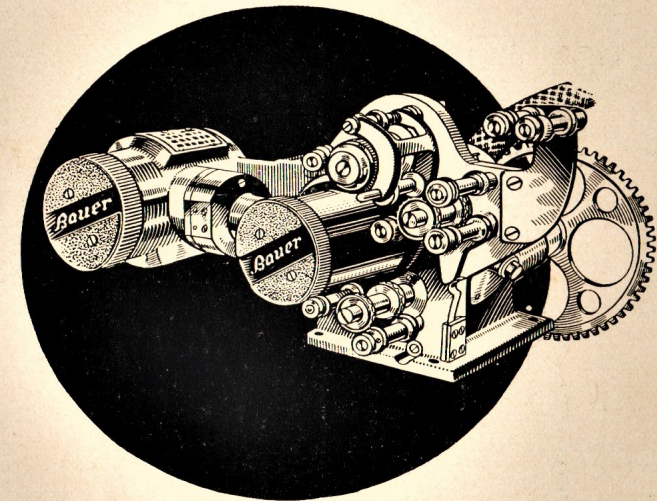
EUGEN BAUER GMBH, STUTTGART-UNTERTÜRKHEIM



***Bauer***

BAUER LTD.  
WARNER HOUSE,  
135, WARDOUR ST.  
LONDON, W.1.

## SOUND HEAD LT5



***A Speciality***

**THE FAULTLESS APPARATUS**

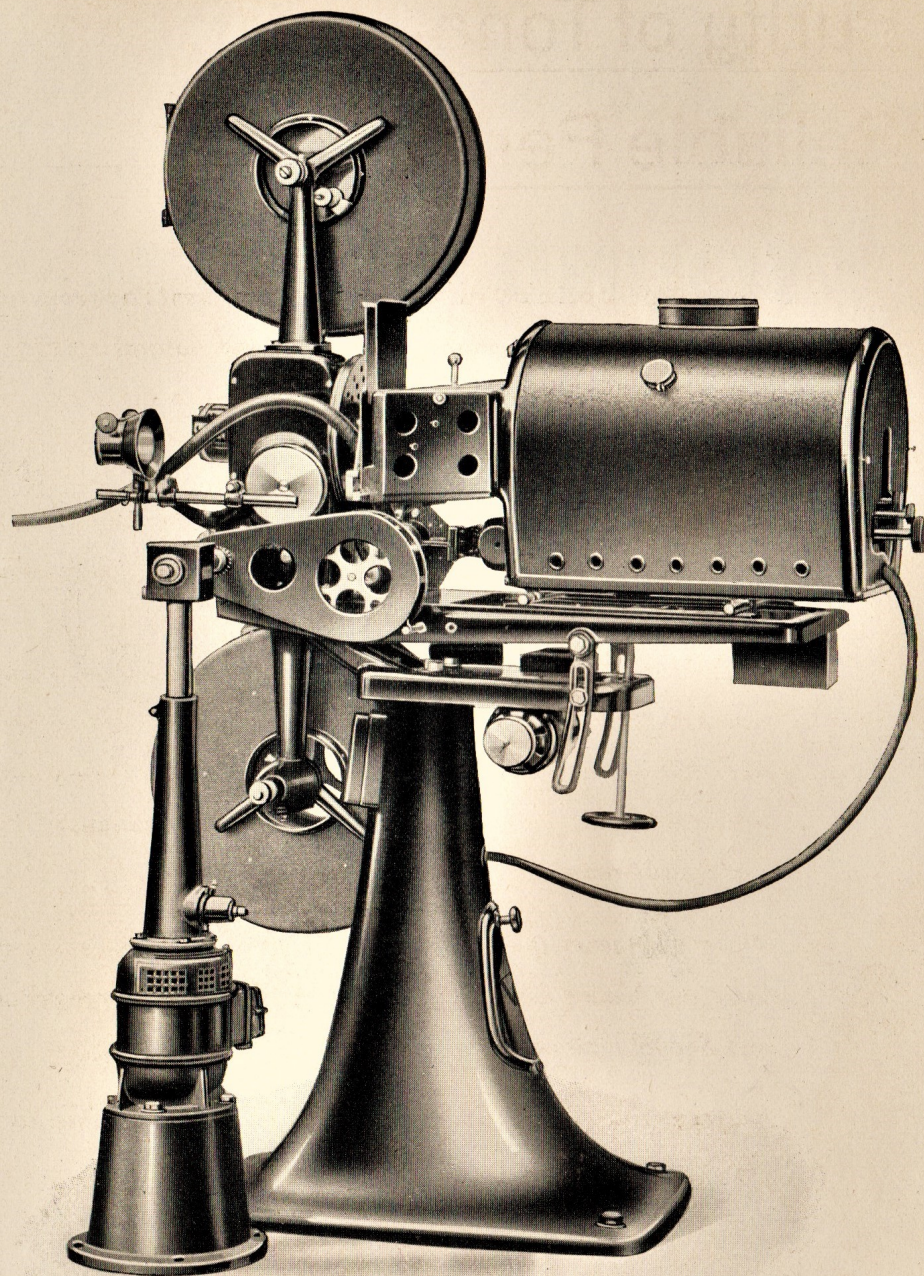
A number of patents have been registered for this Sound Head

We guarantee our Sound Film Equipment in accordance with our general conditions of sale. Moreover, given competent handling, first class amplifying equipment and proper installation, we guarantee perfect sound reproduction and the highest degree of reliability and endurance.

BAUER LTD.

WARNER HOUSE,  
135, WARDOUR ST.  
LONDON, W.1.





**Bauer M7 and LT5.** Driving side. Vertical drive through positive coupling. The driving shaft is easily transferred to the flywheel.

## Purity of Tone

## Reliable Performance

*These are the primary requirements of the present day projector. The reliability of the sound head, clear and natural reproduction of speech and music are most essential to the success of any theatre.*

*Bauer products have proved themselves exceptionally reliable and to have a long life. Bauer sound equipments, installed in the largest theatres at home and abroad, have proved equal to the greatest demands made on them. In common with all Bauer products, they have the benefit of long years of practical experience and are subjected to the most searching tests. Every new article marketed under the name **Bauer** has maintained the world wide reputation gained in the past.*

*When purchasing, the conscientious theatre owner is more exigent than ever before when considering the quality of a projection and Sound equipment.*

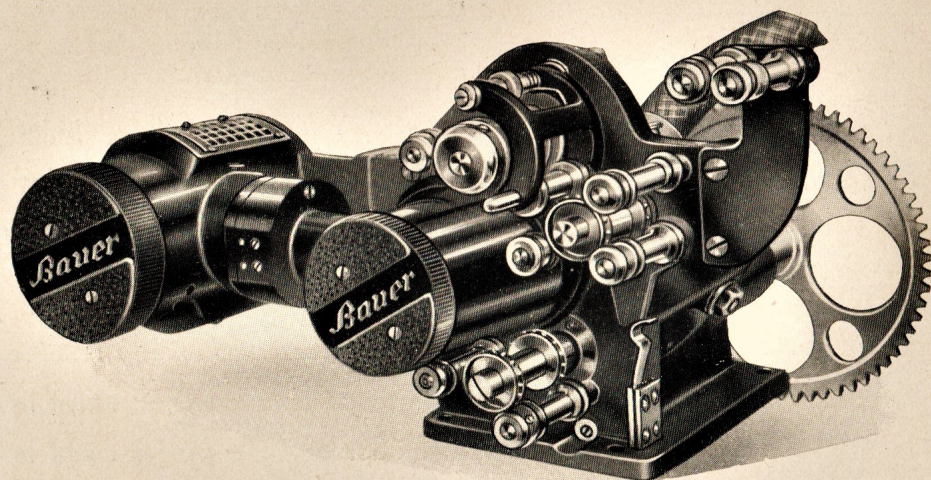
*All requirements – in matters of design or quality of material – are fulfilled in*

THE **Bauer**  
UNIVERSAL SOUND HEAD LT5



**Bauer**

## SOUND HEAD LT5



### **Universal Apparatus.**

for mounting on all types of projectors, especially Bauer M 7, Bauer M 5, Ernemann I, Ernemann II and III, Hahn-Goerz, Nitzsche, Erko etc.

Type LT 5 is supplied as a

*Right-handed Machine*

*Left-handed Machine*

*or for Rear Projection*

The Sound Head is adaptable for theatres of all capacities and may be mounted on practically every existing make of projector without difficulty.

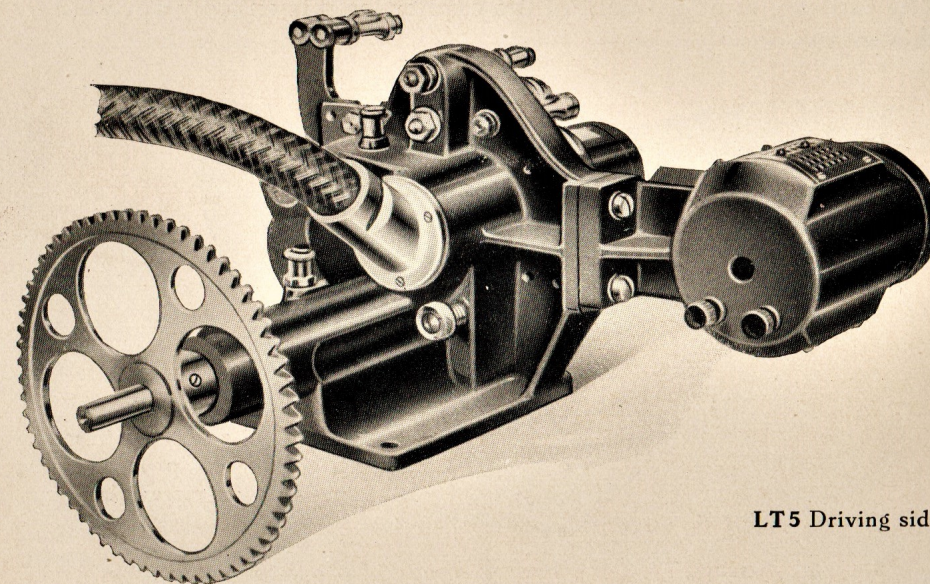
*In ordering, it is essential to state the model and make of projector for which the Sound Head is required and also the width of the motor. This is all the more necessary when ordering for left-handed machines or for rear projection.*

## THE LT5 SOUND HEAD

is the result of extensive experience in the sphere of sound equipment and is constructionally developed to withstand satisfactorily all demands placed upon it. The exceptional advantages of the LT5 prove, that as a sound head its capabilities are unsurpassed. In view of the widely varying conditions of working on various types of projectors, the model has been kept to the smallest dimensions possible, but at the same time no essential factor has been overlooked in the design, thus results a sound head of exceptional quality.

### **Absolute Continuity of Drive.**

In order to convert the intermittent movement of the film from the Maltese Cross sprocket to a smooth and continuous movement, the film is tracked through the sound head by means of two sprockets which are positively meshed with each other. The result is that the progress of the film past the photo electric cell is absolutely smooth and continuous resulting in sound reproduction at all times clear and pure.



LT5 Driving side

It is of special interest to note that neither flywheels nor runners are necessary in the steadying of the film. Runners, in particular, are likely to damage the emulsion surface of the sound track with consequent distortion of sound output.

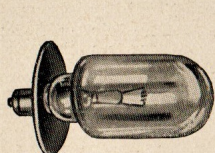


### Quick Threading.

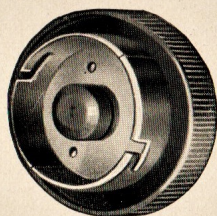
The highly practical design of the spring layout on the LT 5 enables the idler-rollers to be released or engaged with one movement of the hand. The threading of film is consequently easier and speedier.

### Self Centring Exciter Lamp.

The exciter lamp is fitted with a self centring flange which renders the replacement of a defective lamp a matter of seconds only. It is merely necessary to remove the cover cap of the lamp casing and replace with a new lamp.

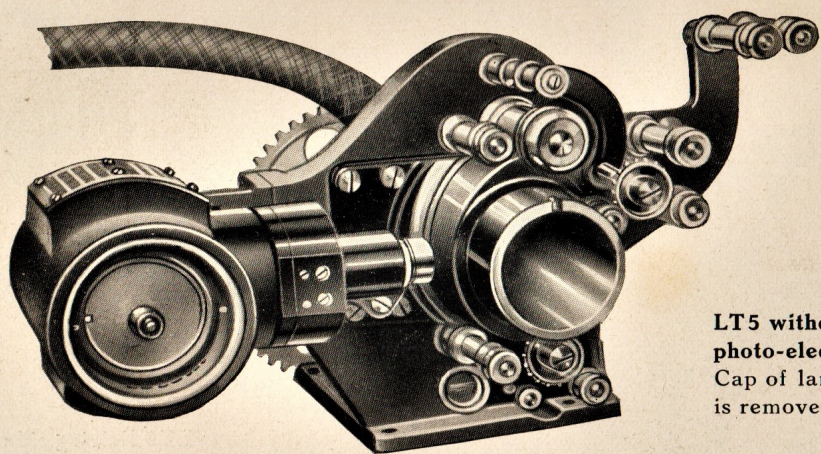


Exciter lamp



Cover cap  
for lamp casing

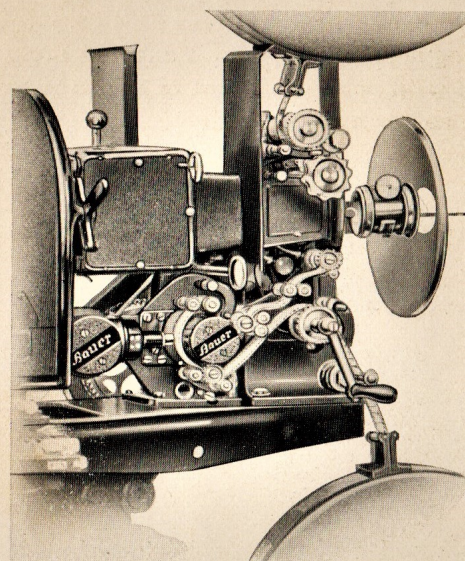
The centring or adjustment of the exciter lamp is entirely obviated by this means.



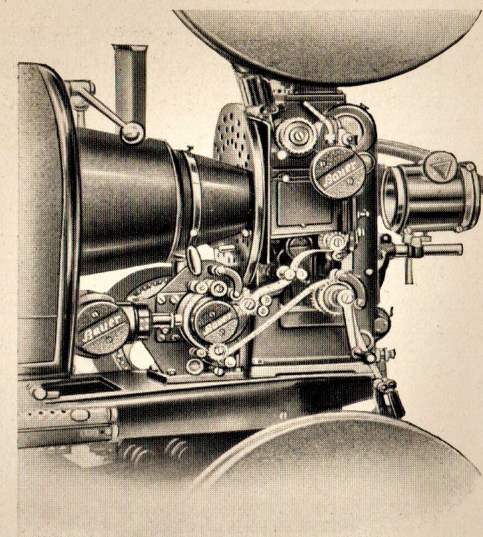
LT 5 without  
photo-electric cell.  
Cap of lamp casing  
is removed.

### Optical Efficiency.

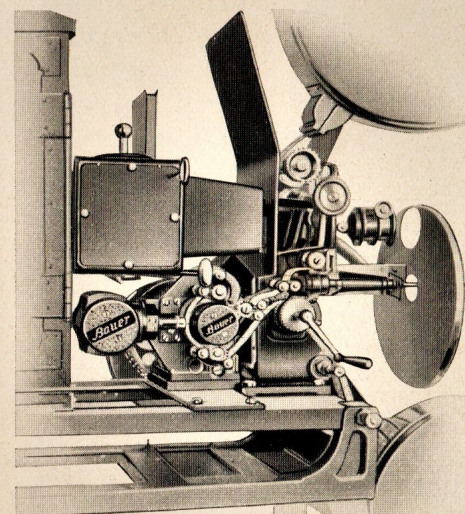
The optical system is designed to yield the highest possible concentration of light on the sound track. The restricted dimensions of the sound head have enabled the whole unit, including the exciter lamp, to be arranged in the same plane of projection.



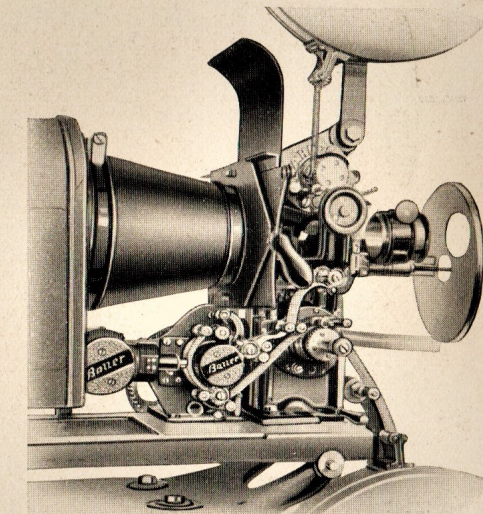
LT 5 fitted to Bauer M5



LT 5 fitted to Bauer M7



LT 5 fitted to Ernemann I

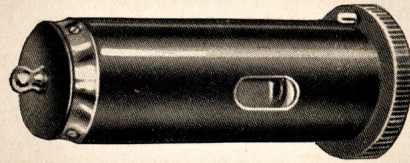


LT 5 fitted to Hahn-Goerz



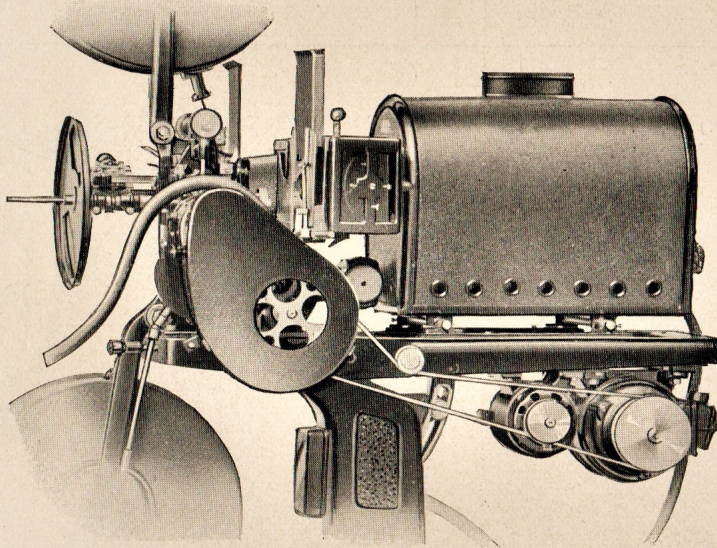
### High Grade Photo Cell.

The Sound Head is equipped with a highly sensitive special Photo-Electric-Cell of long durability. A high reserve of output and perfect reliability are ensured by the extraordinary sensitivity of the electric emulsion. The cell is embedded in rubber and enclosed in a metal housing which completely insulates the unit from electrical disturbances. A replacement can be effected in seconds, the trouble of connecting wires is completely obviated: the simple operation of replacing the cell cover automatically re-establishes contact between the cell and its cable.



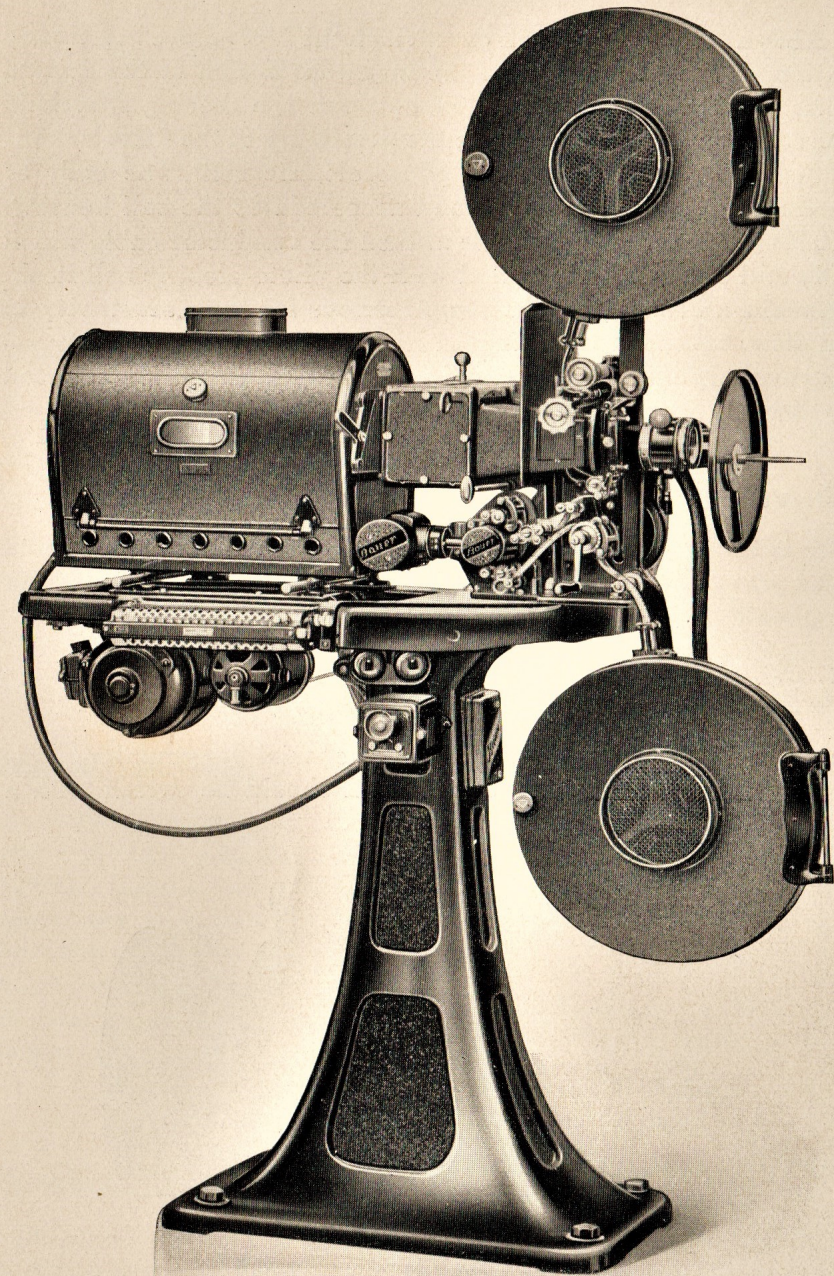
### Non-Sensitive Wiring.

The wiring between the photo electric cell and the amplifying plant should be of the lowest possible capacity and should be completely free from capacity or induced disturbances of external origin. These requirements are unconditionally fulfilled in the conductors employed in this unit so that its efficiency is of the highest possible standard. The cable is completely non-sensitive to any external disturbances and is especially protected against the



Bauer M5 with LT5. Driving side with horizontal motor

chance transmission of machine noises. The photo electric cell cable is guaranteed not to set up any electrical disturbances in contiguous conductors.



Bauer M5 with LT5 (on light pedestal). Drive: Horizontal motor



### **Film Track.**

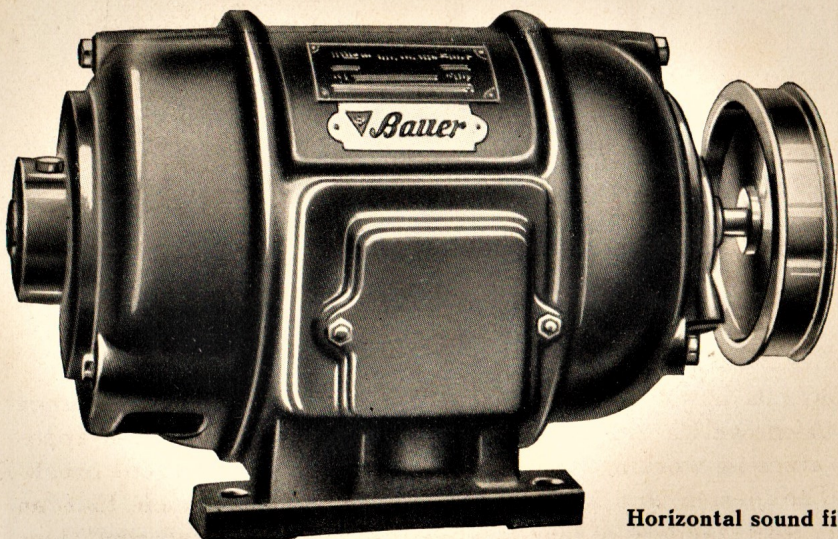
The LT 5 has a convex film track over which the film passes in a steady and continuous manner thanks to the ingenious design of the driving sprockets. Tension rollers, installed between the driving sprockets and idler rollers, completely obviate the possibility of the film slackening or "lashing" when passing the photo electric cell. The body of the film track is circular in shape and accommodates the cell housing. In the farther side of this housing is affixed the conductor cable which is directly and positively connected with the photo-electric cell itself. By this means all small gauge wires, notorious for their sensitivity to external disturbances, are eliminated from the interior of the apparatus, a particularly important factor in obtaining pure and undistorted reproduction.

### **Chain Drive.**

The drive is transmitted from the projector by means of a roller chain which has proved to be the most reliable form of drive and free from any complications.

### **Reliable Sound Film Motor.**

The apparatus is supplied with a motor of special construction. It is absolutely essential that every sound head should be driven with a



Horizontal sound film motor

separate motor, since it is only by this means that rock-steady running can be obtained.

Perfect projection of sound films is dependent upon the reliability of the motor, hence special attention has been paid to its design and manufacture.

### **Vertical Drive.**

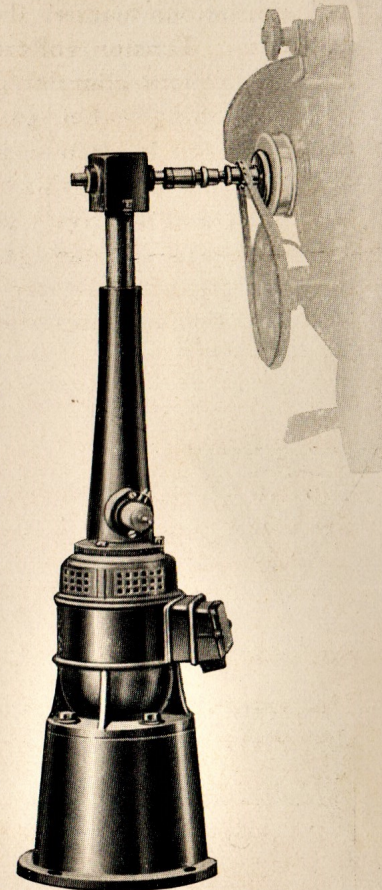
Many theatres use the Bauer Vertical Drive in place of the ordinary sound film motor. This drive can easily be adapted to any type of projector and ensures vibrationless running. On the basis of data collected on working conditions, the Vertical Drive is by far the most efficient means of driving sound head mechanisms.

### **Simple Assembly.**

Assembly can be completed in a very short space of time. Careful attention to the assembly instructions supplied with every apparatus renders expert knowledge unnecessary in fitting the LT 5 Sound Head to any type of machine. It is merely necessary to effect assembly with scrupulous care to ensure perfect working for all time.

### **Sturdy Design.**

The apparatus is solidly built and possesses powers of endurance hitherto unknown. Careful and competent handling will permit the apparatus an efficient working life of many years duration without breakdowns. The design and construction of this unit is such that an invariably high standard of performance is maintained in all conditions and will successfully withstand severe overloads.

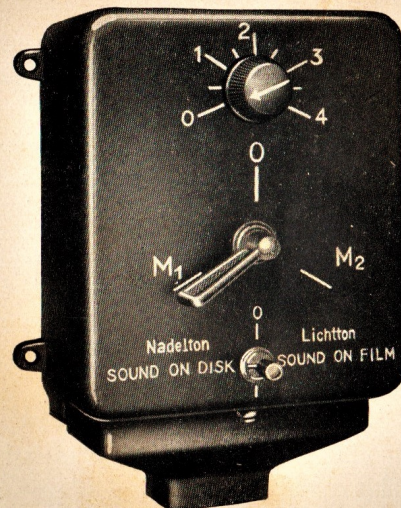


Vertical motor  
an driving shaft  
(applicable to all types  
of projectors)

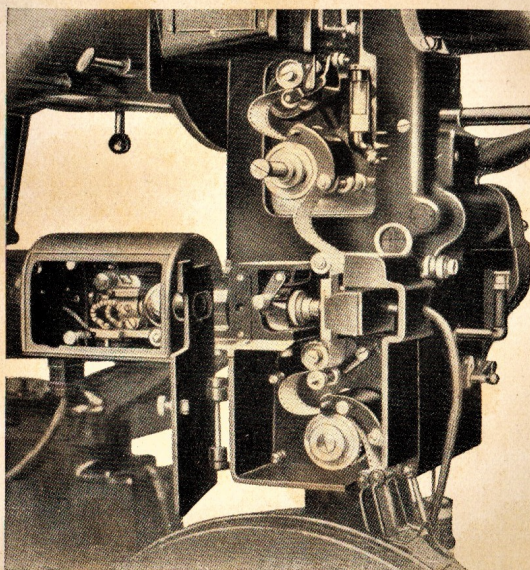


### Fader Switch.

This switch, which can control both machines, renders possible a perfect change over without any sound disturbance. The change over of sound from one machine to another cannot be detected audibly when this fader switch is employed. Practical experience has shown this unit to be the most reliable accessory to successful sound-film projection ever known. Use alone will prove its manifold advantages.



## FOR SUPER THEATRES



### *Bauer*

# LT 7

on the M7 Projector

**The perfect  
outfit for  
big Theatres**

*Ask for our detailed special offer*



