



Pathé

PATHÉ CINEMA
Société Anonyme au
Capital de 50.000.000 de Frs
PARIS

Pathé-Baby

FILM

Each decade extends the influence of the Cinéma broadens its domain, expands its application. At the present time, to enable its entry into our very home, it is diminutive, simple and cheap ; here it is in the school, in the club, now a living lecture sometimes animated news and, but shortly afterwards, a faithful narrator of our own life history. Witness of our youth it enables us to live again the memories of those care free days.

Those discoloured photos, gummed on sallow leaves by our Parents ! of what use are they in comparison with the brilliant animated pictures on the screen ?

The Cinéma, longed for eagerly by all, is now within reach of everyone, and the moment has now come to select from among the available models on the market, that one which complies most nearly with our requirements, and in order to arrive at a careful decision a few explanations are essential.

Consider, first of all, that the material for cinematography comprises two distinct components : FILM AND APPARATUS, the first being constant, the other, variable. In effect, once a particular gauge of film is decided upon it will not undergo any change, whereas, following the laws of progress, apparatus must necessarily be constantly modified to incorporate all the latest improvements.

It is usual therefore to make the choice of apparatus depend upon the choice of film to be used, and in this selection to allow the most important advantages to prevail.

Among the various sizes of film available, which is the most beneficial?

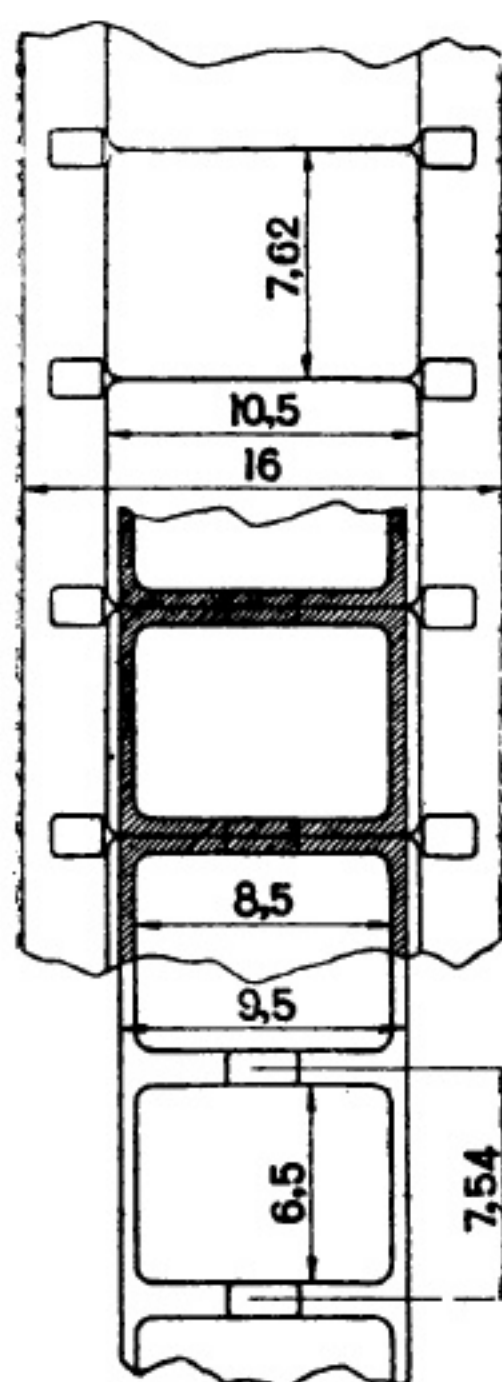
Needless to say, standard (35 mm) film is out of the question; only the most convenient amongst the reduced sizes has to be considered,

*Among the narrow-width films, if one decides—as one ought to decide — that the best film is the **one which shows the largest picture on the smallest of films**; then the “Pathé Baby” film is undoubtedly supreme, its coefficient of effectiveness (i.e., the ratio of the image area to the total area of the film) being 0.78, that is to say, not far short of unity.*

This important yield influences not only the price of the film but also its capacity and compactness. The

photographic quality of the projected image, notwithstanding the small size of the film, is really better than with standard film, since the image on "Pathé-Baby" film projected on a screen 5 ft. in width is subjected to less magnification than Standard film projected on the large picture hall screens of an average width of 13 ft. 6 ins. (x)

Since the size leads the price of the film, it follows that for the same number of pictures, "Pathé Baby" film is, amongst the narrow films, 41 % cheaper than its closest competitor (xx)



(x) The picture on "Pathé-Baby" film, 8,5 mm in width, thrown upon a screen of about 1 m. 50 c. in width represents a magnification of 176 diameters

$$(1.500 : 8,5 = 176)$$

whereas the picture on Standard (35 mm) films which is 24 mm in width and covers a screen 4 m. 50 c. in width, is enlarged 187 diameters

$$(4.500 : 24 = 187)$$

(xx) The picture on 16 mm films is 10,5 mm in width, and if these areas of film corresponding to one picture are measured, is it found that :

for 16 mm film

$$A. = 16 \times 7,62 = 122 \text{ sq. mm}$$

for "Pathé-Baby" 9,5 mm film

$$A. = 9,5 \times 7,54 = 71,6 \text{ sq. mm}$$

The latter area is 41 % smaller than the former.

This advantage is still greater in the case of "still" pictures and titles... thanks to the notches which, stopping the film in the projector, reduce its consumption whilst increasing its yield.

Besides, owing to the reversal process (a treatment turning into a ready-for-projection positive the very film used in the camera) so perfectly suitable for the "Pathé Baby" film, the actual saving is brought to the utmost.

Furthermore, the smallest film makes possible the smallest apparatus; a consideration of capital importance in so far as the Camera is concerned; the regular use of a cine-camera being limited only by its portability and the cost of the films used.

All the foregoing conditions militate in favour of "Pathé Baby" film which is destined more and more to become the universal film for all kinds of animated photography outside that of the Standard Cinema.



INTRODUCTION

BECAUSE the “Pathé-Baby” Projector is constructed on a miniature scale for Home use, one must not be misled into the belief that it is a Toy. On the contrary; built on the soundest principles, the “Pathé-Baby” Projector is a machine in the perfecting of which, Science. Mechanical Accuracy, Skilled Workmanship and Experience of over 25 years have been devoted.

The “Pathé-Baby” Projector contains in its mechanism the greatest simplicity combined with the utmost efficiency and ABSOLUTE SAFETY. As will be seen in the pages of this book the operating of the “Pathé-Baby” Projector is a matter which a child of ordinary intelligence can learn in the course of an hour or two.

How to Prepare and Work the Pathé-Baby Projector

TO PREPARE FOR USE. — On opening the case containing the machine all necessary accessories for projecting perfect pictures will be found.

The outfit comprises :

- (1) *The complete mechanism.*
- (2) *Connecting wire with plug.*
- (3) *An electric bulb.*
- (4) *Two handles.*
- (5) *An insulating mat.*
- (6) *Book of Instructions.*

THE SCREEN. — Whilst it is possible to project perfectly clear Pictures on the wall, or any white surface, it is advisable, to obtain absolute definition and sharpness, to use the extra luminous screen specially prepared in the same way as those used in the leading Cinemas.

This screen, known as the “ Pathé-Baby ” Silver Sheet, may be obtained at small cost from the “ Pathé-Baby ” Projector Department, in two different sizes, and should be placed directly facing the projector at a distance of 10 feet for a small size, and 16 feet for the larger.

A slight forward or backward movement of the apparatus will bring the projection in perfect alignment with the area of the screen.

THE PROJECTION. — Having removed the apparatus from the case, place the machine on the insulating mat supplied to save the table from scratches.

Screw the handles "F" and "D" on their axes (fig. 4).

TO PLACE BULB IN LANTERN. — Slightly loosen the screw at "Z" (fig. 4), pulling out the case "N" (fig. 5) and gently fix lamp in the socket.

NOTE : Take care to see that the tenon *a* of the lamp is fixed securely into the slot *b* of the socket (fig. 1).

Remove lamp from an ordinary electric light, and replace with bayonet attachment at the end of the insulated wire. Fix current plug "Y" as shown (fig. 5).

PLACING THE FILM. — Lean the lantern towards the rear by pressing it downward and outward, supporting it till it rests. Take care not to FORCE the lantern open or closed. Always use the down and outward pressure to open, and the downward pressure to close. Open the gate "B" and attach Film spool to axle, turning the opening on the spool towards rear of apparatus, and engaging the tenon "C" of the shutter in the notch "V" in the case of the spool. Unroll two or three inches of the Film, which should be drawn with the right thumb and index finger out of the spool,

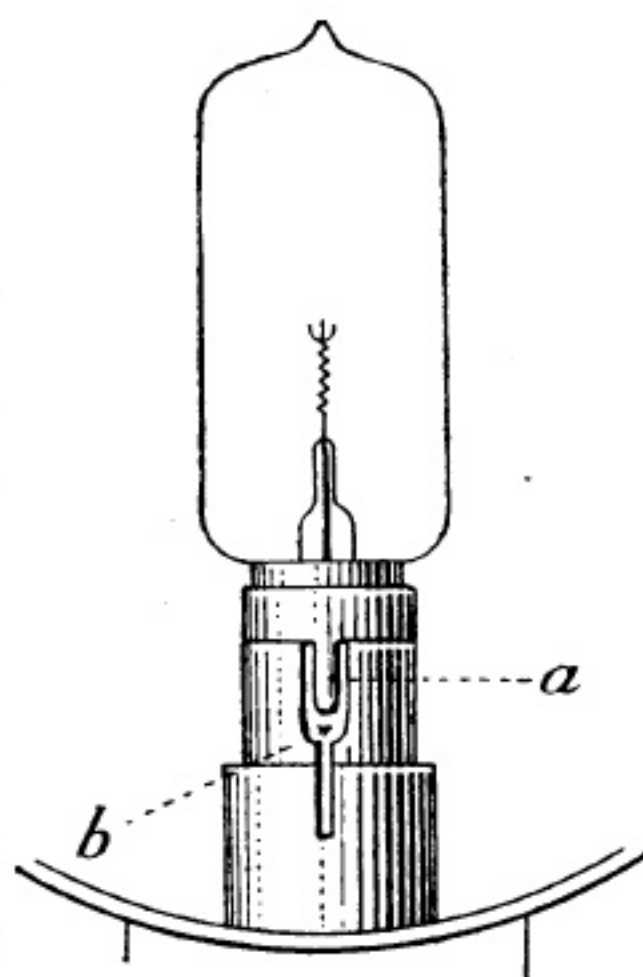


Fig. 1

over the roller guide "L" into the opening of the passage "M", communicating with the lower magazine "T", in front of the hinge of the lantern. until the long notch *g* of the Film (fig. 2 and 3) is presented in front of the catch "J". Replace the lantern but take care not to displace the Film.

All is now ready for projection.

TO PROTECT THE FILM FROM OVERHEATING. — **When the Projector is not running**, the lamp should on no account be kept alight, with the lamp-house in the working position.

Either, **the lamp-house should be disengaged leaving the lamp alight**, or the lamp should be extinguished, by disconnecting the plug "y" (fig. 4 & 5).

For the latter case our Two-way Switch (Ref. P. 111) enables the lamp to be extinguished conveniently, at the same time lighting up the hall, without the necessity of withdrawing the plug "y"

SHOWING THE PICTURE. — The operator should sit immediately behind the apparatus, holding his left hand on the side of the machine to steady it. With the right hand grasp the handle firmly and turn with an easy smooth motion. As soon as the first picture appears it should be focussed and the lighting regulated.

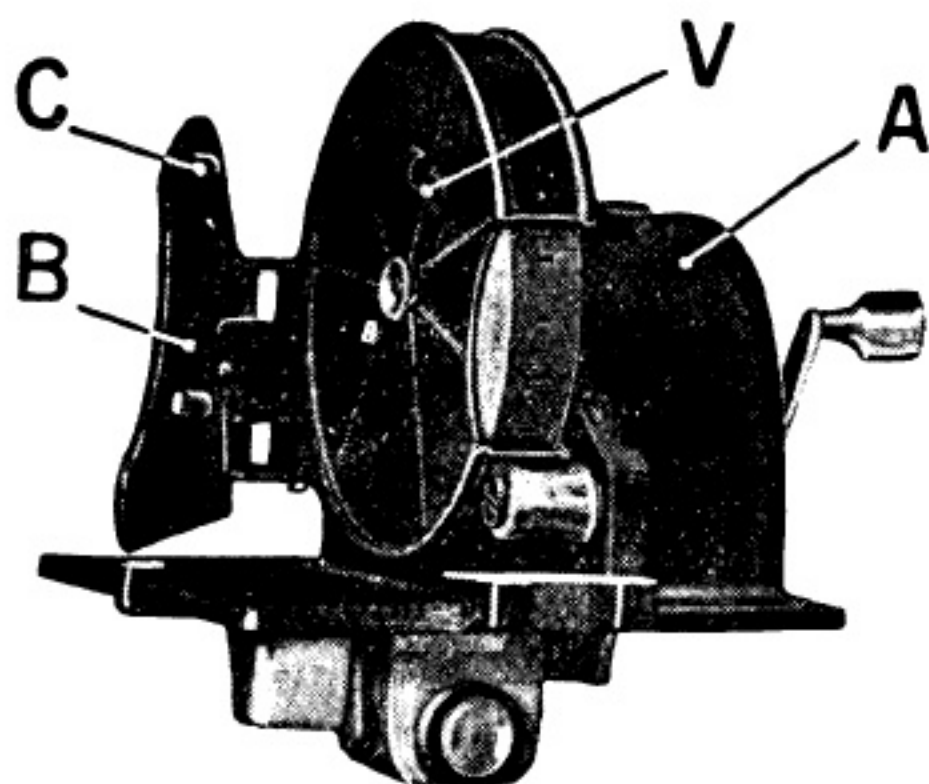


Fig. 2

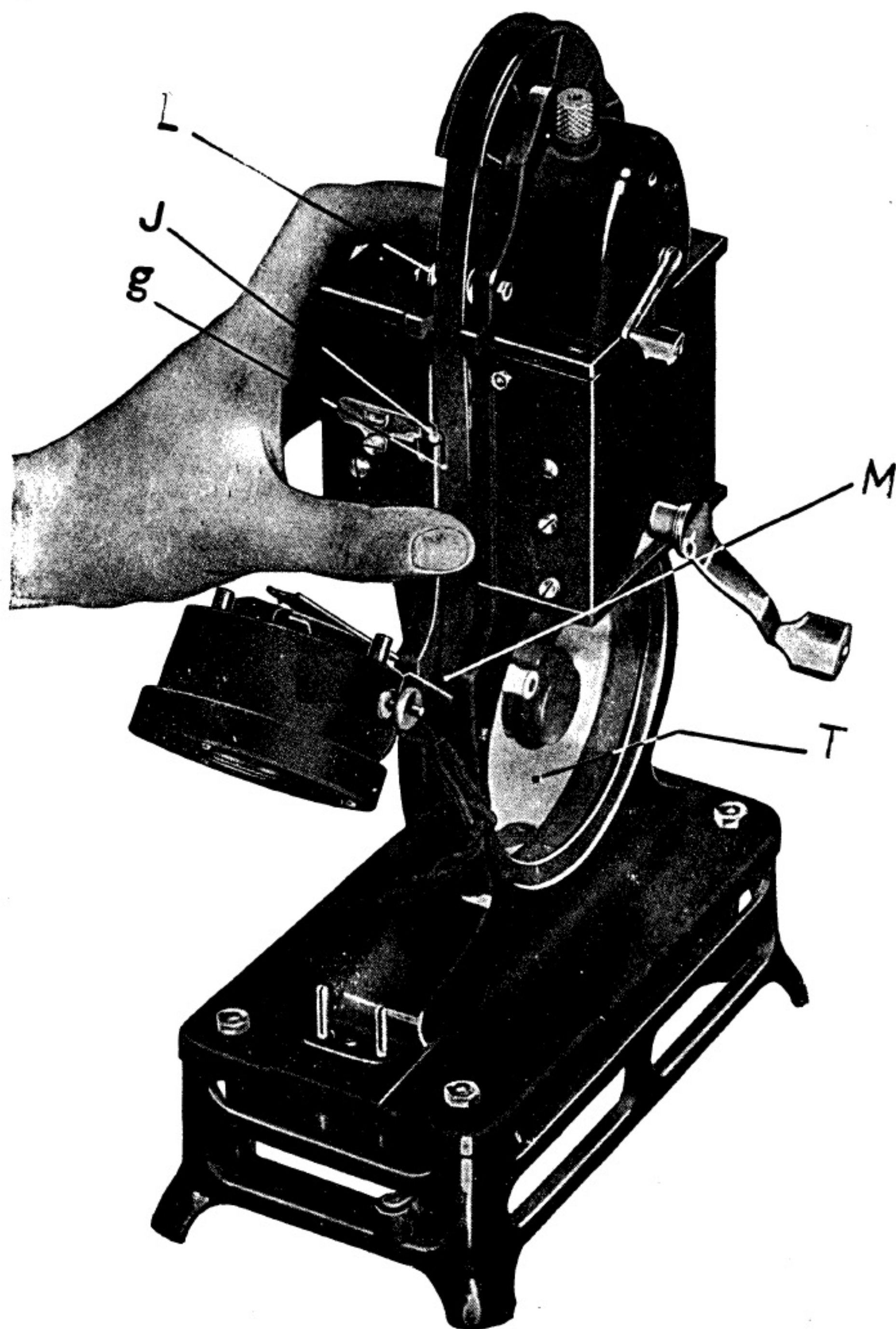


Fig. 3

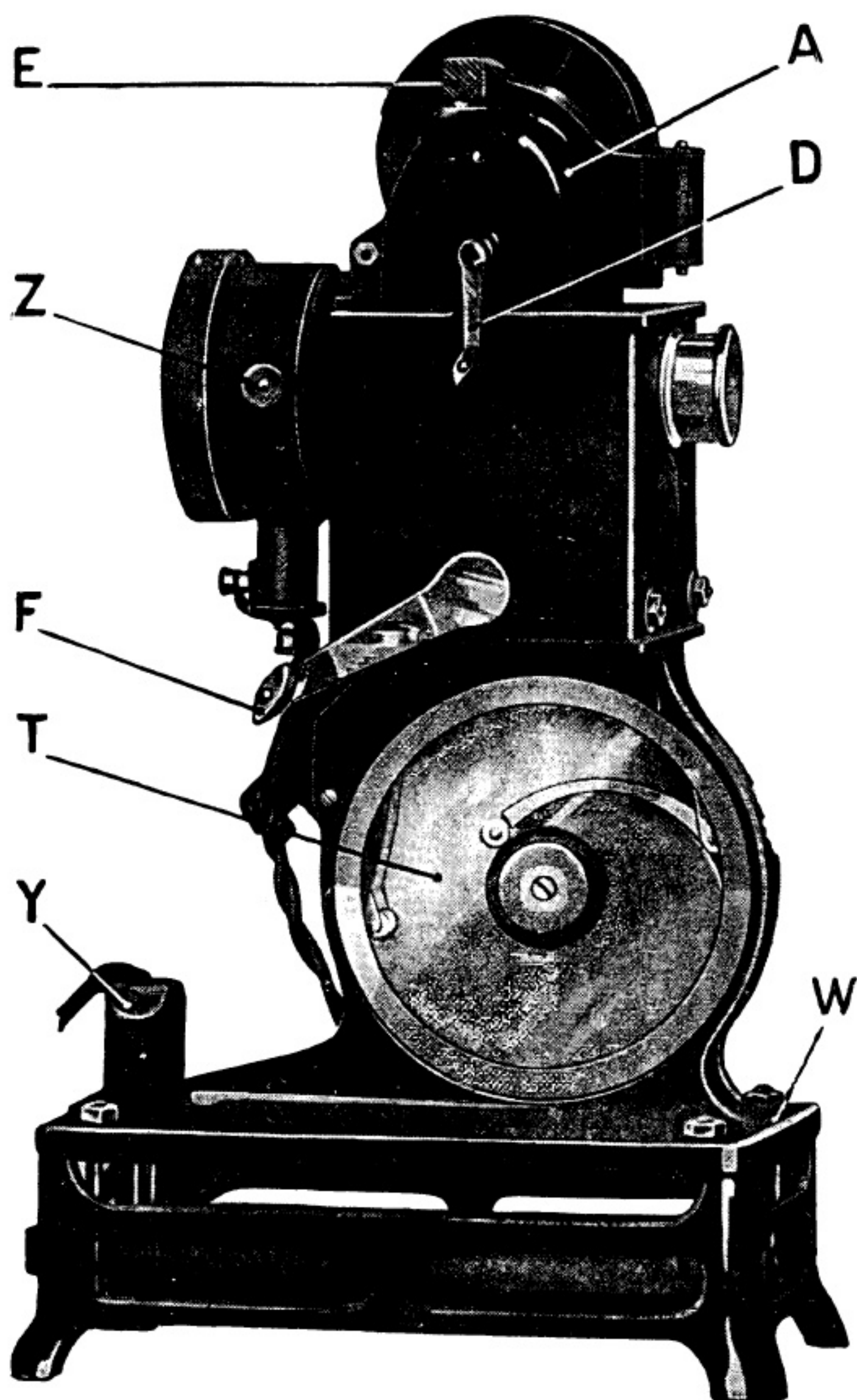


Fig. 4

- | | |
|--|-----------------------------------|
| A. Upper Magazine. | G. Focusing Catch. |
| B. Gate of upper Magazine. | H. Screw for opening Belt Casing. |
| C. Tenon of Ditto. | I. Framing Catch. |
| D. Rewinding Handle. | J. Automatic Picture Fixing. |
| E. Screw for opening Upper Magazine and Machine. | K. Gate Aperture. |
| F. Handle for driving mechanism | L. Roller Guide for Film. |
| | M. Film Track. |

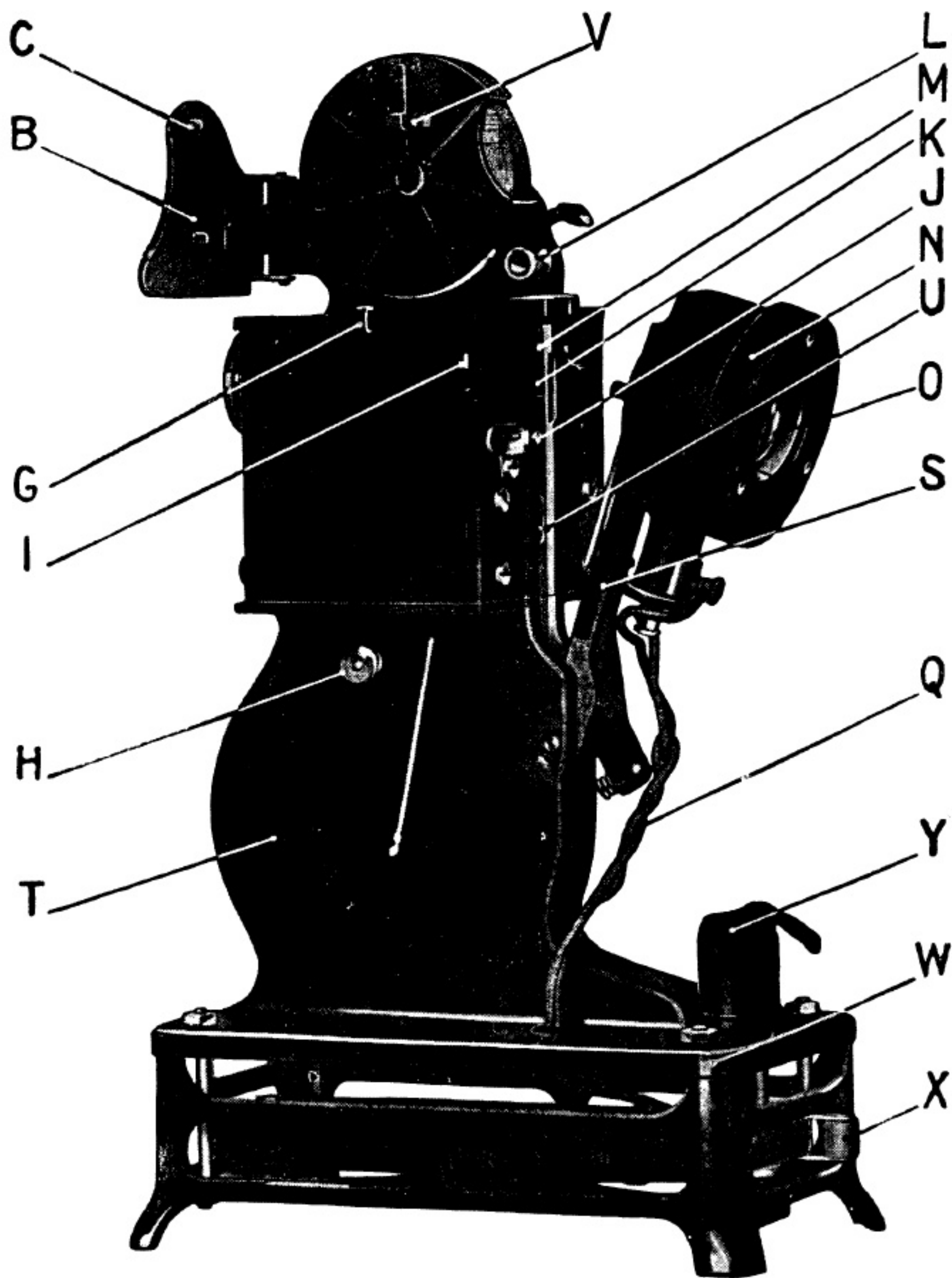


Fig. 5

- | | | | |
|----|-------------------------|----|--------------------------------|
| N. | Projection Lantern. | U. | Claw. |
| O. | Reflecting Mirror. | V. | Notch in reel case. |
| P. | Electric Lamp (Fig. 1). | W. | Base of Projector. |
| Q. | » Conductor. | X. | Lever for regulating rheostat. |
| R. | Condenser (Fig. 9). | Y. | Current Plug. |
| S. | Film Track Gate. | Z. | Opening Screw for Lantern. |
| T. | Lower Magazine. | | |

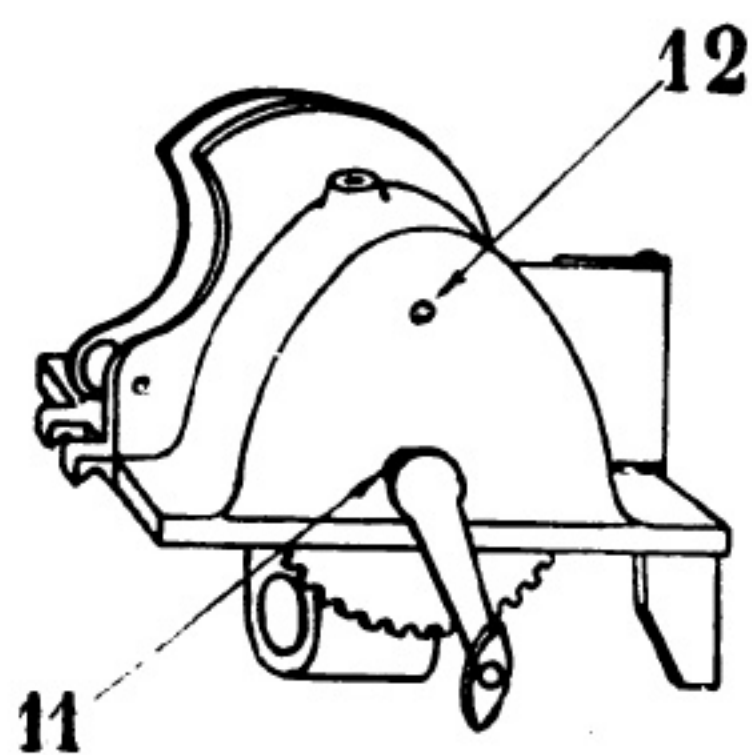


Fig. 6
Upper portion

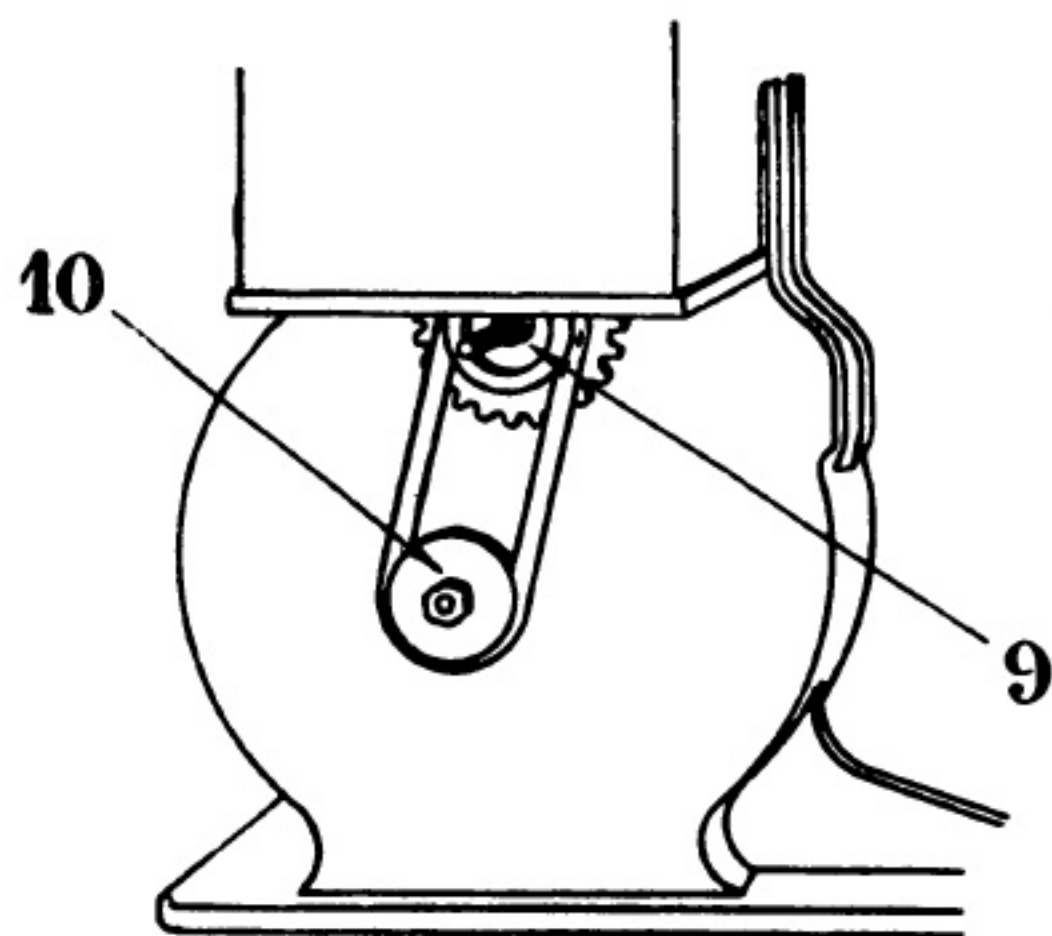


Fig. 7
Lower portion

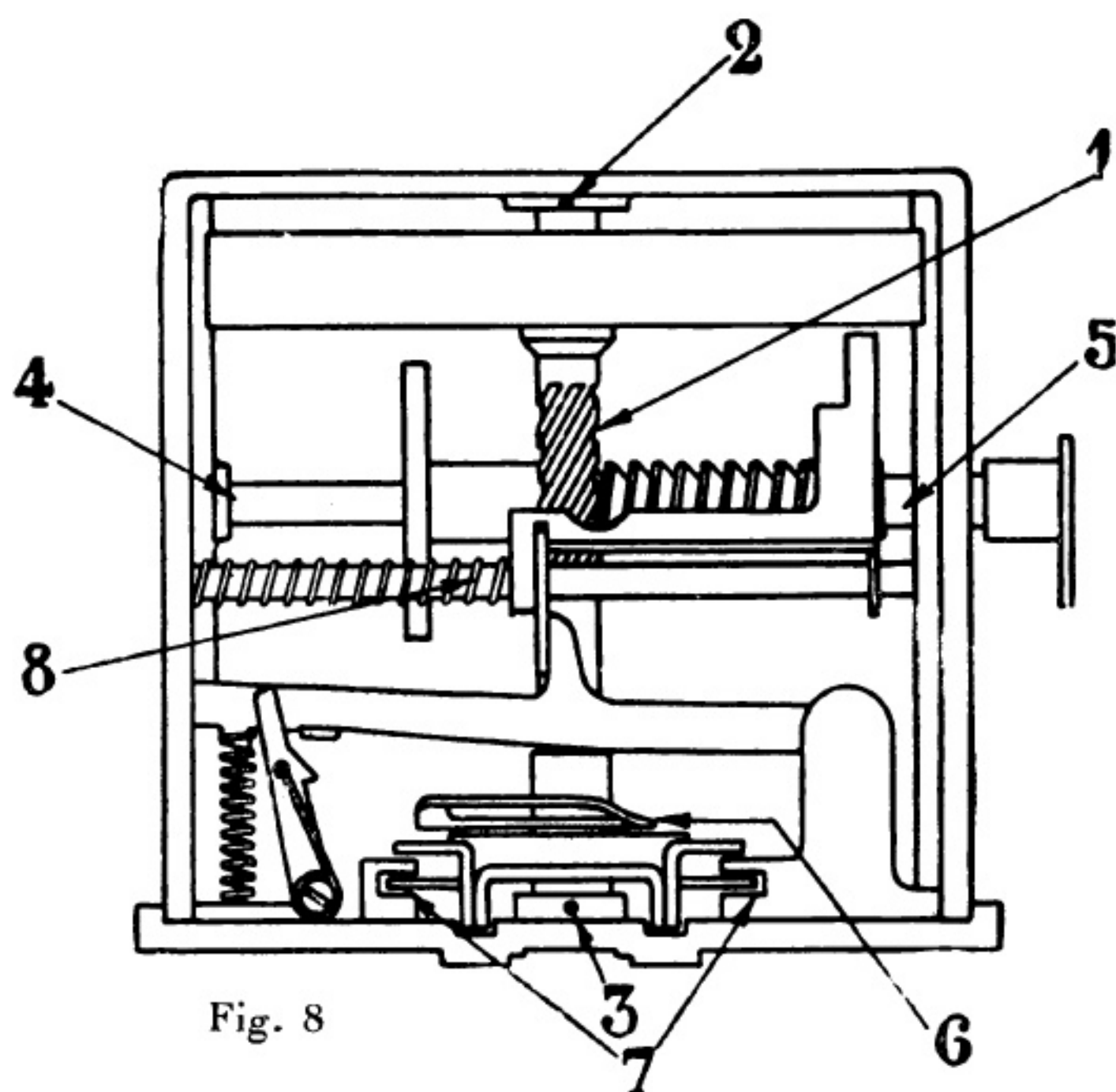


Fig. 8

Mechanism seen from above

NOTE. Oil the parts indicated after every ten occasions of use.

FOCUSSING.

- (1) Move the screen, or apparatus, according to the size of picture required.
- (2) Move the button "G" (fig. 5) forward or backward until the picture appears clear and sharp. In some projectors a milled head replaces the button "G" and is to be rotated one way or the other to obtain clear definition.
- (3) To make certain of a yet better result, one could in the course of projection, focus by a particular detail, object, clear lines, or by any figure situated in the foreground of the picture.

Provided the screen or apparatus is not moved again this focussing will suffice for the entire projection.

REGULATING THE LIGHT. — Move the lever "X" of the Rheostat Regulator in the base of the apparatus towards right or left.

MASKING THE FILM. — Push upwards or downwards the button "I" situated on the back edge of the left hand side of the machine until the projection of the perforations can no longer be seen above or below the projected picture.

STUDYING THE PICTURE. — Recommence the movement of rotation, regulating the pace to such an extent that the spectators have time to read all titles clearly.

Moreover a "title" or a "still" may be held stationary for several seconds without danger to the film whatsoever.

This exclusive feature of the "Pathé-Baby" Projector is of incalculable value to artists, sportsmen, schoolteachers and others in enabling them to make a detailed examination of certain subjects.

REWINDING THE FILM. — Lean the lantern towards the rear (see “Placing the Film”), disengage the film, if necessary, from the pin by drawing it lightly out of the track, grasp the little handle “D” and turn anti-clockwise. In the event of resistance during rewinding, do not force, but turn handle “F” a few times anti-clockwise so that the unrolled film occupies the lower magazine “T”.

When spool is re-wound disengage it and attach the next to be projected.

USEFUL HINTS. — Polish the lens “O” and the electric globe with a soft cloth or chamois. Polish condenser “R” on

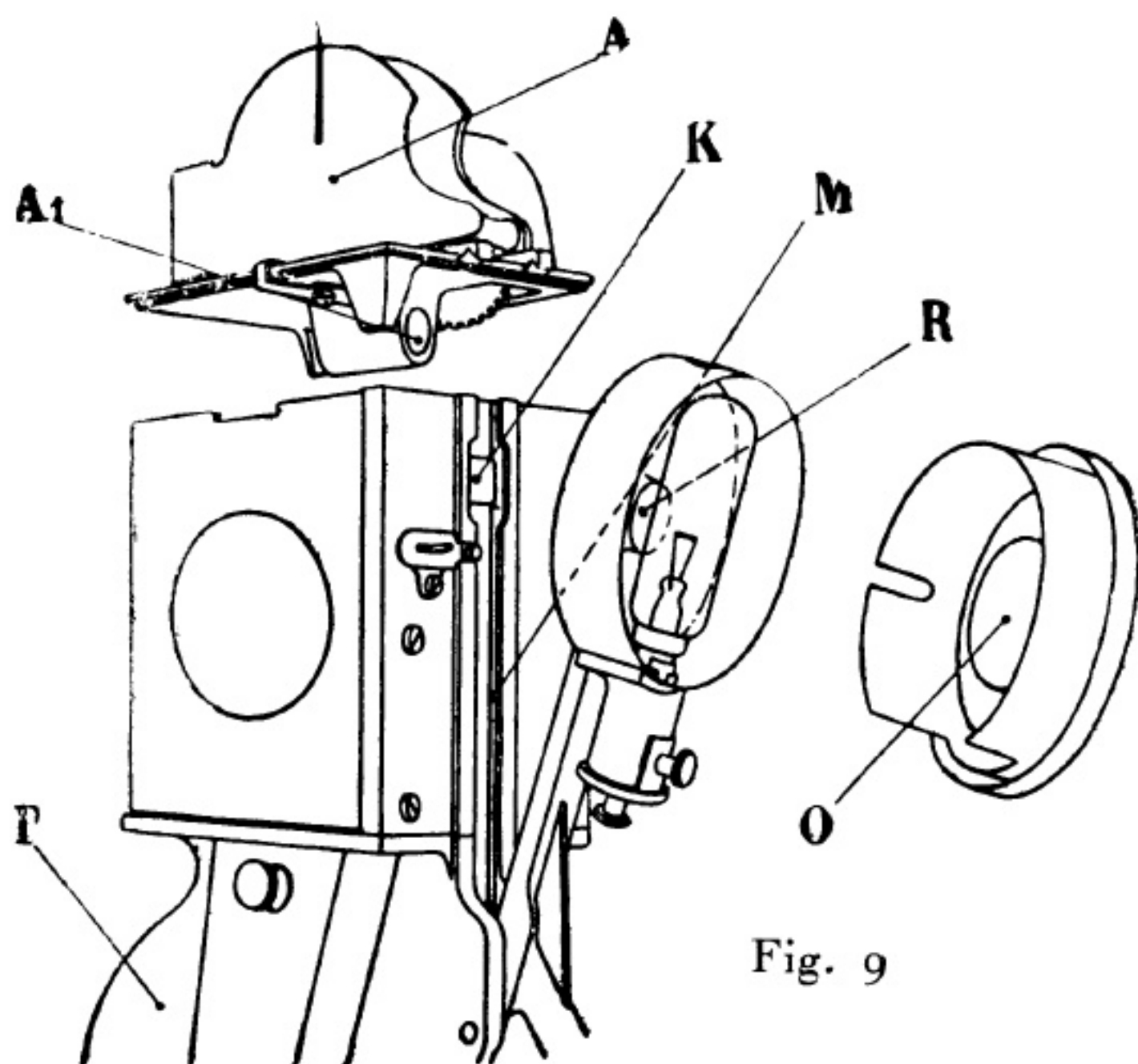


Fig. 9

both faces (fig. 9). Clean the surfaces of the door and the film track so that no dust or grit be left. For this purpose use a little

bone scraper — not a hard metal one which would scratch the surface. Wipe both faces of the projection lens.

Do not allow dust to accumulate in the Magazine “T”. Oil the mechanism regularly with the special oil provided. Place sparingly with the point of the can one drop only in the holes which lead to the axles, and in general on every part where there is friction or movement.

Oil the parts indicated after every ten occasions the machine is used. One drop of oil in the holes or on the surfaces indicated in Figures 6, 7, and 8, is sufficient. To get at the points 9 and 10 undo the screw H. (Fig. 5) and remove the cover plate.

Do not leave an excess of oil about the mechanism as you risk the film becoming smeared with this oil.

Do not allow dust to accumulate in the Magazine “T”. To clean, remove the metal circle by turning it clockwise till the catches are opposite the notch in the edge of the Magazine and let it fall forward.

Our **cleaning outfit** contains all the items necessary for this purpose.

SOME MORE HINTS. — When inserting the film do not pull out more than 5 to 6 inches of the film to avoid scraping it. Should the film be accidentally torn it can readily be repaired by using our **film mender** together with our **mending patches**.

To make the bulbs last longer do not **overvolt** them.

The “Pathé-Baby” Projector will last many years without

needing any repairs, and should replacements or repairs of any kind be necessary they must be carried out by skilled mechanics or at our works.

If you find it tedious to work the Projector by hand you will find it a great convenience to use the "**Pathé-Baby Motor**" (Ref. P. 116) which can be easily attached to all our Projectors.

The **Hermagis Superior Lens** (Ref. P. 107) with Short focus improves projection by allowing a wider and more luminous beam of light.

The **Babycolor** (Ref. P. 120) will enable you to tint your pictures as projected and thus enhance their pictorial beauty.

Perfect projection is assured by using our **Silver Screen** (Ref. P. 153 & P. 154).

The **two way switch** (Ref. P. 111) will be found of the greatest convenience in order to readily illuminate the room whilst changing the film in the Projector.

Above all, with the "**Pathé-Baby Camera**" (Ref. P. 201) you can take, without any special photographic experience, and at extremely low cost, films of your own family. We cannot give you any idea of the delight so created in the family circle by the projection of films showing your dearest ones. This is possible for anybody having our **Camera**.

It is impossible to describe the extreme pleasure and delight such films cannot help but give to all those who participate in them, and they remain for all time a living record of your most cherished memories available at an instant's notice, for reference or the pleasure of once again living over old times. You must have a "**Pathé-Baby Camera**" to obtain the fullest enjoyment from your "**Pathé-Baby Projector**".

Notes for Projector Booklet

Placing the lamp in position. — Loosen milled screw **z** by about one turn and remove the lamp-house cover **n** by pulling it away from the Projector.

Loosen milled screw **x** and place the lamp in position as shown in fig. 1. Engage the base of the lamp in the lamp-socket *taking care to slip the **t** piece **c** of the lamp into the corresponding slot in the socket* — then push the lamp well home. The latter is indispensable in order to obtain a

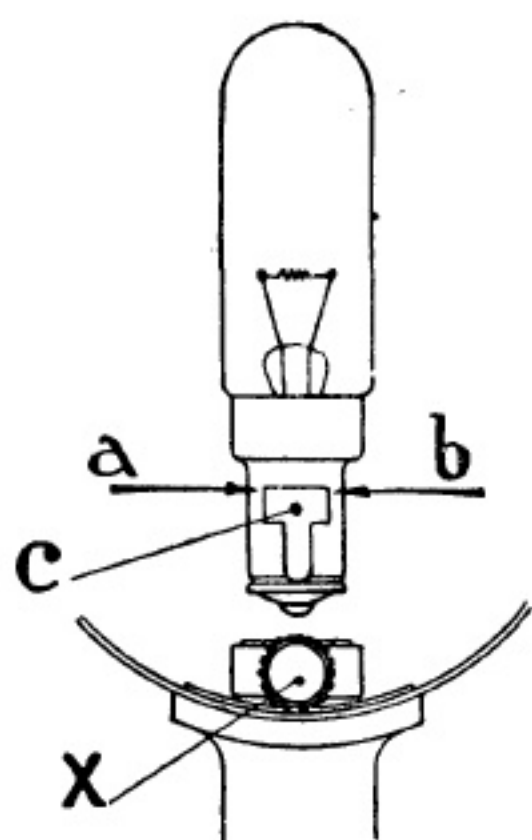


Fig. 1

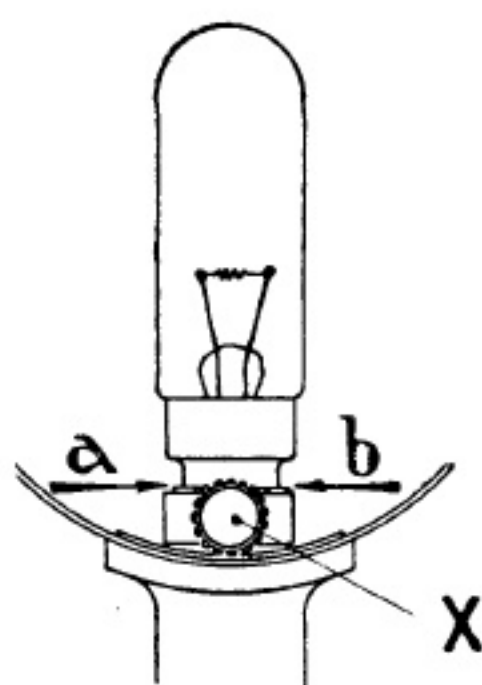


Fig. 2

clear, even lighting of the screen. The upper edge (a-b, fig. 1) of the **t** piece on the lamp must fit flush with the edge (a-b fig. 1) of the lamp socket. Tighten the screw **x**, without forcing it, in order to hold the lamp, and replace the cover **n**.

Opening the Gate. — The gate **s** is opened by pressing the catch **p** fig. 3 downwards and drawing it away from the Projector.

The Take-up. — Make sure that the guide-arm **x** is in the position **f** and not in the position **h**, the latter position being

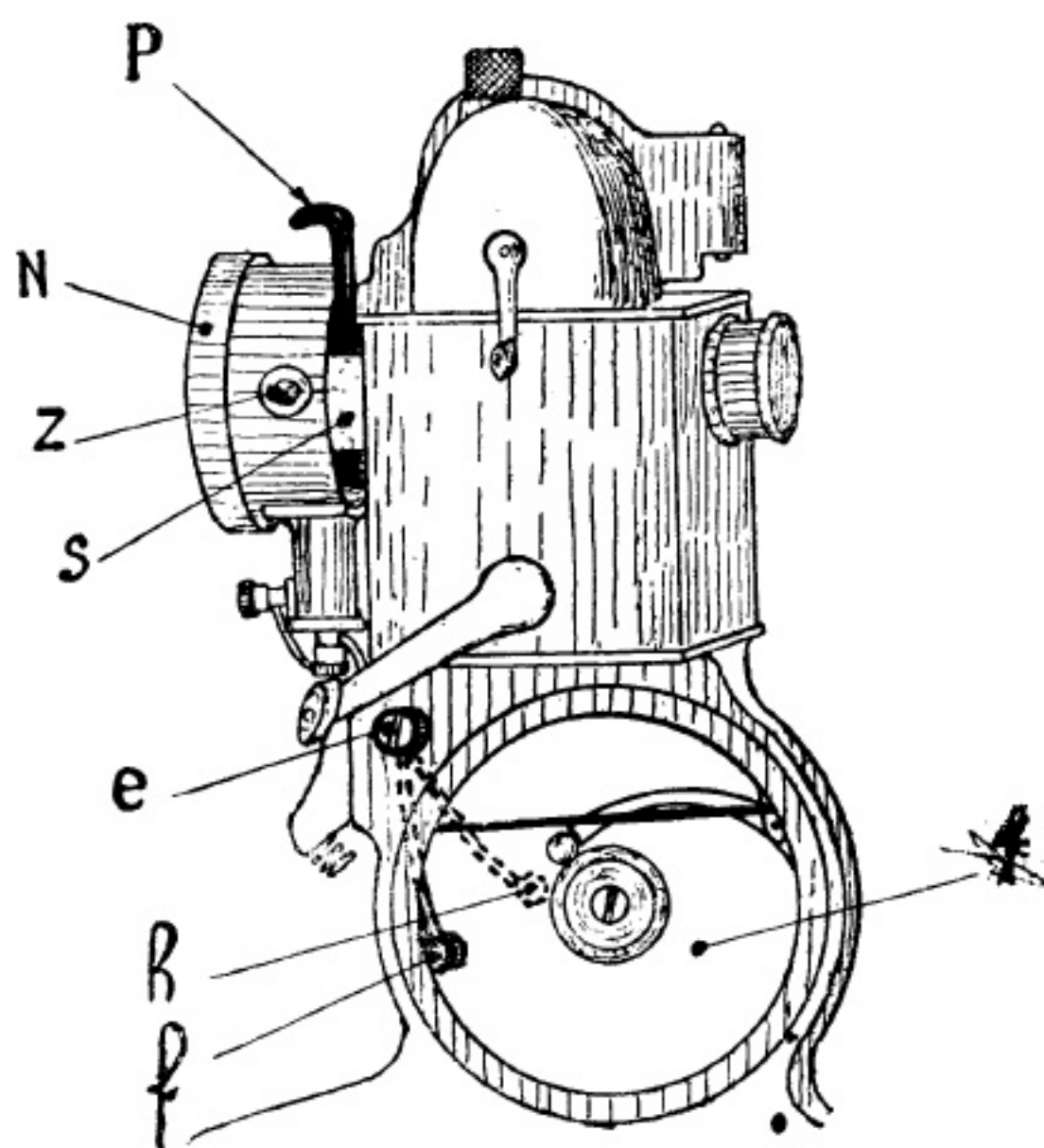


Fig. 3

necessary only when the Super-Attachment is in use for 300ft. reels. Should the guide-arm be at **h**, return it to **f** by turning the knob **e** in a clock-wise direction.

Turn the cover-glass of the take-up chamber round so that its upper edge is horizontal, as shown in fig. 3.



Supplementary instructions for the SUPER-BABY Instructions book

This model projector in conjunction with the Super-Attachment, permits the projection at will of either small reels or Super-reels.

To bring the projector take-up into action. — Remove the take-up pulley cover **9** (fig. 4) and pass the long

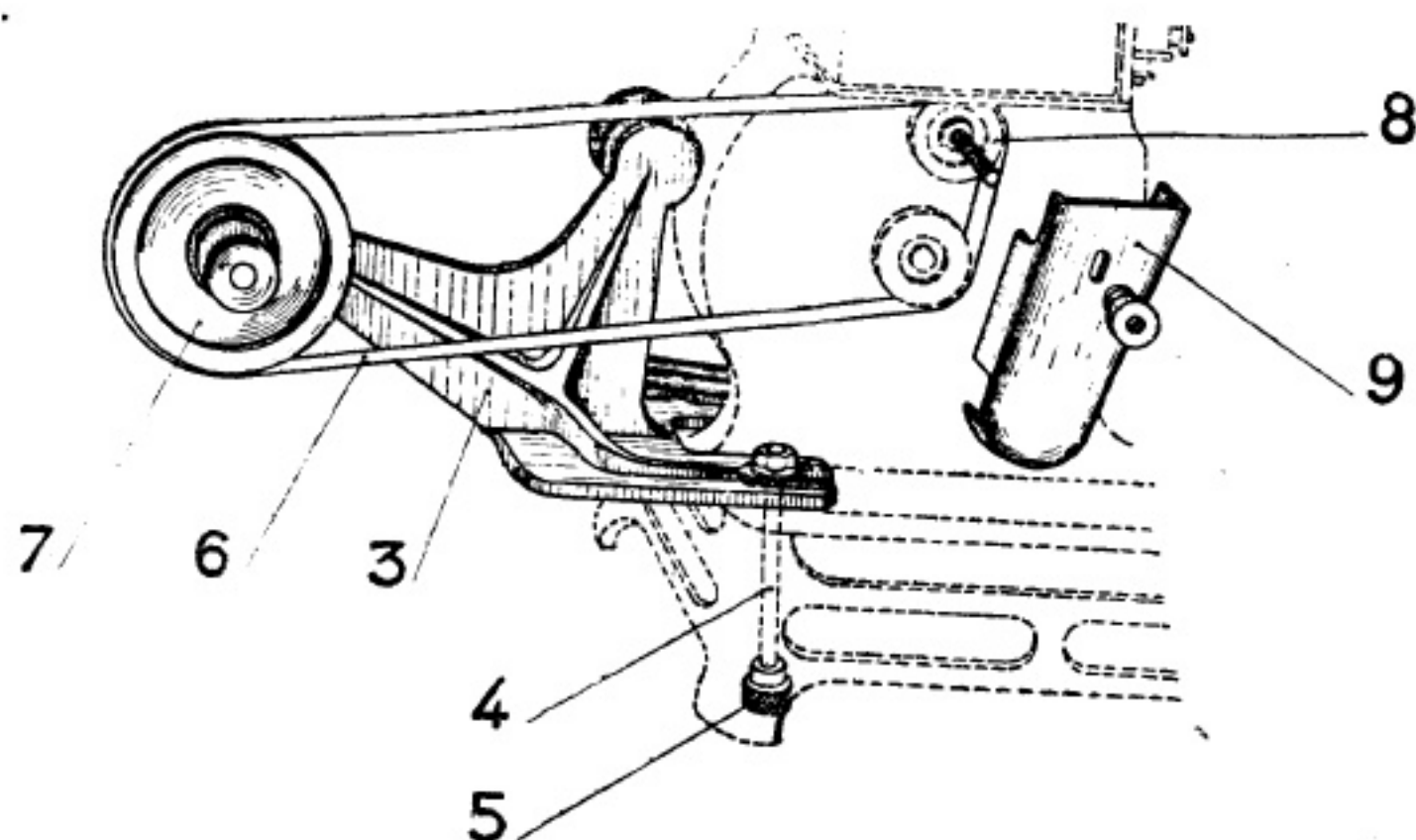


Fig. 4

Super-Attachment take-up belt over both pulleys as shown in the illustration. Replace the pulley cover **9**.

To project Super-reels. — Passing the film across the lower take-up.

Do not remove anything from the projector take-up chamber.

Turn the cover-glass round so that its edge is in a vertical position and the right-hand half of the take-up chamber is covered as shown in fig. 5. Place the spring-roller arm **24** in the position shown in the same illustration. This is done by turning button **25** either with the fingers or with a screw-driver.

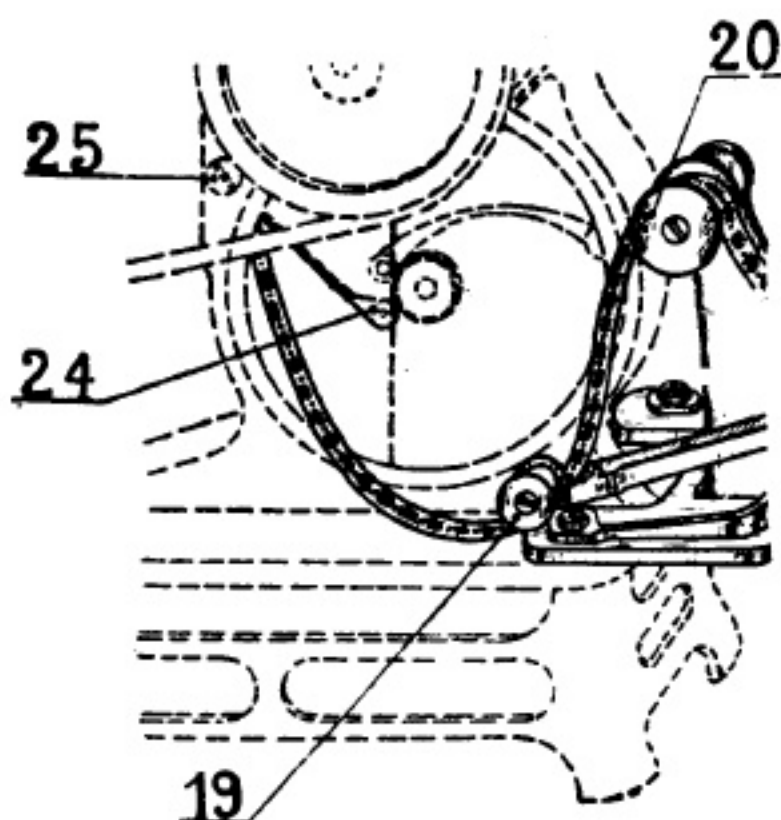


Fig. 5

To project small reels. — Turn the cover glass so that its edge is horizontal and the lower part of the take-up chamber is covered. Place the spring-roller in the vertical position as shown at **f** in fig. 3.