The *Corfield* PERIFLEX 3a

Superb in looks and quality, all-embracing in its scope of application (from snap-shots to technical research work), this best-ever camera in the Corfield range is nevertheless sweetly simple to use. Herein, we show you how.

(1) **LEVER CONTROL.** A single stroke of the operating lever winds on the film, loads the shutter for firing, sets the film counter to the next number, and winds down the periscope for focusing. (See page 9).

(2) **ACCESSORY SHOE.** Fitments should be pushed right home, past the security-grip safety springs.

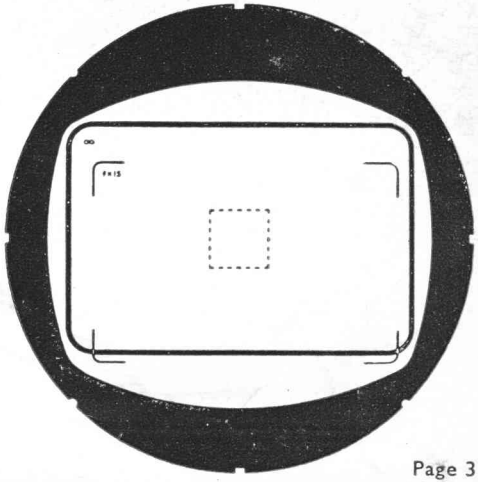
(3) **SPEEDS DIAL.** Required speed may be set (or altered) at any time prior to firing, with the shutter wound or not. Turn dial either direction to bring speed exactly opposite ▶ mark. (Setting between engraved speeds does not give proportionate intermediate exposure). For Time exposures, set to "B" and use Periflex time-lock cable release.

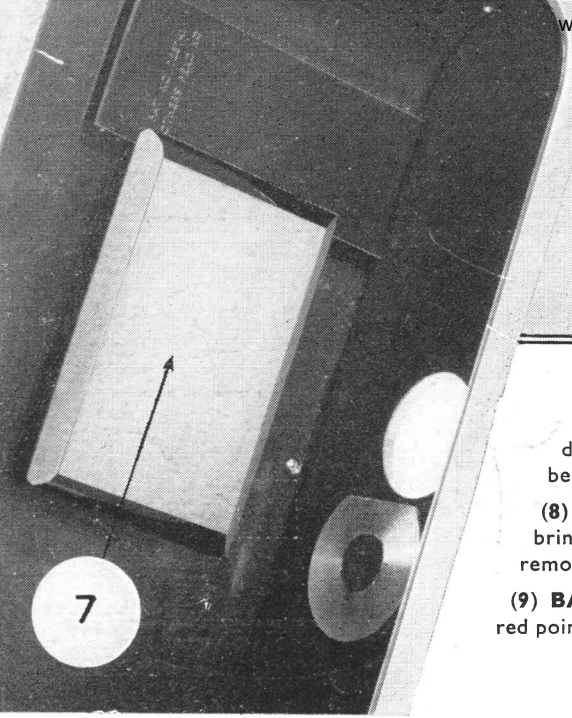
(4) **EXPOSURE VALUE DIAL.** Using an exposure value meter, set shutter on suitable speed for subject. Take meter reading and set lens to stop shown against indicated Exposure Value. (In illustration, E.V. of 8 with 1 second requires *f*/16. With speed altered to 1/15th, lens must open to *f*/4.)

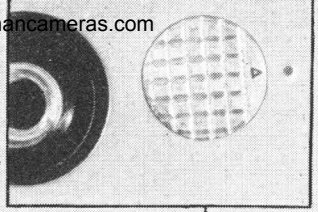
(5) UNIVERSAL VIEWFINDER EYEPIECE. Simply screwing in the appropriate viewfinder objective automatically adjusts the viewfinder image for whatever focal length of lens is used on the camera. For infinity and medium-distance subjects, the view embraced by the solid frame (see sketch) will apply. The view seen between the four unconnected corners is the parallax-corrected picture at 15 x the focal length of the lens in use, e.g., approx. 2′ 3″ with the camera's standard lens, 5′ with a 100mm. (4″) lens, and so on.

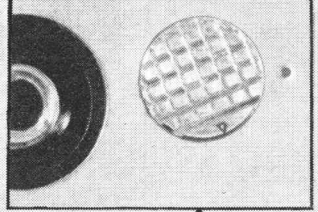
The dotted frame shows the area of the subject covered by the periscope focusing, and may be used to effect parallax compensation at any distance in the following manner. Compose the subject in the solid frame and make a mental note of the field embraced by the dotted area. Now, using the focusing screen, compose the same part of the subject on it, and after focusing, fire the shutter without referring back to the viewfinder. At very close distances, this is best performed by using a tripod with tilting head.

(6) FOCUSER EYEPIECE. For focusing operation, see page 12.







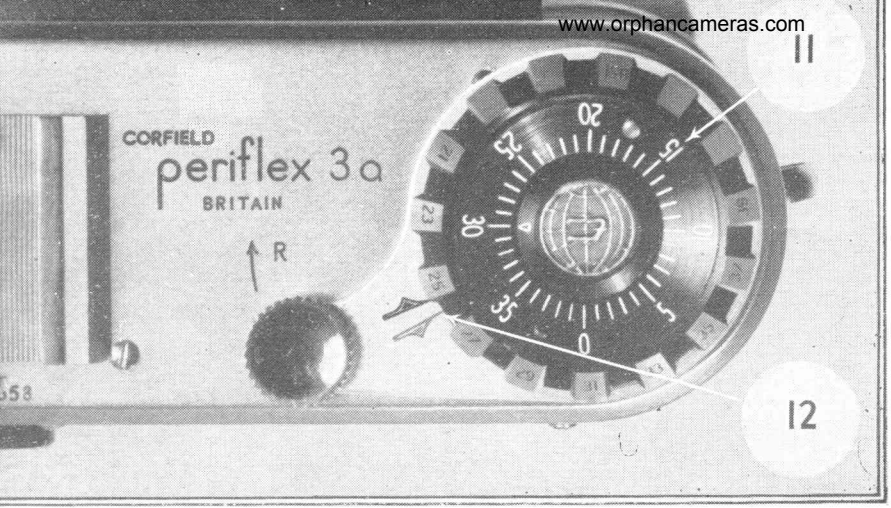


(7) **PRESSURE PLATE.** This special glass fitment, which is specially designed to safeguard films against scratching and static fogging, should be polished occasionally with a soft handkerchief.

(8) **BASE-LOCK OPEN.** With tips of fingers, turn locking button to bring black dot and red pointer exactly in line. Camera back may now be removed (see opposite).

(9) **BASE-LOCK CLOSED.** With finger-tips as before, separate black dot and red pointer turning button either left or right as far as it will go.

(10) TAKE UP SPOOL. LOADING CAMERA WITH FILM. Unlock base, slide back of camera down $\frac{1}{4}$", lift off, and put on one side where no grit can blow in. Wind shutter, and fire. Partly wind shutter again until slot comes into convenient position for inserting film therein, with one edge against the lower flange of the spool : press film through spring-loaded catch until it touches bottom of the slot. Bend film sharply back over slot, draw cassette back towards cassette chamber, taking care not to pull out more film than is necessary. Insert cassette as shown, engaging rewind 'dogs' in centre spool. Complete winding of shutter, and fire. Replace camera back (reversing removal procedure) and lock. Operate lever-wind twice, firing shutter each time and checking that rewind knob revolves as the lever is moved. Then set frame counter (page 6).



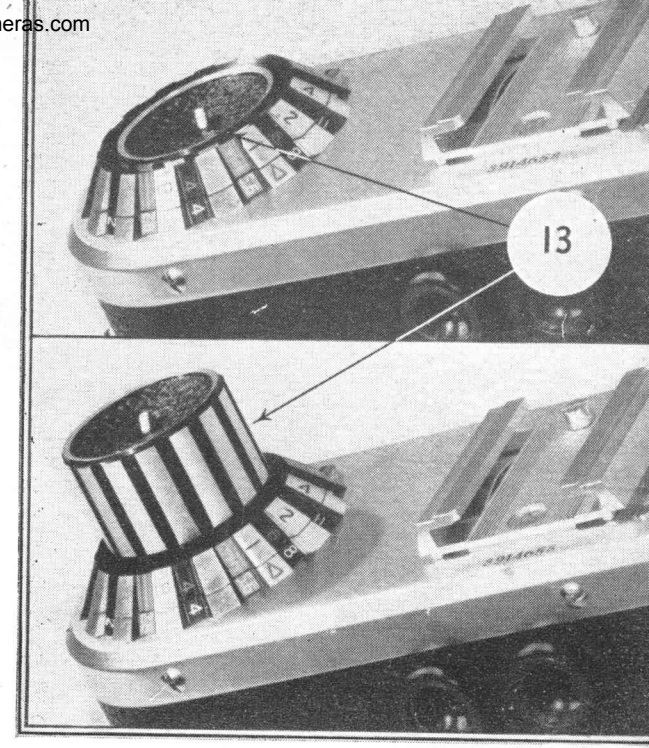
(11) **FRAME COUNTER.** After loading camera with film, finger-tip-turn dial, bringing number 36 (for a full loading of film) against the index. (Using short strips of film, set counter to number of frames loaded.) With each wind-on, the number against the index will reduce by one, showing number of frames left for exposure.

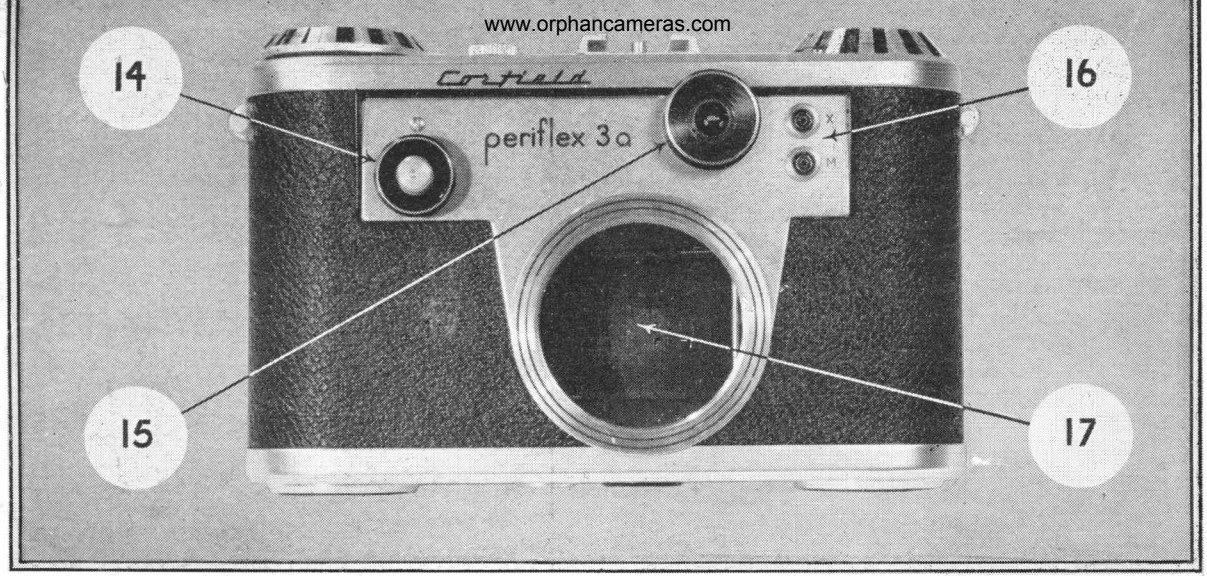
(12) **FILM MEMORY DEVICE.** Set to speed of film in camera. Use black indicator for mono-chrome, red for colour film.

FILM INTERCHANGING. Having taken, say, 20 exposures in monochrome, you see something you want in colour. Rewind film and remove. Load colour film (as in "10"), take pictures required, rewind, and remove. Reload the monochrome, wind on two blank frames as usual, and set counter to "36". Without having wound the shutter, depress release button and keep it depressed while repeatedly operating transport lever until counter reads "16". In this way, it is not necessary to fire the shutter 20 times as on most cameras.

(13) " HIDEAWAY " REWIND KNOB REWINDING THE FILM

Push the transport lever beyond its normal return position in the direction of the engraved arrow on the top plate of the camera body, thus automatically disengaging the wind-on mechanism. Raise the rewind knob by moving the serrated lever in the top of it to one side. (Moving this lever allows the rewind knob to spring up to a convenient position for rewinding.) Turn the knob clockwise until the frame counter ceases to revolve, indicating that the film is completely rewound into its cassette. During rewinding, the frame counter indicates the amount of film which has been re-wound into the cassette, and it is easy to check when the re-winding is almost complete. To return the knob to its flush position, press the serrated lever and push the knob home, releasing the lever at the same time.





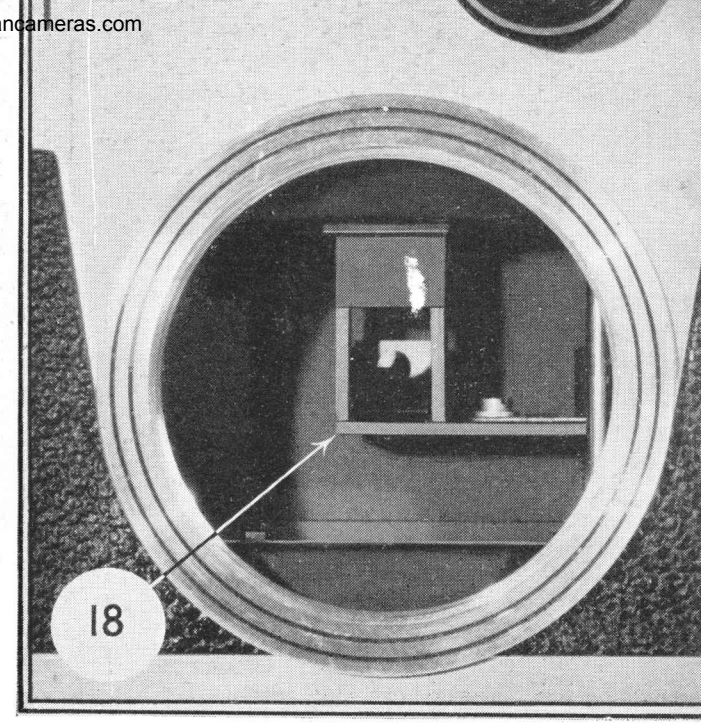
(14) **SHUTTER RELEASE BUTTON.** Outer guard ring screws off for fitting Periflex cable release : socket in button ensures correct location of cable release nipple. For shutter firing instructions, see page 13.

(15) **SOCKET FOR VIEWFINDER OBJECTIVES.** Interchangeable viewfinder objectives to suit the focal length of the camera lens in use are simply screwed in and removed in the same way as the lenses themselves. (See page 3).

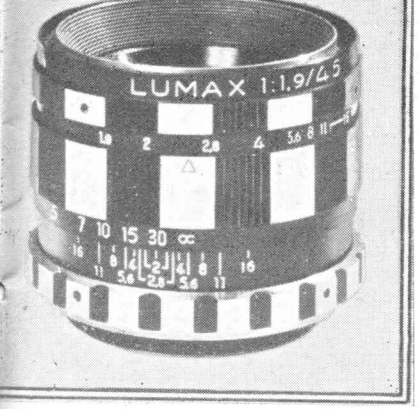
(16) FLASH SYNCHRONISATION SOCKETS. Any standard 3mm. co-axial plug, as fitted to most flashguns, will fit into these sockets : in general, use X for electronic, M for flashbulbs, and expose as per details given in separate instructions leaflet on flash with the Periflex.

(17) LENS APERTURE, SHUTTER FIRED. Focusing periscope is out of sight, as lever wind has not yet been operated.

(18) LENS APERTURE, SHUTTER WOUND. The lever-wind has now been moved, and periscope focuser is in position for checking the lens focus. As shutter release is depressed, the periscope rises clear of film gate and triggers off shutter.



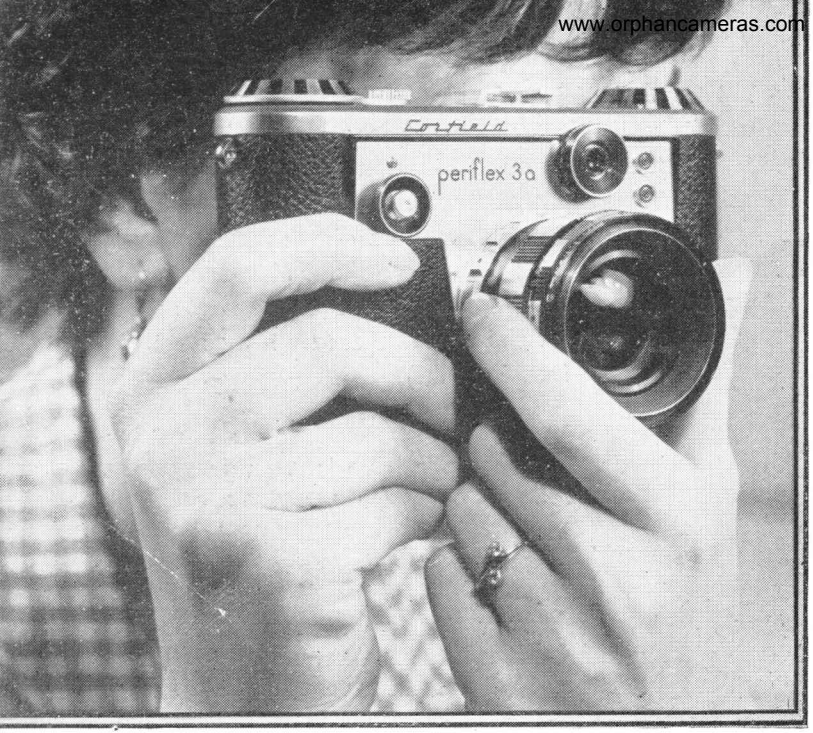
LENS REMOVAL. This illustration of a Lumax being removed from its camera demonstrates an error. Correct is the method of holding the camera with lens flange towards the body, protecting the shutter from bright light and the camera interior from blown grit. Wrong is removal of the lens by the focusing jacket : always grip the main body close to the screw-in thread.



CLOSE FOCUSING. Our booklet "Close-ups with a Periflex" is available free on request, and highlights the close-focusing provisions of the 45mm., 35mm. and 28mm. lenses in the Lumax range with which, thanks to their Supra-Normal mounting, the subject may be direct focussed from as close as ca. 9″, 6″ and 3″ respectively. (This means, for example, that with the 28 mm. lens, a subject 4″ x 3″ can be made to fill the whole of the negative area without the use of any supplementary focusing aid.)

WIDE-APERTURE WORKING. All lenses in the Lumax range have lanthanum-content components and are so designed that there is little to be gained from stopping down apart from increased depth of focus. Do not hesitate to take advantage of their wide apertures, because these new-concept lenses strikingly demonstrate that the day is past when a fast lens had to be stopped down to *f*/5·6 or below for crisp definition.

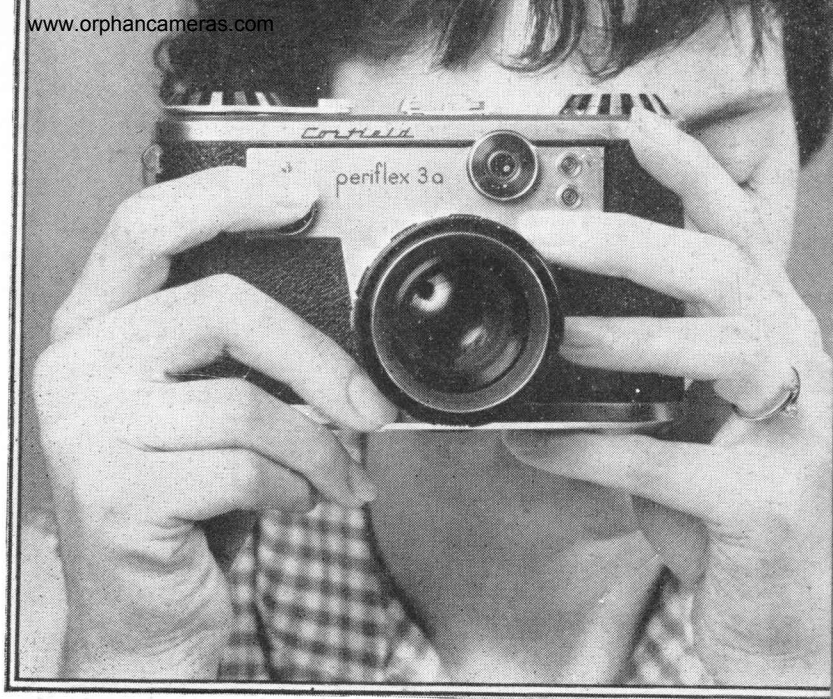
DEPTH OF FOCUS. The depth scales on Periflex lenses are clear and simple to use. For example, our illustration shows that when the 45mm. Lumax lens is focused on 30ft., everything between 15ft. and ∞ will be acceptably sharp at *f*/5·6 but at *f*/2·8 the range narrows to between 20 and 60 feet.



FOCUSING THE LENS. Your Periflex is equally convenient to operate with either hand for focusing, but we show it here with a 'comfortable' right-hand hold. It will be found that even at *f*/16 the lens passes enough light for normal focusing requirements, but the depth of field is then so great that it is difficult to establish the plane of sharpest focus. Whenever convenient, therefore, it is best to focus with the lens fairly well open, and stop down to take the picture. (Set the iris by bringing the desired aperture on the diaphragm scale in line with the pointer on the focusing ring.) The method of focusing is extremely simple, applying both to close work (including copying, etc.) and distant shots : it is the same whatever lens is fitted to the camera, and whether or not extension tubes are used. Bring camera to the 'ready' position by operating the wind-on lever and look directly at the subject through focuser eyepiece (6). Hold focusing ring as illustrated, and turn it until the subject image is crisply sharp on the focusing screen. Transfer to Viewfinder (5) for composing the picture prior to firing shutter. (See also details on page 3 concerning focusing-area frame in centre of viewfinder image, and page 15 if the camera is fitted with a Corfield Split-Image Prismatic Rangefinder Assembly.)

FIRING THE SHUTTER. The Periflex shutter release has been specially designed to kill one of miniature photography's biggest bogeys — camera shake. In our illustration, the right-hand forefinger is resting on the release button, ready to "squeeze the trigger", and it will be noted that pressure is applied parallel to the lens axis, theoretically and in practice the ideal way to minimise camera movement when firing. (When releasing shutter on slow speeds, it is essential to keep finger on release button until shutter is heard to close.)

TRIPOD-HELD EXPOSURES. When a tripod is used firing is often effected by cable release (see 14). The Periflex is especially suited to tripod work, as the bush (which includes an adaptor for both English and Continental fittings) forms an integral part of the die-cast camera body The camera can therefore carry the heaviest lenses without lens flange/focal plane collimation being impaired.



When using the Periflex with long focus or telephoto lenses, it is advisable to use a tripod whenever possible, although thanks to the great care taken in designing the shapes and weights of the camera and its lenses, it is possible to get fully acceptable telephoto shots with the camera hand-held at shutter speeds which would be impracticable with many instruments. For *best* results, however, always in hand-held working use the highest shutter speed possible consistent with the other factors involved, and take full advantage of the ever-ready case strap for the very effective "case-brace". When using objectives of great focal length such as our superb 240mm. Lumar and 400mm. Tele-Lumax lens (illustrated), a sturdy tripod is of course essential.

THE SPLIT-IMAGE RANGEFINDER

Additionally to the normal reflex-focusing system, the majority of Periflex 3a cameras are fitted with the Corfield Split-Image Prismatic Rangefinder Assembly, for which the following supplementary instructions are required.

This system is characterised by its great brightness which enables precision focusing under the most difficult lighting conditions.

The centre of the periscope field is divided by a fine line (horizontal when the camera is held normally) on either side of which the image divides. Focusing is achieved by rotating the lens barrel until lines crossing this division are no longer split but quite continuous. When taking horizontal format pictures use vertical lines for best results. Using the camera vertically your choice will naturally fall on horizontal lines.

The system is in effect an optical split image rangefinder and is similarly used.
Focusing however is still carried out through the taking lens and it is best to use this at an aperture not less than *f*/5·6 as otherwise important light beams may not reach the eye and part of the image will blacken.

Since this is purely an optical device the precision achieved in its manufacture is much higher than the normal rangefinder mechanism, the image is optically much sharper and fine degrees of separation can be much more readily corrected. It is most particularly welcomed by those who wish the advantage of " through the lens " focusing but whose eyesight is not well adapted to bringing a ground glass image to its point of best sharpness.

The famous Corfield Works in Ballymoney, Northern Ireland, where Periflex equipment is manufactured and tested under the most modern conditions and with the very latest equipment by craftsmen of exceptional ability. All enquiries relating to the Periflex, its unequalled range of wide-angle and telephoto lenses, and its "periflexible" accessories should, however, be addressed to

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