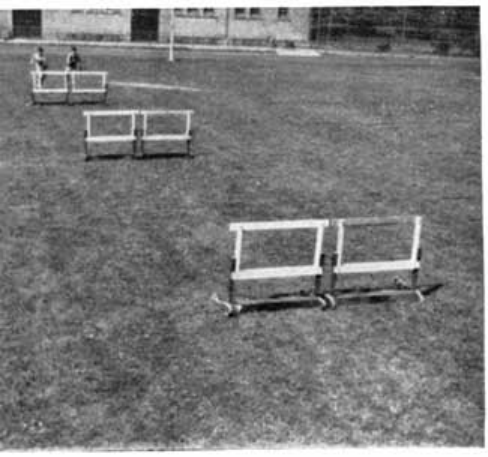
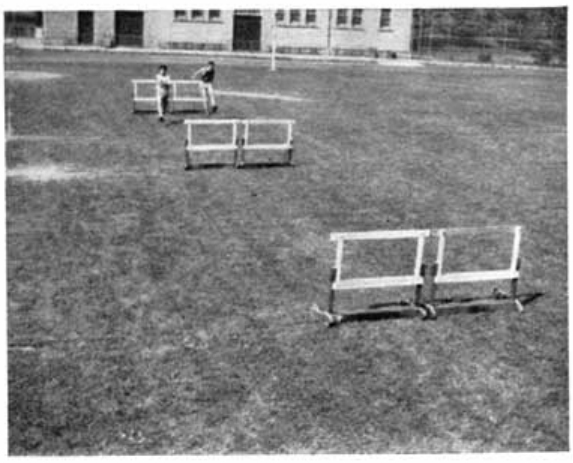
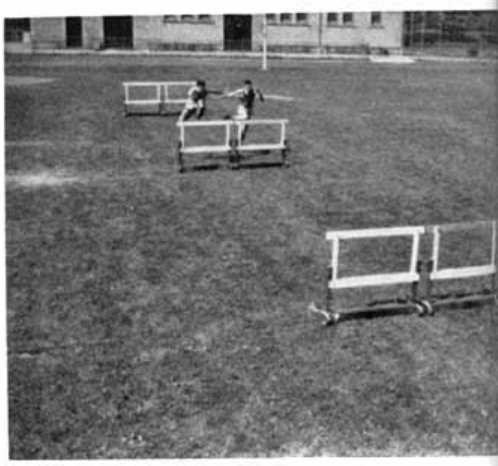
the hurdlers start . . . *2 seconds later* *3 seconds later*







the OMEGA 120

IT'S A RARE THING in the photographic industry when a really original design is presented to the public. Most cameras called "original" usually are modifications and improvements of existing designs or a compilation of a number of the best features of many different cameras. But the new Omega 120 is original in both appearance and operation. Simmon Brothers, manufacturers of the Omega enlargers, set ambitious performance goals for their new camera. They started from scratch to obtain ruggedness, fast handling, and a higher standard of definition than has ever been achieved for a given negative size. Let's see how well they succeeded.

MODERN was fortunate enough to obtain an Omega 120 camera for more than a month of rigorous testings. Over a hundred rolls of film were run through the camera to test each mechanical operation as well as the optical qualities. All sorts of subjects were tried before the lens (example: hurdlers *above*).

Unusual appearance

First glance at the new camera produced a universal comment from photographers, "What is it?" It's certainly unusual in appearance, faintly reminiscent of the K-20 aerial camera in general outline, but completely unlike it in operation and construction. The entire camera is built around a magnesium casting, to which plastics, moulded nylon, and aluminum parts have been added. The body itself is finished in black crackle with the bright metal in a brush chrome finish. No leather is used anywhere on the camera to peel or scuff with hard use. This should aid in keeping the camera looking relatively new throughout a great deal of its life.

Probably the most unique feature of the new Omega 120 is the film transport system. Drawing out and push-

1. **Lens is a specially designed, Wollensak made, four element modification of the Tessar formula using rare earth glass in one element. Omicron shutter provides speeds from 1 sec. to 1/400 plus time and bulb settings.**

2. **Focusing knob is oversized for greater accuracy and can be operated with gloves. Rings are slipped over it for flash readings with various films, bulbs.**

3. **Large rangefinder windows admit a great amount of light, producing a brilliant, magnified image. The rangefinder can be used instead of the viewfinder for emergency fast shooting whenever such is necessary.**

4. **Viewfinder is fully parallax compensated at all focusing distances. Large eyepiece makes seeing through either finder quite easy while wearing glasses.**

5. **Shutter release falls easily under left forefinger, takes a bit of pressure to work since it must first actuate film pressure plate before the shutter is released.**

6. **Grip provides firm grasp for supporting camera and releasing the shutter. Special adapters will be available for modifying handle to various sized hands.**

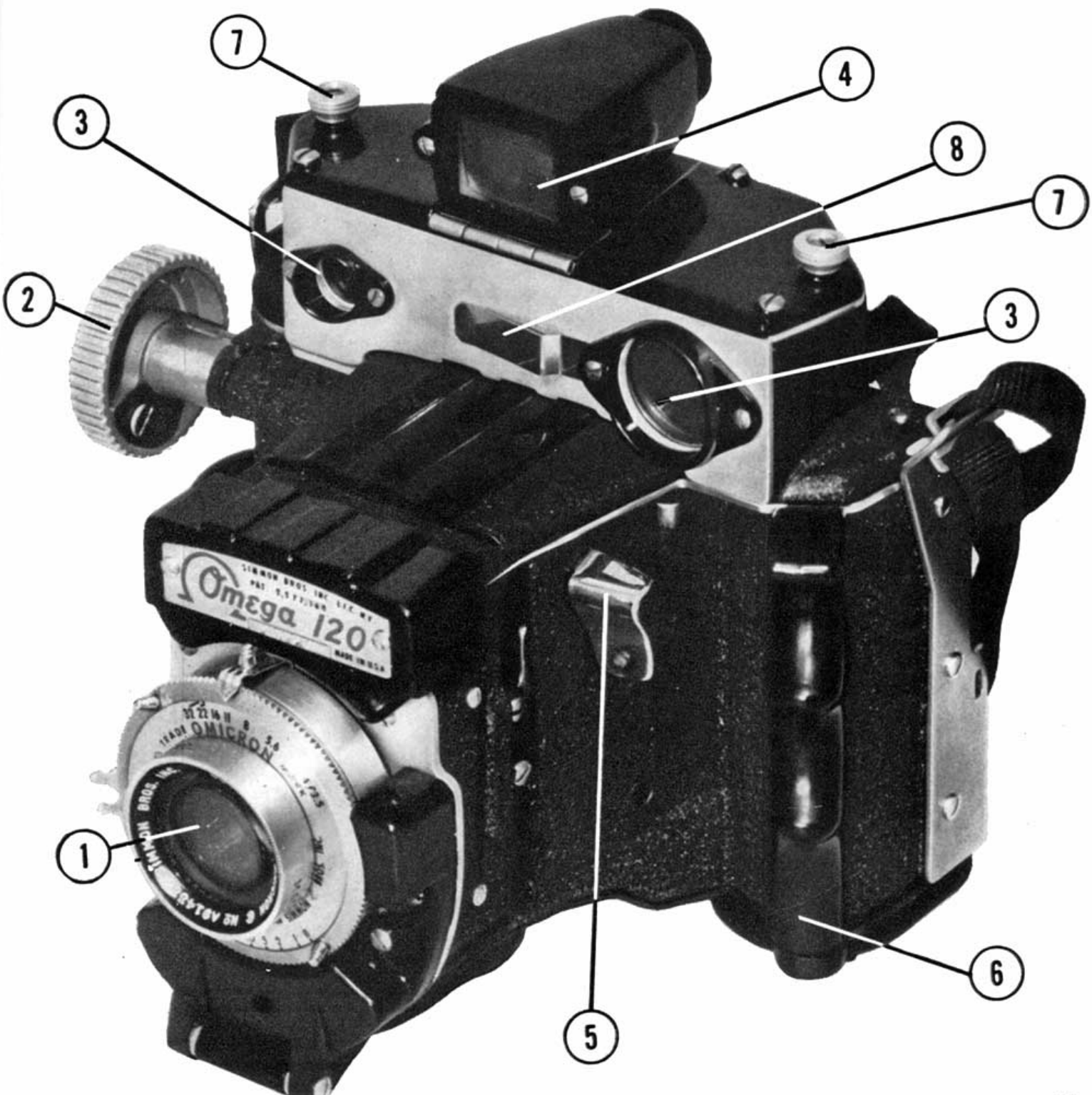
7. **Film spool retaining knobs are spring loaded, easy to lift. They slow down loading operations, however.**

8. **Clip holds accessory close focusing device to permit shots to 18 inches with proper framing in viewfinder and parallax compensation on the rangefinder.**

5 seconds later

7 seconds later

photos and text
by Arthur Kramer



ing in a knob located at the lower right side of the camera cocks the shutter and winds the film in one rapid operation. The unit is designed so that the knob cannot be pushed back until it has been drawn out completely. Partial film winding is impossible. The camera can easily be pressed into rapid sequence service whenever necessary. You can make seven exposures in six seconds. Exposing the entire roll of nine exposures in eight seconds requires little practice.

Returning the transport knob places your fingers in a natural position on the focusing knob which is calibrated from three feet to infinity. It has an engraved depth of field scale and measures $1\frac{3}{8}$ inches across, large enough to use with gloves. The very legibly engraved figures can be seen clearly in even the poorest light. A series of adapters may be slipped over the focusing knob to provide direct reading of "f" stops for flash. Three such rings are presently available, two for SM bulbs with medium and low speed films, the third is blank and may be marked by the user for any combination.

Bright rangefinder

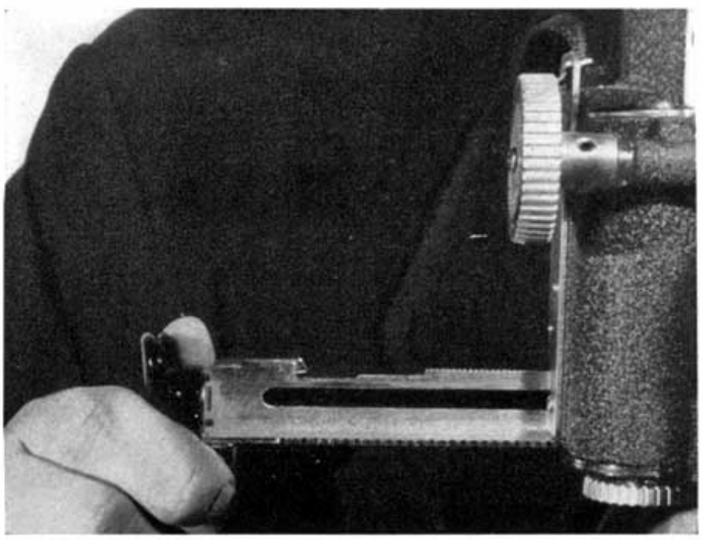
The Omega 120 rangefinder is among the brightest yet tested, the secondary image being almost as bright as the primary image and requiring no coloring to distinguish the two. Focusing was easy, even in extremely dull light. The rangefinder may be used for shooting when time doesn't permit using the viewfinder. The viewfinder is fully parallax compensated throughout the entire focusing range. Care must be taken not to apply pressure against the viewfinder in use as this will disturb the parallax adjustment. Some reflection from the inside of the tube was encountered when focusing into the light. Both rangefinder and viewfinder have very large exit pupils allowing the man who wears glasses a full view of both fields. A clip placed between the rangefinder windows will hold a closeup attachment that permits parallax corrected focusing down to 18 inches with the rangefinder.

The camera front is extremely rigid, riding on a massive brass plate to insure alignment of lens and film plane. The lens is a special four-element Wollensak 90mm f3/5 based on the Tessar formula but incorporating rare earth glass in one element. Both practical and optical bench tests showed the lens to be of unusually high quality. Good definition was obtained over the entire field at full aperture. Stopping down the f/3.5, 90mm lens to f/4 produced amazingly sharp negatives. The lens retained its excellent performance at f/22. A part of the camera's superb definition may be attributed to the special ceramic pressure plate which comes forward, pressing the film into the focal plane when the shutter release trigger is pressed. When the trigger is released, the pressure plate draws back again permitting the film to be advanced to the next frame with no pressure or scratching.

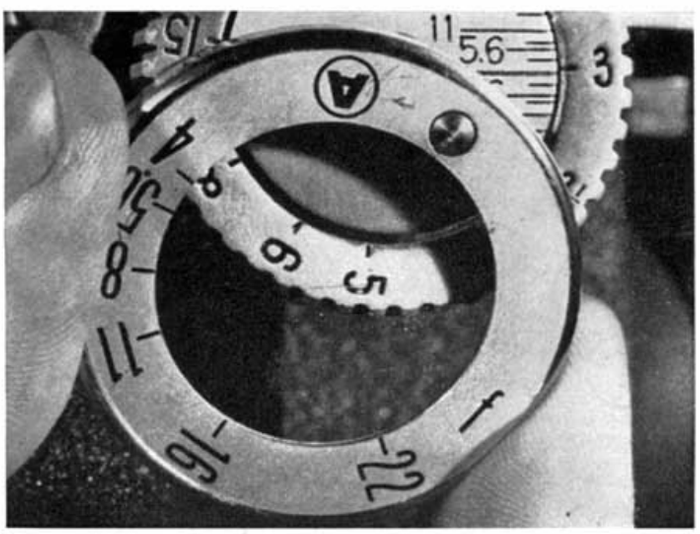
The Omicron (Wollensak-made) shutter provides speeds from one second to 1/400 and bulb and is synchronized for electronic flash at 1/200 and 1/400, for F type bulbs at 1/50 and 1/100 and for M type bulbs from 1 second to 1/25. Setting the shutter and diaphragm are the only operations which *(Continued on page 93)*

the Omega 120 is of a unique

1. General appearance of the Omega 120 is reminiscent of an aerial camera. All controls are large, easy to grip even with gloves and placed where they fall directly under hand. Camera feels rock steady at eye level.

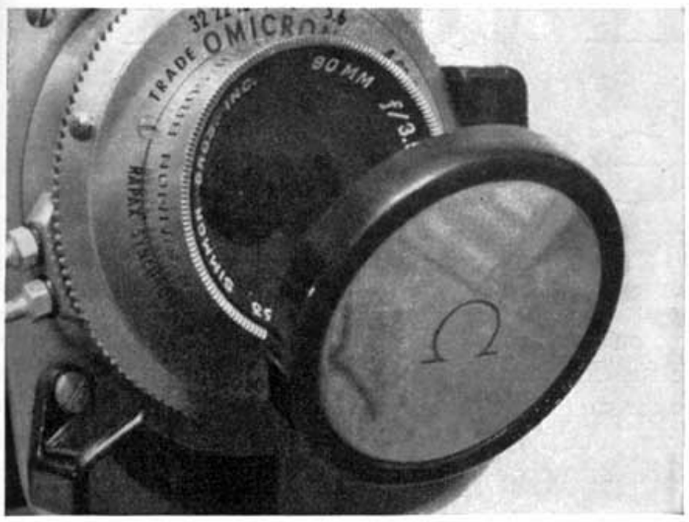


4. Film is advanced and the shutter cocked by pulling out and pushing in the film advance knob. The rapid operation makes semi-sequence pictures easily possible, but noise of the advance makes candids difficult.

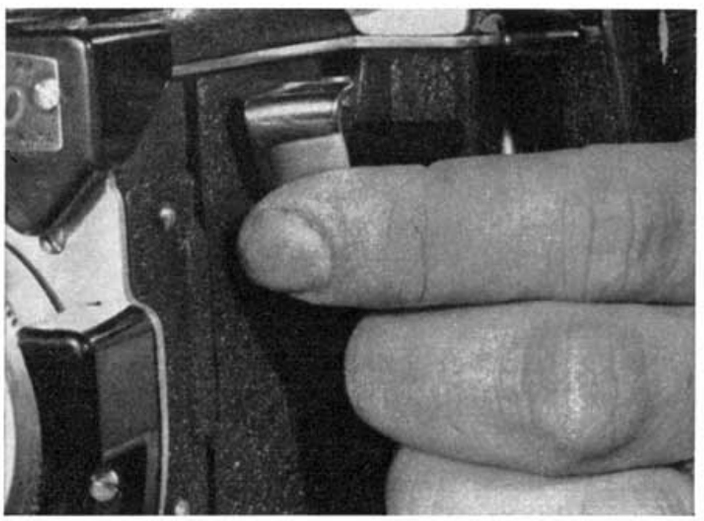


7. Accessory flash guides may be slipped over focusing knob, will read directly in f/stops for a given film and bulb combination. Guide shown is for SM bulbs, films of ASA 50 to 80. Blank ring can be marked by user.

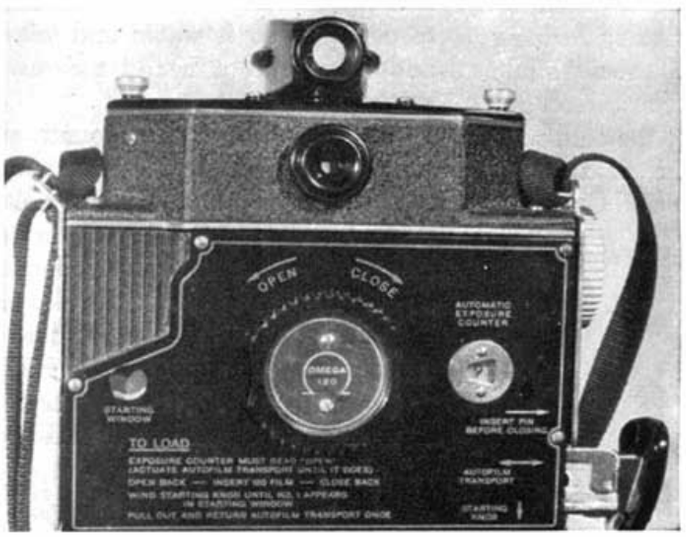
design, with features never before found on any other camera.



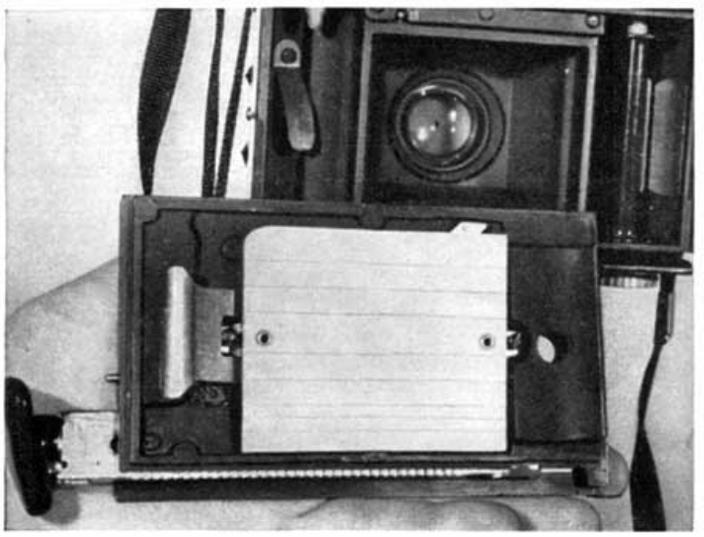
2. The lens cap is made of compressed nylon having great strength and light weight. It swings out of way directly under the camera front. Special Omega sunshade which can be left on the camera has own lens cap.



3. Natural position of release produces exposures with minimum of vibration. Since pressure plate movement is geared to release, the auxiliary cable release fastens to camera, acts against body release instead of shutter.

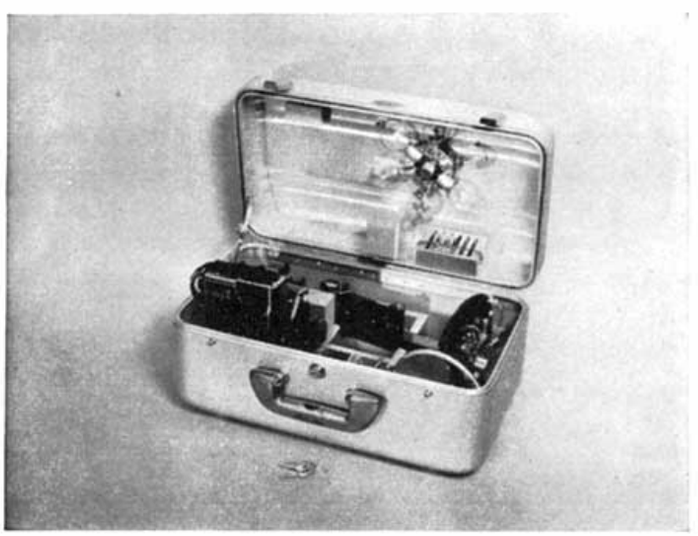


5. Back is clearly marked with operating instructions. The rangefinder and viewfinder windows are spaced fairly close together for rapid shooting. Rangefinder is very brilliant. Viewfinder is parallax compensated.



6. Ceramic pressure plate remains out of close contact with film until pressure is put on shutter release. Then it applies firm, even pressure to entire negative area. After shutter release, plate returns to the first position.

8. Flash gun holds six bayonet-base bulbs and is a BC unit. The turret head is coupled directly to the film advance so a fresh bulb is placed in the proper position for each separate shot. Extra bulb turrets are available.



9. Watertight aluminum carryall case holds camera in shockproof mounting, also accepts flash unit, extra turret, filters, sunshade, exposure meter and film. When it's normally loaded, the case will float in water.

THE OMEGA 120

(*Continued from page 58*)

could not be readily accomplished while wearing gloves. When the shutter is cocked a warning red indicator appears in a window below the shutter. Unfortunately, the window is quite small and the signal is almost invisible in poor light.

The entire front housing below the lens plus the lens cap is made of moulded nylon and is extremely strong and durable. The hinged lens cap is a good feature which will prevent lost or misplaced lens caps.

Although most modern cameras using 120 size roll film have standardized on either a 2¼ x 2¼ or 2¼ x 3¼ negative format, the Omega 120 does not. Instead it makes nine negatives 2¼ x 2¾ on a roll. This may seem to be an odd size but it has very excellent reasons behind it. This new format provides perfect proportions for enlarging to 8 x 10 without any waste in the negative. Thus, the negative size is utilized to the fullest in terms of making prints and enlargements.

The camera back is completely removable and clearly marked with instructions for loading the camera. A large knob located in the center opens or closes the camera back when rotated through a small angle. The film is loaded in a conventional manner. The spools are held in place by spring loaded retaining knobs. An open ruby window is used to locate the first exposure manually; then the film transport takes over automatic operation and shuts the window with a metal cover.

When the ninth exposure has been made, the film transport is operated five more times (warning dots appear each time). When the word "open" appears in

(*Continued on page 94*)

THE OMEGA 120

(*Continued from page 93*)

the exposure counter window at the right of the camera back, the back may then be removed and the rolled up film extracted. Due to the narrowed dimensions of the film chamber, removing the film proved difficult. The film knob must be turned to ascertain position before the roll can be removed easily. A number of cameras were checked but the proper position for this knob varies.

To replace the back, you engage a pin with a hole on the camera body, and rotate the locking knob clockwise through the small angle. The transport slide must be all the way in before the back will lock. Once the first exposure is in place the back cannot be opened, accidentally or intentionally, until the entire cycle is repeated and the "open" appears in the film counter window.

Unusual flash

The Simmon brothers have designed a new type of BC flashgun that holds six bulbs in a turret. The unit is linked to the film transport system of the camera and automatically places a new bulb in position each time the film is wound. The entire system is very rapid but unfortunately the bulb is below the lens when horizontal pictures are made. Turning the camera to a vertical position corrects this fault. A slight amount of slippage was found in the model tested causing the sixth bulb to align itself short of center thus producing inefficient illumination. Careful alignment of the first bulb in the reflector plus tightening down the magazine retaining screw as far as it would go subsequently corrected this. Turrets are easily interchanged. Price of the Omega flash attachment is $49.50. Extra Omega flash turrets are available at $7.50 each. Accessories include lenshood and filter holder, $7.50; special cable release, $12.50; flash guide attachments $3.50 and a closeup attachment at price to be announced when available. The camera itself costs $239.50.

What's the impression of the Omega 120? Despite its odd looks, it's probably one of the easiest, fastest handling cameras ever devised for any size film. No camera boasts better or more accurate controls more judiciously placed for the photographer. Because of its relatively noisy film transport, the Omega will probably never be used with great success in candid work. But for sports, aerial photography, documentary work or anywhere else that a highly durable and completely reliable camera is needed, the Omega fills the bill. No delicate fussy camera this. If you feel like going over Niagara Falls in a barrel while taking rapid sequence shots, better take the Omega. *It* will survive.—THE END.