To load camera, unscrew dummy tripod screw at bottom of ever-ready case, take camera out.

The ever-ready case supplied with the camera, while fully protecting it from dust and shocks, gives instantaneous readiness for picture taking.

The $2\frac{1}{4} \times 3\frac{1}{4}$ No. 120 (B 2) roll film gives twelve exposures $2\frac{1}{4} \times 2\frac{1}{4}$ in.

To open camera-back, push sliding lock in direction of arrow, swing camera-back open.
To prepare camera for loading, swing out lower spool holder, turn hinged spool carrier to the left.

Have an empty spool in readiness in the upper spool chamber. — Be sure to load camera in subdued light only.

To insert new spool, slip slotted spool end over fixed carrier peg, return hinged carrier to engage second peg, swing spool into chamber.

Attention — Be sure to insert the spool with the narrow end of the backing paper pointing to the empty spool.
To thread film, tear adhesive tape, carefully remove free ends of tape; then unfold flap of backing paper and thread paper into wide opening of spool slot.

Carefully align backing paper with camera edges and pull paper taut by giving winding knob several turns; be sure to wind paper correctly between spool flanges, thus ensuring protection from stray light.

To close camera back, use both your hands to close camera firmly until it snaps shut.

Upon continued turning of the winding knob at first there will appear the warning marks in the window (dots, hands, arrows). The figure "1" appearing in the window indicates that the camera is ready for the first exposure.
To open camera front, press button on top of camera and the lens board will spring forward; if necessary, assist the braces to snap into position.

The ingenious spring-brace mechanism makes for instantaneous readiness for exposure as well as firm support of the lens.

To set the diaphragm, place right thumb on stop lever and set at desired mark (4.5 - 5.6 - 8 - 11 - 16 - 22 - 32).

Small stop number, 4.5, for example:
Large aperture, high speed.

Large stop number, 16, for example:
Small aperture, low speed.
To set the shutter speed, turn milled shutter ring until "V" mark registers with desired shutter speed (25 — 75 — 200, i.e., $\frac{1}{25}$ — $\frac{1}{75}$ — $\frac{1}{200}$ second).

Setting the "V" mark at "B" will cause the shutter to remain open as long as the release lever is depressed. For long-time exposures, the release can be locked by raising sliding lock "T".

To focus the lens, rotate front lens mount until desired distance registers with horizontal reference mark.

For close-ups, and when using large apertures, carefully estimate the distance and focus accordingly (Cf. Para. "Depth of Field", p. 14).
To wind the shutter, prior to every exposure, give the winding lever a lateral pull with your index finger until the lever is caught.

For time exposures, with the "V" mark set at "B", also wind the shutter.

In order to avoid releasing the camera accidentally, and to protect the shutter mechanism, make it a rule to wind the shutter only just before picture-taking.

Before every exposure check settings of diaphragm, shutter speed, distance.
To take a picture, bring view-finder close to your eye so that front window will be visible. Use both your hands to hold camera firmly. With your index finger, give release a smooth lateral pull.

Even at the lowest shutter speed of $\frac{1}{25}$ second, you may be fairly sure of obtaining an unblurred picture. Be sure, however, to stand firmly and to press your upper arms against your body. Always hold the camera in a horizontal position, never tilt it laterally.

To be ready for the next picture, turn winding knob until next film number appears in film window.

If you make it a rule, from the very beginning, to advance the film immediately after exposure, the risk of double exposures will be eliminated.
To close camera, gently depress, with both index fingers, the brace joints and the camera will close.

To lock camera front, press front firmly against camera body until it locks into the closed position.

After taking the last (12th) picture, turn the winding knob until the end of the backing paper has passed the window.
To unload film spool, open camera back (see p. 4), pull out winding knob, at the same time turning it clockwise. Use your left thumb to hold the backing paper in place in order to exclude stray light.

A built-in spring slightly lifts the spool to facilitate removal.

NOTICE — Be sure, during removal, to keep the spool from unwinding. Fold in flap of backing paper and secure with attached adhesive tape. Immediately replace spool into wrapper.
Now change empty spool to opposite chamber by reversing procedure as outlined on p. 5: Swing out spool holder, remove spool and transfer it to opposite chamber—sliding circular hole on fixed carrier peg.

To position empty spool, push spool into chamber, gently push in winding knob while rotating it clockwise until winder key has engaged slotted spool end.

After loading a new film, return the spool holder into its chamber and close the camera.
Depth of Field

The square image of the Isolette "V" Camera makes it possible to use short-focus lenses characterized by better depth-of-field properties. The depth of field is defined as the zone within which sharply defined pictures are obtained; the smaller part of this zone is located in front of the point on which the lens is focussed, the larger part being located behind that point.

A large diaphragm aperture (small stop-number) results in a smaller depth of field, and vice versa. — The extent of the depth of field is smaller for close-up subjects than it is for distant ones.

A short study of the depth-of-field table will show you how much your pictures may benefit from taking this relationship into account.

The two-point focussing method offers the most convenient way of keeping camera settings within a certain depth-of-field zone. A red dot will be found between the marks "8" and "11" on the stop scale. On the focussing ring, the figures "10" and "30" (feet) are marked in red. Thus it is only necessary to set the stop lever at the red dot while the focussing ring, depending on whether it is desired to use either the close-up or the long-distance zone, is set at "30" or "10", respectively. These two settings offer the following depth-of-field zones:

- 30-ft. setting: 15 ft. to infinity;
- 10-ft. setting: 8 ft. to 15 ft.

The two-point focussing method will give satisfactory results with most of the so-called snapshot exposures.
# Depth-of-Field Table

for Agfa Agnar 1:4.5, f: 3.35 in. (85 mm)

<table>
<thead>
<tr>
<th>Lens focussed for distance of (feet)</th>
<th>f/4·5</th>
<th>f/5·6</th>
<th>f/8</th>
<th>f/11</th>
<th>f/16</th>
<th>f/22</th>
<th>f/32</th>
</tr>
</thead>
<tbody>
<tr>
<td>3</td>
<td>2.9–3.1</td>
<td>2.8–3.2</td>
<td>2.7–3.3</td>
<td>2.6–3.4</td>
<td>2.5–3.7</td>
<td>2.4–4.0</td>
<td>2.1–5.5</td>
</tr>
<tr>
<td>3.5</td>
<td>3.4–3.7</td>
<td>3.3–3.8</td>
<td>3.1–3.9</td>
<td>3.0–4.1</td>
<td>2.9–4.5</td>
<td>2.7–5.0</td>
<td>2.6–7.8</td>
</tr>
<tr>
<td>4</td>
<td>3.8–4.3</td>
<td>3.7–4.4</td>
<td>3.6–4.6</td>
<td>3.4–5.1</td>
<td>3.2–5.4</td>
<td>3.0–6.1</td>
<td>2.8–9.2</td>
</tr>
<tr>
<td>5</td>
<td>4.6–5.5</td>
<td>4.5–5.6</td>
<td>4.3–5.9</td>
<td>4.1–6.4</td>
<td>3.8–7.3</td>
<td>3.5–8.9</td>
<td>3.0–13.2</td>
</tr>
<tr>
<td>6</td>
<td>5.4–6.7</td>
<td>5.3–7.0</td>
<td>5.0–7.5</td>
<td>4.8–8.2</td>
<td>4.4–9.8</td>
<td>3.9–13</td>
<td>3.5–43.2</td>
</tr>
<tr>
<td>8</td>
<td>7.0–9.4</td>
<td>6.8–9.8</td>
<td>6.4–11</td>
<td>5.9–12</td>
<td>5.3–17</td>
<td>4.7–28</td>
<td>3.9–∞</td>
</tr>
<tr>
<td>10</td>
<td>8.4–12</td>
<td>8.2–13</td>
<td>7.5–15</td>
<td>6.9–18</td>
<td>6.1–29</td>
<td>5.3–103</td>
<td>4.3–∞</td>
</tr>
<tr>
<td>15</td>
<td>12–21</td>
<td>11–23</td>
<td>10–30</td>
<td>9–48</td>
<td>7.5–∞</td>
<td>6.4–∞</td>
<td>5.2–∞</td>
</tr>
<tr>
<td>30</td>
<td>19–69</td>
<td>18–101</td>
<td>15–∞</td>
<td>13–∞</td>
<td>10–∞</td>
<td>8–∞</td>
<td>6.0–∞</td>
</tr>
</tbody>
</table>

Sharp definition will be obtained within the range given (feet):
View-Finder

The bright image seen in the view-finder shows, on a reduced scale, the field covered by the camera. However, when close-ups are being taken, there will occur a slight deviation, the so-called parallax error. After gathering some experience, the user will find it easy to take this deviation into account. Moreover, a disturbing effect will only occur within a range of 6½ feet or less. To eliminate the error, simply lift the lens slightly. As a result, the view-finder image will include a small zone at its upper edge which, however, will not appear in the picture taken.

Camera Care

Regular care will extend the life of your camera. Be sure to protect it from dust and excessive exposure to sunlight. Prior to loading a film, remove any dust or other foreign particles that may have entered the camera.

The lens, of course, requires particular attention. Immediately remove from the lens all dust and finger-prints, if any, because they are more detrimental to highly polished lens surfaces than most people think. To wipe the lens clean, take a suitable piece of chamois leather or soft linen which must be absolutely clean and free of dust or grease, and wrap it around your fingertip or a matchstick. On no account must a sharp-edged object or a metallic tool be used. — Never take the lens apart!
Flash Contact

The Isolette "V" is provided with a 1/8-in. (3-mm) nipple to which a flashbulb release cable may be attached. Automatic synchronizing ensures that the flash coincides with the exposure. As a great variety of flashbulbs are available on the world market, all of them having different delay- and flashing-periods, it is recommended, when using a flashbulb, to set the shutter for 1/25 second.
## Comparison of Emulsion Speeds

<table>
<thead>
<tr>
<th>Tenth deg. DIN*</th>
<th>10</th>
<th>11</th>
<th>12</th>
<th>13</th>
<th>14</th>
<th>15</th>
<th>16</th>
<th>17</th>
<th>18</th>
<th>19</th>
<th>20</th>
<th>21</th>
<th>22</th>
<th>23</th>
<th>24</th>
<th>25</th>
<th>26</th>
<th>27</th>
</tr>
</thead>
<tbody>
<tr>
<td>ASA Logarithmic Exposure Index</td>
<td>8</td>
<td>10</td>
<td>12</td>
<td>16</td>
<td>20</td>
<td>25</td>
<td>32</td>
<td>40</td>
<td>50</td>
<td>64</td>
<td>80</td>
<td>100</td>
<td>125</td>
<td>160</td>
<td>200</td>
<td>250</td>
<td>320</td>
<td>400</td>
</tr>
<tr>
<td>ASA Arithmetic Exposure Index</td>
<td>20°</td>
<td>21°</td>
<td>22°</td>
<td>23°</td>
<td>24°</td>
<td>25°</td>
<td>26°</td>
<td>27°</td>
<td>28°</td>
<td>29°</td>
<td>30°</td>
<td>31°</td>
<td>32°</td>
<td>33°</td>
<td>34°</td>
<td>35°</td>
<td>36°</td>
<td>37°</td>
</tr>
<tr>
<td>Weston Numbers</td>
<td>6</td>
<td>8</td>
<td>10</td>
<td>12</td>
<td>16</td>
<td>20</td>
<td>24</td>
<td>32</td>
<td>40</td>
<td>50</td>
<td>64</td>
<td>80</td>
<td>100</td>
<td>125</td>
<td>160</td>
<td>200</td>
<td>250</td>
<td>320</td>
</tr>
<tr>
<td>General Electric</td>
<td>10</td>
<td>12</td>
<td>16</td>
<td>20</td>
<td>24</td>
<td>32</td>
<td>40</td>
<td>48</td>
<td>64</td>
<td>80</td>
<td>100</td>
<td>125</td>
<td>150</td>
<td>200</td>
<td>250</td>
<td>300</td>
<td>400</td>
<td>500</td>
</tr>
<tr>
<td>H. &amp; D. (Ilford)</td>
<td>400</td>
<td>500</td>
<td>600</td>
<td>750</td>
<td>1000</td>
<td>1200</td>
<td>1500</td>
<td>2000</td>
<td>2500</td>
<td>3000</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>H. &amp; D. (Europe)</td>
<td>1300</td>
<td>1700</td>
<td>2100</td>
<td>2700</td>
<td>3500</td>
<td>4400</td>
<td>5600</td>
<td>7200</td>
<td>9100</td>
<td>11600</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Relative Exposure Time</td>
<td>8.00</td>
<td>6.40</td>
<td>5.13</td>
<td>4.00</td>
<td>3.20</td>
<td>2.56</td>
<td>2.00</td>
<td>1.60</td>
<td>1.28</td>
<td>1.00</td>
<td>0.80</td>
<td>0.64</td>
<td>0.50</td>
<td>0.40</td>
<td>0.32</td>
<td>0.25</td>
<td>0.20</td>
<td>0.16</td>
</tr>
</tbody>
</table>

The vertical columns indicate films of identical emulsion speed.
The bottom line indicates the relative amounts of light required to expose films of different emulsion speed.

Example: A film of \(\frac{1}{10}\) deg. DIN requires double the amount of light needed by a film of \(\frac{3}{10}\) deg. DIN (difference 3/10 deg. DIN). This goes to show that either the lens aperture must be increased by one full stop, or exposure time must be increased by one full step, i.e., it must be doubled.

* DIN = German Industrial Standard Specification.
Hints for Correct Exposure

Picture-taking time between three hours after sunrise and three hours before sunset.

<table>
<thead>
<tr>
<th>Emulsion speed</th>
<th>Light Conditions</th>
<th>Bright Sun</th>
<th>Sunny</th>
<th>Partly Cloudy</th>
<th>Cloudy</th>
<th>Shutter Speed</th>
</tr>
</thead>
<tbody>
<tr>
<td>18 to 19/10 deg. Din</td>
<td>Bright Subject</td>
<td>16</td>
<td>11</td>
<td>8</td>
<td>5.6</td>
<td>1/75 second</td>
</tr>
<tr>
<td></td>
<td>Dark Subject</td>
<td>11</td>
<td>8</td>
<td>5.6</td>
<td>4.5</td>
<td></td>
</tr>
</tbody>
</table>

In the shade: Increase aperture (smaller stop-number) or expose $\frac{1}{25}$ second. — For a fast-moving subject, increase aperture by one stop and expose $\frac{1}{200}$ second. Extremely bright subjects such as snow-covered landscapes or beaches in bright sunlight permit stopping the lens down to f/22 or f/32, respectively, exposure time remaining unchanged.

When in doubt, use a longer exposure time rather than a shorter one. It is difficult to hold the camera steady for exposure times exceeding $\frac{1}{25}$ second. Therefore, to make time exposures ("V" mark set at "B"), use a tripod or support the camera in some other way.
A cable release can be screwed into the nipple provided near the release lever.

For long-time exposures, set "V" mark at "B", depress the release lever, and lock it by raising sliding lock "T". The shutter will remain open until the lock is lowered again.

As regards indoor pictures, it is harder to arrive at the correct exposure time. Unless you can draw on personal experience, use an exposure meter, preferably of the electrical type, or a detailed exposure table. In this case, too, the rule applies: Use a longer exposure time rather than a shorter one.

The design of the Isolette "V" camera is subject to changes as may be caused by technical development.

All cameras and lenses bear serial numbers. (The camera serial number will be found on the outside of the fixed spool carrier.) Be sure to make a note of both these numbers as in case the camera has been lost, recovery entirely depends on circulating the numbers among photographic dealers and on publishing them in the daily press.
Supplement and Correction for Isolette V

Pronto Shutter: B, 1/25, 1/50, 1/100, 1/200, "T".
Delayed action selftimer: (cannot be used with "B" setting).
Delay period approximately 10 seconds.
1. Cock shutter,
2. Cock selftimer lever,

Vario Shutter: B, 1/25, 1/50, 1/200, "T".
The Vario Shutter has been changed to the effect that the shutter speed
of 1/75 sec. has been substituted by 1/50 sec. Inasmuch as par. "Hints for
correct exposure", page 19, is giving approximate stop numbers only, the
numbers pertaining to the 1/75 sec. can be used for the 1/50 sec. as well.
However, when using the 1/200 sec. it should be observed that against the
indicated shutter speed the aperture is to be increased by one to two stops
(smaller figures).

The accessory holder of the Isolette "V" is no longer accomo-
dated at the side of the camera as shown in the illustrations, but
is now fitted in the middle right above the optical viewfinder.

AGFA CAMERA WERK, MÜNCHEN
US Administration

110 engl. - 0950 (Correction Slip for M 917 E - 1149).