

IPSCO

CAMERAS PLATES PAPERS

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Terms of Sale

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Order Through Your Dealer

E prefer to sell through the regular photographic dealer, but if there should be no Ica dealer in your locality, send your order direct to us.

Give full shipping directions, stating whether goods are to be shipped by freight, express or parcels post; otherwise we will use our discretion.

All goods are carefully packed and inspected before delivery to transportation companies. Claims for damaged or broken goods must be made against such companies. All other claims should be made in writing within ten days of receipt of goods. Remittance should be made by New York draft, express or money orders. Stamps will be accepted for amounts of less than one dollar.

When goods are to be forwarded by mail, and cash accompanies order, add the amount of postage to the remittance. Otherwise, goods will be forwarded by express, charges collect. If the goods ordered by mail are sufficiently valuable, they should be ordered sent by insured parcel post, the additional charge for which should be added to the remittance for the goods.



WELVE months ago the first *Ipsco* catalogue was yet to be created, and the term "*Ica*," as applied to the highest grade camera possible to obtain was practically unknown in America.

By sheer merit—the merit of efficiency ideals realized in workmanship, construction and material—*Ipsco* products have gained an enviable reputation, and have taken a foremost place in the favor of the American photographic public.

The idea underlying the issuing of this, the second edition of our catalogue, is to place in greater detail before the photographer who knows and wants the *best*, the merits of the goods we represent. Every camera, every lens and accessory listed, has been selected with the most careful attention to the requirements of all phases of photography, and any and every article can be purchased with the full assurance that, for the purpose for which it is required, no better article can be bought.

Regarding *Ica* cameras, while we will most willingly assist all camera buyers in selecting the most suitable instrument for their requirements, we earnestly request that the final purchase be made through the photographic dealer who carries our goods in stock.



ICA Cameras

THE cameras listed herein embrace a careful selection of the best and most popular models made by

ICA Aktiengesellschaft

a consolidation representing some of the largest and best known manufacturers in Europe.

Combining great durability and accuracy, Ica cameras embody many advantages found in no other make.

Their general finish is black; on most of them an especially fine grade of black morocco leather is used as a covering, and for the bellows carefully selected skins are used. A few of the cameras are covered with a leatherized, wear-defying material, impervious to scratches or cuts. All metal parts are finished in black enamel, except the movable parts, or parts constantly handled, which are highly polished nickel finish.

These cameras, without exception, take regular size film and plates, as well as plates and film of foreign make.

Every Ica camera is sold with the lens and shutter equipment as listed. Cameras without lenses or shutters, or cameras with different lenses or shutter equipment than those specified, will not be sold. This action is taken because of the delicate adjustment necessary to fit other lenses and shutters to insure accuracy; and, in view of the high grade lens and shutter equipments of Ica cameras (perfect enough for the most exacting photographer), we believe greater satisfaction is obtained in furnishing our cameras equipped with the lens and shutter as it is received from the factory, than to encourage the fitting of other lens equipments, with the possibility of destroying the delicate balance of perfectly adjusted and accurate instruments.

Lens Equipment

HE Ica Helios Extra Rapid Double Aplanat lens, f. 8 is especially made for the Ica Cameras by one of the largest lens manufacturers in Continental Europe. It is an unusually rapid lens for an Aplanat, and, where the bellows extension of the camera permits, the rear element can be used as a telephoto or for landscape work, being a lens of the symmetrical type. While not as optically perfect as an anastigmat lens, it is, nevertheless, fully corrected for all major optical defects, and is greatly superior to the ordinary Rapid Rectilinear lens equipment of American cameras. It renders excellent definition, and for general work, where the better corrections of the anastigmat are not required (as for instance, in ordinary "snap-shot" work), the Helios will be found a most reliable and serviceable lens.

THE Hekla Double Anastigmat lens, f. 6. 8, is a most capable lens for general work. It is a highly corrected, symmetrical anastigmat, ideal for general portraiture, landscape and architectural work, and all phases of photography where great speed is not the primary essential. Hekla negatives are crisp and clean-cut, showing definition to the plate margins, even at full opening. When used on an Ica camera with a sufficiently long draw of bellows, the rear element of the lens may be used for distance work.

The Carl Zeiss Icar lens, a non-symmetrical lens, with an aperture of f. 6. 3, will appeal to those photographers who prefer a speedier lens than the Hekla working at f. 6. 8. This lens, the product of the famous Carl Zeiss Laboratories at Jena, is especially made for the Ica cameras. Its speed renders it particularly valuable for all hand camera work, and in addition, it possesses all the other characteristic qualities of Carl Zeiss lenses—flatness of field, and brilliant illumination. At full opening it gives sharpness to the margin of the plate, and is fully corrected for all chromatic aberrations. By reason of its careful construction, it will meet the requirements of the most critical under the most trying photographic conditions.

THE Carl Zeiss Amatar is one of the most perfect of high grade anastigmat lenses made under the Carl Zeiss formula in Jena,

Germany. Its speed, F: 6.8 insures perfect results for all outdoor work. Being a doublet of symmetrical construction, consisting of two combinations of three cemented lenses each, the front and rear elements can be used singly with great effect for landscape and outdoor portraits, the focal length of the single



elements being about double that of the entire doublet. The Amatar gives an extremely flat field, and is entirely free from distortion, astigmatism, etc. For all around work we recommend this lens as one of the best obtainable for cameras having a double extension of bellows.

The Carl Zeiss Tessar F: 4.5 and F: 6.3, and the Convertible Protar Series VII are conceded by leading photographic authorities to be the most perfectly corrected anastigmats made. They are the production of the Carl Zeiss factory at Jena, Germany, and we unhesitatingly recommend them in conjunction with Ica cameras. A special booklet of Carl Zeiss lenses will be sent upon request: or upon receipt of 25 cents in stamps we will furnish the De Luxe Carl Zeiss Photographic Catalogue, an elaborate cloth bound volume, containing detailed information on photographic lenses.

Shutter Equipments

AREFUL consideration should be given to the selection of the proper shutter for one's camera. The shutter ranks next in importance to the lens. Consistently good work cannot be expected from a shutter which cannot be depended upon, and with this fact in mind, the manufacturers of Ica cameras have equipped their instruments with the most accurate shutters made.

There are three models of Ica shutters, the Automatic Models X and XI, and the Compound Shutter.

Model X Automatic Shutter

Model X is strongly made, and is fitted with Helios and Hekla Lenses. It has speed adjustments of 1/25, 1/50, and

I/100 of a second, as well as Time and Bulb exposures. It is ready for instant action, does not have to be set, and is wonderfully accurate, giving well timed exposures at the rated speeds. It is operated either by a trigger release, or by the flexible metal cable release furnished with all Ica cameras.



Model XI Automatic Shutter

THE Model XI shutter responds instantly to the slightest pressure of the cable or trigger release. In appearance it is similar



to the Compound Shutter, but the speeds are all set from the small movable dial at the top of the shutter. It has time and bulb adjustments, as well as instantaneous exposures of I second, I/2, I/5, I/10, I/25, I/50, and I/100 of a second. It is strongly constructed, and is carefully

tested to respond accurately to its rated speeds.

Compound Shutter

THE Compound Shutter is admittedly one of the best between-the-lens shutters made, and combines delicacy of adjustment with

great structural strength. It is made for the simplest as well as the most serious photographic work, and will respond instantly to the cable or trigger release. Can be set for time and bulb exposures, and has speed adjustments up to 1/300 of a second in the appell sizes and 1/150 of a



small sizes, and 1/150 of a second in the large sizes.

The flexible metal cable releases which accompany all Ica shutters fit perfectly. They give greater satisfaction than the rubber bulb release, which has a tendency to wear out or harden after long usage.

Film Pack Adapters

THE Ica Film Pack Adapter clamps on or slides into the space occupied by the focusing back of all Ica Cameras designed for the use of film packs or plates, after the back has been removed. The sliding or clamping arrangement depends upon what type camera the adapter is intended for. There is no jarring of the camera, no blurring of the carefully focused object, either in inserting or taking off the adapter; a single snap or gentle slide, and the adapter is ready for action. To insert the film pack into the Adapter, the back of the Adapter is opened by pressing two springs which, being released, allow the back to drop The pack is then placed in the Adapter, and is used as in the ordinary Adapter. metal slide protects the sensitized face of the film, so that at any time the Adapter can be removed with the same ease with which it is put on, and the focusing back or metal plate holder substituted.

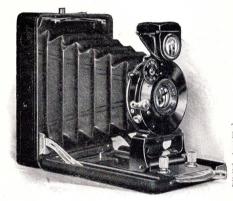
The use of the Ica single metal plate holders is as convenient as the Adapters, clamping or sliding on

in the same manner. Those who have attempted to thrust a

heavy, loaded double plate holder into the back of a camera without jarring will appreciate at once what great benefit is to be derived from the use of the Ica holders.



Victrix



Takes Pictures 1¾ x 2¾ Inches

Film Pack or Plates

Specifications

Camera Body—Aluminum composition. Covering—Black grain leather. Bellows—Black leather. Finder—Large, brilliant and reversible. Shutter Release—Flexible detachable cable and trigger. Back—Slides on and off with ground glass. Tripod Sockets—For horizontal and vertical positions. Focusing Adjustment—When drawn out, the front locks on infinity, focusing for closer distances up to three feet being done by an accurate lever movement. Shutter Speeds—Time, bulb, and Instantaneous—1/25, 1/50, and 1/100 of a second.

Dimensions: 3 11-16 x $1\frac{1}{8}$ x $2\frac{3}{4}$ in. Weight: $10\frac{1}{2}$ oz.

Price

Including 3 single metal plate holders in purse.

With Helios Aplanat Lens, F: 8, 3½ in. focus Model X
Shutter ... \$15.00
3 extra plate holders in purse ... 1.50
Film pack adapter ... 2.50
Metal plate holders, each ... 40

The growth in popularity of the small camera and the reasons underlying this growth, form one of the most interesting pages in modern photographic history.

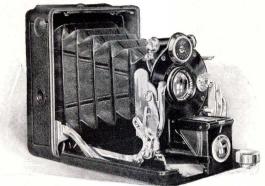
For many years the small camera was an inconspicuous instrument in America, used only as a convenience, to be laid aside when more serious work was contemplated.

With the freer and more universal use of the anastigmat lens, many people realized that the small camera had numerous advantages besides convenience in carrying. It was not until the advent of the small camera made abroad (or as recently as the last year and a half) that discerning photographic investigators recognized it had capabilities which brought it into favorable comparison with the larger size cameras built for the most serious kind of work.

During the year 1913, the advantages of the small camera in conjunction with the short focus anastigmat were brought to the attention of the camera-loving public by such conservative magazines as "Photo Miniature," "Camera Craft," "Wilson's Photographic Magazine," etc., and by writers who had studied the subject from a great many angles. And as more phases of this very interesting subject develops, much more will undoubtedly be written.

The practical application of the small camera to any and every field of photographic endeavor has not, by any means, been exhausted, but to summarize some of the advantages which these small cameras possess (aside from the convenience of carrying, which is well known to all), we might cite the following:

Atom Model A



Takes Pictures 13/4x23/8 in. Film Pack or Plates.

Specifications

Camera Body—Aluminum composition. Covering—Black morocco leather. Bellows—Black leather. Front Standard—Self-erecting, and absolutely rigid. Finder—Extra large and brilliant; collapsible, with indestructible metal mirror, easily cleaned. Reversible, with spirit level. Shutter Release—Flexible detachable cable, and trigger. Back—Clamps on. Has large, folding focusing hood. Tripod Sockets—For horizontal and vertical positions. Focusing adjustment—Front locks in focus for objects twenty feet or more distant when opened. For closer work up to five feet, focusing is done with a lever movement. Shutter Speeds—Model X, Time, Bulb, and Instantaneous exposures of 1/25, 1/50, 1/100 of a second; compound, Time, Bulb, and I second to 1/300 of a second Instantaneous exposures.

Dimensions: 3 ½x 1½ x 2¾ in. Weight: 12¼ oz.

Price

Including 3 single metal plate holders in purse, and flexible metal shutter release.

| metal shatter release. | | 3 6 1 1 37 | 0 |
|---|-------------------------------------|---------------------------------|--------------------------|
| Lens Equipment | Focus in. | Model X Automatic Shutter | Com- pound Shutter |
| Hekla Anastigmat Lens, F: 6.8 Carl Zeiss Tessar Lens, F: 6.3 | $\frac{3\frac{1}{2}}{3\frac{1}{2}}$ | \$25.00 | \$32.00 |
| 3 extra black enamel plate holder | | | 1.50 |
| 3 extra white metal holders in ger | nuine leath | er purse | 3.50 |
| Single plate holders, black ename | l, each | | .40 |
| Single white metal folding plate l | nolders, ea | ch | 1.00 |
| Film Pack Adapter, leather cov | ered | | . 2.50 |
| Plate magazine, to hold 12 plate | s | | . 17.50 |
| Leather case for camera, 3 plate | holders a | nd film pac | k |
| adapter | | | |

- 1. Greater depth of field in the negative, by reason of the short focus of the lens.
- 2. Greater illumination, on account of less glass in the lens to absorb the light rays.
- 3. Microscopic detail, in many cases invisible to the eye, making the negatives ideal as enlarging possibilities.
- 4. Greater speed; the ability of the small camera to stop motion with half the exposure required for a camera twice its size. In this connection, very interesting experiments have been made showing that a small camera with No. 00 Compound shutter and Carl Zeiss Tessar lens f. 4.5, 2½ inch focus, taking pictures 1¾x2¾ inches, stopped motion of a rapidly moving object at an exposure of 1-300 of a second; while a 5x7 camera, fitted with a focal plane shutter, and a 7 inch lens with an aperture of f. 6.8, required an exposure of 1-600 of a second to arrest the same motion. Besides which, a careful examination of the small negative showed more detail in the shadows, greater depth, and better illumination.

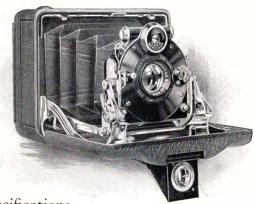
Applying these principles to a practical test, we find we can obtain a 5x7 or even larger reproduction of a 1¾ x2¾ negative which cannot be distinguished in comparison, point by point, from a contact print of the same size. In fact, the *enlargement* will show more detail in the shadows, a more even illumination, and greater depth, than a similar size contact print.

The advantages of such a camera are obvious, and the question naturally arises: "If negatives can be obtained which, when enlarged, are better than contact prints, why be burdened with the troublesome bulk of the larger camera?"

Atom, Model B

Takes Pictures 13/4 x 23/8 Inches

Film Pack or Plates



Specifications

Camera Body—Aluminum composition. Covering—Black morocco leather. Bellows—Black leather. Front Standard—Self erecting and absolutely rigid. Finder—Extra large and brilliant; collapsible, with indestructible metal mirror easily cleaned. Reversible. Shutter Release—Flexible detachable cable, and trigger. Back—Clamps on. Has large folding focusing hood. Tripod Sockets—For horizontal and vertical positions. Focusing Adjustment—When open the front locks in focus for objects twenty feet or more distant. For closer work up to three feet, focusing is done by a lever movement. Shutter Speeds—Time, bulb, and I second to I/300 of a second instantaneous exposures.

Dimensions 3 1/2 x 1 1/2 x 23/4 in. Weight: 12 1/2 oz.

Price

Including three single folding white metal plate holders and flexible metal shutter release.

| Lens Equipment | Focus inches | PRICE WITH Compound Shutter |
|------------------------------------|----------------|-----------------------------------|
| Hekla Anastigmat Lens, F: 6.8 | $2\frac{1}{2}$ | \$41.00 |
| Carl Zeiss Tessar Lens, F: 4.5 | $2\frac{1}{2}$ | 64.50 |
| 3 extra white metal folding plate | holders in pu | rse 3.50 |
| Single white metal folding plate h | | |
| Film Pack Adapter, leather cove | ered | 2.50 |
| Plate Magazine, to hold 12 plate | s | 17.50 |
| Leather case for camera, 3 plate l | holders and ad | apter 3.50 |

Phase ten years ago this question would have been met with the objection that making enlargements of negatives would cost a great deal more than, say, 5 x 7 contact prints—in other words, that the up-keep of the smaller camera would be higher than that of the 5 x 7, even taking into consideration the cost of the larger size plates. And, that the advantages to be gained would be more than offset by the trouble of enlarging.

But to-day there are so many really good enlarging outfits on the market, that enlarging one's negatives is now practically as easy as any of the simplest operations in photography—as well as one of the most pleasurable. A moment's calculation will convince anyone that the upkeep of a small camera, even taking into consideration the enlarging of the negatives, is considerably less than a camera of larger size.

Since the many virtues of the small camera have become universally recognized, many types are now on the market, but it is safe to say that the group of Ica Miniature Cameras described in these pages are the most perfect of their kind ever offered. Simplicity of operation, strength and rigidity are the keynotes of their popularity, and the delicacy and accuracy of their lens, shutter and focusing adjustments insure the greatest amount of satisfaction.

There are five types of Ica Miniature Cameras, and a glance at the specifications of any one of them will convince the most skeptical that, in comparison, they are superior in point of workmanship, material, and the little details which

Bebe Model A



Takes Pictures 13/4 x 23/8 Inches

Film Pack or Plates

Specifications

Construction-Entirely of aluminum and hardened steel. Bellows—Black leather. Finish-Body of camera, black fine grain leather. other parts, black enamel and polished aluminum. Extension—Fixed, rigid, with collapsible struts. Finder—Direct view type. Focusing Adjustment -Revolving collar, operated by lever. Slides on and off, with ground glass focusing Tripod Socket—For horizontal position. screen. Shutter—Compound, with Time, Bulb, and Instantaneous exposures up to 1/250 of a second. Dimensions: 35/8 x 23/4 x 15/8 in. Weight: 14 oz.

Price

Including carrying case and 6 single white metal plate holders in a purse.

| in a purse. | | |
|-----------------------------------|-----------------|---------|
| Lens Equipment | Focus Inches | Price |
| Hekla Anastigmat Lens, F: 6.8, | 3 | \$47.50 |
| Carl Zeiss Tessar Lens, F: 4.5, | 3 | 71.50 |
| 6 plate holders in purse | | 5.25 |
| Film Pack Adapter | | 5.75 |
| Plate Magazine, to hold 12 plates | | 19.00 |
| Cable Shutter Release | | I.00 |
| Single plate holders, each | | 80 |

mean accuracy in the fullest sense of the term, to any camera of similar size or design now on the market.

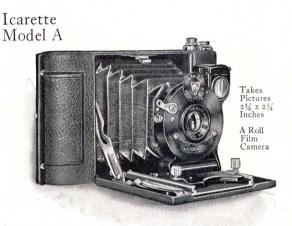
Each Ica camera has qualities peculiar to itself.

The VICTRIX camera (page 10) has a sliding ground glass back, and is equipped only with the Helios Aplanat (f. 8) lens, $3\frac{1}{2}$ inch focus. It is not an "ambitious" camera; that is, it is not intended for the more serious work the other Miniatures are capable of. Yet it is exceedingly strong and rigid, and for general "snapshot" or for a "knock-around-in-the-pocket" camera, it has no equal. A moderately priced instrument, it is sure to give a great deal more satisfaction than its cost would appear to warrant.

The ATOM, MODELS A and B (pages 12 and 14) are the most thoroughly equipped and popular of the Ica Miniature type. They are composed entirely of metal (aluminum and steel), the body being covered with an exceedingly high grade black morocco leather. Model A opens vertically and is equipped with lenses having a 3½ inch focus. Model B opens horizontally, and by reason of its construction, takes lenses of even shorter focal length, viz.: 2½ inch, an undoubted advantage in many instances. Both models are recommended for work requiring accuracy and care, and where the bulk of larger and heavier cameras can be avoided.

These two types are self-erecting cameras, that is, when the front is opened, the lens is automatically extended, and locks rigidly in focus for objects at a distance of 20 feet or more.

In Europe the BEBE camera has been known as the precision camera de luxe for several years.



Specifications

Construction—Entirely of metal, the body of the camera being aluminum. Covering—Black fine Bellows—Black leather. grain leather. Bed—Re-inforced aluminum. Front—Rigid metal construction. Finder—Large and brilliant; collapsible with indestructible metal mirror, easily cleaned. Focusing Adjustment-When drawn out the front locks on infinity, focusing for closer distances up to three feet being done by an accurate lever movement. Shutter Release—Flexible detachable cable, and trigger. Tripod Socket— Shutter Speeds-Auto-For horizontal position. matic, Time, Bulb, and 1/25, 1/50, and 1/100 of a second Instantaneous exposures. Compound, Time, Bulb, and Instantaneous exposures from I second to 1/300 of a second.

Dimensions: 47/8 x 11/8 x 27/8 in. Weight: 121/2 oz.

| Price | Lens Equipment | Focus Inches | Model X Automatic Shutter | Compound Shutter |
|----------------|--------------------------|-----------------|---------------------------------|---------------------|
| | Rapid Aplanat lens, F: 8 | | 13.50 | 0.14111 |
| Hekla Doubl | e Anastigmat Lens, F: 6. | 8 3 | 19.50 | \$25.50 |
| Carl Zeiss Ica | ar Lens, F: 6.3 | 3 | | 38.00 |
| | ssar Lens, F: 6.3, Lens, | 3 | | 43.50 |
| Carl Zeiss Te | ssar F: 4.7, Lens, | 3 | | 54.50 |
| Carrying cas | se\ | | | 2.00 |

Its elegant finish and distinctive design place it in a class by itself. It is made entirely of hardened steel and aluminum. The camera body is covered with black, fine grain leather. The front is held rigid, when extended, by collapsible metal struts. The focusing adjustment is unique, being a revolving collar of aluminum operated by a lever of the same metal. With this camera as well as with the Atom B and Victrix Models, subjects can be photographed as close as three feet.

There is nothing to get out of order on the Bebe; it is always ready for action, and it is an invaluable addition to the kit of the camper, sportsman, naturalist or prospector.

The ICARETTE is the most compact, fully equipped roll film camera made. Its construction is very substantial, and all adjustments are accurate. It is so compact and light in weight, that it can easily be carried in the pocket or in a lady's bag, and as a constant companion, will afford many opportunities to obtain most unusual and interesting pictures that would be impracticable with a larger camera.

Particular attention is called to the specifications of this camera, especially to the metal used in its construction, and to its lens equipment. The metal used is aluminum, not just "metal," or "metal composition." The aluminum makes it extremely light, which is a factor worthy of consideration. Its lens equipment, likewise, bears favorable comparison with any camera of similar design on the market, even the Helios lens working at f. 8 giving clear sharp definition at full opening, under ordinary lighting conditions.

Objects can be focused as close as three feet with the Icarette.

Bebe Model B



Takes pictures 2 1/4 x 3 1/4 inches

Film Pack or Plates

Specifications

Construction—Entirely of aluminum and hardened steel. Bellows—Black leather. Finish—The body of the camera is covered with black fine grain leather. All other parts are black enamelled and polished aluminum. Extension—Fixed, rigid, with collapsible struts. Finder—Direct View Type. Focusing Adjustment—Revolving collar, operated by lever. Front Movement—Horizontal sliding. Back—Slides on and off with ground glass focusing screen. Tripod Sockets—For horizontal and vertical positions. Shutter—Compound, with Time, Bulb, and Instantaneous exposures up to 1/200 of a second.

Dimensions: $5\frac{1}{4} \times 3\frac{5}{8} \times 2\frac{1}{8}$ in. Weight: 29 oz.

Price

Including carrying case and 6 single white metal plate holders in purse.

| With Hekla Anastigmat lens, F: 6.8, 434 in. focus | \$63.00 |
|---|---------|
| With Carl Zeiss Tessar lens, F: 4.5, 43/4 in. focus | 97.00 |
| Six white metal plate holders, in purse | . 6.50 |
| Film Pack Adapter | 7.50 |
| Plate Magazine, for 12 plates | . 25.00 |
| Flexible metal Cable Shutter Release | . I.00 |

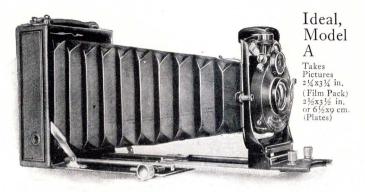
The 2½ x 3½ Ica cameras are the ideal pocket size cameras. Larger than the Miniature group, they make pleasing and satisfactory contact prints, with correspondingly beautiful enlargements.

Ica pocket cameras consist of the Bebe Model B, Ideal Model A, Niklas, Cupido, and the Model C Icarette. They are distinctive because they have all the finer adjustments of larger cameras in compact form.

Attention is called to the brilliant collapsible finders on these as well as on all the Ica cameras. The mirrors are metal which will not tarnish, and are easily cleaned. They form part of the front board of each camera, so that they can never become decentered.

The Ideal, Niklas, and Cupido are for use with plates or film packs; the Model C Icarette for roll film. The plate holders of the plate cameras clamp on the back quickly and easily after the focusing back is removed, without imparting any vibration to the camera.

The BEBE Model B camera is a rigid extension camera, constructed entirely of metal, with all working parts of hardened steel. It is similar in every respect to the Bebe Model A,



Specifications

Camera Body—Aluminum composition. Covering—Black fine grain leather. Bellows—Black leather. Front Bed—Reinforced aluminum. Front Standard-Rigid U-shaped. Front Movements—Rising and falling, operated by lever, and sliding. Front locks automatically on infinity when drawn out. Extension-81/2 inches. Finder-Extra large and brilliant; collapsible, with indestructible metal mirror, easily cleaned. Reversible with spirit level. Front Board—Aluminum, forming the finder front, making it impossible for the finder to become decentered. Shutter Release—Flexible, detachable cable, and trigger. Back—Clamps on. Has large folding focusing hood. Tripod Sockets-For horizontal and vertical positions. Shutter Speeds—Automatic, Time, Bulb, and Instantaneous exposures up to 1/100 of a second; Compound, Time, Bulb, and Instantaneous exposures up to 1/250 of a second.

Dimensions: $5\frac{1}{4}$ x 2 x $3\frac{1}{2}$ in. Weight: $26\frac{1}{2}$ oz.

Price

Including 3 single metal plate holders, and flexible metal shutter release

| situited delease. | | | | |
|---|-----------------------------|-------------------------|----------------------------------|---------------|
| Lens Equipment | Combined Focus Inches | Rear Focus Inches | Model XI Automatic Shutter | Com- pound |
| TT 11 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 | | | Snutter | Shutter |
| Hekla Anastigmat lens, F: 6.8 | 31/2 | $6\frac{1}{4}$ | _ | \$36.50 |
| Carl Zeiss Amatar lens, F: 6. | $8 3\frac{1}{2}$ | 6 | _ | 60.00 |
| Carl Zeiss Protar lens, F: 6.3 | 4 | 7 | _ | 74.00 |
| Carl Zeiss Tessar lens, F: 4.5 | $4\frac{3}{4}$ | - | _ | 62.00 |
| 3 extra plate holders in cloth | n purse . | | | 2.00 |
| 3 extra plate holders, in genu | iine leath | ner pur | se | 2.75 |
| Single Plate holders, each | | | | .60 |
| Film Pack Adapter | | | | |
| Leather case to hold camera, 3 | plate ho | olders ar | nd Adapter | 3.50 |

except that it takes larger pictures, and in consequence is equipped with lenses of longer focal length; has a larger Compound shutter (which works up to 1/200 of a second on instantaneous exposures); has a sliding front and a vertical as well as a horizontal tripod socket, where the Model A only has the horizontal socket. Like its smaller prototype, on account of its strong, simple construction and ease of manipulation, it is sure to appeal to the sportsman, naturalist, or anyone desiring a dependable camera for rough treatment out-of-doors.

For strength, rigidity, and ability to do the most serious kind of work, the IDEAL MODEL A challenges the comparison of the most critical. It is a double extension camera, having a draw of 8½ inches, permitting the use of the rear elements of all its lenses with the exception of the Carl Zeiss Tessar, f: 4.5 (a non-symmetrical lens). Portraits, architectural work, landscape and telephoto work, copying work requiring critical sharpness and accuracy of lines, are faithfully rendered by this wonderful little instrument. For telephoto work with this camera, we especially recommend the Tele-Peconar, a description of which will be found on page 59.

The NIKLAS Camera is of the same construction and form as the Ideal, except that it is a camera of single bellows extension. The lenses are all of slightly greater focal length (45% inches). The rear elements of these lenses cannot be used because the bellows extension of the Niklas is insufficient, but its compactness, and its ability to do



Takes Pictures 2¼ x3¼ in. (Film Pack). 2½x3½ in. or 61/2x9 cm. (Plates)

Specifications

Camera Body-Aluminum composition. Covering-Black fine grain leather. Bellows—Black leather. Front Bed—Reinforced aluminum. Front Standard—Rigid, U-shaped. Front Movements-Rising and falling, operated by lever and sliding; front locks automatically at infinity when drawn out. Extension-47/8 inches. Finder-Extra large and brilliant; collapsible with indestructible metal mirror, easily cleaned. Reversible, with spirit level. Front Board-Aluminum, forming the finder front, making it impossible for the finder to become decentered. Shutter Release-Flexible detachable cable, and trigger. Back-Clamps on. Has large, folding focusing hood. Tripod Sockets-For horizontal and vertical positions. Shutter Speeds—Automatic, Time, Bulb, and Instantaneous exposures up to 1/100 of a second: Compound, Time, Bulb, and Instantaneous exposures up to 1/250 of a second.

Dimensions: 51/4 x 17/8 x 31/2 in. Weight: 24 oz.

Price

Including 3 metal plate holders in purse and flexible metal shutter release.

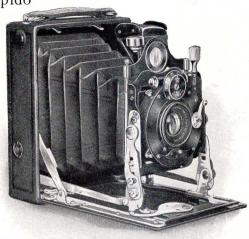
| Lens Equipment | Focus Inches | Compound Shutter |
|---|-----------------|---------------------|
| With Hekla Anastigmat Lens, F: 6.8 | 45/8 | \$35.00 |
| With Carl Zeiss Tessar Lens, F: 6.3 | 45/8 | 57.00 |
| With Carl Zeiss Tessar Lens, F: 4.5 | $4^{5/8}$ | 60.00 |
| 3 extra plate holders in cloth purse | | |
| 3 extra plate holders in genuine leather purse | | |
| Single plate holders, each | | |
| Film pack adapter | | |
| Leather case to hold camera, 3 plate holders as | nd adap | ter 3.50 |

all sorts of general work under the most trying conditions make it a most popular camera for advanced amateur work.

The CUPIDO is distinct from the Ideal and Niklas because when opened the front automatically erects itself, and locks focused for infinity. The self-erecting front is made possible (as in the case of the Atom, Models A and B), by strong steel struts, which work smoothly and without friction, and will not get out of order. The focusing adjustment of this camera is also unique, consisting of a lever on the right of the camera bed which swings evenly to the various distances noted on the focusing scale. The front has a rising and falling movement, operated by screw adjustment. On account of the ease with which it is brought into action, the Cupido is especially recommended for travellers and tourists.

The ICARETTE MODEL C is a roll film camera, in many respects similar to the Model A Icarette. The front of this camera, however, drops vertically, although it has the same aluminum body, and is covered with the same genuine black morocco leather. The back, instead of having a sliding lock, is securely fastened by a lock running its entire width, at the top. The back is removed by pressing two knobs together which releases the catch, the back then coming off naturally and easily. The winding key which keeps the film spool in place has two small steel extension rods which permit pulling the key out and

Cupido



Takes
Pictures
2½x3¼ in.
(Film Pack)
2½x3½ in.
or 6½x9 cm.
(Plates),

Specifications

Camera Body—Aluminum composition. Covering—Black fine grain leather. Bellows—Black leather, ventilated, so that the rapid opening of the camera will not cause it to collapse. Extension—4½ inches. Front Bed—Reinforced aluminum. Front Standard—Self-erecting, and absolutely rigid. Front Movement—Rising and falling, operated by screw adjustment, with lever focusing mechanism. Finder—Extra large and brilliant; collapsible, with indestructible metal mirror, easily cleaned. Reversible, with spirit level. Shutter Release—Flexible detachable cable or trigger. Back—Clamps on. Has large, folding focusing hood. Tripod Sockets—For horizontal and vertical positions. Shutter—Compound, Time, Bulb, and Instantaneous exposures up to 1/250 of a second.

Dimensions: 51/8 x 17/8 x 33/4 in. Weight: 25 oz.

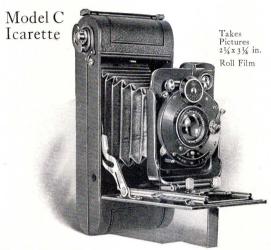
Price

Including 3 single metal plate holders in purse, and flexible metal shutter release.

| Lens Equipment With Hekla Anastigmat lens, F: 6.8 | Focus Inches | Co | WITH ompound utter |
|---|-----------------|-------|--------------------|
| With Carl Zeiss Tessar lens, F: 4.5 | $4\frac{3}{4}$ | | 69.00 |
| 3 metal plate holders in cloth case | | | 2.00 |
| 3 metal plate holders in genuine leather p | | | 2.75 |
| Single metal plate holders, each | | | .60 |
| Film Pack Adapter Leather case to hold camera, 3 plate | holder | s and | 2.50 |
| adapter | | | 3.50 |

releasing the spool without any effort. It takes the regular No. 2 Brownie roll film (which can be purchased anywhere films are sold), and is the most efficient, as well as the most handsome of this particular type of camera now being offered. A first glance, even at the half tone reproduction of this camera on page 28, must impress every one with its two main qualities-strength and compactness. But in addition, its lens equipments are well worth special consideration, graded as they are for all classes of work; from the Helios Aplanat lens, with an aperture of f: 8, for the camerist who wants an instrument "just to take pictures," to the fully corrected Carl Zeiss Tessar f: 4.5, for the photographer who appreciates "lens efficiency." The Helios, Hekla, Icar, and Carl Zeiss Tessars, IIb and Ic, are the best of their respective types, and insure the best possible results under any and all conditions.

It is extremely hard to tell what one of the cameras just described will meet the needs of all. After reading the specifications of each camera, if you are still uncertain, consult your dealer, or write to us, and we will recommend the outfit which we consider best for the class of work you wish to do. We can say without fear of contradiction that no matter what your requirements are, one of the Ica pocket cameras will give the greatest amount of satisfaction, and will insure to you the maximum of efficiency.



Specifications

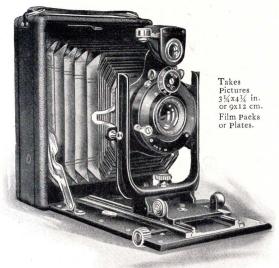
Construction—Entirely of metal, the body of the camera being aluminum. Covering—Black seal grain leather. Bellows—Black leather. Front Bed—Reinforced aluminum. Front— Rigid metal construction. Finder-Large and brilliant; collapsible with indestructible metal mirror, easily cleaned. Focusing Adjustment-When drawn out the front locks on infinity, focusing for closer distances up to 6 feet being done by an accurate lever movement. Shutter Release—Flexible detachable cable, and trigger. Tripod Sockets—For horizontal and vertical positions. Film Winding Adjustment—Metal, reinforced with steel pins. Shutter Speeds-Model X Automatic Shutter, Time, Bulb, and 1/25, 1/50, and 1/100 of a second Instantaneous exposures; Compound, Time, Bulb, and Instantaneous exposures up to 1/250 of a second.

Dimensions: 61/2 x 1 3-16 x 23/4 in. Weight: 201/2 oz.

Price

| Lens Equipment | Focus | Model X Automatic C | ompound |
|---|----------------|------------------------|---------|
| | Inches | Shutter | Shutter |
| Helios Extra Rapid Aplanat lens, F: 8 Hekla Double Anastigmat lens, F: 6.8 | | \$21.00 | \$35.50 |
| Carl Zeiss Icar lens, F: 6.3 | 31/2 | _ | 46.00 |
| Carl Zeiss Tessar lens, F: 6.3 | 31/2 | _ | 56.00 |
| Carl Zeiss Tessar F: 4.5 lens | $3\frac{1}{2}$ | _ | 59.50 |
| Carrying case | | | 2.50 |

Delta



Specifications

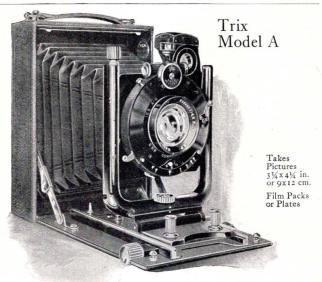
Camera Body—Ebonized mahogany. Covering—Black seal grain leather. Bellows—Black leather with automatic take up. Front Bed—Reinforced aluminum. Front Standard—Rigid, U-shaped. Front Movements—Rising and falling, operated by lever and sliding. Front locks automatically on infinity when drawn out. Extension—II 3-16 inches. Finder—Extra large and brilliant. Reversible with spirit level. Front Board—Aluminum, forming the finder front, making it impossible for the finder to become decentered. Shutter Release—Flexible detachable cable, or trigger. Back—Slides on and off. Has large focusing hood. Tripod Sockets—For horizontal and vertical positions. Shutter Speeds—Time, Bulb, and Instantaneous exposures of I second, 1/5, 1/10, 1/25, 1/50, and 1/100 of a second.

Dimensions: 61/2 x 2 1/4 x 43/4 in. Weight: 28 oz.

Price

Including 3 single metal plate holders in purse and flexible metal shutter release.

| Lens Equipment With Helios Double Aplanat lens, | Combined Focus Inches F: 8 5 | Rear Focus Inches | Auto | del XI omatic shutter 25.00 |
|--|---------------------------------------|-------------------------|------|--------------------------------------|
| 3 extra plate holders in cloth purse 3 extra plate holders in genuine lea | | | | 2.15 3.25 |
| Film pack adapter, leather covered Single plate holders, each | | | | 3.00 |
| Leather case for camera, 3 plate ho | lders and a | dapter | | 3.75 |



Specifications

Camera Body—Aluminum composition. Covering—Black fine grain leather. Bellows—Black leather. Front Bed—Reinforced aluminum. Front Standard—Rigid, U-shaped. Front Movements—Rising, falling and sliding. Locks automatically on infinity when drawn out. Extension—634 inches. Finder—Extra large and brilliant; collapsible, with indestructible metal mirror, easily cleaned. Reversible with spirit level. Front Board—Aluminum, forming the finder front, making it impossible for the finder to become decentered. Shutter Release—Flexible detachable cable, and trigger. Back—Clamps on. Has large folding focusing hood. Has extreme vertical locking swing adjustment. Tripod Sockets—For horizontal and vertical positions. Shutter Speeds—Time, Bulb, and Instantaneous speeds up to 1/150 of a second, with intermediate slower speeds.

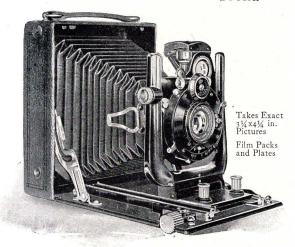
Dimensions: 65/8 x 21/8 x 43/4 in. Weight: 42 oz.

Price

Including 3 single metal plate holders in a purse and flexible metal shutter release.

| With Carl Zeiss Tessar lens, F: 4.5, 51/4 in. focus, and | |
|--|---------|
| | \$70.00 |
| 3 extra plate holders, in genuine leather purse | |
| Single plate holders, each | .75 |
| Film pack adapter, leather covered | 3.00 |
| Leather carrying case, for camera and six plate holders | 3.75 |

Trona



Specifications

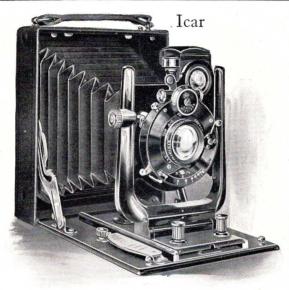
Camera Body—Aluminum composition. Covering—Black, fine grain leather. Bellows—Black leather. Has automatic take-up, preventing it from sagging when not fully extended. Front Bed—Reinforced aluminum. Front Standard—Rigid, U-shaped. Front Movements—Rising and falling, operated by screw adjustment, and sliding. Front locks automatically when drawn out. Extension—10¾ inches. Finder—Extra large and brilliant; collapsible, with indestructible metal mirror, easily cleaned. Reversible, with spirit level. Front Board—Aluminum, with bayonet shutter lock. The front board forms the finder frame, making it impossible for the finder to become decentered. Tripod Sockets—Three, for horizontal and vertical pictures. Back—Slides on and off. Has large, folding focusing hood.

Dimensions: $5\frac{3}{4} \times 2 \times 4\frac{3}{8}$ in. Weight: 34 oz.

Price

Including 3 single metal plate holders and shutter release.

| Lens Equipment | bined Rear Model XI pound Focus Focus Auto Shutter Inches Inches Shutter |
|--|--|
| Hekla Double Anastigmat, F: 6.8 Amatar Double Anastigmat, F: 6.8 | 4 ³ / ₄ 8 ¹ / ₄ \$38.00 \$42.50 4 ³ / ₄ 7 ⁷ / ₈ — 66.00 |
| Single metal plate holders, each 3 metal plate holders, in cloth purse | 2.15 |
| 3 metal plate holders in genuine leat | |
| Film pack adapter | 3.00 |
| Leather carrying case for camera and | d six plate holders 3.75 |



Takes Exact 3¼x4¼ Pictures Film Packs or Plates

Specifications

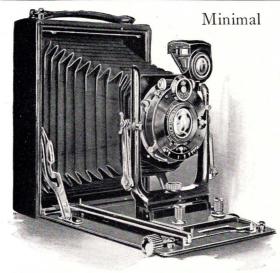
Camera Body—Aluminum composition. Covering—Black seal grain leather. Front Bed—Reinforced aluminum. Front Standard—Rigid, U-shaped. Front Movements—Rising and falling, operated by screw adjustment, and sliding. Extension—5% inches. Finder—Extra large and brilliant; collapsible, with indestructible metal mirror, easily cleaned. Reversible, with spirit level. Front Board—Aluminum, with bayonet shutter lock. The front board forms the finder frame, making it impossible for the finder to become decentered. Tripod Sockets—Two, for horizontal and vertical pictures. Back—Slides on and off. Has large, folding focusing hood. Focusing Scale—Accurately adjusted. Actuated by lever focusing adjustment.

Dimensions: $5\frac{3}{4} \times 113-16 \times 4\frac{1}{2}$ in. Weight: 27 oz.

Price

Including 3 single metal plate holders and shutter release. With Carl Zeiss Tessar lens, F: 6.3, 5 1/2 in, focus, in

| Compound Shutter | \$57.00 |
|--|----------|
| Single metal plate holders, each | .60 |
| 3 metal plate holders, in cloth purse | 2.15 |
| 3 metal plate holders, in genuine leather case | |
| Film pack adapter | 3.00 |
| Leather carrying case | 3.75 |



Takes
Pictures
3½ x 4½
Inches, and
9 x 12
Centimeters

Specifications

Camera Body—Well seasoned mahogany. Covering—Black seal grain leather. Bellows—Black leather. Has automatic take-up, preventing it from sagging, or cutting off the margin of the plate when not fully drawn out. Front Bed—Reinforced aluminum. Front Standard—Rigid, U-shaped. Extension—11/4 inches. Finder—Extra large and brilliant: collapsible, with indestructible metal mirror, easily cleaned. Reversible, with spirit level. Front Board—Aluminum, with bayonet shutter lock. The front forms the finder frame, making it impossible for the finder to become decentered Tripod Sockets—Three: for horizontal and vertical positions. Back—Clamps on. Has large, folding focusing hood. Front Movements—Extreme rise and fall, operated by lever adjustment; sliding movement by screw adjustment. Shutter Speeds—Time, Bulb, and Instantaneous speeds up to 1/250 of a second, with intermediate slow speeds.

Dimensions: $6\frac{1}{2} \times 2 \times 4 \times 15-16$ in. Weight: $35\frac{1}{2}$ oz.

Price

Including 3 single metal plate holders in purse, and flexible shutter release.

| | | - | | |
|--|-----------------------------|-------------------------|---|---------|
| Lens Equipment | Combined Focus Inches | Rear Focus Inches | | npound |
| Hekla Anastigmat lens, F: 6.8 | $5\frac{1}{4}$ | 91/2 | , | \$47.00 |
| Carl Zeiss Amatar lens, F: 6.8 | 51/4 | 9 | | 71.00 |
| Carl Zeiss Double Protar, F: 6.3 | 5 | 83/4 | | 87.50 |
| Single plate holders, each | | | | .75 |
| 3 extra plate holders in cloth purse. | | | | 2.75 |
| 3 extra plate holders in genuine leath | ner purse. | | | 3.75 |
| Film pack adapter, leather covered. | | | | 3.00 |
| Leather case to hold camera and 3 pl | ate holde | rs | | 3.75 |

Roll Film Cameras

To many the Roll Film Camera will always remain a popular instrument, because of its compactness, and the ease with which it is loaded with roll film.

In this respect, the Ica Roll Film Cameras are absolutely unique, besides having refinements of adjustment found on no other Roll Film Camera.

Every Ica Roll Film Camera is a plate camera as well. The backs of these cameras slide off and plate holders can be inserted in their place—this without the additional focusing back required by other cameras of this type. If the more accurate ground glass focusing is desired, then it is advisable to purchase at a small extra cost the ground glass focusing back.

A comparison of the specifications of Ica with those of any other Roll Film Cameras will prove very interesting. The bellows locking at the infinity mark, the rack and pinion movement, the double extension bellows (of the Nixe models), the brilliant collapsible finder, and above all, the strength and rigidity of the metal U-shaped upright find their counterparts in no other make of camera.

Special attention is called to the manner in which the film is loaded and held in place.



In the Halloh camera the film is held in place by strong metal holders which are opened or shut from the inside of the camera (See illustration A).

The film containers of the Nixe camera swing out of the film chambers (illustration B), and all types by reason of the extension springs in the film chambers at all times present a smooth, even plane of the film during exposure. There are no projecting buttons or

parts on the outside of the camera to become disarranged or knocked. The film is inserted with ease and convenience, and is held tightly with no danger of being jarred out of place.

In the various pages of our catalogue we have called particular attention to the *strength* and *rigidity* of all Ica cameras. Too much attention cannot be given these qualities in selecting a camera—especially a Roll Film Camera, and especially if the Roll Film is to be used for tripod work. If the uprights which support the heavy lens board are not rigid, the lens board will sag in time and if the finder is attached to the lens board, the finder will become decentered.



This is one of the reasons why every photographer in selecting a camera should see that the upright posts of his camera are absolutely rigid and strong, and that they give every indication of remaining so.

The rack and pinion adjustment found on all the Ipsco Roll Film Cameras is of the most improved design, and brings objects into focus at varying distances quickly and easily. This adjustment is operated by a milled head focusing screw of chilled steel and will not get out of order.

The focusing back for the Ica camera is well made, light-tight, and is provided with large focusing hood and ground glass. It is easily adjusted to the camera, and is easily taken off. It comes in a purse with three plate holders and can easily be carried in the pocket.

The focusing scale of all the Roll Film models has a sliding device making it interchangeable for plates or film.

The Nixe (double extension) cameras have an indicator showing "Infinity" for plates or film when the single lens element is used.

Halloh Model B



Takes
3½ x 4½
Pictures
Roll Film

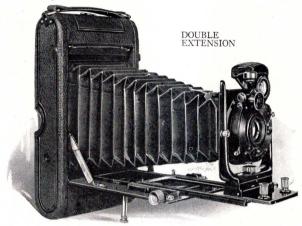
Specifications

Camera Body—Sides are of ebonized mahogany, back and ends aluminum. Covering—Black fine grain morocco leather. Bellows—Black leather. Front Bed—Reinforced aluminum. Front Standard—Rigid, Ushaped. Front Movements—Rising and falling, operated by lever, and sliding. Front locks automatically on infinity when drawn out. Extension—61/8 inches. Finder—Extra large and brilliant; collapsible, with indestructible metal mirror, easily cleaned. Reversible, with spirit level. Front Board—Aluminum, forming the finder front, making it impossible for the finder to become decentered. Shutter Release—Flexible detachable cable, and trigger. Back—Adjustable by means of a removable panel, so that plates may be used. Tripod Sockets—For horizontal and vertical positions. Shutter Speeds—Time, Bulb, and Instantaneous from I second to I/250 of a second. Dimensions: 8½ x 1¾ x 5 in. Weight: 32 oz.

Price

| Including flexible metal shutter release. Lens Equipment | Focus Inches | Compound Shutter |
|---|------------------------|---------------------|
| Carl Zeiss Icar, F: 6.3 | $5\frac{1}{4}$ | \$50.00 |
| Carl Zeiss Tessar, F: 6.3 | $5\frac{1}{4}$ | 62.00 |
| Hooded ground glass focusing back and | | |
| in cloth case | | |
| Hooded ground glass focusing back and | 3 plate ho | olders |
| in genuine leather case | | 5.50 |
| Single plate holders, 9 x 12 centimeters | s, or $3\frac{1}{4}$: | $\times 4^{1/4}$ |
| inches | | 50 |
| Camera carrying case, genuine leather | | 3.50 |

Nixe, Model A



Takes
3½ x 4½
Pictures
Roll Film
or Plates.

Specifications

Covering—Black morocco leather. Bellows—Black leather. Automatic take-up device, preventing sagging, when not fully extended. Front Bed—Reinforced aluminum. Front Standard—Rigid, U-shaped. Extension—10½ inches. Front Board—Aluminum. The front forms the finder frame, making it impossible for the finder to become decentered. Tripod Sockets—Two, for horizontal and vertical positions. Finder—Extra large and brilliant; collapsible, with metal mirror, easily cleaned. Reversible, with spirit level. Front Movements—Rising, falling and sliding. Front locks at infinity when drawn out. Shutter Release—Flexible detachable cable, and trigger. Back—Adjustable for plates. Film Tension—Nickeled springs pressing against the full width of the film insure a perfectly flat plane of the film during exposure. Shutter Speeds—Model XI, Time, Bulb, and Instantaneous speeds up to 1/100 of a second; Compound, same, with Instantaneous exposures up to 1/250 of a second.

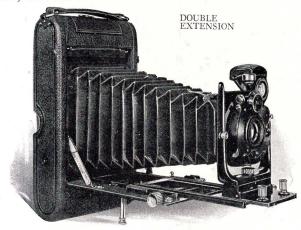
Dimensions: 8 9-16 x 13/4 x 5 in. Weight: 41 oz.

Price

Including flexible metal shutter release.

| | Combined | Rear | Model XI | Com- |
|------------------------------|-----------|--------|-----------|---------|
| Lens Equipment | | | Automati | |
| | Inches | Inches | Shutter | Shutter |
| Helios Extra Rapid Aplanat, | F: 8 5 | 9 | \$37.50 | - |
| Hekla Double Anastigmat, F | | | ź – . | \$48.00 |
| Carl Zeiss Double Protar, F: | 6.3 5 | 83/2 | <u> </u> | 91.00 |
| Carl Zeiss Double Amatar, F | | | _ | 74.50 |
| Hooded glass focusing back, | 3 plate h | olders | in leathe | er |
| case | | | | 5.50 |
| Single plate holders, each | | | | .50 |
| Carrying case | | | | 2 50 |

Nixe, Model B



Takes 3½ x 5½ in. Pictures Roll Film or Plates. Specifications

Covering—Black fine grain leather. Bellows—Black leather. Has automatic take-up device, preventing it from sagging or cutting off the margin of the plate when not fully extended. Front Bed—Reinforced aluminum. Front Standard—Rigid, U-shaped. Extension—12½ inches. Double extension track, actuated by rack and pinion. Front Board—Aluminum. The front forms the finder frame, making it impossible for the finder to become decentered. Tripod Sockets—Two, for horizontal and vertical positions. Finder—Extra large and brilliant; collapsible, with indestructible metal mirror, easily cleaned. Reversible with spirit level. Front Movements—Rising and falling, operated by lever adjustment, and sliding. Front locks at infinity when drawn out. Shutter Release—Flexible detachable cable and trigger. Back—Adjustable by means of a removable panel, so that plates may be used. Shutter Speeds—Time, Bulb, and Instantaneous exposures up to 1/250 of a second, with Hekla and Amatar; 1/200 with Protar.

Dimensions: $9\frac{3}{4} \times 2 \times 5\frac{1}{8}$ in. Weight: 45 oz.

Price

Including flexible metal shutter release.

| Lens Equipment | | Rear Focus Inches | pound Shutter |
|---|----------------|-------------------------|------------------|
| Hekla Double Anastigmat lens, F: 6.8 | 6 | | \$52.50 |
| Carl Zeiss Double Amatar lens, F: 6.8 | 6 | . 10 | 78.00 |
| Carl Zeiss Double Protar lens, VII, F: 7 | $5\frac{3}{4}$ | 8 11-16 | 100.00 |
| Hooded Ground Glass Focusing Back, with 3 p | late | | |
| holders in cloth case | | | 5.75 |
| Single plate holders, each | | | .70 |
| Carrying case | | | 3.75 |



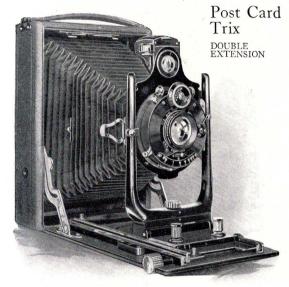
Specifications

Covering—Black fine grain leather. Bellows—Black leather. Front Bed—Reinforced aluminum. Front Standard—Rigid, U-shaped. Front Movements—Rising and falling, operated by lever, and sliding. Front locks automatically on infinity when drawnout. Extension—6½ inches. Finder—Extra large and brilliant; collapsible, with indestructible metal mirror, easily cleaned. Reversible, with spirit level. Front Board—Aluminum, forming the finder front, making it impossible for the finder to become decentered. Shutter Release—Flexible detachable cable; trigger. Back—Adjustable by means of a removable panel, so that plates may be used. Tripod Sockets—For horizontal and vertical positions. Shutter Speeds—Time, Bulb, and Instantaneous exposures up to 1/250 of a second. Dimensions: 95% x 134 x 5 in. Weight: 42½ oz.

Price

Including flexible metal shutter release.

| Lens Equipment | Focus Inches | Compound Shutter |
|---|-----------------|---------------------|
| Hekla Double Anastigmat lens, F: 6.8 | 6 | \$52.50 |
| Carl Zeiss Icar Anastigmat lens, F: 6.3 | 6 | 62.50 |
| Carl Zeiss Tessar lens, F: 6.3 | 6 | 71.50 |
| Hooded ground glass focusing back, with | | |
| holders in cloth case | | |
| Single plate holders, each | | 70 |
| Carrying case | | |



Takes 31/4 x51/2 in. Pictures

Film Packs or Plates

Specifications

Covering-Black fine grain leather. Bellows-Black leather. Has automatic take up, preventing it from sagging when not fully drawn out. Front Bed—Reinforced aluminum. Front Standard—Rigid, U-shaped. Extension—12½ inches. Finder—Extra large and brilliant; collapsible, with indestructible metal mirror, easily cleaned. Reversible, with spirit level. Front Board—Aluminum. The front forms the finder frame, making it impossible for the finder to become decentered. Tripod Sockets—Three: for horizontal and vertical positions. Back-Slides on. Has large, folding focusing hood. Front Movements—Extreme rise and fall, operated by lever adjustment; sliding movement by screw adjustment.

Dimensions: 7 1-16 x 21/8 x 43/4 in. Weight: 34 oz.

Price

Including 3 single metal plate holders.

| including juligic inclui place | - morac | .10. | | |
|----------------------------------|----------------------------------|-------------------------|---------------------------------|--------------------------|
| Lens Equipment | Com- bined Focus Inches | Rear Focus Inches | Model XI Auto. Shutter | Com- pound Shutter |
| Helios Aplanat lens, F: 8 | 6 | 10 | \$39.00 | _ |
| Hekla Anastigmat lens, F: 6.8 | 6 | 10 | _ | \$56.00 |
| Carl Zeiss Amatar lens, F: 6.8 | 6 | 10 | _ | 81.50 |
| Carl Zeiss Double Protar, F: 7 | $5\frac{3}{4}$ | 83/4 | - | 97.00 |
| Carl Zeiss Tessar, F: 4.5 | 6 | _ | - | 90.50 |
| Single plate holders, each | | | | 70 |
| 3 extra plate holders in cloth p | urse | | | 2.50 |
| 3 extra plate holders in genuine | | | | |
| Film pack adapter, leather cov | | | | |
| Leather case to hold camera ar | ıd 3 pla | ate holde | ers | 4.00 |



Specifications

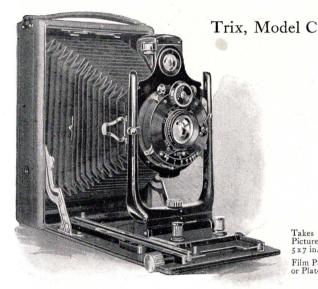
Body—Kiln dried mahogany, ebonized. Covering—Black fine grain leather. Bellows—Black leather. Has automatic take-up device. Front Bed—Aluminum reinforced. Front Standard—Rigid, U-shaped. Front Movements—Rising, falling, operated by lever; sliding, by screw adjustment. Extension—13½ inches. Finder—Extra large and brilliant; collapsible, with indestructible metal mirror, easily cleaned. Reversible, with spirit level. Front Board—Aluminum, forming the finder front, making it impossible for the finder to become decentered; has bayonet shutter lock. Back—Slides off and on. Has large, folding focusing hood. Tripod Sockets—For horizontal and vertical positions.

Dimensions: $7\frac{3}{4} \times 2\frac{3}{8} \times 5\frac{3}{8}$ in. Weight: 48 oz.

Price

Including 3 single metal plate holders and shutter release.

| including 3 single inetal plate | HOIGE | s and | SHULLEI | rerease. |
|-----------------------------------|----------------|---------------|----------------------|--------------------------|
| Lens Equipment | bined Focus | Rear Focus | Model XI Auto. | Com- pound Shutter |
| | Inches | Inches | Shutter | |
| Helios Extra Rapid Double | | | | |
| Aplanat lens, F: 8 | $6\frac{1}{2}$ | II | \$39.00 | |
| Hekla Double Anastigmat | -/ 2 | | F 3 9.00 | |
| lens, F: 6.8 | 61/ | **1/ | | 4-6 |
| | $6\frac{1}{2}$ | 111/4 | _ | \$56.00 |
| Carl Zeiss Tessar lens, F:4.5 | $6\frac{1}{2}$ | - | _ | 91.00 |
| Carl Zeiss Amatar Double | | | _ | _ |
| Anastigmat lens, F: 6.8 | $6\frac{1}{2}$ | 103/4 | _ | 81.50 |
| Single metal plate holders, each | | | | 90 |
| 3 metal plate holders in cloth pu | 1200 | | | 2.25 |
| 3 metal plate holders in cloth pt | iisc | | | . 3.25 |
| 3 metal plate holders in genuine | leathe | r purse | | . 4.50 |
| Film pack adapter | | | | . 4.00 |
| Carrying case | | | | . 4.50 |



Takes Pictures 5 x 7 in. Film Packs or Plates

Specifications

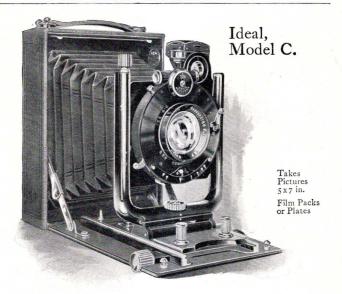
Camera Body—Kiln dried mahogany, ebonized. Covering—Fine grain black leather. Front Bed—Reinforced aluminum. Front Standard-Rigid, U-shaped. Front Movements-Rising and falling, operated by lever button; sliding, by screw adjustment. Extension-87/8 inches. Rack and pinion movement. Finder—Extra large and brilliant. Collapsible, with indestructible metal mirror, easily cleaned. Reversible, with spirit level. Front Board-Aluminum, with bayonet shutter lock. The front board forms the finder frame, making it impossible for the finder to become decentered. Tripod Sockets Two, for vertical and horizontal pictures. Back—Clamps on. Has large, folding focusing hood, and extreme vertical swing.

Dimensions: $8\frac{5}{8}$ x $2\frac{3}{8}$ x $6\frac{7}{8}$ in. Weight: $4\frac{1}{2}$ pounds.

Price

Including double wooden plate holder and shutter release.

| Lens Equipment | Focus Inches | Model XI Auto. Shutter | Com- pound Shutter | |
|--|-----------------|---------------------------------|--------------------------|--|
| Helios Double Aplanat lens, F: 8 | $7\frac{1}{2}$ | \$42.50 | _ | |
| Hekla Double Anastigmat lens, F: 6.8 | 7 | _ | \$63.50 | |
| Double wooden plate holders, each | | | | |
| Film pack adapter | | | . 7.25 | |
| Leather case, to hold camera and 3 plate | e holders | | . 5.00 | |



Specifications

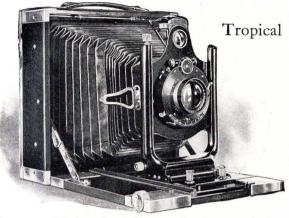
Camera Body—Kiln dried mahogany, ebonized. Covering—Fine grain black leather. Bellows—Black leather. Has automatic take-up device, preventing it from sagging. Front Bed—Reinforced aluminum. Front Standard—Rigid, U-shaped. Front Movements—Rising, falling, and sliding, operated by screw adjustments. Extension—16½ inches. Double extension track, actuated by rack and pinion. Finder—Extra large, brilliant; collapsible, with indestructible metal mirror, easily cleaned. Reversible, with spirit level. Front Board—Aluminum. The front board forms the finder frame, making it impossible for the finder to become decentered. Tripod Sockets—Three; for vertical and horizontal positions. Back—Clamps on. Has large, folding, focusing hood and extreme vertical swing.

Dimensions: 9 x 2 1/8 x 7 in. Weight: 5 pounds.

Price

Including double wooden plate holder, and shutter release.

| Lens Equipment | Combined Focus Inches | Rear Focus Inches | Compound Shutter |
|--|-----------------------------|-------------------------|---------------------|
| Hekla Anastigmat lens, F: 6.8 Carl Zeiss Amatar lens, F: 6.8 | 7 | 121/2 | \$74.00 101.00 |
| Double wooden plate holders, of Film pack adapter Leather case to hold camera an | | | 7.25 |



Takes Pictures 5 x 7 in. Film Packs or Plates

This model is especially made for tropical service, being built entirely of teakwood and heavy, non-rusting metal. No glue is used in its construction, all corners and angles being reinforced with aluminum, secured with heavy nickeled screws.

Specifications

Camera Body and Front Bed—Polished teakwood, especially seasoned, reinforced with aluminum. Bellows—Black leather chemically processed to withstand the ravages of insects. Automatic take-up device to prevent bellows sagging when not fully extended. Front Standard—Rigid, U-shaped. Front Movements—Rising, falling, and sliding, operated by two separate screw adjustments. Extension—16½ inches. Rack and pinion movement. Finder—Extra large and brilliant. Collapsible with indestructible metal mirror. Reversible with spirit level. Front board forms part of finder frame so that finder can never become decentered. Front Board—Rigid, metal, with bayonet shutter lock. Tripod Sockets—Two. Back—Revolving, clamps on. Has large folding focusing hood and extreme vertical swing. Shutter Speeds—Compound, Time, Bulb, and Instantaneous exposures up to 1/150 of a second.

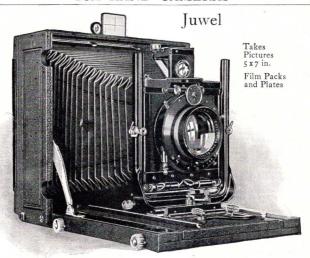
Dimensions: $9\frac{1}{4} \times 3\frac{3}{8} \times 8\frac{7}{8}$ in. Weight: 7 pounds 14 ounces.

Price

Including I double teakwood plate holder, and cable release.

With Carl Zeiss Double Protar lens, Series VII, F: 6.3, and Compound Shutter \$180.00

Double plate holders of teakwood and metal, each... 8.00 Film pack adapter, polished teakwood 11.00 Carrying case for camera, 3 holders and adapter 12.00



THE Juwel has many fine adjustments and is especially valuable for all who require one camera for many different subjects.

Specifications

Camera Body and Front Bed—Thoroughly seasoned, kiln dried mahogany. Covering—Seal grain black leather. Front Standard—Rigid, U-shaped. Front Movements—Rising, falling and sliding, operated by screw adjustment; tilting lens board, locked by lever adjustment. Extension—Triple extension, 19 inches. Rack and pinion movement. Finders—Two, direct view, and brilliant finder, extra large. Spirit level. Front Board—Especially seasoned mahogany. Tripod Sockets—Two. Back—Reversible; clamps on. Has large folding focusing hood and extreme vertical swing. Drop front. Shutter Release—Bulb, or flexible detachable cable, trigger. Shutter—Compound with Time, Bulb, and Instantaneous exposures up to 1/150 of a second.

Dimensions: 91/8 x 31/2 x 87/8 in. Weight: 71/4 pounds.

Price

Including one double wooden plate holder and flexible metal shutter release.

| Lens Equipment | Combined Focus | Rear Focus | With Compound |
|--------------------------------------|-------------------|---------------|------------------|
| * * | Inches | Inches | Shutter |
| Carl Zeiss Tessar, F: 4.5 | $8\frac{1}{4}$ | | \$168.00 |
| Carl Zeiss Protar, F: 6.3, Ser. VII | 8 | 14 | 172.50 |
| Double wooden plate holders, each | | | 7.75 |
| Film pack adapter | | | 7.25 |
| Leather case to hold camera, 3 plate | holders a | nd adag | oter 11.00 |

THE advantages of a reflecting type camera are three-fold: it is ready for use at a moment's notice; the reflecting principle shows the exact image in the finder of what will appear on the plate, up to the moment of exposure; and the focal plane shutter permits of much higher speeds than the ordinary between-the-lens shutter is capable of.

Heretofore, to embody these advantages in one camera, complicated mechanism, and a variety of confusing details and parts were necessary. These features naturally counteracted two advantages very important in the eyes of the operator,—portability, and simplicity in handling.

Simplicity is the structural keynote of the Ipsco Reflex Cameras; simplicity and strength. But in order to attain this simplicity and strength, only the most skilled labor is employed, and the most elaborate and severest tests are made of the materials used.

The "shell" alone of the Ipsco Reflex takes eight weeks to make, which is an indication of the thoroughness with which all operations and processes in the construction of these cameras are performed.

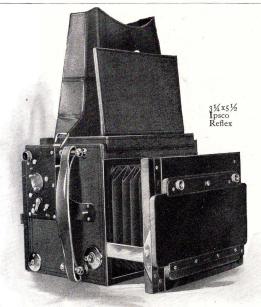
Here are some unique Ipsco construction features: The Mirror Movement—The manufacturers of Ipsco Reflex cameras have patented this unique movement, so that it will be found only in the Reflex cameras made by them. Unlike most mirrors, which swing up and down in a fixed position, the Ipsco Reflex mirror swings in a curve, backward and forward. This movement allows the mirror to dodge the lens, and permits lenses of short focal length to be used.



2½x3½, 3¼x4¼, 4x5 IPSCO REFLEX Showing Changing Box Attached. Specifications

All camera bodies of mahogany, especially seasoned. Coverings of best black morocco leather. Bellows are made of the finest selected skins carefully tested for pin-holes and other imperfections. The metal work, such as screws, small plates, etc., are machine-made, but the shutter gear, and other important parts are hand finished by skilled workmen. All metal parts finished with extra fine black enamel. Back, revolving, except 31/4 x 5½. Fitted with focusing ground glass. The back can be taken off and plate holder, film pack adapter or changing box substituted, without jarring the camera. Front movements, rise and fall. The lenses mounted on the $2\frac{1}{2}$ x $3\frac{1}{2}$, $3\frac{1}{4}$ x $4\frac{1}{4}$ and 4 x 5 models are protected by hinged doors or shutters, which can be used as lens hoods, to prevent internal reflection. Large focusing hood of genuine leather. Top with hood attached can be raised, permitting an examination of the interior of the camera. Bellows extension, $2\frac{1}{2} \times 3\frac{1}{2}$, $8\frac{1}{2}$ inches; $3\frac{1}{4} \times 4\frac{1}{4}$, 10 inches; $3\frac{1}{4} \times 5\frac{1}{2}$, $9\frac{7}{8}$ inches; 4 x 5, 121/2 inches. Shutter, focal plane, consisting of a blind, run on rollers, especially woven and dyed. Thin, flexible, tough and lightproof. Shutter speeds: Time, and Instantaneous, up to 1/800 of a second, except the 31/4 x 51/2 model, which has a maximum Instantaneous exposure of 1/700 of a second.

| Di | We | Weight (without lens) | | | | | | | |
|--------------------------------------|------------------------------------|-----------------------|-------|--------|--|--|--|--|--|
| $2\frac{1}{2} \times 3, \frac{1}{2}$ | $6\frac{7}{8} \times 6$ | x 6½ | 3 lbs | 6 ozs. | | | | | |
| $3\frac{1}{4} \times 4\frac{1}{4}$ | $6\frac{3}{4} \times 7$ | x 6½ | 4 " | | | | | | |
| $3\frac{1}{4} \times 5\frac{1}{2}$ | $6\frac{3}{4} \times 7\frac{3}{4}$ | x 6½ | 4 " | 2 ozs. | | | | | |
| 4 x 5, | $8\frac{3}{4} \times 7\frac{1}{4}$ | x 6½ | 5 " | 5 ozs. | | | | | |



Price

| 1 1100 | | | | |
|---------------------|------------------------------------|------------------------------------|----------|----------------------|
| Ipsco camera with | $2\frac{1}{2} \times 3\frac{1}{2}$ | $3\frac{1}{4} \times 4\frac{1}{4}$ | 31/4 x 5 | $5\frac{1}{2}$ 4 x 5 |
| one holder, no lens | \$82.50 | \$83.50 | \$85.00 | \$125.00 |
| Do., with Zeiss | 13/4" lens | 6" lens | 7" lens | 7" lens |
| Tessar F: 4.5 lens | 112.00 | 123.50 | 135.00 | 175.00 |
| Case to hold camer | | | | |
| and 6 holders | 11.00 | 11.00 | 12.00 | 13.00 |
| Extra plate holder | s, | | | |
| each, | 3.00 | 3.00 | 4.25 | 4.25 |
| Film pack adapter | 5.00 | 6.25 | 7.50 | 7.50 |
| Changing box | 14.50 | 14.50 | 16.50 | 16.50 |
| | | | | |

Ipsco Stereoscopic Focusing Magnifiers

This extremely useful accessory fits the top of the hood of the Reflex cameras, allowing the operator to focus with great exactness, while at the same time nearly all outside light is excluded. It consists of two paired magnifying glasses in a neat mount with folding side wings, having hooked ends which catch over the end of the hood.

For Ipsco Reflex cameras, all sizes.

Price (in neat leather case)......\$4.00

Changing Box

The Ipsco Reflex Changing Box is of the best quality mahogany, covered in real Morocco. The box carries twelve plates or twenty-four Flat Films, and either may be used in the same box. The method of changing is extremely simple and efficient. The box is placed on the camera. The Roller Blind Shutter is drawn away by means of the leather tab at back; this exposes the plate. The act of closing the shutter pushes the exposed plate into the leather bag, whence it is placed at the back of the box. The numbers on the sheaths can be seen through window at back of box.

PRICES

| $2\frac{1}{2} x$ | $3\frac{1}{2}$ | and | $3\frac{1}{4}$ | X | $4\frac{1}{4}$ | | | | | | | \$14.50 |
|-----------------------|----------------|-----|----------------|----|----------------|--|--|--|--|--|--|---------|
| $3\frac{1}{4} \times$ | 51/2 | and | 4 X | 5. | | | | | | | | 16.50 |

Film Pack Adapter

Made of first quality ebonized mahogany. Will take Premo Daylight Loading Film Pack. Stocked to fit Ipsco Reflex Cameras only.

PRICES

| $2\frac{1}{2} \times 3\frac{1}{2}$. | \$5.00 |
|--------------------------------------|------------|
| $3\frac{1}{4} \times 4\frac{1}{4}$. | 6.25 |
| $3\frac{1}{4} \times 5\frac{1}{2}$. | 7.50 |
| 4 x 5 | 7.50 |

The photographer who attempts to use a lens of short focus, on a reflecting camera with a fixed up and down movement will find that the mirror will come in contact with the lens mount, and will "stick" or refuse to go up, because, to focus sharply, the lens must be racked in close to the plate. The shock or vibration caused when the shutter flies up is absorbed by a special device in the Ipsco Reflex.

The Mirror—The mirror is made of exceedingly thin, optically-worked glass, silvered on the surface, to avoid double reflection. The surface is coated with a very thin and transparent varnish to keep it bright, and to prevent tarnishing. The brilliance of an Ipsco Reflex mirror will always be retained.

Actual Speeds—Controlled by the width of the slit, are recorded on a dial at the left side of the camera, rendering tables and calculations unnecessary. These speeds are tested separately before leaving the factory, and are guaranteed accurate.

The above are only a few of the many advantages the Ipsco Reflex Cameras possess. Amateur or professional will find them equally valuable for any class of photographic work desired.



Specifications

Camera Body—Aluminum composition. Front Movements—Rising, falling, and sliding. Focusing Adjustment—Lever operated focusing lens tube. Extension—Fixed, rigid. Automatically locks, focused for infinity when front is drawn out. Shutter—Palmos focal plane with adjustable speeds regulated and indicated from the outside. Shutter Release—Flexible metal cable and trigger. Back—Has large folding focusing hood. Slides on and off. Tripod Sockets—For horizontal and vertical positions. Finder—Direct view type.

| Dimensions: Weight: | 0, 0 | Model A 11-16 x 4 ⁵ / ₈ 29 oz. | Model B $7\frac{1}{4} \times 3 \times 5\frac{3}{8} \times 46\frac{1}{2} \text{ oz.}$ | Model C $7\frac{1}{2}x3x6\frac{1}{8}$ 53 $\frac{1}{2}$ oz. |
|------------------------|------|--|--|--|
| Focal length of lens, | | 43/4 in. | 6 in. | 6 in. |

Price

| Palmos camera complete with Carl Zeiss Ic Tessar lens | odel A | Model B | Model C |
|--|--------|----------|----------|
| F:4.5, and 3 plate holders, | 97.00 | \$112.00 | \$120.00 |
| Film pack adapter Double wooden plate holders | 6.75 | 7.25 | 8.00 |
| eachLeather case to hold camera | 5.50 | 6.00 | 6.00 |
| and six plate holders | 6.00 | 7.00 | 7.50 |

Minimum Palmos Cameras

T TITH the exception of the reflecting feature, the Minimum Palmos has all the advantages of the reflecting camera without its bulk and added complications. Because of its portability and great range of speeds (up to I/Ioooth of a second in the larger sizes), the Minimum Palmos is a wonderfully efficient camera. For sporting events, races, interior snapshots, and particularly æronautical work, in making views from aeroplanes, balloons, etc., it is unequalled. It can be brought into action instantly. The finder is of the direct view type, so that the camera is held at the eye's level in operating it. The focal plane shutters which form part of the equipment of these cameras, are especially noteworthy. They are operated without any vibration, the regulation of speeds, and all other adjustments being made on the outside of the camera.

All the Minimum Palmos cameras are equipped with the Carl Zeiss Series Ic Tessar lenses, f: 4.5, which insure maximum speed, and greatest illumination under trying light or atmospheric conditions.



Cupido Stereolette



Takes Pictures 45x107 mm. Film Packs or Plates

PICTURES taken with this camera are marvelous examples of stereoscopic work. The lens separations and focal length are ideal for rendering the truest and most realistic photograph possible to obtain. Autochrome Stereoscopic pictures are possible with this camera, the ideal equipment for this work being the Carl Zeiss Tessar f: 4.5 lens, Ica Universal Plate Holders, and Ducar Filters.

Specifications

Camera Body—Aluminum. Covering—Black fine grain leather. Bellows—Black leather. Front Standard—Self-erecting, collapsible. Focusing Adjustment—When opened, the front automatically erects itself, focused for infinity. For closer distance, focusing is done by a focusing lever. Finder—Extra large and brilliant, with spirit level. Back—Clamps on. Has large folding focusing hood. Shutter Release—Flexible metal cable, with trigger. Shutter Speeds—Time, Bulb, and Instantaneous exposures up to 1/250 of a second.

Dimensions: $5\frac{1}{2} \times 1\frac{1}{2} \times 3\frac{1}{4}$ in. Weight: $20\frac{1}{2}$ oz.

Price

Including 3 single metal plate holders in leather case and flexible metal release.

| Lens Equipment Matched Hekla lenses, F: 6.8, Carl Zeiss Tessar lenses, F: 4.5, | Focus $ \begin{array}{c} 2\frac{1}{2} \\ 2\frac{1}{2} \end{array} $ | SI | mpound hutter \$61.00 98.50 |
|--|---|----|--------------------------------------|
| Film pack adapter | | | 2.00 |
| 3 plate holders in genuine leather purse Single metal plate holders, each | | | 2.50 |
| Magazine holder for twelve plates Carrying case to hold camera and 6 pl | | | 21.00 |



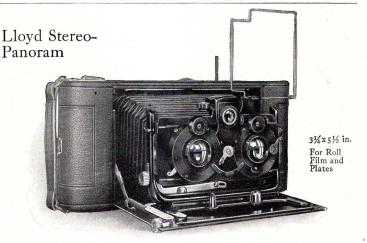
THE Polyscope represents, in highest form, a type of stereoscope camera that has been extremely popular in Europe for many years. It is constructed principally of light metal and is so simple of operation that the most inexperienced amateur is assured of successful pictures with it from the start. The magazine which is furnished for the Polyscope holds twelve plates. It is readily loaded or unloaded, and the plates can be changed instantly.

Specifications

Finish—Polished aluminum and fine grain leather. Extension—Model A has rigid extension and Model B is collapsible. Focusing Adjustment—Lever from 3 feet to infinity. Shutter—Has speeds from 1/3 to 1/250 of a second and Time exposure. Finder—Both direct and reflecting with spirit level. Dimensions: Model A, 5½ x 2¼ x 2¾ in.; Model B, 5½ x2¼ x 1 5-16 in Weight: Model A (With plate finagazine), 31½ oz.; Model B, (with plate magazine), 32½ oz.

· Price

| Including camera carrying case of genuine l | olack leat | ther. |
|---|------------|----------|
| · N | Model A | Model B |
| With Carl Zeiss lens, F: 4.5, 2½" focus with plate adapter, and 6 metal plate | | |
| holders | 5129.00 | \$131.00 |
| With Carl Zeiss lens, F: 4.5, 2½" focus, with plate magazine for 12 plate | | |
| holders | 149.50 | 150.00 |
| Magazine plate holder, for 12 plates | 25.00 | 25.00 |
| Film pack adapter | 6.50 | 6.50 |
| Single plate holders | .65 | .65 |
| Plate adapter, for single plate holders | 2.60 | 2.60 |
| Flexible metal shutter release | 1.00 | 1.00 |



THE Stereo-Panoram Lloyd is not limited to stereoscopic work, as it is a most perfect post-card size camera, taking a full size $3\frac{1}{4} \times 5\frac{1}{2}$ inch picture.

The interior of the bellows is divided by a folding partition.

The interior of the bellows is divided by a folding partition. To make a full $3\frac{1}{4} \times 5\frac{1}{2}$ inch picture, this partition is moved to one side by a button on the back. The front is then moved, bringing one lens into the center. If a small picture is wanted, one side of the camera may be used by capping one of the lenses, thus making a $2\frac{1}{4} \times 3\frac{1}{4}$ picture.

Specifications

Body—Ebonized mahogany and aluminum. Covering—Black fine grain leather. Bellows—Black leather. Front Movements—Rising, falling and sliding. Focusing Adjustment—Rack and pinion. Front Standard—Rigid, U-shaped. Finders—3: Wire frame, direct view type, and brilliant. Spirit level. Back—Aluminum, with removable panel to permit use of plates, or ground glass focusing screen. Tripod Socket—One, for horizontal position.

Dimensions: 111/2 x 21/2 x 51/4 in. Weight: 65 oz.

Price

Including flexible metal shutter release.

| Lens Equipment | | FOCUS Inches | Model XI Auto. | Com- pound Shutters |
|--|---------|-----------------|----------------------|---------------------------|
| Helios Rapid Aplanat lenses, F: 8 | | 51/8 | Shutters \$61.00 | |
| Hekla Anastigmat lenses, F: 6.8 | | 51/4 | - | \$92.50 |
| Carl Zeiss Tessar lenses, F: 6.3 | - | $5\frac{1}{4}$ | _ | 133.50 |
| Hooded focusing ground glass back, with 3 plat | te hold | ers | | |
| in leather case | | | | . 6.00 |
| Single plate holders, each | | | | |
| Leather carrying case | | | | . 3.75 |

Opera Glass Stereoscope

For viewing 45 x 107 mm. stereoscopic transparencies. Constructed entirely of metal; light, and of elegant appearance.

Price........\$7.00



Stereo Printing Frame

Self Transposing printing frame, for printing positives 45 x 107 mm. on either paper or glass, constructed of polished mahogany.

Ica Trays

Ipsco Plate Tank

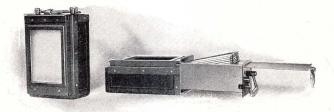


This tank is constructed of brass, heavily nickel plated. It can be securely locked when loaded, and will not leak. Developer is poured in after the cover is clamped on. The plates are loaded into frames which are readily inserted into the tank. These tanks can be adapted for film packs by means of adapters, which receive the film and develop the same as plates. Plates and film can be

as plates. Plates and film can be developed, fixed and washed in the same tank without removing them.

| Size | Plate Capacity | Price |
|--|-------------------|--------|
| 13/4 x 23/8 (4.5 x 6 cm.) | 12 | \$3.50 |
| $2\frac{1}{2} \times 3\frac{1}{2} (6\frac{1}{2} \times 9 \text{ cm.})$ | 6 | 3.50 |
| 9 x 12 cm. (3 1/4 x 4 1/4) | 6 | 4.00 |
| 10 x 15 cm. | 6 | 4.50 |
| 4.5 x 10.7 cm | 6 | 3.50 |
| Extra cages for $4\frac{1}{2} \times 6$ c | m. | 2 |
| or $6\frac{1}{2}$ x 9 cm, each | | .75 |
| Adapters for developing | film, each | . 15 |





Ica Plate Magazine

HIS magazine is easy to operate. The plates are loaded into metal septums, and do not come in contact with each other in the magazine, so that there is no chance of their getting scratched. Plates can be changed instantly. Magazines are listed only for the cameras specified below.

Atom, Models A and B \$17.50
Bebe, Model A...... 19.00
Bebe, Model B..... 25.00

Polyscope, A and B \$25.00

Cupido Stereolette 21.00

Ica Printing Frames

HESE frames are especially made for printing Ica negatives. They are well made and very durable.

 $1\sqrt[3]{4}$ x $2\sqrt[3]{8}$ ($4\sqrt[4]{2}$ x 6 cm.) 20 cents 9 x 12 cm... 20 cents $2\sqrt[4]{2}$ x $3\sqrt[4]{2}$ ($6\sqrt[4]{2}$ x 9 cm.) 20 cents 10 x 15 cm... 40 cents

Carl Zeiss Ray Filters

ARL ZEISS yellow filters are especially valuable for snow scenes, or bringing out cloud effects, without over-exposing. They are entirely free from stain and flaws and are optically worked.

The following Carl Zeiss filters are furnished for Ica cameras. In making a selection, the price charged is for the nearest size *larger* than the inside diameter of the lens mount.

| No. | For lenses with inside diameter of | Price | No. | For lenses with inside diameter of | Price |
|-----|--|--------|-----|--|--------|
| 170 | 11-16" | \$2.75 | 473 | 17/8" | \$4.75 |
| 236 | 15-16" | 3.00 | 533 | 2 1-16" | 6.25 |
| 285 | 1 ¹ /8" | 3.50 | 604 | 23/8" | 7.00 |
| 385 | 11/2" | 4.00 | | | |

Tele-Peconar Lens, F5

A "POCKET" telephoto lens of great power, especially recommended for use with the Ideal Model A and Minimal Cameras, or cameras of similar bellows extension and focal length.

This wonderful little objective allows telephoto work at practically instantaneous exposures, on the lowest magnification (3x), the speed being f:5. Faultless pictures can be made of 3 to 5 times magnification. It is a complete objective in itself, and where non-symmetrical lenses are used (such as the Tessar series) both front and rear elements are unscrewed from the shutter, and the Tele-Peconar screwed on. The rear element of symmetrical lenses, such as the Hekla, Amatar and Protar series can be used with the Tele-Peconar, if desired.

Aside from its functions as a telephoto lens the Tele-Peconar is particularly valuable for taking large portraits, giving sharp detail with correct perspective.

Tourist Ruby Lamp

A weighing only 5 ounces, complete. The illuminant is white paraffin wax in a glass container, that will burn with a clear, steady flame for hours. Chimney is made of non-actinic ruby glass, preventing the fog-

ging of plates. The lamp will not leak white light. Fitted with neat nickel case for travelling.



| | Price | |
|------------------------|----------|--|
| No 523 | . \$1.00 | |
| Extra candles, per doz | 60 | |

Intona Paper Self-Toning

PRINTS in sunlight, and tones to a beautiful rich purple brown, without a salt bath, or preliminary washing of any kind, plain hypo only being required. The same tones as the best of those got from separate toning can be obtained without any trouble by means of the simple hypo fixing bath mentioned.

Intona is absolutely permanent, and is not subject to climatic changes.

Grades

Glossy Carbon (Semi-Matt) Matt All sizes are furnished at the uniform price of 35 cents per package except post-cards, in the following sizes:

| | | o. | | | | | | | | | | | | | | | | | | | Sheet | , | | | |
|----------------|---|-------|-----|--|--|--|--|----|--|--|--|--|---|--|--|---|--|--|--|--|-------|----|---|-----|----|
| | | Sizes | | | | | | | | | | | | | | | | | | | packa | ge | | | |
| 31/4 | | | | | | | | | | | | | | | | | | | | | | | | | |
| 31/4 | X | 51/2 | ٤. | | | | | ·, | | | | | | | | | | | | | 19 | | | | |
| 4 | X | 5 | | | | | | | | | | | ٠ | | | | | | | | 19 | | | | |
| 5 | | | | | | | | | | | | | | | | | | | | | | | | | |
| $6\frac{1}{2}$ | X | 81/2 | 2 . | | | | | | | | | | | | | | | | | | 7 | | | | |
| 8 | X | 10 | | | | | | , | | | | | | | | ٠ | | | | | 4 | | | | |
| Pos | t | card | ls | | | | | | | | | | | | | | | | | | 12 | 20 | C | ent | ts |

Certinal

Ilford Concentrated Liquid Universal Developer

Carrinal requires only the addition of water for the development of all makes of plates as well as bromide and gaslight papers. It is diluted with from 15 to 100 parts of water, depending on the result desired. It is energetic, does not cause chemical fog, and does not stain or injure the skin.

Furnished in 3 ounce bottle only..... \$.45

Ilford Manual of Photography

By C. H.Bothamley, M. Sc., F. C. S., F. I. C., etc., etc., 218 pages illustrated

THE most useful photographic text book ever published, containing very complete information for the prac-

Ilford Plates and Papers

THE Ilford plates and papers described in the following pages will most certainly appeal to the careful, critical worker who wishes to be known for the uniform excellence of his work. They will likewise commend themselves to the amateur who wants a plate or paper that at all times and under all circumstances can be depended upon to give the best results in exposure and handling.

Versatile Most Rapid

(Speed Wynne F 111)

THE Ilford versatile plates are so named because of their versatility in producing under the most trying conditions the best results. They are clean-working, smooth, extremely rapid, give great latitude in exposure, and the amount of forcing in development they will stand is remarkable. The last two qualities recommend these plates to the amateur of all grades. They are the ideal plates for outdoor photography, speed work under adverse weather conditions, and for work where brilliancy and gradation are essential.

Ilford Rapid Chromatic are color-sensitive plates. They will be especially appreciated by the photographer who uses small plates and wishes to enlarge, owing to their extremely fine grain. A good all around plate for all around work, having a speed of Wynne F: 90.

Prices

| Centimeter sizes | |
|---|-----|
| | 35 |
| | 45 |
| $6\frac{1}{2} \times 9 \text{ cm.}$) glass | 45 |
| 9 x 12 cm | 60 |
| IO x I5 cm | 90 |
| | 45 |
| $3\frac{1}{4} \times 5\frac{1}{2}$ inches | 65 |
| 4 x 5 inches | 65 |
| 5 x 7 inches | 10 |
| $6\frac{1}{2} \times 8\frac{1}{2}$ inches | 65 |
| 8 x 10 inches 2 | 40 |
| Lantern Plates | |
| Alpha (warm tone) Gas-Light Lantern, Special Lantern. | |
| 45 x 107 mm 45 cents $3\frac{1}{4}$ x 4 inches 45 cen | ıte |
| 45 A 107 Hilli A5 Celles 37/A A Hillings 45 Cell | LO |

Cellofix Self-Toning Paper

ELLOFIX, a self-toning paper made by Kraft & Steudel, is one of the best German productions ever brought to this country. The emulsion is fixed on heavy cream and white card-board, and the tone effects are as follows:

Warm Sepia, Chocolate Brown, Red, Green, Blue.

Cellofix prints are as permanent as the base they are made on. The tones are brilliant, showing excellent gradations, and offer the photographer a wide range of chromatic effects which give additional charm to the printing of favorite negatives—particularly the land and seascapes.

In using Cellofix the prints, which should be printed just slightly darker than the finished prints desired, are washed for about three minutes in water. They are then placed in a fixing bath, consisting of one part hypo to 20 parts water for a period of from 5 to 10 minutes, after which they are washed for about a half hour. It is a very simple operation, yet the tone effects are wonderful, and give to the prints a "snappy" bright appearance with atmosphere and life, that cannot be duplicated in lifeless, toneless black and white. It is an artistic and practical medium for all classes of negatives, and it is earnestly recommended to the earnest and ambitious photographer who wants the best possible prints with the least expenditure of time, trouble and money.

Price List

Sheets in each package

| Cream (Cardboard) | White | Glossy | Price |
|----------------------|--------------------------|---|---|
| 12 | 14 | 14 | 20 cents |
| 16 | 18 | 18 | 35 cents |
| 16 | 18 | 18 | 35 cents |
| 8 | 10 | 10 | 35 cents |
| 5 | 6 | 6 | 35 cents |
| 3 | 4 | 4 | 35 cents |
| 10 | 10 | 10 | 20 cents |
| | (Cardboard) 12 16 16 8 5 | (Cardboard) White 12 14 16 18 16 18 8 10 5 6 3 4 | (Cardboard) White Glossy 12 14 14 16 18 18 16 18 18 8 10 10 5 6 6 3 4 4 |

Matt Red, Green or Blue Cream Fabrique

| $3\frac{1}{4}$ | $x 4\frac{1}{4}$ | . 22 | 22 | 35 cents |
|----------------|-----------------------|------|----|----------|
| 31/4 | $x 5\frac{1}{2}$ | 16 | 16 | 35 cents |
| 4 | x 5 | 16 | 16 | 35 cents |
| | x 7 | 8 | 8 | 35 cents |
| | $\times 8\frac{1}{2}$ | _ | 5 | 35 cents |
| 8 | X IO | | 4 | 35 cents |

Autochrome Accessories



CA cameras are ideal for autochrome work, especially when equipped with two of the most important accessories, the universal plate holder and the Ducar color filter.

Universal Plate Holders

The ordinary single metal plate holder which comes with the Ica cameras is too thin to accommodate the double thickness of Autochrome plates, but the Universal plate holders, which fit any of the Ica cameras where the holder clamps on, are of the right thickness. They are single holders, with no springs in them, the plates being loaded through the backs of the holders. They are made of metal enamelled black, except the smallest size $4\frac{1}{2} \times 6$ cm.), which is white metal.

Prices

| $1\frac{3}{4} \times 2\frac{3}{8} (4\frac{1}{2} \times 6 \text{ cm.}) \dots \1.00 | 45 x 107 mm\$1.15 |
|---|---------------------------|
| $2\frac{1}{2} \times 3\frac{1}{2} (6\frac{1}{2} \times 9 \text{ cm.}) \dots 1.15$ | 9 x 12 cm 1.35 |
| In ordering, please specify for what of | camera holder is desired. |

Zeiss Ducar Filters

HE Ducar Filter consists of two optically worked discs of colorless glass enclosing a film which is identical with that supplied by Messrs. Lumiere for their Autochrome process. It has, however, the distinctive property that when used on the front of the lens it displaces the focal plane by I 2-3 mm away from the lens thus compensating for the reversal of the Autochrome plate. The Ducar Filter is therefore invaluable for use on hand cameras since Autochrome pictures may be secured without the slightest alteration to the camera, the picture being focused on the screen (without the filter) and the filter placed in position. If a focusing scale is used the filter should be placed in position and the camera set to the required distance in the usual way.

| No. | For use with | Focus | | D . |
|---------|---------------------------|-------|--------|--------------|
| No. | | Cm. | Inches | Prices |
| R-54 | Tessar, F: 4.5 and F: 6.3 | 6½ | 2 1/2 | \$3.75 |
| 1-7.5 | Tessar, F: 4.5 and F: 6.3 | 7.5 | 3 | 3.75 |
| 1-9 | Tessar, F: 4.5 and F: 6.3 | 9 | 3 1/2 | 3.75 |
| I-I2 | Tessar, F: 6.3 | 12 | 43/4 | 3.75 |
| I-I2 | Amatar and Protar | I 2 | 43/4 | 3.75 |
| II-I2 | Tessar, F: 4.5 | I 2 | 43/4 | 4.75 |
| IV-13.5 | Tessar, F: 4.5 | 13.5 | 51/4 | 4.75 6.25 |
| 11-15 | Tessar, F: 6.3 | 15 | 6 | 4.75 |
| IV-15 | Tessar, F: 4.5 | 15 | 6 | 6.25 |
| VI-16.5 | Tessar, F: 4.5 | 16.5 | 61/2 | 7.75 |

Other sizes on application

Direct View Finders



With Plain Metal Sight

THE following direct view finders portray objects at the eye's level, and are invaluable for speed work, enabling the operator to watch the subject and keep it in the finder at the same time. To be obtained at all Ica dealers, or will be fitted to Ica cameras, at an extra charge of fifty cents for fitting.

| No. | Diameter of Finder glass | With plain metal sight | With blue glass sight |
|------|-----------------------------|---------------------------|--------------------------|
| 1345 | 15-16 x 11/4" | \$1.75 | |
| 1346 | 15-16 x 11/4" | | \$1.75 |
| 1347 | 1 x 1 5-16 | _ | 2.00 |
| 1348 | 5/8 x 13-16" | _ | 1.50 |



With Blue Glass Sight

Enlarging

For the benefit of those having small Ica cameras, and who do not wish to enlarge their own negatives, we have established an enlarging plant equipped with all the modern conveniences for handling work of this character.

Prices

| | Developing Packs | Developing Plates |
|---|---------------------------|----------------------|
| 4½ x 6 cm | \$.30 | each \$.03 |
| $6\frac{1}{2}$ x 9 cm. | .30 | each .04 |
| $3\frac{1}{4} \times 4\frac{1}{4}$ inches | .30 | each .05 |
| 14 14 | Enlargements Unmounted | Mounted |
| 3½ x 5½" | \$.15 | \$.20 |
| 4 4 5 | .15 | .20 |
| 5 x 7 | .25 | .30 |
| $6\frac{1}{2} \times 8\frac{1}{2}$ " | .40 | .50 |
| 8 x 10 " | .60 | .75 |

No order received for less than 25 cents.

