# BOILE.



1946 CATALOG

## To Owners and Prospective Owners of BOLEX Equipment:





Tens of thousands of BOLEX Motion Picture Cameras and Projectors are serving their owners faithfully and superbly throughout the United States and Possessions. This equipment was placed in the hands of representative dealers by the American Bolex Co., as sole American Distributors in this territory, for the manufacturers, E. Paillard Cie., S. A., of Ste. Croix, and Yverdon, Switzerland.

The makers of BOLEX Motion Picture Equipment enjoy a world-wide reputation in precision instrument manufacture. The Paillard Company was founded in 1814, over 130 years ago. In its early days, watches were the chief product; then, music boxes; later the phonograph and spring-wound and electrical motors. And, still later, typewriters and radio receiving sets; then, optical goods and motion picture cameras and projectors. In these fields, the world has long recognized the name Paillard (pronounced "Py-Are") as standing for the utmost in precision and highest quality.

Because of the very nature of Switzerland, manufacturers within the country must depend almost entirely upon world markets, as Switzerland itself has a total population of less than five million. To survive and compete with manufacturers in their lines, therefore, the Paillard factories have, since their inception, been faced with the necessity of turning out products of the finest possible quality and of greater precision than could be found in competing items anywhere in the markets of the world.

Owners of BOLEX motion picture equipment testify enthusiastically as to the superior quality of Paillard products. Along with the trade-name BOLEX are other famous trade-names, HERMES (typewriters); in the phonograph field of many years ago, SONORA, the parts for which machine were Paillard made, and PAILLARD radios, motors, etc.



Craftsmen in Paillard factories, many of whom today are direct descendants of original workers who started with the company in 1814, take a real pride in their work. Here, craftsmanship is an art. Mass production methods are unknown and BOLEX equipment is manufactured and assembled with painstaking care. Each BOLEX product is a masterpiece in itself.

The American Bolex Company is proud to represent the Paillard Company. We attempt to carry into our merchandising the highest principles in our field. We take a personal interest in every BOLEX owner and his equipment, rendering efficient and painstaking service as required. This firm, founded in 1936, is 100% American; a partner—ship composed only of the writer and his immediate family. We have an efficient organization at the disposal of BOLEX owners.

We extend our deepest gratitude to those BOLEX purchasers with whom we have been privileged to deal through hundreds of Photo Supply Dealers during the past ten years, and extend our hand in welcome to those thousands who will join them during the years to come.

Cordially,

AMERICAN BOLEX COMPANY,

Ezra S. Brockway

ESB:FMC

PHOTOGRAPHIC MANUFACTURERS & DISTRIBUTORS

## THE PRECISE AND VERSATILE BOLEX

CHOICE OF CRITICAL MOVIE MAKERS EVERYWHERE



MODEL H-16

THE WORLD'S FINEST



The people of Switzerland are noted for their industry, their technical ability, their devotion to an ideal which will not tolerate the shoddy or the second-rate. Exemplifying this national trait to the highest degree is the firm of E. Paillard & Co., manufacturers of precision instruments for more than 130 years.

The craftsmen and artisans at the Paillard factories have a more than temporary or ephemeral interest in this business. As is customary in some of the old and settled communities of Europe, employees are an integral and indissoluble part of an enterprise. Craftsmanship descends in an unbroken chain from father to son, from generation to generation—some of the present workers, as a matter of fact, trace their descent in unbroken line to the first workers of E. Paillard, in 1814. They bring to their tasks, therefore, a truly genuine "patriotic" pride.

Because BOLEX is a product of E. Paillard & Co., whose products are most favorably known and sold in practically every country of the world, and whose integrity and ability have been recognized for more than a century, BOLEX may proudly boast of its ancestry. The enviable record of its manufacturer is your guarantee of flawless performance and dependability. BOLEX stands alone in this remarkable position, as no motion picture equipment made can boast of a similar background.

In the United States, there was an immediate and favorable reaction to BOLEX superiority. The merest demonstration sufficed to convince dealer and ultimate user alike that here were cameras and projectors that uniquely combined professional performance with amateur simplicity, unerring precision in every constructional detail . . . with the result that today BOLEX occupies a pre-eminent position in the field of substandard film equipment.



Tens of thousands of movie makers, all over the country, have come to know BOLEX superiority. Our files contain thousands of letters from these BOLEX owners which express their appreciation for BOLEX unequalled performance and testify to BOLEX superior quality. When home movie makers start with BOLEX they have the ultimate in the beginning. For, BOLEX is a precision instrument made in factories which have specialized in manufacturing precision instruments for over one hundred and thirty years. And, BOLEX, models H-16 and H-8 are the most versatile of all 16 mm and 8 mm cameras. Therefore, the critical workers, men and women who strive for perfection in their movie making, appreciate BOLEX because, in these fine cameras, they find every means for the expression of their advanced knowledge and ability to produce the very finest of so-called "home movies."

In the description of BOLEX cameras in this booklet, much will be written about BOLEX superiority. These references are not the trite assumptions of an advertising man nor are they "selling" words without foundation in fact. The claims made for BOLEX are fully substantiated by owners of the cameras themselves and one has but to handle and examine BOLEX cameras to immediately sense their superiority. After ten years of constantly mounting sales and increasing popularity, movie makers of America know the outstanding quality of our products. BOLEX has won a position at the top through superb performance, precision construction, extreme versatility and highest quality photographic results.

BOLEX cameras were designed primarily for amateur home movie makers. But they were designed and constructed so well that they have found their way into lines of professional endeavor where they serve with equally high commendation. Colleges and universities use BOLEX in the making of educational and sports training films. Professional motion picture studios use BOLEX in the making of entertainment and commercial films for sales and advertising purposes. BOLEX cam-

eras are used in large industrial plants in time study work. In fact, there is a BOLEX camera especially designed for this technique which, since the war, has become a very important part of plant management. BOLEX was chosen by engineers and scientists at Massachusetts Institute of Technology, working with army engineers, for very important work in connection with Radar in the late world war. Hundreds of BOLEX H-16 cameras were used by the Army Air Forces to photograph projections on radar screens in planes at very high altitudes and very low sub-zero temperatures. BOLEX was called upon to alternately expose "still" and slow motion movies at 64 frames per second in temperatures sometimes more than 50° below zero. This assignment called for rigid and precise construction as well as dependable performance. BOLEX performed admirably in this as it does in all demands made upon it. The United States Coast Guard photographers, who usually hit the beaches first in all invasions, carried BOLEX cameras to record landing operations and other military projects. BOLEX cameras, will be found everywhere, all over the world, performing important motion picture functions and these cameras are never found wanting.

The versatility of BOLEX which permits of including every professional characteristic in personal films makes it the ideal camera for the critical worker. With BOLEX model H cameras all screen transitions may be made without the additional cost of extra gadgets, and the adaptation of them to the camera. BOLEX provides all mechanisms necessary for slow motion, animation, fades and dissolves, superimpositions, backward action, "quickies", etc., within the camera. These features, integral parts of the camera, do not confuse the beginner as they require no adjustments whatever unless the professional characteristics they accomplish are desired. The tyro, who never owned  $\boldsymbol{\alpha}$ camera before, finds BOLEX as simple to operate as any movie camera—much more simple in fact than many of them. In making ordinary "straight" movies, one has but to load the camera with film (this operation is practically automatic with BOLEX), set the lens, sight the camera and press the button. As the operator advances however, he finds he has all the means for adding professional characteristics to his films and these features of the camera are quite as simple to use as it is to make ordinary movies. When a movie maker starts out with a camera which limits him to the making of ordinary movies, he finds, as he advances, that there are many "gadgets" he would like to buy and sometimes he spends more for these than he did for the camera

in the beginning. Obviously, it is far better to start with BOLEX. Not only because this is a sound economical procedure but because "gadgets", hung on cameras, do not improve their appearance. Adapted mechanisms seldom work as well as the features built in a camera to perform the desired functions when the camera was produced. And, too, there is no finer precision motion picture camera made, anywhere in the world, than the BOLEX model H cameras.

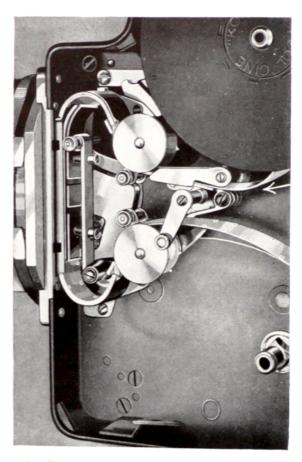
Making personal movies is so fascinating a hobby that most beginners become serious workers in a very short time. When the interest increases and if an inexpensive camera, not equipped to satisfy the critical worker, was purchased to start with, the owner very soon becomes restless and dissatisfied resulting in trading his first camera, at a loss, for a better one. If the beginner starts with a BOLEX, he will remain satisfied during all of his personal moving picture making career.

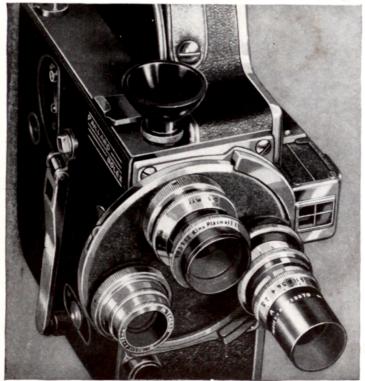
BOLEX cameras are handled by all good photographic supply stores in the United States. While these dealers and their clerks have a working knowledge of our products, it would be too much to expect that they would have the knowledge the reader of this catalogue will possess, providing he assimilates all we have written concerning them and unless the clerk or dealer has done likewise. Since the purchase of a motion picture camera is a serious undertaking requiring a sizeable investment, we urge upon our readers not to buy the "just as good or better variety" offered when the dealer is temporarily out of stock in his BOLEX department. Insist rather upon a thorough demonstration of BOLEX against any other camera. Compare the fine points we bring to your attention in this catalogue with the fine points your supply dealer is able to point out to you in other cameras. Wait for the dealer to get a BOLEX that he may give you this opportunity for comparison. If you will do this, there is no doubt in our minds that you will purchase BOLEX the-



## AUTOMATIC THREADING MECHANISM

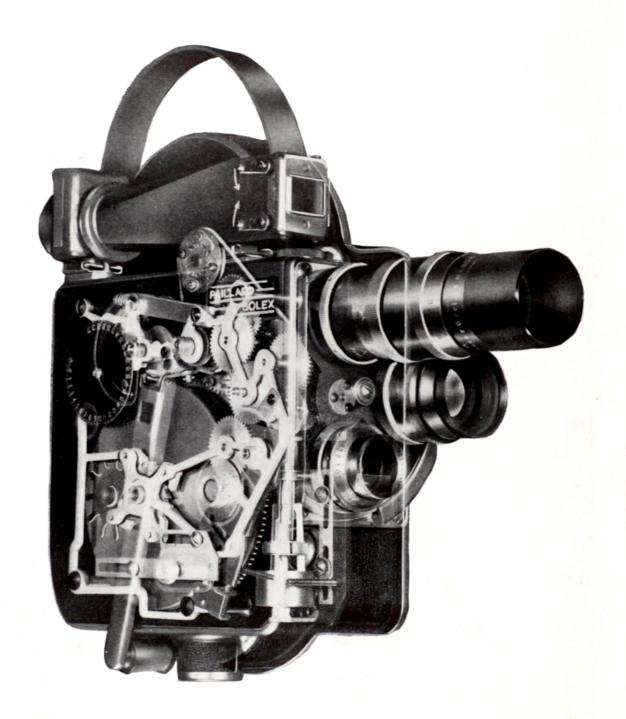
The illustration (right) shows the automatic threading mechanism of the BOLEX Models H-16 and H-8. The end of the film is inserted in channel at arrow, and as release button is pressed, the film is carried through sprocket wheels and gate. It is then only necessary to attach the end to take-up spool. Changing film requires less than one minute! Illustration shows the loop guides closed. After threading, the small lever (shown just above and to right of lower sprocket) is moved to the horizontal position. This opens the loop guides and permits free passage of the film through the gate. This exclusive BOLEX feature prevents jamming of film and assures rock-steady pictures.



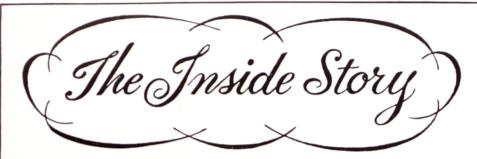


#### CRITICAL VISUAL FOCUSER

At left is shown the cupped eyepiece fitted to critical visual focuser with l" lens in focusing position. Magnification of 15 diameters through the taking lens and groundglass permits instant and accurate focusing. After focus is set, the turret is revolved, bringing the taking lens in front of the aperture (next to viewfinder). Focuser magnifies greatly a portion of field and complements viewfinder in which [exact] field is shown. This method permits quicker and more accurate focusing than any method yet devised for motion picture cameras. While critical visual focusing is not required for long shots at full aperature, it is unexcelled for titles, animation, and scientific close-up



SUPERIMPOSED PHOTOGRAPH OF THE BOLEX MODEL H-16—INSIDE AND OUTSIDE—THE UTMOST IN PERFECTION.

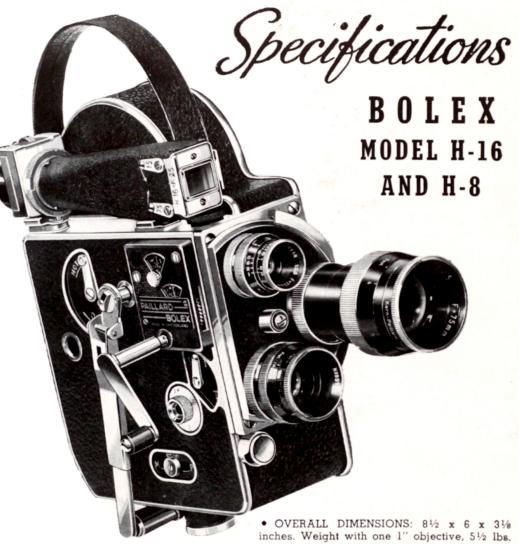


The super-imposed photographs opposite show BOLEX inside and outside. Not only are the BOLEX H-16 and H-8 beautiful to look at from outside, but if it were possible for you to examine the inside of the BOLEX and compare it with the inside of other motion picture cameras, you would learn at a glance why the claim to superiority is justified.

All of the technical skill of craftsmen who are trained in precision construction, in a factory where precise workmanship has predominated for more than a century, goes into the manufacture of BOLEX Cine Cameras. Yes, there is a great deal of difference between BOLEX and other motion picture cameras when you look inside. The construction and operation of the precise mechanism would make you think of a high grade watch.

**BOLEX** is not accompanied by "oiling instructions." In fact, BOLEX requires no oil for at least three years under average use. The instruction booklets furnished with BOLEX, instead of calling your attention to an oil can and bottle of oil, packed with the camera, and the customary caution as to when and how to use them, tells you NOT to oil your camera for at least three years and then, not to do it yourself, but to send it to the distributor who will clean and oil it for you. This is the sort of treatment given to high grade watches, and the mechanism of BOLEX is of that type. One has only to handle the BOLEX to realize that it is a truly fine, precision instrument.

Precision construction assures BOLEX owners of dependable performance for a lifetime. And, this precision construction, coupled with the unique and exclusive BOLEX focal plane type shutter and excellent optical system makes the slogan "Better Pictures With BOLEX" a reality.



AUTOMATIC THREADING MECHANISM—Obviates all danger of spoiled or unsteady pictures due to imperfect threading. The end of the film is simply placed in a channel leading to the feed sprocket, the release is pressed, and the film is then automatically threaded throughout the entire mechanism. This offers a sure guarantee against jamming and unsteady pictures.

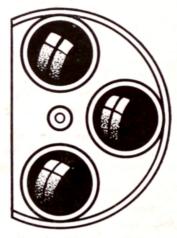
- $\bullet$  FOOTAGE COUNTER—Adds and subtracts accurately in forward or reverse motion, and automatically returns to zero when a new film is placed in camera.
- AUDIBLE FOOTAGE INDICATOR—A distinct click announces the passing of each 10 inches of film through the gate. This mechanism may be instantly disengaged, if desired, by simply moving a lever.
- TRI-FOCAL TUBULAR VIEWFINDER—Giving the exact fields for the 15mm, 1" and 3" lenses, as standard equipment. Corrections for all other focal lengths available on special order. It provides also for absolute correction of parallax down to 18 inches from the lens.

- SEMI-CIRCULAR TURRET for three objectives. Accommodates all lenses of the standard "C" type mount being the international 1" (25.4mm) with distance of 0.690" (17.52mm) from face of turret to film. All lenses, including those of 15mm focal length, can be accommodated in this turret without special fitting and present no interference with the smooth operation of the turret.
- VARIABLE SPEED—There is a speed range of 8, 16, 24, 32, and 64 frames with all intermediate speeds and the ability to change from one to another while camera is operating. SPEED IS CONSTANT AND UNDEVIATING. Operation starts at first frame at exact speed indicated and maintains that speed throughout the entire sequence—right down to the last frame. Starting and stopping at full speed takes place without jarring. First and last frames always receive correct exposure.
- FORWARD AND REVERSE ACTION BY HAND CRANK—Governor on speed mechanism controls cranking at speed indicated. CLUTCH disengages spring motor and permits cranking forward and backward without necessity for running down the spring. This feature provides as much leeway as desired for dissolves and super-impositions. The entire 100' roll may be rewound in the camera if desired.
- ullet SINGLE FRAME device for animation and "still" pictures, the latter at exposures from 1/20 to 1/80 second, with provision also for time exposures.
- FRAME COUNTER—Attached to hand-crank shaft. Two indicators are used—one counts individual frames as they pass the gate and the other counts blocks of fifty at a time. In making fades, superimpositions and dissolves this device is invaluable.
- VISUAL FOCUSER—Shows a greatly magnified, erect, luminous image on the groundglass, facilitating instant and accurate focus through the lens. A cupped eyepiece renders it practical for use in bright sunlight.
- $\bullet$  FOCAL PLANE TYPE SHUTTER—Rotating disc, 190° opening, revolves very close to film, thereby preventing linear distortion and producing better photographic performance. It operates only 118/1000 of an inch from emulsion side of film and gives an exposure of 1/30 second at 16 frames. This type of shutter is exclusive with BOLEX in the substandard movie field.
- SINGLE CLAW is spring-operated and so designed that the tearing of perforations is impossible.
- PRINTING—The Model H-16 serves as an ideal contact printer. Winding an unexposed 50' roll of positive against a processed 50' roll of negative upon a 100' spool and feeding both films through the threading mechanism at once; the positive is printed in the camera. Printing is done with lens wide open focused at infinity and held to clear sky or white reflector.
- LENSES—We have selected the finest objectives for BOLEX cameras obtainable in their respective price ranges. All models are equipped, at the option of the purchaser, with either the KERN-PAILLARD or the WOLLENSAK lenses. These are fully described elsewhere in this catalogue. The price-list will show prices of all models with the different lens equipment. World War II brought out many improvements in photographic lenses and the recommended lenses for BOLEX cameras embody every advancement, including anti-glare coating of all elements. Whether your camera is equipped with the KERN-PAILLARD or the WOLLENSAK lenses, your cine photography will reveal the finest results obtainable for the reason that there are no better lenses manufactured in their respective price ranges.

#### TURRET HEAD FOR THREE LENSES

The semi-circular design of the three-lens turret head, which is another exclusive BOLEX feature, offers many advantages. The camera may be carried with the turret so placed that no part of it protrudes beyond the side of the instrument. It is thus protected against knocks or jars which might tend to throw the optical system out of alignment.

The BOLEX turret permits complete lens interchangeability. Objectives of all makes and focal lengths may be used. The thread for H-16, 16mm lenses is the international standard type "C", 1" (25.4mm) and the distance from face of turret to film plane 0.690 (17.52mm). There is no difficulty in accommodating 15mm, f/1.5 lenses



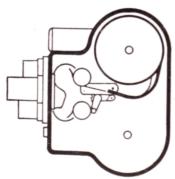
to the turret, providing thereby the facility for fast lens, wide-angle work.

Lenses may be so arranged that the protruding 3" or 4" telephoto lens will not show in the field of the wide-angle (15mm) lens. These, therefore, may be retained in the turret during wide-angle shots. The turret revolves smoothly in its track and is held firmly in place when lenses are in front of the aperture. Dust caps are provided for lens mounts when lenses are not in the turret. The thread of 8mm lenses is the 8mm standard, the distance from face of turret to film plane being 0.485.

#### AUTOMATIC THREADING

Threading the film through the sprockets and gate is accomplished with exceptional ease. A knife-blade on the inside of the camera cuts the end of the film instantly to the desired shape for threading. The film is then offered to the first sprocket through a channel, the release button is pressed, and the camera is instantly and automatically threaded. The only requirement then

is to attach the end of the film to the take-up spool.



This simple method, an exclusive BOLEX feature, results in loops of proper size and assures accurate threading. This is a guarantee against jamming and unsteady pictures. After the camera is threaded, one operation throws the loop-guide lever to its proper position. If this is overlooked, the camera will not close. Threading the BOLEX is indeed a positive and infallible operation.

#### TRI-FOCAL, PARALLAX-CORRECTING VIEWFINDER



In all cameras, still or movie, with the exception of those having direct focusing on groundglass, there exists a problem known as parallax. "Parallax" means that images close to the lens are not recorded on the film exactly as they appear in the

finder. This is due to the fact that the finder is never on the same vertical or horizontal plane as the lens, and this definitely alters the view included in a "frame."

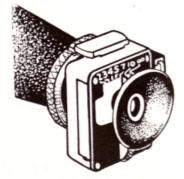
One is frequently astonished that heads or feet of the persons so visible in the finder, do not appear in the picture. This is caused by parallax, or the image deviation which exists between finder and lens. The importance of parallax must not be underestimated. In movie making, without provision for parallax correction, one can waste much perfectly good film.

In prevailing types of motion picture cameras, parallax cannot be avoided; but in the BOLEX H-16 and H-8 parallax is definitely overcome. The tri-focal viewfinder of the BOLEX is situated on the top of the camera for convenience in carrying the instrument in its case. For shots made at the "infinity" setting of the lens the viewfinder will perform accurately in this position for all scenes 10 feet or more from the camera. When filming subjects 10 feet from the lens or closer, accurate results are obtained by attach-

ing the viewfinder in position on the side of the camera. This change may be made *instantly*. In this position all parallax is eliminated down to a distance of 18 inches from the lens!

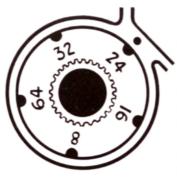


The tri-focal viewfinder is quickly adjusted for any distance, and all speculation as to accurate centering is eliminated. This feature is of inestimable value in filming portraits, closeups, and titles. In title-making, the card may be accurately centered. If the camera is from 2 feet to 10 feet from the card and the footage scale on viewfinder set at the corresponding distance, perfect results can be obtained. Of course, the use of a tripod is recommended, but it is not absolutely essential to good results.



The viewfinder may be instantly adjusted to the focal length of the lens in taking position in the turret. Standard equipment with the camera provides viewfinder corrections for 15mm, 1" and 3" lenses. Corrections for all other focal lengths are obtainable, and it is a simple process to substitute one for the other.

#### VARIABLE SPEEDS



The BOLEX permits variable speeds from 8 to 64 frames per second. While the speed indicator is marked for 8, 16, 24, 32, and 64 pictures per second, all intermediate speeds between these stops are also obtainable. Changes may be made from one speed to another while camera is in operation. One may start with normal action (16 frames), gradually change to slow motion (64 frames), and revert back to normal action—doing all this without stopping the mechanism for a moment! A governor, or control, on the speed mechanism prevents hand-cranking at a faster speed than is indicated. This is a very desirable feature

in the event the hand-crank is employed to film a scene in which action continues beyond the capacity of the spring motor. This feature also assures the same exposure and action as in that part of the sequence that was run by motor. The BOLEX shutter which gives an exposure of approximately 1/100 second at 64 frames contributes to the excellence of the slow-motion shots.

#### CRITICAL VISUAL FOCUSER

The consensus of opinion among camera authorities is that the visual focusing mechanism of the BOLEX is the most superior and useful of its kind. A prism covering a large portion of the subject is fitted inside the camera opposite the lens at the top position in the turret. The prism is protected from dust by a large screw which is removed when the prismatic focusing device is used. A greatly enlarged, right-side-up image permits rapid and accurate focusing. The cupped eye-piece protects the vision when in bright sunlight. By reason of the magnification, shots of a large picture area are quickly and properly focused.

No attempt is made to present the entire picture area in this reflex focuser. An image sufficiently large to permit the rapid use of the focuser was con-

sidered of greater importance for, while the focuser enables needle-sharp definition, the exact field or picture area is accurately presented through the parallax-correcting viewfinder. Thus, one of these instruments is designed to complement the other. One has in the BOLEX, therefore, a precise and dependable gauge for quick and accurate focusing, perfect centering, and flawless presentation of the exact field.



#### REWINDING AND HAND-CRANKING

The BOLEX is provided with a hand-crank which winds either forward or backward. When making super-impositions or lap-dissolves, the hand-crank rewinds the film footage required for the purpose. However, due to an exclusive BOLEX feature, it is not necessary to let the spring run down before rewinding with the hand-crank.

A clutch on the spring motor disengages the motor mechanism so that film may be rewound to any extent, whether spring is fully wound or not. It is possible to rewind an entire 100' roll of film. This feature not only aids in making super-impositions and lap-dissolves but it permits changing from one type of film to another without loss of film or the necessity of seeking a darkroom.



The exposed portion of the film may be entirely rewound on the feed-spool and then removed. Before rewinding, the footage indicator should be consulted to ascertain the number of feet exposed. When this film is again placed in the camera, the exposed footage is run through to the point indicated at the time of removal.

If the film is reloaded carefully, only a few frames will be lost. Should the BOLEX be loaded with Kodachrome and light conditions change, the color film may be quickly removed and black-and-white film substituted. The same principle also permits filming forward or backward, by hand, to the extent of an entire roll of film, if desired. And it makes no difference whether film is cranked forward or backward—the precision mechanism of the BOLEX assures its accurate take-up.

The BOLEX footage indicator, absolutely dependable in performance, is conveniently located at the side of the camera. It adds when the camera is in forward motion and subtracts when it is in reverse. A "click" announces the passage of each 10 inches of film through the gate. When a film is placed in the camera, the footage indicator automatically reverts to zero.





The choice of a shutter when designing a motion picture camera is a vitally important matter. Much of the success of the camera; the screen performance of pictures made with it, depend on a precisely-correct shutter, designed and balanced to operate in careful synchronization with other components of the mechanism—opening when the film is at rest; cutting off the light sharply before the film starts moving again.

Of all the possible types of shutters which could be used, the Focal Plane Type Shutter was selected by BOLEX designers as meeting every exacting requirement of perfect picture-making, with complete freedom from operational defects.

The placement of such a shutter is critical. If it is too close to the lens, distorted images will result in most cases. The ideal position is right next to the film surface, as close as is possible without actually making contact with the film. This precise positioning provides clean-cut interruption of the image as each picture is photographed, eliminates the blur occasioned by moving objects, and achieves that ultimate uniformity of exposure so conspicuously lacking in some cameras.

The BOLEX Focal Plane Type Shutter operates at only 0.118 of an inch from the film! In two other high priced movie cameras the shutters operate at 0.330 and 0.440 respectively.

The 190° opening in the BOLEX disc shutter permits the camera lens to perform with greater uniformity; provides, in addition, average exposure speed of 1/30th second when operating at 16 frames per second, yet makes maximum utilization of the light coming through the lens. This exclusive BOLEX feature produces results widely recognized as far superior to those usually obtained with other 8mm and 16mm cameras.

The beautiful correctness of this BOLEX shutter design is proven by the fact that the most efficient and expensive miniature and press cameras invariably employ focal plane shutters as an integral part of their construction. It is this shutter that makes "stills" a highly practical feature of the BOLEX.

### "STILL" PHOTOGRAPHY

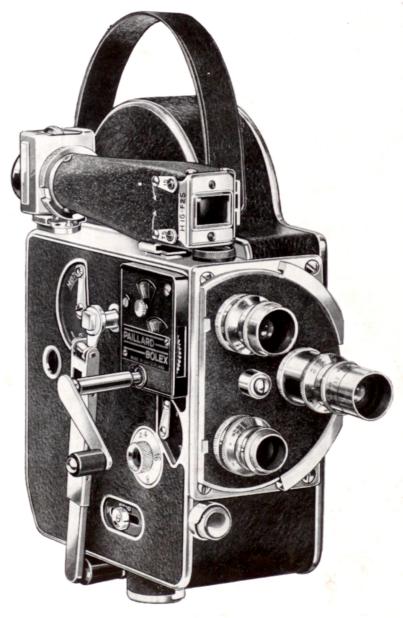


The BOLEX is an ideal "still" camera as well. Its ingenious optical and mechanical system provides either instantaneous or time exposures at speeds ranging from 1/20 to 1/80 second. The unique combination of its fast lenses (f/1.4 and f/1.5), constant speed and focal plane type shutter facilitate the making of excellent stills that enlarge beautifully. This ability of the BOLEX is very useful in the making of titles, animated cartoons, etc.

### CONSTANT SPEED

A spring motor mechanism—running with uniform regularity regardless of the degree to which the spring is wound—insures an equivalent exposure to every frame of each sequence, including the first and last frames. This constant speed and exposure contribute greatly to the excellent photographic results obtained with the BOLEX. This is an important factor in making animated pictures, as uniformity of exposure from frame to frame is completely assured. Many substandard film cameras over-expose the first and last few frames of each sequence, as they can neither be instantly started nor stopped. BOLEX has mastered this problem. The mechanism starts and stops at proper speed without jarring.

## The Professional Eight BOLEX MODEL H-8



## The World's finest Double-Eight

The economy and growing popularity of 8 mm home movies motivated the development by E. Paillard & Co. of this, the finest, by a very wide margin, of all Double-Eight Cine Cameras—the only "professional" Eight in the field.

The BOLEX Model H-8 possesses every refinement of the Model H-16, and the characteristics of the H-16, described in preceding pages, also apply to this versatile "professional" 8 mm Cine Camera. Except for its optical system and mechanism geared to 8 mm film production, it is identical in every particular to the Model H-16. This BOLEX Double-Eight is capable of producing the professional characteristics of the Hollywood cinema. It is the same in size and weight; identical in appearance and of the same precise construction as the BOLEX 16 mm. The BOLEX H-8 is the ultimate in 8 mm cine cameras. BOLEX Model H-8 provides for loading 25', 50' and 100' rolls of Double-Eight film.\*

The projection time of 100' of double-eight film is the equivalent of 400' of 16 mm film. Twenty-five feet of double-eight is the equivalent of 100' of 16 mm. The spring motor in the double-eight unwinds approximately 14' of film at one winding—the equivalent of 28' of 16 mm film.

Possessing all of the economical features of 8 mm film production, the BOLEX H-8 brings superior motion picture making ability to the 8 mm field. Built with the precision of a fine watch, the model H-8 will adequately reward its owner for the additional cost over ordinary 8 mm equipment in performance, versatility, and superior photographic results. This is the Eight that serious workers have dreamed of and hoped for. The BOLEX Double-Eight is ready to serve the most critical with the same degree of efficiency as the world-renowned BOLEX H-16.

Profit by the economy of 8 mm film production, but invest part of the saving in the BOLEX and produce motion pictures of better quality—pictures that will adequately compensate you for stretching a point to own the very best.

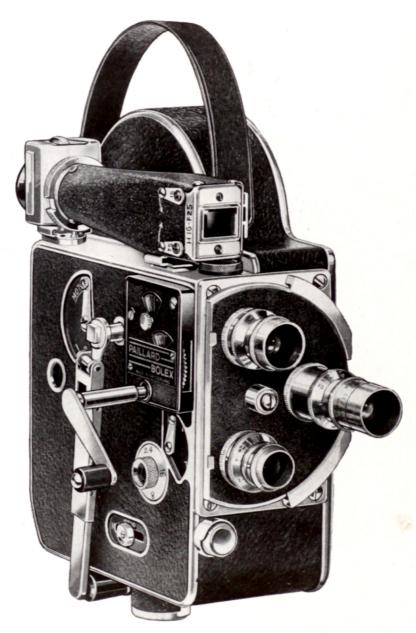
<sup>\*</sup> ANSCO reversible, is marketed in 100' rolls for the BOLEX Double-Eight. Kodachrome and other EASTMAN films are readily available, on special order, in 100' rolls for the BOLEX Double-Eight.



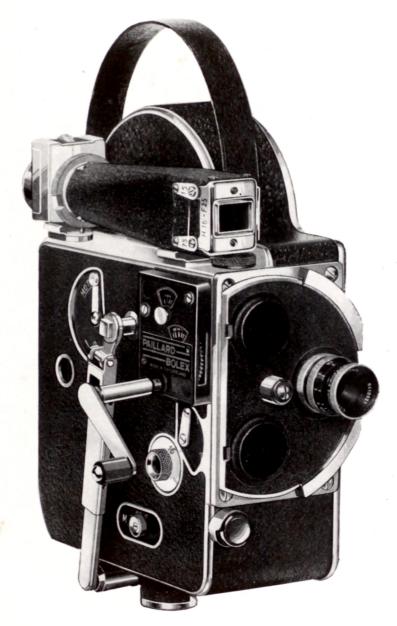
Equipped with KERN-PAILLARD 1", 15mm and 3" lenses



Equipped with WOLLENSAK 1", 17mm and 3" lenses



Equipped with WOLLENSAK 12½mm, 1" and 1½" lenses



Equipped with KERN-PAILLARD 121/2mm lens

Note: Kern-Paillard 1" and 11/2" Lenses for This Camera Will Be Announced Later

## Lenses For Bolex MODELS H-16 AND H-8

The second World War made demands upon optical goods manufacturers for greater precision than the optical industry had heretofore known. Untiring research and optical engineering brought into being vast improvements in photographic lens manufacture. The Kern Company of Aarau, Switzerland and the Wollensak Optical Company of Rochester, N. Y., played very important parts in producing and supplying fine objectives for war purposes. The products of these two companies have been selected by the American Bolex Company for all BOLEX cameras. We can assure our readers there are no finer motion picture camera lenses available, in their respective price classes, than Kern-Paillard and Wollensak lenses. These lenses embody every advancement made in photographic objectives.

#### KERN-PAILLARD CINE LENSES

Kern-Paillard lenses for motion picture cameras are imported and distributed in the United States and Possessions by the American Bolex Company. The Kern Company, manufacturers of the world famous Kern microscope, Kern Drawing Instruments and other precision optical equipment, is well on its way into its second century of existence. The name "Kern" is known around the world for the high quality of the many precision products it has produced for more than 125 years. At the time this catalogue goes to press (November 1, 1945) we are able to describe only five of the Kern Switar and Kern Yvar lenses, viz., Switar, 1" f/1.4, Yvar 1" f/2.5, Yvar 15mm f/2.8 and the Yvar 3" f/2.5, all for the BOLEX Model H-16 camera, and the Yvar 12½ mm f/2.8 for the BOLEX Model L-8 camera. There will be 4" and 6" telephoto lenses for the model H-16; standard 12½mm for the H-8 as well as 1" f/2.8 and 1½" f/3.5 telephoto lenses for the BOLEX Model H-8 camera. It is expected that the complete line will be available early in the spring of 1946 and our national advertising will announce each new lens as it is ready for the market.

#### KERN-PAILLARD SWITAR 1" f/1.4 for the BOLEX MODEL H-16

This lens, pictured at the right, on the next page, is without a doubt the finest speed lens ever made anywhere in the world for 16 mm motion picture cameras. It is an ultra-fast anastigmatic with characteristics which achieve an ideal correction of all aberrations. Even at wide-open aperture it renders astonishingly sharp and highly contrasted movies. When the diaphragm is only slightly closed, it renders excellent definition from one extreme corner of the field to the other. Such definition formerly was only obtained in lenses known as

"piquès". The SWITAR is of perfect chromatic correction which makes it the ideal lens for Kodochrome and Ansco color. It is entirely free from parasitic reflection and the optical distortion that has been common in the past with all such fast lenses. An anti-glare coating has been applied to all surfaces of all elements. This coating makes it possible to film extremely brilliant subjects, against the light, without halation. It also makes the lens more luminous than f/1.4 lenses were heretofore which is a great aid in

filming indoors or under incandescent light. Each diaphragm stop locks automatically in position as diaphragm is set. The diaphragm in use therefore cannot be unintentionally changed by brushing against the lens accidently. This is an innovation that will be appreciated by every serious worker. The focusing scale operates from  $1\frac{1}{2}$  to infinity. An ingenious depth of field scale operates automatically as diaphragm stops are changed. Operators can tell at a glance, when setting diaphragm, the exact distances from the camera at which all objects will be in sharp focus. This is an exclusive feature in the Kern-Paillard Switar. Movie makers who have lost good scenes because they misjudged the depth of focus



of their lenses will fully appreciate it. In short, the SWITAR 1" f/1.4 is the finest 16mm lens, by far, that has as yet been produced for 16mm motion picture cameras. It will be fitted exclusively to BOLEX motion picture cameras. This lens is covered by United States patents pending.

#### KERN-PAILLARD WIDE ANGLE (15 MM f/2.8)

The Kern-Paillard Yvar, 15mm f/2.8 affords a field 60% greater than 1" lenses used on 16 mm cameras. This lens was developed for the BOLEX

model H-16. Wide angle lenses are used for greater coverage when making interiors or filming large groups at close quarters, or, where it is desirable to broaden the field as is sometimes the case in making landscape shots. This lens is illustrated in the cut opposite. Similar in appearance to the Switar, dull black trimmed in dull chrome, it looks well in the turret of BOLEX cameras. Its performance, whether when using color or black and white, is exceptional. While the Yvar wide-angle does not have the locking diaphragm feature and depth of field scale described above and which are Switar features, it is nevertheless precise in every



detail. It is fully anastigmatic and renders excellent definition even at full aperture. It is furnished only in a focusing mount.

#### KERN-PAILLARD YVAR 1" f/2.5

For those who do not feel a need for an ultra-fast lens such as the Switar, this  $1^{\prime\prime}$  f/2.5 will produce clear, well defined, sparkling movies. It is fully color corrected and like the Switar is anastigmatic. Whether in black and white or color, this Yvar  $1^{\prime\prime}$  f/2.5 will produce unusually sharp pictures over the entire field. Its precision focusing mount is similar to the Yvar wide-angle. And, its price, as it will be noted in the price-list, is much lower. When 16 mm motion picture cameras are purchased with one lens only, that lens should be of  $1^{\prime\prime}$  focal length. The  $1^{\prime\prime}$  lens does most of the picture making on all 16 mm movie cameras. Movie makers therefore, who start out with one lens will find this lens will meet their most exacting expectations.

#### KERN-PAILLARD YVAR 3" f/2.5 TELEPHOTO LENS

The telephoto lens is almost entirely a sports lens. Used at foot-ball and base-ball games; yachting, for distance shots of sailing craft and striking scenes ashore from a distance; to photograph wild-life in the woods; getting close-ups of action too far from the camera to be reached with 1" and wideangle lenses, telephoto lenses capture most unusual movies-those which would be missed but for the telephoto lens for the reason that lenses of shorter focal lengths demand that the operator be within reasonably close proximity to the scene being photographed. With the telephoto lens one may photograph real close-up action of foot-ball skirmishes from the stands. In fact, most all colleges use telephoto lenses for training pictures. Action that was a hundred yards from the operator appears to have been but a matter of a few feet away on the screen. The Kern-Paillard is a relatively fast telephoto. Its f/2.5 aperture makes it possible to film under adverse light conditions. Most telephoto lenses are of f/3.5 or f/4 apertures. This lens like all other Kern-Paillard lenses is fully color corrected. It is anastigmatic. Its focusing scale covers all distances from 4' to infinity.

The Kern-Paillard line of lenses will include all focal lengths and apertures for all BOLEX cameras, as stated above. When the line is completed, circulars will be available and will be sent upon request. Consult price list for lens prices and camera combinations with different lens equipment. The Kern-Paillard line will include the following lenses.

	For BOLEX H-16	For BOLEX	H-8	For BOLEX L-8
	SWITAR 1" f/1.4	Yvar 12½mm		Yvar 12½mm f/2.8
	YVAR 1" f/2.5 Yvar 15mm f/2.8	Yvar 1'' Yvar 1½''		Yvar 1" f/2.5 Yvar 1½" f/3.5
	Yvar 3" f/2.5		,	
	Yvar 4" f/3.5 Yvar 6" f/4.			
	SWITAR 17,4		1416	
		TAN I		
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1		THE REAL PROPERTY.		E INC
		1" f/2.5	3" f/2.5	15mm f/2.8
	1" f/1.4			

#### WOLLENSAK CINE VELOSTIGMAT LENSES

Wollensak lenses are made by the Wollensak Optical Company of Rochester, N. Y. Since 1899 Wollensak lenses have occupied an enviable position in the field and are in constant use by the better photographers throughout the world who manifest keen delight and complete satisfaction. Only high grade artisans, best materials and the finest optical glass procurable enter into the making of Wollensak lenses. The American Bolex Company is proud to represent the Wollensak Company and to recommend Wollensak lenses to BOLEX users. Our decision to equip BOLEX cameras with Wollensak lenses came after years of experience with this excellent line of motion picture objectives. There are thousands of BOLEX cameras in use which are Wollensak equipped and these lenses have met the exacting requirements of critical home movie enthusiasts everywhere. There is a Wollensak lens for every movie purpose. In the opinion of the American Bolex Company, Wollensak lenses offer greater value per dollar than any line of movie lenses made in America. Precision cameras such as BOLEX demand precision lenses. We wholeheartedly recommend any of the Wollensak lenses listed in this catalogue to BOLEX owners and prospective owners, knowing that our cameras so equipped will meet the most exacting requirements and wholehearted endorsement of BOLEX movie makers. Wollensak lenses like the Kern-Paillard lenses are furnished with an anti-glare coating applied to both sides of all elements. Wollensak lenses are furnished in the following focal lengths and apertures for BOLEX cameras.

#### For BOLEX H-16

1" f/1.5

17 mm f/2.7 (wide-angle) in focusing mount

17 mm f/2.7 (wide-angle) fixed focus

fixed focus

3" f/4 (telephoto)
in focusing mount

4" f/4.5 (telephoto)
in focusing mount

6" f/4.5 (telephoto)
in focusing mount

#### For BOLEX H-8

12½ mm f/2.5 fixed focus 12½ mm f/1.9 in focusing mount 1" f/2.7 (telephoto) in focusing mount 1½" f/3.5 (telephoto) in focusing mount

#### For BOLEX L-8

12½ mm f/2.5 fixed focus 12½ mm f/1.9 in focusing mount 1" f/2.7 (telephoto) in focusing mount 1½" f/3.5 (telephoto) in focusing mount

Consult price list for lens prices and camera combinations with different lens equipment.

#### FOR 16 MM CAMERAS



WOLLENSAK 1" f/1.5



WOLLENSAK 17 MM f/2.7



WOLLENSAK 3" f/4



WOLLENSAK 121/2 MM f/1.9



WOLLENSAK 1" f/2.7



WOLLENSAK 11/2" f/3.5

## NAME OF THE PARTY OF THE PARTY

1" Lens 16 mm or 1/2" Lens 8 mm



2" Lens 16 mm or 1" Lens 8 mm



3" Lens 16 mm or 11/2" Lens 8 mm



4" Lens on 16 mm Camera



6" Lens on 16 mm Camera

## AS DIFFERENT LENSES SEE THE SAME PICTURE

The cuts opposite show area or field covered with 1", 2", 3", 4" and 6" lenses used on 16mm cameras. Also the area or field covered with  $12\frac{1}{2}$ mm, 1" and  $1\frac{1}{2}$ " 8mm lenses.

The field covered with a 16mm camera equipped with a wide-angle (15mm) lens is 60% greater than that covered with the 1" lens mounted on 16mm camera. As yet we cannot announce a satisfactory wide-angle lens for the 8mm camera.

For practical purposes, the 1" and  $1\frac{1}{2}$ " telephotos are the only long focal length lenses offered for the 8mm camera. It is possible however, to adapt 3" 16mm lenses to the 8mm camera from which the result would be the same as with a 6" lens used on the 16mm camera.

#### THE CONSENSUS

America's leading amateur motion picture magazine, "HOME MOVIES", completed a survey in August 1944, the purpose of which was to determine the features, in post-war motion picture cameras, that are most desired by motion picture club members. Questionaires, mailed to thousands, brought expressions which effectively nominated BOLEX, models H-8 and H-16, as the cameras of the future; the cameras with features expected and most desired in post-war cameras by the country's leading amateur movie makers and most of which were to be found in no other movie cameras.

This survey disclosed that *back-winding mechanism* was desired by 40.4% of the club members responding. Back-winding mechanism has been an integral part of BOLEX, models H-8 and H-16, for over fifteen years. BOLEX was the first camera to provide built-in backwinding mechanism and offers this feature today in a more practical way than any other camera available (Read features of BOLEX back-winding on page 15).

FRAME COUNTERS were at the top of the list of preferences. BOLEX originated the frame counter on sub-standard size film cameras and is the only amateur motion picture camera today offering this feature. The BOLEX frame counter is not an adaptation as with some cameras but an integral part of the mechanism so constructed however, that early models not equipped with the frame counting device, may be so equipped. (Read features of BOLEX frame counter on page 57.)

With the exception of sound, desired by only 12.8% of the club members responding, and magazine loading, desired by only 6.4%, all other features desired are embodied in the latest BOLEX cameras. The great majority of those features had always been standard with BOLEX.

BOLEX is now, and always has been, years ahead in contemplating the needs and wishes of serious minded workers. BOLEX has been first in most advanced features of movie camera and projector design. There is no need for any movie maker to await promised, mysterious, innovations in post-war motion picture cameras. There will be none! BOLEX has lead the field for a generation in precision construction, versatility, design and superior performance and the present-day BOLEX will lead in the post-war market as always.

### THE PEER OF ALL "POCKET-SIZE" EIGHTS



#### **BOLEX Model L-8**

Equipped with the Kern-Paillard,  $\frac{1}{2}$  f/2.8 Yvar lens in micrometer focusing mount. Consult price-list for L-8 so equipped.

#### **BOLEX MODEL L-8**

For the past twenty years, the cinema department of Paillard and Company has manufactured the finest of all home movie cameras in models H-16 and H-8. These cameras, among movie club members, critical amateurs and professionals have won world acclaim. Their indisputable and enviable position at the top made it mandatory upon the manufacturers to develop a small, double-eight camera of comparable quality.

Years of intensive research and expert engineering went into the manufacture of this precision BOLEX, model L-8. Among the small eights, i.e., 8mm cameras of 25' film capacity, Paillard and Company found much room for improvement. Small, double-eights were in use over ten years before BOLEX L-8 was available. This company was determined not to release a "pocket-size" eight until maximum performance and finest photographic quality could be guaranteed its owners.

For years, movie enthusiasts refused to take the double-eight seriously, preferring to look upon it as a "toy". This viewpoint was not without some foundation in fact. There had been a predominating tendency to build 8mm cameras down to a price. Paillard and Company has built them up to a standard. Too much emphasis was placed on a low first cost—the cost of the camera itself—with too little done about the vital matter of precise construction and quality results. Movie enthusiasts themselves made demands for better 8mm movies and greater precision in the 8mm camera. Paillard and Company has met these demands with the BOLEX L-8. This camera is a precision instrument; not the product of mass production but rather a product manufactured and assembled with painstaking care by the craftsmen of Paillard factories where precision construction has been an art for over 130 years. Mechanically, BOLEX L-8 is not even remotely similar to other small eights. Precisionwise, this little gem is far in advance of its field as all BOLEX cameras have always been.

With BOLEX L-8, 8mm movies approach very closely the quality of home movies made with the BOLEX H-16. This camera offers you the economy of 8mm film production without sacrificing quality. In the description which follows, many other interesting points of superiority will be emphasized.

To own this fine instrument one may pay the equivalent of the cost of a few rolls of film over prices for ordinary small eights but his film library of the future will reward him for the investment in sparkling color and black and white movies of the finest quality.

#### THE COMPLETE BOLEX L-8 OUTFIT



The complete BOLEX L-8 outfit consists of the L-8 camera which, without a doubt, is the most eye-appealing of all 8mm cameras. In its duralumin case with highly polished edges and chrome-plated trim, against its genuine black leather covering, it is a really beautiful camera. The carrying case of soft, gray, suede leather, which opens and closes in a jiffy by means of its "zipper" fastener, protects it from the weather and accidental scratching. The carrying strap of heavy, braided, genuine leather, screws into the tripod socket. For convenience in carrying, it is slipped over the wrist. When filming, the strap permits getting a better grip on the camera and guards against accidental dropping. This outfit is packed in a sturdy red and gold cardboard box. The BOLEX L-8 is a complete outfit, truly worthy of the name Paillard, and one that you will be proud to carry and use anywhere, in any company, under all conditions.

#### SPECIFICATIONS BOLEX L-8

- OVERALL DIMENSIONS: 4%" x  $3\frac{1}{8}$ " x  $1\frac{3}{4}$ ". (From front to back with  $12\frac{1}{2}$ mm lens,  $4\frac{1}{8}$ ") Weight, 1 lb. 12 oz. with lens and film spool.
- OUTER CASE, heavy dural, highly polished. All metal parts chrome-plated.
   Covered with genuine leather.
- FILM CAPACITY, 25' daylight loading spools. Double-eight films either color or black and white. When a roll runs through the camera once, it is reversed and run through again. One side of film is exposed only at each of these operations. When processed, by the film manufacturer, film is split and spliced together giving 50' for projection. Projection time at 16 frames per second for 25' roll, therefore, 4 minutes.
- VIEWFINDER, telescopic type, exact in picture area, i.e., the scene as viewed in the finder will cover the identical area on the film. Viewfinder instantly changed, from one to the other of lenses of three different focal lengths, viz.,  $12\frac{1}{2}$ mm, 1'' and  $1\frac{1}{2}$ ". The exact field is seen through the telescopic finders as it will appear on the screen.
- FOOTAGE COUNTER, automatically resets to zero when film is removed or when
  changing spools from one side to the other. When the end of 25' of film is passing
  the gate, an indicator comes into the finder automatically showing at all times
  the footage left to expose before reversing rolls or removing an exposed film
  from the camera.
- THREADING is a very simple operation, requiring less than a minute. It is unnecessary to form loops; the gate is opened and the film slipped behind it, the gate is then closed and the roll of film is placed upon one spindle and the end attached to the other.
- RELEASE BUTTON provides for the making of exposures by the finger-tip release
  method or of locking it in running position to enable the operator to appear in the
  pictures. A definite lock is provided to prevent the accidental starting of the
  camera while it is being handled or carried.
- SPRING MOTOR is of the constant speed, governor controlled type. The strong, steel spring is entirely encased in metal housing. The spring is wound four times for the complete exposure of 25' of film. Spring cannot be over-wound and winding is a simple and easy operation. Generous winding key, attached to camera, folds back against its side when not in use. (See further details of the constant speed motor on page following.)
- PRESSURE PLATE with film tracks of highly polished stainless steel. Due to
  unique Paillard design film is held against movement both vertically and horizontally assuring rock-steady pictures. Pressure plate is removable and when it is
  desired to clean aperture, easy access is permitted and a thorough job may be
  done.
- TRIPOD SOCKET, Zipper Carrying Case, carrying strap, feed spool, etc., etc.

## PERFECTION IN A SMALL DOUBLE-EIGHT BOLEX, MODEL L-8

The basic idea of movies; making a series of exposures of moving objects, at close intervals, becomes the operation wherein precision is demanded. After "taking" the movies they are transmitted through projection. Projectors, regardless of their degree of efficiency, will not transmit to the screen anything not recorded on the film and, by the same token, any errors of cameras or operators will be transmitted to and magnified on the screen. Human errors are, to a certain degree, pardonable, but mechanical errors, caused by camera inefficiencies, are not. Owners of cameras have a right to expect efficiency in camera operation. The cost of movie film demands that the utmost in results be achieved in the camera. It does not take long to build up an investment many, many times the cost of a camera in the film that is used in it.

Motion pictures are possible because motion literally is created by an illusion of the eyes. Actually, a movie camera takes 16 different "still" pictures a second. Movie cameras, driven by spring motors, transport film past an aperture where an exposure, or picture, is made every 1/16th of a second. The film transport therefore is synchronized with a continuously operating shutter, generally of the circular disc type. Through an intermittant gear mechanism, the film comes to a stop and is started 16 times each second. The opening in the shutter is before the film while the film is at rest so the exposure can be made. As the spring motor pulls the film onward to the next frame, the metal part of the shutter disc is before the aperture to prevent exposing the film as it moves from frame to frame. The ideal exposure is 1/30th second at normal speed, viz., 16 frames per second. This is standard for silent movies. If the

speed of the motor is not accurately controlled and the film comes to rest 12 times each second instead of 16 times, the exposure no longer remains 1/30th second. When the speed of the motor drops down, the exposure increases thereby causing over-exposure. Or, if the speed of the motor increases at the start, after being freshly wound, the exposure will be less than 1/30th second causing under-exposure. Tens of thousands of movie makers use exposure meters to get properly exposed movies, and very often, in cameras which do not have constant speed motors. When film is not properly exposed, after using a meter, the meter is usually blamed for the discrepancy, when all too often, it is the camera with erratic speed which is causing the trouble. Exposure information applied to a camera which does not operate at 16 frames when this speed is indicated, cannot be of much assistance to an operator.

It is of greatest importance therefore, in the interest of maximum movie results, that motion picture cameras be precise as to speed. No one factor in movie making is of more importance. The BOLEX L-8 was not released until the speed of the motor could be guaranteed. When movies are made with the L-8, exposures are 1/30th second at 16 frames for the reason that the camera was made to travel at no other speed and to hold that speed constantly throughout every frame of every sequence filmed. A precision built, constant speed motor and ingenious governor assures perfect exposure and accuracy. This feature was the result of considerable research in the Paillard engineering department. And, until this inherent disadvantage of small eights could be thoroughly overcome, Paillard would not offer the multitude of 8mm enthusiasts a 25' capacity small eight. In order to achieve this precision in speed and exposure however, it was necessary to make some radical departures in design.

In pocket-size eights, precision in our opinion, is of paramount importance even at the cost of versatility. Had the engineers at the Paillard factories attempted to ascertain how much they could give 8mm movie makers for how little, the L-8 would probably have variable speeds and other "features" that fall in the trick performing category. But, whether it would, with all these innovations, operate efficiently in the all-important de-

partments of speed and exposure is another question, and certainly if precision built, and so equipped, it would not sell at a popular price.

In order to have accuracy in speed and exposure, Paillard made the L-8 to operate at one speed only, viz., normal 16 frames per second. Small eights do not lend themselves, because of their size, to extreme versatility and precision at the same time. A survey showed that 95% of camera owners made movies at no other speed than 16 frames per second. There was little point therefore in sacrificing precision for versatility. Eights of 25' capacity are but small handfuls of mechanism at best. Their chief advantages are in their size and their low operating cost. Rather than to make one of these little cameras a "Jack Of All Trades and Master of None" sort of an arrangement; hung full of weird "gadgets", we made the finest 8mm camera of 25' capacity the field has yet known. The L-8 is a dependable and precise instrument; operating every bit as efficiently as our world famous models H-16 and H-8. It will give its owner a lifetime of dependable service and will achieve the maximum in photographic results under all conditions. That sort of precision in the small eight field is really something new-something "post-warish".

We ask you to put 8mm cameras from which you would select one to buy or, that a clerk in a photo supply store would sell you, to this simple test. Take the camera in your hands; wind the spring motor fully; then press the release button and allow the spring motor to exhaust itself. As the motor runs down, watch the shutter carefully (unscrew the lens if necessary so the shutter may be observed) and listen to the mechanism. If you observe the motor slowing down toward the end of its power, or, if the motor seems to sputter, stopping momentarily, or if a noise is heard which sounds like something being thrust against the case from the inside, that camera does not have a constant speed motor and an exposure of 1/30th second, at 16 frames cannot be relied upon. Now, try a BOLEX L-8. Proceed in the same manner. Observe the smooth sound of the mechanism. Note how the same speed is held right up to the closing of the shutter on the last frame. Try it again and again, with both

cameras if you wish. You will buy the L-8 with the constant speed motor, even if it costs the price of a few rolls of film more in the beginning. This slight extra investment will be rewarded in better movies. A movie camera is nothing if not precise. The L-8 is the most precise small eight in the field.

The BOLEX is light in weight; fits in a man's side coat pocket or a woman's hand-bag. It may be carried conveniently, suspended from the wrist by its carrying strap. It is beautiful in appearance and the easiest camera to hold and use in the small eight field. Those who have used cameras with cast metal cases will appreciate the warmth of the BOLEX with its fine leather covering. After years of use it will still look like new. It may be loaned to Junior or his little sister with complete confidence in their ability to operate it. Anyone who can see a scene in the finder and press a button can make excellent movies, after the most simple of instructions as to the setting of the lens. This camera has had a maximum of excellent movie making ability built into it by Paillard engineers. The L-8 is the ideal instrument for the recording of a family history in full color or black and white.

#### OPERATION OF BOLEX L-8

The BOLEX L-8 is loaded with 25' rolls of color or black and white, double-eight film. The cost of roll film is appreciably less than the cost of 25' magazines. Threading a new roll of film into the camera is a simple operation requiring no longer than a minute, even to the inexperienced. The pressure plate which holds the film in the camera against the aperture is hinged. This is opened and the end of the film placed behind it after which it is closed. The roll of film is then placed upon the feed spindle and the end is attached to the take-up spool which is then placed on the take-up spindle and the hinged cover of the camera is snapped shut. The spring motor is fully wound and the scene to be photographed sighted through the telescopic viewfinder. Exactly what is seen in the finder will be recorded upon the film. The release button is pressed, after lens is set at the proper aperture for the brightness of the day, and the movie

is made. Four windings of the spring motor are required for the exposure of 25' of film. The footage counter records accurately the exact length of film which passes the aperture. When the end of a run is being completed, a pointer appears in the view-finder calling the operator's attention to the fact that when the 25' mark is reached, he must reverse the film or if this has been done, take the roll out and reload. Reversing the roll is quite as simple as loading the camera in the beginning. When the roll of film has been removed it is sent to the film manufacturer for processing, the cost of which was included in the price when the film was purchased.

Provision is made with the L-8 for the rapid interchanging of lenses. The standard lens with which most movies are made is the  $12\frac{1}{2}$ mm. Medium telephoto is the 1" and full telephoto the  $1\frac{1}{2}$ ". When it is desired to use a lens of different focal length than that on the camera, the lens in the camera is unscrewed and the wanted lens screwed in its place. The view-finder is instantly adjustable to lenses of  $12\frac{1}{2}$ mm, 1" and  $1\frac{1}{2}$ " focal lengths. The corresponding correction to the lens being used is pushed over the viewfinder aperture with one movement of the finger and as easily reset when lenses are again changed.

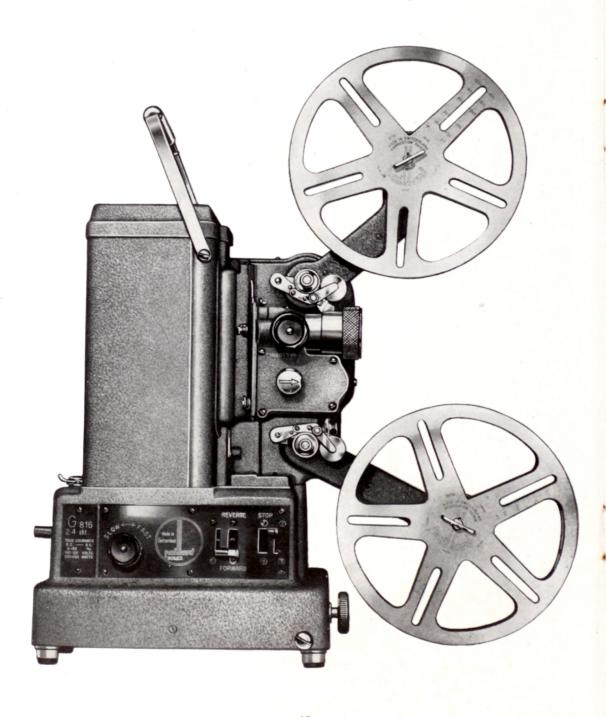
The American Bolex Company recommends the BOLEX L-8 to all serious minded movie makers. Without qualification, or fear of contradiction, we offer the L-8 as the finest of all 25' capacity movie cameras available, from the standpoints of precision construction, satisfactory performance and maximum photographic results.

## **BOLEX MODEL L-8**



The above cut shows the model L-8 equipped with the Wollensak Cine Velostigmat lens, 12½mm, fixed focus, f/2.5. This lens requires no setting for distances; only adjustment being in the aperture ring. Consult price list for L-8 so equipped.

# **BOLEX Model G-816 Projector**





The picture on the page opposite illustrates the Model G-16, G-816, G-3 and G-8 Bolex Projectors. All are identical in appearance and performance, the only difference being the versatility of the four models. The G-16 is designed for 16mm film only; the G-8 for 8mm only. G-816 projects both 8mm and 16mm film and the G-3 projects all three substandard sizes, viz., 8mm,  $9\frac{1}{2}$ mm and 16mm films.

#### **OUTSTANDING FEATURES OF BOLEX PROJECTORS**

Model G Projectors command the interest of the advanced amateur who appreciates the value of brilliant, distortionless and rock-steady projection. There is no instrument that is quite comparable to the BOLEX, no apparatus that is distinguished by a similarly precise construction or an equally high performance. The important features listed here are common to all Bolex Model G Projectors:

- Rapid Motor Rewinding Instantaneous Reverse Projection
- · Perfect Diffusion of Light Over the Entire Picture Area
- · Brilliant White Light Without Flicker
- · Illuminated Meter Showing Lamp Consumption of Current in Watts
- · Independent Lamp Switch · "Still" Projection-Without Blistering Film
- · Micrometer Focusing for Sharpest Definition
- · Universal Motor for Direct or Alternating Current
- Gate and Pressure Pad of Stainless Steel obviates wear and tear of these important parts and insures smooth passage of film
- · All Controls Readily Accessible on One Side of Projector
- · Entire Freedom from Belts-No Outside Gears
- · Ability to Use Lenses of Various Focal Lengths
- · No Light Reflection from Lamphouse · Extremely Quiet Operation
- · Simple Method of Adusting Optical System for Lamps of Different Types
- · Steady and Flickerless Pictures at Speeds from 12 to 24 Frames
- · Conveniently Placed Framing Device Enables Instant and Accurate Framing
- · Tilting Screws Assuring a "Straight" Picture
- · Direct Draft Ventilating and Cooling Systems for Lamp and Film
- · Aperture and Film Constantly Cooled by Forced Draft
- Greatest Simplicity in Threading, with Locking Guide Rollers That Assure Free Passage of Film at All Times and Prevent Jamming
- · Speed and Voltage Controls
- Four-Hundred Foot Reel Arms Standard Equipment. Eight-Hundred Foot Reel Arms Available at Slight Additional Cost
- · Radio Interference Eliminator
- Finish and Appearance. Beautiful Gray Satin; All Metal Parts Heavily Chrome Plated, Generous Bakelite Carrying Handle; Weight Without Case, 14 lbs.
   Strong Leather-Covered Carrying Case
- All Models use Standard G.E. Westinghouse or Radiant 750-Watts (500-Watts optional) 110-Volt, Pre-Focus Base Projection Lamps

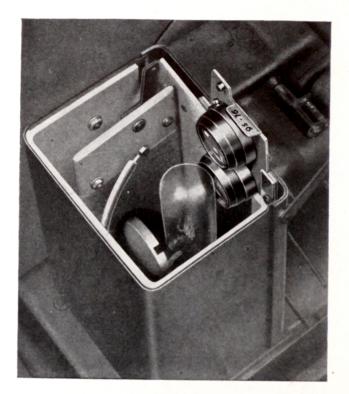
# BOLEX MODEL G-816 TWO PROJECTORS IN ONE

The illustration at the left shows the double optical system of the Paillard-Bolex Model G-816 Projector. There are separate condensers for 16mm and 8mm, instantly changeable from one size to the other by simply lifting the condenser mount, turning it around and sliding it back into position. This operation automatically changes the lamp to its proper position for the size of film being projected.

The model G-816 provides for two separate projection lenses -one for 16mm and one for 8mm. Reel spindles, sprockets, quide-rollers and gate are instantly changeable from one size to the other. The throw of the intermittent claws which draw each frame of film into position is regulated by the knob shown in photo at left. The complete operation of converting the projector from 16mm to 8mm and, vice versa, is accomplished in a few minutes and requires no tools.

The G-816 is equally efficient in projecting both film sizes, and nothing has been sacrificed in either size to attain this extreme versatility.

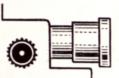
There is however, slightly less brilliance in 8mm projection.





#### MICROMETER FOCUSING

BOLEX Cameras and Projectors are nothing if not precise. This precision extends to every conceivable detail, embraces every



individual feature of a BOLEX instrument. Focusing of the projection lens in most projectors is accomplished, crudely, by means of a sleeve tube. The lens is pushed or screwed in or out and manipulated entirely by hand.

The precision of the Bolex does not permit of crude and approximate methods of gauging the distance. Focus is accurately obtained by means of a micrometrically exact knurled knob which assures precise setting of the lens to the screen distance.

#### PROJECTING STILLS

Makers of personal movies know from experience the damage caused in the projection of "stills" in most projectors. Due to inadequate cooling systems or poorly designed fire screens, sometimes both, the projected frame "blisters". Not only is this aggravating to both operator and audience, but the damage necessitates a splicing job; and the projection of too many "stills" will, in time, necessitate discarding the film. This is the result of powerful illumination concentrated on one spot, without adequate film protection.

In the BOLEX all this is obviated by an extremely powerful air cooling system which provides adequate cooling for aperture and film as well as for the lamp. Also, due to another exclusive feature the draft from the fan becomes twice as intense when the clutch is thrown to project a single frame.

#### ALL CONTROLS TO ONE SIDE

Simplicity and convenience are frequently matters of intricate organization, require special planning and a detailed adapta-

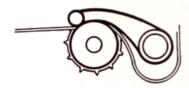


tion of each part to the whole. In the BOLEX Projector, all controls are conveniently placed at the right-hand side of the operator. Slow or Fast Motion—Reverse, Forward and Stop—Single Frame Feature—Clutch—Framing Device, etc.—all these are at your fingertips and obviates the necessity of searching for them.

#### SIMPLICITY IN THREADING

If the simple directions in the BOLEX instruction booklet are followed, film can be threaded with the utmost ease. One merely unfolds the arms; places the spool on the spindle; releases film-guides, sprockets and gate; threads the film between roller guide and top-sprocket; introduces the film into the channel of the gate and threads it between the lower sprocket and roller

guide. This amazing simplicity of performance is characteristic of the BOLEX only. There is no "fiddling" necessary to make sure intermittent claws have engaged the sprocket holes of the film. And when threaded properly, no fear of jamming and broken film is entailed.



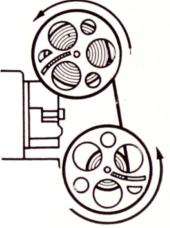
#### INSTANTANEOUS REVERSE ACTION

A switch conveniently located on the control board instantly reverses film. A unique feature is the fact that the lamp is automatically switched off when the switch is thrown from forward to reverse and vice versa. Another touch of the switch lights the lamp again when projector attains proper speed. Thus, the lamp

is saved from the shock of too much current momentarily while mechanism adjusts itself to normal speed. And, the reverse action is actually seen while in process, as distinct from a repeater.

# A REALLY POWERFUL MOTOR REWIND

Uniquely designed, the rewind mechanism of the BOLEX is very efficient. The speed at which the film is rewound is controlled with same knob that controls projection speed.

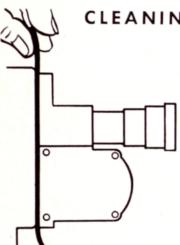


#### COMPLETELY GEAR DRIVEN

Not a single belt is used in the entire projector—including the forward and reverse take-up. The BOLEX is completely gear-driven, and there are no outside gears to complicate and to confuse.

# GATE AND PRESSURE PLATE OF STAINLESS STEEL (Free Passage of Film)

Is this placing undue emphasis on a mere detail—or is this fact of real constructional significance? This point, the manufacturers believe, is of the very highest importance. The constant passage of film through a gate will—in time—erode metals that lack the resistance and tenacity of stainless steel. The clever construction of the gate enables the passage of films that are slighly wider or narrower than the standard 16mm size—a notable feature in view of the fact that some library films are not as uniform as they should be. It makes little difference in a BOLEX Projector, and no matter how many splices your film may possess, it will run through the gate just as easily. The pressure plate is also of stainless steel.



#### CLEANING THE GATE APERTURE

The aperture of the gate may be cleaned with amazing ease and rapidity. A leather-covered metallic band supplied with the projector is introduced at top of gate and moved up and down past the aperture, resulting in the complete removal of extraneous specks of dirt. Not necessary to become provoked in trying to get part of a handkerchief, on either your finger or a pencil, into an impossible opening and then, if successful in reaching the spot, doing a poor job. This is another exclusive BOLEX feature that will be much appreciated

by those experienced in cleaning apertures the old way.

#### ILLUMINATION

It depends on lumens—not on wattage. Due to the precise construction of the reflectors and condensers, a 750-watt lamp operates with utmost efficiency in the BOLEX. The 750-watt lamp is interchangeable with 500-watt lamps, and due to the unique construction of BOLEX reflectors and condensers, the 500-watt lamp will deliver the equivalent in screen lumens of most 750-watt projectors. There is absolute light control; the resistance placed on the left-hand side of the lamphouse and the built-in illuminated meter, which shows whether the lamp is being worked at its normal wattage, enables the operator to control illumination with ease at all times, even while projector is running.

#### SINGLE AND DOUBLE BLADE SHUTTERS

All BOLEX Model G Projectors are equipped with instantly interchangeable shutters, i.e., either single blade, giving two obscurations per frame, or double blade, giving four obscurations. The advantages of this exclusive BOLEX feature are numerous.

The single-blade shutter provides a maximum of brilliance and is used for long throws or in large auditoriums where large screen images are desired. The double blade is used for home projection where great screen brilliancy is neither desired nor necessary. With four obscurations per frame, projection at 12 frames per second is possible without the slightest trace of flicker. This feature permits 25% more "viewing" time: 100 feet of film at 16 frames projects four minutes; and 100 feet at 12 frames projects five minutes. There are many instances, as all projectionists know, when it is very desirable to have more time in which to view certain films.

Changing the shutter from single to double-blade is very quickly and easily accomplished.

#### FILM PROTECTION

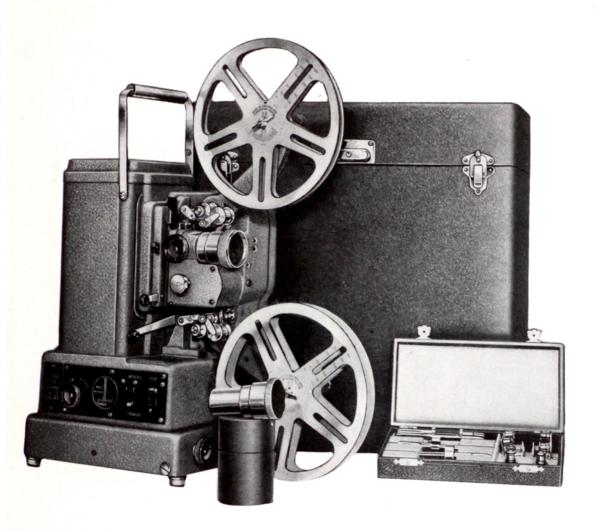
The preservation of personal movies is an all-important item, since few pictures are made without preservation in mind. We look forward to future reference to present vacations and records of friends and family. After years of use in BOLEX Projectors, films will not be scratched and worn; on the contrary, your prized possessions will be worth showing and in perfect condition.

Every part of the film transport mechanism of the BOLEX has been designed to eliminate film wear and scratching. Gate and pressure pads are made of stainless steel and each part is machined and polished to within a few ten-thousandths of an inch. In the gate channel, formed by the pressure pad and the gate itself, the film glides on lateral guides which are absolutely parallel, while a double claw of tempered steel ensures steady passage.

No G projector leaves the factory until it has passed the most rigid tests, including the projection of a small length of unused film which is passed through the projector no less than 500 times at normal projection speed and it is then microscopically examined to make certain that the mechanism is perfect.

Locking film guides and the efficiency of the gate, sprockets and pressure plate assure that film, in good condition when placed in the projector, WILL NOT JAM. Therefore, ordinary damage to film and torn sprocket holes caused by jamming are entirely eliminated in BOLEX projection.

# COMPLETE MODEL G-816 PROJECTOR OUTFIT



BOLEX, Model G-816 Projector with its Carrying Case; both 16mm and 8mm projection lenses, take-up reels and leatherette case with changeover accessories. Changing from 16mm to 8mm or vice versa, requires but a few minutes and no tools are needed.

# EMMET CARRYING CASES FOR BOLEX Models H-8 and H-16



The American Bolex Company acts as exclusive distributor for Emmet Carrying Cases in the United States, east of the Mississippi River. This fine case, made by Frank A. Emmet Company of Los Angeles, Cal., for BOLEX Cameras only, is of sturdy construction yet light in weight and of excellent quality. Lined throughout with genuine suede leather; covered with high grade leatherette and fitted with lock and key, this case is a worthy companion to the BOLEX Model H Cameras. Adequate space for camera, three or more lenses, small accessories and four 100' rolls of film.

#### AMERICAN BOLEX WINDERS



A good pair of film winders is a necessity with every projector. Editing, splicing and transferring film from one reel to another are operations which definitely call for winders. Early film winders had many draw-backs. For the most part a winder was a set of gears arranged to turn a spindle when a revolving handle was turned. A reel, fastened to a spindle, was revolved, winding the film, or re-winding it, i.e., transferring the film from one reel to another. Most present-day winders do just this and no more.

With ordinary winders, it is necessary that the operator hold one hand against the feed-reel which serves as a brake to keep the reel holding the film from turning faster than the take-up reel. If the feed-reel was not held back, the film would unwind faster than it could be taken up with the result that it would, and very often does, as users of ordinary winders know, throw itself in coils and snarls all over the floor.

Users of American Bolex film winders do not worry over film getting away from them to be irreparably damaged upon the floor. Our winders are equipped with tension control which automatically brakes the speed of the feed-reel and holds the film on that reel with any desired tension. The tension is controlled by a milled knob on the crank shaft which is instantly set with a touch of a finger.

American Bolex winders are precision built, smooth running, equipped with self-lubricating bearings that never require oil which in itself, is ruinous to film. No part of your equipment will out-match them in "eye-appeal" and no other winder will outperform them. All metal parts are heavily chrome plated, grip on handle is of beautiful red plastic and the uprights are finished in sparkling black enamel.

## THE "MASTER" TITLE LETTER KIT

Everything you need to make the finest TITLES

Easily and QUICKLY

222 characters—including capitals, small letters, numerals and punctuation marks—plus 30 periods and commas. Supplied in very sturdy partitioned box.

Included in the Master Title Kit, is the exclusive, graduated, composing templet, created by American Bolex Company. This templet is of the greatest assistance in providing the means for properly spacing and centering letters and lines. It also assures lines being straight and that the complete title is centered within the title background area.



The famous KNIGHT LETTERS, made in Seneca Falls, N. Y., by H. W. KNIGHT & SON, Inc., are distributed exclusively through the American Bolex Company. Featured in this MASTER TITLE KIT are the Knight Classic, 5%" white metal letters. These letters are furnished in either plain or pin backs. The former are fastened with rubber cement to title cards; cardboard, wood or glass. The latter are best suited for cork or other backgrounds which are easily penetrated with pins.

Letters may be tinted with water color for movie titles in color films. This color may be easily removed by washing when it is preferred to use white letters for black and white titles.

Included with each kit is a booklet of complete instructions with many helpful aids to movie titling. The templet, exclusively an American Bolex Company product, renders great assistance and simplifies straight allignment of letters, perfect centering of lines and the entire title. These were difficulties with all letter kits and work without the templet is tiresome and tedious. Once you have used the MASTER TITLE KIT you will wonder how you got along without it. Your results with this kit will be professional in every particular. Special literature upon request.

## KNIGHT LETTERS

KNIGHT LETTERS, favorably known to movie makers as the ideal letters for titling films are exclusively distributed by the American Bolex Company. These letters, made in many styles, offer the utmost in letter design. Not only do they photograph well but are easy to use, impervious to wear and adaptable to either black and white or color films. Several styles are pictured below and a special folder giving further details is available upon request.



5/8" Classic

THE SEA FOAM
THEATER
WELCOMES YOU

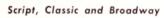
5/8" Broadway

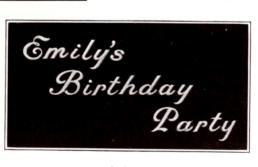
Knight metal letters and figures are furnished in lacquered black or white or in colors.



With orders for 200 or more a wooden case with 36 compartments is furnished without extra cost







Script

The following is suggested as a useful assortment of the above styles: Four each of A E I N O, three each of B C D M R S T, two each of F G H J K L P U W and two each of 1 2 3 4 5 6 7 8 9 0 & ?!, ten periods and twenty commas. Lower case letters, seven each a i o t, nine each e ,eight r s, six each g n p, five each f h l y, four each b c d j m u v w and three each k q x z.

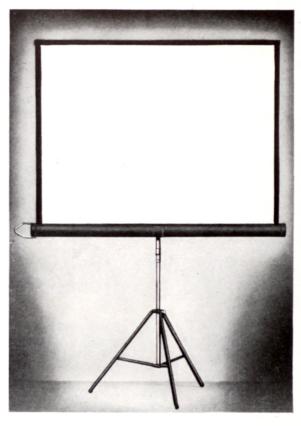
## AMBOL PROJECTION SCREENS

To the right is illustrated the AMBOL, tripod model, crystal beaded screen. Millions of tiny, crystal clear beads are securely and evenly embedded in the white pigment coating on the face of the screen fabric. Their embedded curvatures form tiny concaved reflectors. Both the pigment and the beads are highly reflective, the pigment, however, being a diffuse reflector, while the beads are directional reflectors. When used together, they tend to neutralize each other somewhat, so that the character of the light reflected is a combination of both.

Pictures shown on this type of screen, when viewed from angles less than about 15 degrees from the axis of projec-

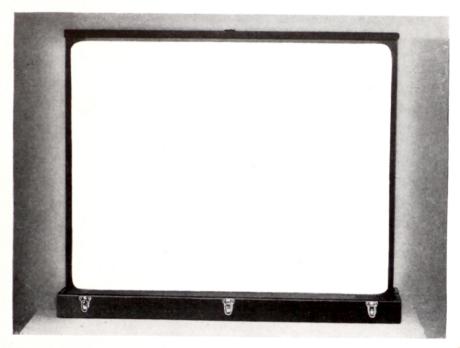
tion, are more brilliant than on any other type of screen.





The tripod is constructed of strong but lightweight metal tubing. It can be easily and quickly set up for use and when not in use can be folded into a neat, compact unit, placed in a special carrying case and easily carried. The tripod is so constructed that the height of the screen can be quickly adjusted between its lowest and highest position. This adjustment of height is not limited to two or three positions as is commonly the case with tripod models. The AMBOL is of highest quality and a suitable companion to the BOLEX PROJECTORS. Consult price list for sizes and prices. Write for special literature. The tripod model is also furnished in "Whitelite" material described on page 53.

## AUTOMATIC COLLAPSIBLE MODEL



This AMBOL model combines sturdy construction with a beauty of design that is pleasing and in harmony with the equipment of tastefully furnished homes. The carrying case is made of the best grade half-inch whitewood. It has locked jointed corners and is covered with a good grade of leatherette. Hardware is nickle-plated and handle is of sturdy leather. The screen is made to stand on table or other high flat surface.

The screen is attached to a special spring roller, mounted in the case and its upper edge is attached to a suitable top crossbar which is supported at both ends by sturdy self-acting, collapsible legs. The entire outfit is practically automatic in operation. A slightly upward pull on the top bar erects the screen

for use and a slight right twist to the ring on top bar allows the screen to be gradu-



ally lowered into the case.

Because of its fine appearance and easy portability this is a very popular model.

Like the tripod model, this screen is crystal beaded or of "White-lite" material. The latter a special rubberized fabric with a smooth "flat white" face and a black back. It reflects light diffusely and is therefore suitable for large auditoriums. It is an ideal fabric for the projection of color films but with, of course, somewhat less reflecting power than the beaded surface.



The GEARMASTER is a revolutionary all geared tilt and pan tripod head for both movie and still cameras. Gearmaster is manufactured by American Bolex Company under U. S. Patents. It provides geared circular panning for cine cameras and more efficient handling of still cameras. It eliminates entirely the protruding handle on the conventional old style head. Screws into any tripod stand.

Our new, post-war model is pictured above. We expect to start deliveries about January 15, 1946. The new GEARMASTER, made of the finest materials, will be acclaimed by all as a most practical and efficient tripod head. Thousands of GEARMASTERS were sold before the war. Our new, improved model, made of steel, brass and duralumin, precision built and smooth operating will find immediate and enthusiastic acceptance by users of both movie and "still" cameras.

Making movie panoramas with the GEARMASTER is accomplished by turning the crank which rotates the camera smoothly eliminating the jerking effect of pan shots made by hand. The precise gears move the camera as slowly as desired without back-lash and the results on the screen are professional and pleasing. Tilting the camera is a simple operation and the locking device to hold it in any position is positive. Combination pan-tilt shots are made easily and accurately. If you must pan in movie making, do so only with a GEARMASTER. This is the tripod head that put "panning" back among the permissables of movie making.

Movie makers cannot afford to be without GEARMASTER. Wherever following action in filming is desirable, such as in sports shots . . . baseball, football, swimming, yachting, etc., this tripod head will more than save its costs in turning out film that stays in the reel rather than being cut out in editing because of blurring and unsteadiness. If you do not own a GEARMASTER, do not make pan shots! Write for special literature.

# AMBOL STURDY TRIPOD

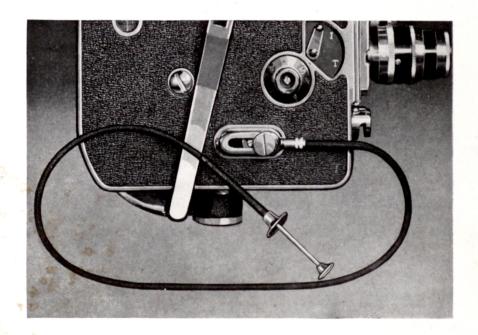
This booklet is going to press before it is possible to print photographs and details of the new, greatly improved AMBOL Tripod. There has been a need, at a reasonable price, for a good, sturdy tripod stand; a stand that will hold cameras without movement, easily and quickly adjusted for height, light to carry and easily collapsible.

American Bolex Company has studied the tripod question for many years and when our new tripod is available, about February 1, 1946, it will be found that we have produced the most satisfactory tripod stand, for heavy and light cameras, ever produced at a popular price. Not only will this new product be beautiful in appearance, light in weight, rock-steady in use but it will possess features new in the tripod field and long wanted by both "still" and movie camera owners.

It will pay you to wait for it!

#### **BOLEX CABLE RELEASES**

When movie making calls for precise work such as close-ups, technical studies, etc., a cable release is desirable. Even with the BOLEX on a tripod as it should be for such work, unsteady hands may cause slight movement when starting and stopping the camera. The cable release, shown below, affords single frame or continuous operation without fear of camera movement. A device which is attached to the starting button housing, fitted in one position, provides for single frame exposures as the release is pressed. When fitted in another position, the motor runs continuously; started when release is pressed and stopped when pressure on release button is relaxed.



The Bolex Cable Release is furnished for all Bolex Camera models. In the cut pictured above, the type for BOLEX models H-8 and H-16 cameras is shown. While a similar release is furnished for the BOLEX model L-8, we cannot at the time of going to press, illustrate this release. However, prices for releases for all models will be found in the price-list and deliveries will begin about January 15, 1946.

## SPECIAL TELEPHOTO VIEWFINDERS



Although BOLEX, models H-8 and H-16 come equipped with trifocal, parallax-correcting viewfinders which show exact fields with proper magnification for 1", 15 mm and 3" lenses, for those who wish to take telephoto pictures with 4" and 6" lenses, a special BOLEX viewfinder is available. These optical viewfinders are corrected for parallax and show exact fields, properly magnified, for the desired special lenses.

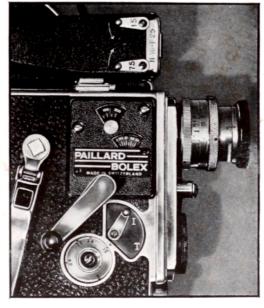


## CINEA FILM CEMENT

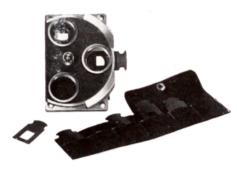
The only film cement for all kinds of film — acetate or nitrate — 35 mm, 16 mm or 8 mm. Cinea Cement is odorless, slow to evaporate from uncorked bottle, yet it joins film quickly and securely. Carried by BOLEX dealers everywhere.

## **BOLEX FRAME COUNTER**

For those who wish to make lap dissolves, fades, superimpositions and wipes, accurately, the BOLEX frame counter was designed. While all new cameras are equipped with frame counters. older models may have frame counters added. Owners may install them themselves by following simple instructions. Only a small screw driver and a few minutes are required. The BOLEX frame counter eliminates all guess work in counting frames. Every frame passing the camera gate is counted and indicated and each block of fifty frames is likewise indicated, up to 1000 frames on the model H-16, and 2000 on the H-8. Measuring the exact length of film used to fade in or out is told at a glance and rewinding can therefore be done with absolute accuracy.



## SLOT FOR GELATIN FILTERS



Motion picture cameras, equipped with several lenses, require a considerable number of filters, when outside filter mounts are used. To eliminate the necessity of carrying one to three filters for each lens, we designed filter holders which fit into a slotted face-plate behind the lens. Gelatin filter squares are purchased at very nominal cost and inserted in these holders. If, for instance, black and white movies are being made with a light yellow or green filter to emphasize cloud effects, and shots are being made with three or more lenses, it is unnecessary to carry a large number of filters or to fuss with changing filters from one lens to

another, if the BOLEX filter slot has been installed in the camera. One filter will serve all lenses and do so more efficiently than is possible with filter holders used in front of the lens. Photographically, it is far better to use filters behind the lens than in front of it. Unwanted light reflections this way are entirely eliminated. The BOLEX FILTER SLOT is the only adaptation for the BOLEX Model H-8 and H-16 cameras. It is necessary when filter slot adaptations are wanted to ship the camera, carefully packed, by express, to the American Bolex Company. We will adapt the camera and supply, in a neat leather case, five filter holders in which the owner will slide gelatin filters of the types desired. When cameras are so equipped, different lenses are revolved in the turret and the filter is always in place. When no filters are wanted, a blank holder is left in the slot. Consult price list for cost of adaptation.

#### BOLEX IRIS VIGNETTER

The BOLEX IRIS VIGNETTER is used to produce fade-in and fade-out effects. This vignetter is totally closing and precise in operation. When one is filming and it is desired to fade, the long handle on the vignetter is easily reached with

a finger and either closed or opened slowly to produce the desired effect. The vignetter screws into the sun-shade of the lenses. It is necessary to specify the make and aperture of the lens for which it is intended when ordering. Available for 1" Leitz f/1.4, Primoplan 1" f/1.5 immediately and will be available for all Kern-Paillard and Wollensak lenses early in 1946.



# CINELAL PROTECTOR

# GIVES YOUR FILMS LIFETIME PROTECTION

If you value your movie films—if they are worth anything or mean anything at all to you as a record of your life, your travels, your family—protect them with CINELAC.

CINELAC preserves films for a lifetime — protects them against scratches, finger marks, and brittleness—keeps them pliable—prevents them from curling. CINELAC protects all kinds of film—color and black-and-white, large and small. Motion picture film should always be kept flat, pliable, and free from scratches which cause "rainy" effects on the screen.



MOTION PICTURE FILM is commonly damaged in several different ways—scratched surface—warping or curling—torn or weakened perforations—brittleness. "Rainy" projection is caused by the cutting action of particles of emulsion which are deposited on the aperture plate, where they are baked hard by the heat of the projection lamp and which scratch the film as it passes during projection.

CINELAC permeates the emulsion, toughening it so that it both resists scratches and prevents particles from coming loose.

Projection-lamp heat often causes uneven withdrawal of moisture from untreated emulsions, resulting in warping and curling of the film.

CINELAC impregnates the film with a fixed chemical and holds moisture permanently in the emulsion, thus preserving the film in a flat condition and, at the same time, keeping it pliable and free from brittleness.

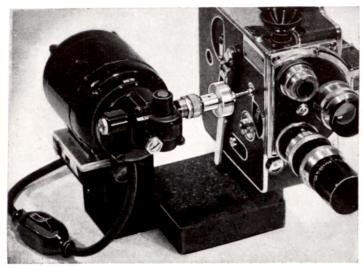
CINELAC-treated films can be enjoyed time and again, year after year, being continually projected and rewound without damage. And they do not have to be stored in a humidifier—CINELAC keeps them in good condition regardless of variations in the humidity of the air and changes in climatic conditions.

# CINELAC IS USED BY LARGE MOTION PICTURE LABS & U. S. GOVT. DEPARTMENTS

One 2-ounce bottle of CINELAC is sufficient to treat over 5,000 square inches of negative surface or nearly 1,500 feet of 16 mm motion-picture film. It costs only \$1.00 per bottle.

EASY TO APPLY

## AMERICAN BOLEX SYNCHRONOUS MOTORS



Although the spring motor in BOLEX cameras operates at constant speed from first frame to last, regardless of the degree to which the spring is wound, there are times when the 'take" may require a longer period than the capacity of the spring motor permits. There also is work which sometimes is much simplified when camera may be driven electrically. And, when films are produced to which it is intended to add sound. a speed of 24 frames must be constant and the synchronous motor is designed to run at this speed and no other. The motor is equipped with an automatic clutch which disengages, if for some unusual reason. there is a sudden drag placed upon the motor. The motor itself is mounted on an aluminum alloy base-properly

balanced—and it fits, with the camera, on all tripods. These motors were furnished before the war and will be furnished again with deliveries starting early in 1946. Model SA6, 60 cycle, 110 volt AC, operates at 24 frames per second. Special literature will be available in February 1946. Deliveries are expected to start about March 15, 1946.

# AMERICAN BOLEX LENS CLEANER



One drop of this lens cleaner will assist in removing all dirt from outer lens surfaces. It is ideal for cleaning both camera and projection lenses. A drop is applied to the surface and a clean, lintless cloth is used lightly to remove all smudge and dust particles. After its use, lenses are brilliantly clean and covered with a protecting surface coating which keeps them clean longer. Enough in one bottle to last for years.

#### **NEW ACCESSORIES**

This catalogue contains advance information on but a few of the motion picture camera and projector accessories which will be released by the AMERICAN BOLEX COMPANY during the first half of 1946.

Many precision items, such as the AMBOL PRECISION TITLER for making home movie titles; the AMBOL FILM SPLICER which will operate differently and with greater speed and efficiency than any splicer yet placed on the market and THE AMBOL FILM EDITOR, a movie viewer giving extreme brilliance and perfect action, showing every frame, are among the accessories which we will place on the market during 1946.

The BOLEX cameras, as shown in this catalogue, will undergo no change in design. As they are today, they are as efficient as motion picture cameras can be made. With anything mechanical, some slight improvements are incorporated from year to year and this natural progress of course, will be evident with BOLEX in the years to come. The present-day BOLEX is already the motion picture camera of the future; being years ahead, in its present models, of the entire field. BOLEX will maintain this position.

The AMERICAN BOLEX COMPANY has earned a reputation for quality merchandise of which it is very proud. The new accessories we are planning for movie makers will be welcomed and acclaimed by them as representative of the high quality to which amateur movie makers have become conscious in our past and present-day products.

## **OUR GUARANTEE**

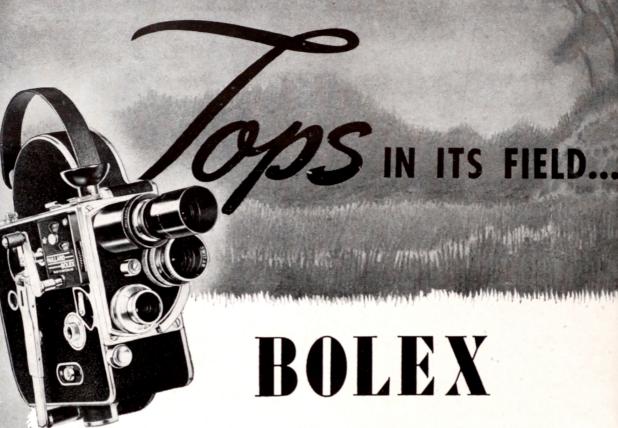
All BOLEX products are unconditionally guaranteed against defects in workmanship and materials for one year. If mechanical defects are going to show up in a mechanical product they will become evident well within a year. We could, if we desired to indulge in extravagance, call this guarantee a "lifetime quarantee". Since all quarantees of all things mechanical cover only defective materials and workmanship and since such defects, if they are going to show up at all, will become evident well within a year, serious minded buyers expect no longer guarantee period. We will replace or repair, without cost whatever to the owner, any defective mechanism which may appear in new BOLEX cameras for a period of one year from the date of purchase. And, if the unusual did happen and a defect came to our attention, which was definitely caused by faulty materials or workmanship at any time during the life of the camera, it would be corrected without charge.

#### SERVICE

Expert mechanics, trained in the construction and maintenance of BOLEX cameras stand ready to handle all items of service owners of BOLEX cameras may require. Adequate stocks of all camera and projector parts are always on hand in our service department and careful, courteous, painstaking and expert attention is at all times available to all owners.

# INDEX

Accessory Lenses 24, 25, 26, 27	, 28	Interchangeable lenses	11, 33
Ansco Film	19	Knight letters	51
Animation	5	Lamps for projectors	
Audible footage counter	10	Lenses for Bolex cameras	
Automatic threading	7	Letters (for titles)	
American Bolex lens cleaner	60	Master title kit	56
American Bolex synchronous motors	60	Micrometer focusing	43
American Bolex winders	49	Miniature camera	
Ambol projection screens 52	2-53	Motors (electrical synchronous)	60
Ambol sturdy tripod	55	Optical viewfinder 1	0, 33, 57
Bolex camera,		Paillard and Co.	
Model H-162, 8, 10, 11, 20	, 21	Pan and tilt head	62
Bolex camera, Model H-8	, 23	Parallax correcting viewfinder	
Bolex camera, Model L-830	, 39	Preserving films	59
Bolex, Model G projector40	, 47	Pressure plate	11, 33
Cable Releases	56	Printer (camera as a)	11
Carrying cases	48	Professional effects	4-5-6
Cement, Cinea		Projectors	40, 47
	15	Projection lamps	41
Cinelac	59	Repairs	62
Cooling (projector)	46	Rewinds (American Bolex)	49
Counter (Frame)		Screens (Ambol)	52
Cranking (hand-camera)	15	Service for Bolex	62
Critical visual focusing	14	Shutter (focal plane)	16
Double blade shutters (projector)	46	Shutter (single-double blade, p	oro-
Eastman film	19	jectors)	
Eight millimeter		Special viewfinders	57
cameras	, 39	Specifications, Bolex H-16	10-11
Eight hundred foot reel arms		Specications, Bolex H-8	
(projector)	41	Specifications, Bolex L-8	33
Electric synchronous motors	60	Still photography	4-5-6
Film protection (Cinelac)	59	Synchronous motors	
Filter slot adaptation	58	Telephoto lenses	6, 27, 28
Focal plane shutter	16	Titlers	
Footage counter	15	Tripod	
Forward action by hand crank	15	Tripod head	
Frame counter	57	Variable speeds	
Gelatin filters	58	Viewfinders	13, 57
Guarantee	62	Vignetter	
Gearmaster	54	Visual focusing	
Hand crank (camera)	15	Wide angle lenses 2	6, 27, 28
Inside of Bolex camera	8	Winders (American Bolex)	49



BOLEX motion picture cameras are thoroughbreds which, like the hunter pictured above, give flawless performance and serve their owners faithfully for a lifetime.

The word "precision" is used to cover a multitude of descriptions in the motion picture camera field. To define just how much "precision" goes into the making of a specific camera might be as difficult to do as to define just how high is "up." A buyer usually gets as much precision as he pays for. But, when buyers get more precision than they are used to at a price, they are doubly satisfied. There are tens of thousands of doubly satisfied buyers, owners of BOLEX cameras, in the United States.

BOLEX cameras are made in the Paillard factories where precision instrument manufacturing has gone on for over 130 years. The workers in these factories are craftsmen to whom precision manufacturing is an art. For the most part, these workers are descendants of other workers who, like themselves, became masters of precision production under Paillard management. BOLEX cameras are not made under mass production methods. Each part of every camera is precisely made and assembled with expert care by men who take pride in their craftsmanship. The highest grade watches are not made under more painstaking care than are BOLEX cameras.

As with high grade watches, oil cans are not packed with new BOLEX cameras for a new BOLEX camera needs no oiling for at least three years under normal conditions. When oiling is necessary, the camera, like a fine watch, is sent to us for a cleaning and oiling job. Only precision mechanism of the highest character is designed to receive this sort of treatment. Yes, BOLEX cameras are products of the utmost in precision manufacturing skill. BOLEX cameras are thoroughbreds.

#### **BOLEX MODEL H-16**

Our model H-8 is identical in every detail with the Model H-16 pictured above. The H-8 is for double-eight millimeter film taking 25′, 50′ or 100′ film rolls. The H-16 is for 16mm taking either 50′ or 100′ film rolls. Both provide automatic threading, parallax correcting viewfinders, critical visual focusing, still picture mechanism for snapshots or time exposures, frame counters, rewinding mechanism, operation by spring motor or by hand crank, all speeds from 8 to 64 frames, turrets for three lenses, and many refinements found in no other motion picture camera. Price, Model H-8, without lens, \$200.00. Standard 8mm lenses fit the H-8. Soon—a new 8mm lens for this camera will be announced. Price Model H-16, without lens, \$200.00. With Kern-Paillard Switar 1″ F/1.4, \$357.50; in beautiful leather case, \$397.00. (Excise tax on Switar lens, \$26.25; no tax on camera.) Model H-16, with Kern-Paillard, Yvar 1″ F/2.5, in micrometer focusing mount, \$258.50; complete with case, \$298.00. (Excise tax on Yvar 1″ F/2.5, \$9.75; no tax on camera.) Frame counter for H-16 or H-8, \$17.50 additional on each model.





#### THE WORLD'S FINEST LENS FOR THE WORLD'S FINEST 16MM MOVIE CAMERA

Your fondest hopes and desires for postwar perfection in motion picture lenses could never approach that which is available to you in the new Paillard-Kern, Switar 1" F/1.4. This motion picture lens is as far in advance in its field as BOLEX cameras have always been. It is a BOLEX product, designed by Paillard and produced by Kern, makers of the world famous Kern microscopes and other precision optical goods. The new Switar is double-coated; an anti-glare coating has been applied to both surfaces of all elements. It will film brilliant subjects against the light without halation.

Movies made with the Switar have a new, sparkling brilliance and realistic depth. Its full chromatic correction and optical precision make it an exceptionally efficient "color" lens. Diaphragm stops lock automatically in position and stay where set until intentionally moved. An ingenious depth of field scale operates automatically as diaphragm stops are set and the distances from camera at which subjects will be in sharp focus is instantly read. In fact, one cannot set the diaphragm without reading this depth of field scale. This feature is another BOLEX "first" that will be welcomed with open arms by the movie fraternity.

The focusing mount is of Paillard precision and makes Switar the smoothest lens to operate that has yet been produced. The focusing scale runs from 1½" to infinity. Even at full aperture, the Switar renders an astonishingly sharp and contrasted picture with focus consistent from corner to corner. We say without hesitation or fear of contradiction that the Switar is the finest 16mm movie lens ever made anywhere in the world. It is now available for the BOLEX Model H-16. Price, \$157.50.

# BOLEX MODEL L-8

This little gem of the 8mm field is just a beautiful handful of precision mechanism. It may be carried in a side coat pocket or hung from the wrist with a leather strap. The at may be carried in a side coat pocket or nung from the wrist with a leather strap. The case of this camera is of sturdy duralumin, covered with genuine leather, chrome plated trim. The L8 is designed to produce movies at normal speed and exact exposure. The trim. The L-8 is designed to produce movies at normal speed and exact exposure. The constant speed spring motor and governor in this camera do not permit uneven speed, i.e., a sputtering and slowing of mechanism as the motor nears the end of its power. Each frame in every sequence receives the same exposure, viz., 1/30th second at 16 frames per second. When the speed changes in cameras without constant speed motors the exposure changes, resulting in over-exposure in the latter part



of each sequence and a stepping-up of the action beyond normal. of each sequence and a stepping-up or the action beyond normal. This will not happen in the precise BOLEX L.8. Equipped with the Kern-Paillard Yvar 1/2" F/2.8 lens, the BOLEX L.8 is in the vanguard of all small eights from the standpoint of precision construcfrom ease of operation and accurate performance. An ideal camera tion, ease of operation and accurate performance. An ideal camera for the sportsman. Perfect for the ladies, and just the "ticket" for newcomers to the home movie fraternity. Price, \$68.75, with zipper sudded base. Kern-Paillard ½" Yvar F/2.8 lens in micrometer focusing mount, \$50.80. Excise tax, \$12.50 and \$8.47, makes this complete outfit, with taxes, \$140.52



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