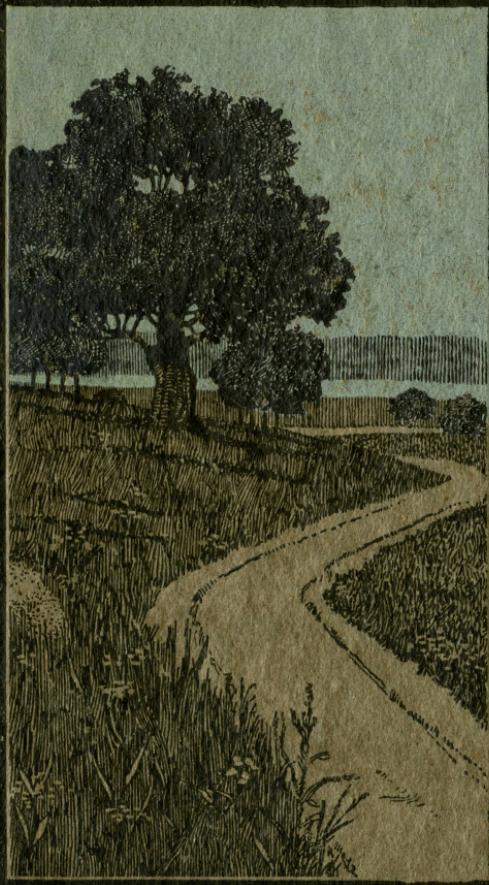


WOLLENSAK
LENSES *and* SHUTTERS



WOLLENSAK
SHUTTERS



NOTICE



THE working models of the new Victus, Regno and Autex shutters as listed and described in this catalogue are completed, the patent has been applied for and the dies and tools for producing them are well under way. We expect that the No. 2 size will be ready before May 1st, and the other sizes shortly after that.

Orders received for Victus, Regno and Autex shutters will be filled with the types listed in our 1911 catalogue until the new designs are ready for delivery.

WOLLENSAK OPTICAL CO.

A Catalogue of



PHOTOGRAPHIC
LENSES & SHUTTERS
made by the
**WOLLENSAK
OPTICAL
COMPANY**
of ROCHESTER, N.Y.

1912 - 1913

Introductory

HE past three years have witnessed advances in every branch of photography. From a sturdy youngster it has leaped by bounds into manhood, and has become generally recognized and accepted as one of the arts and sciences.

The demands of the purchasers of photographic equipment have become more exacting each year, until now, quality is the prime factor. This fact, together with the greatly increased demand for products of the highest grade, has made it necessary to invent and perfect labor and time-saving machinery, and processes of manufacture, thereby enabling progressive manufacturers to market their products at a moderate price, and at the same time, maintain their high standard of quality.

This company has enjoyed a steady and substantial growth during this period, brought about, no doubt by the methods employed in the manufacturing and marketing of their products. The policy of the company has been to keep abreast of the times: to produce one grade of products—the best possible to make—and to market the same at a reasonable price; to give their customers liberal and courteous treatment and prompt and efficient service at all times.

A photographic lens or shutter is but a tool in the hands of the operator be he an amateur or professional, and we have learned by years of experience that while one person will obtain results satisfactory in every respect with a lens, another fails to obtain even fair results. On this account we make it a condition of sale in every instance to—"Let the User Judge"—which places each purchaser of Wollensak Products in a position where he is the sole judge as to whether the instrument he has bought, or is interested in is adaptable to his particular requirements and capabilities or not.

Our lenses and shutters are being used in the principal studios and by the leading workers in every branch of photography, and it is a generally conceded fact that the name WOLLENSAK on a lens or shutter is an absolute guarantee of quality and perfection.

The list prices as shown in this catalogue supersede all previous lists and attention is called to the fact that a reduction in price has been made in nearly every case where a change has been made.

Ask our Promotion of Trade Department about it

Velostigmats



HE manufacture of photographic lenses is a complicated one, involving the installation of expensive machinery, the employment of skilled labor and the utmost care in preparing formulas.

Theory in lens making has its place, but as practical results are desired, an objective may be theoretically correct, but as a practical working tool, a blank failure. The incorporation of the two branches—practical and theoretical—makes an ideal combination. In our lens department these two branches have been linked together, with the result that our product is as near perfect as money, experience, skill and care can make it.

Velostigmats are fully corrected objectives of the Anastigmat type. The name "*Velostigmat*" is a trade name adopted to distinguish Wollensak Anastigmats from other makes, and is derived from the Latin words meaning velocity and stigmatism. The glass used in making *Velostigmats* is of the highest grade possible to obtain, and no expense is spared to eliminate any possible error that might occur in the making of them from the time the glass is fused until the finished lens is shipped.

The average photographer has a misconception of the possibilities of anastigmat lenses when compared with the Symmetrical, etc. Like fine tools of any kind they require more careful handling, in fact more thought in operating to get the best results, but once the user discovers their wonderful possibilities, the results obtained will be far superior than is possible with any other type of lens.

Exposures can be made with *Velostigmat* lenses at times when cheaper types would be of absolutely no use.

We have repeatedly said—"There are cheaper Anastigmats than the *Velostigmat*, but they are not as good," "there are higher priced ones, but they are no better," and this claim backed up by our broad guarantee gives absolute protection to the purchasers of them.

In choosing a lens do not be misled in the belief that one lens will do all kinds of work with the best results. For portraiture, a portrait lens; for speed work, a speed lens; for as near an all-around lens as can be obtained, the most desirable is an Anastigmat working at a moderate speed.

Your dealer is a Wollensak dealer

Velostigmat, Series I. F:6.3

It is a remarkably good lens.—G. A. Streeter, Pawnee, Okla.

I have used lenses of foreign make that cost nearly double the price of the Velostigmat, but they are certainly no better. In fact, I consider the Velostigmat superior to any of them.—D. C. Boone, Greensboro, N.C.



It is a wonderful lens—the best I ever used.—Chester Stevenson, N. Yakima, Wash.

I am using a Velostigmat lens of $6\frac{1}{2}$ " focus on a No. 4 kodak with great success.—F. J. Bradie, Kingston, N.Y.

My Series I. Velostigmat lens gives excellent satisfaction.—F. M. Somerville, Peterborough, Canada.

AFTER a most thorough series of experiments and tests, we have succeeded in increasing the working speed of the Series I. from F:6.8 to F:6.3 without detracting from its high quality or fine optical corrections. The mechanical and optical construction of this lens is of the highest order and it is fully corrected for spherical and chromatic aberration and astigmatism. The finish whether mounted in barrel or in shutter is black enamel with gold engraving, making it durable, practical and beautiful in appearance.

The Series I. is as near an "all-around" or "general purpose" lens as can be made, and because of its small size is especially desirable for compact cameras and Kodaks. It will cover plates two sizes larger than is listed for by stopping down and single combinations are corrected for separate use by stopping down. The Series I. is especially desirable for landscape and view work, architectural and commercial photography, copying, enlarging, and for all classes of work requiring a perfectly corrected objective.

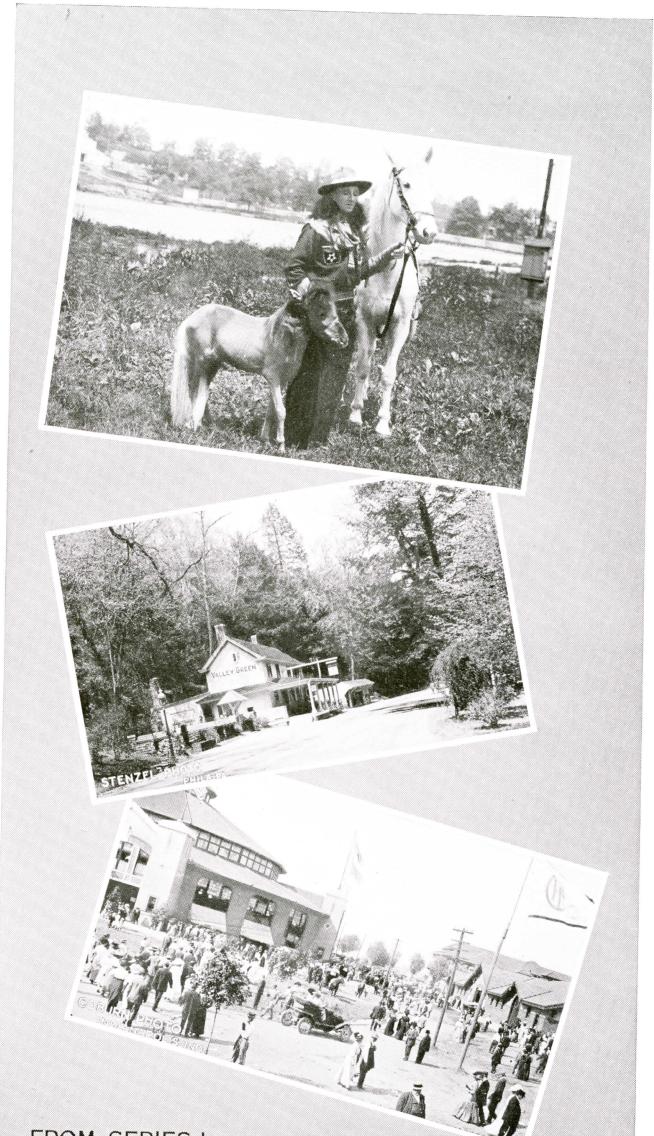
We can supply the Series I. lenses in cells to fit the $3\frac{1}{4} \times 4\frac{1}{4}$ — $3\frac{1}{4} \times 5\frac{1}{2}$ and 4×5 sizes Folding Pocket Kodaks, Senco and Ansco roll film cameras. To secure perfect results all anastigmat lenses should be mounted and fitted at the factory.

No.	Diam. of Lens	Equivalent Focus	Plates Covered Sharply at F:6.3	With Barrel or Regno Shutter	With Autex Shutter	With Optimo Shutter
1	$\frac{7}{8}$ in.	5 in.	$3\frac{1}{4} \times 4\frac{1}{4}$	\$ 25.00	\$ 28.00	\$ 35.00
2	1 "	6 "	4×5	30.00	33.00	40.00
2a	$1\frac{1}{8}$ "	$6\frac{1}{2}$ "	$3\frac{1}{4} \times 5\frac{1}{2}$	30.00	33.00	40.00
3	$1\frac{1}{8}$ "	7 "	5×7	38.00	42.00	50.00
4	$1\frac{1}{2}$ "	10 "	$6\frac{1}{2} \times 8\frac{1}{2}$	58.00	62.00	70.00
5	2 "	13 "	8×10	70.00	75.00	85.00
6	$2\frac{1}{2}$ "	$16\frac{1}{2}$ "	11 x 14	125.00		

NOTE—To ascertain cost of Velostigmat in mounts fitted to customer's own shutter, deduct following amounts from list prices in barrel:
No. 1, \$3.00; No. 2, \$4.00; 2 A -\$4.00; No. 3, \$5.00; No. 4, \$6.00; No. 5, \$7.00; No. 6, \$8.00.

Portrait on Title from Verito negative by B. C. Golling, St. Paul, Minn.

Ask us or your dealer about it



FROM SERIES I.
VELOSTIGMAT NEGATIVES.

Velostigmat, Series II. F:4.5

It is by far the best Anastigmat lens I have ever used—J. E. Mock, Rochester, N. Y.

My 8x10 Series II. is giving the best of satisfaction and is superior in every way to your claims for it.—Harris & Ewing, Washington, D. C.



The Velostigmat Lens is the finest Anastigmat I ever saw for portrait work.—W. M. Deming, Winsted, Conn.

The Velostigmat Lens Series II. F:4.5 is giving excellent results and is in every way a most satisfactory lens.—Edward F. Weckel, Canton, Ohio.

THE Series II. is the latest addition to our *Velostigmat* Series. It is fully corrected in every respect, and is at least equal to any objective of its type on the market. The smaller sizes are particularly adapted to cameras of the Reflex type and all outfits where extreme speed and fine definition is desired. The three larger sizes are equipped with our simplified diffusing adjustment, making them desirable and practical for use in the studio, for portraits and groups, and all classes of professional work as well as for home portraiture, etc.

The diffusing adjustment enables the operator to obtain an even degree of diffusion or softness over the entire plate. This is a decided advantage in an Anastigmat lens—in reality giving the owner two lenses in one. Without the use of the diffusing adjustment, the Series II. is desirable for any class of work to which an Anastigmat can be adapted, and by using the diffusion adjustment it at once becomes a thoroughly practical portrait lens. The single combinations of the Series II. cannot be used separately, as they are not corrected for use alone.

No.	Diam. of Lens	Equivalent Focus	Plates Covered Sharply at F:4.5	Price		
				With Barrel or Regno Shutter	With Autex Shutter	With Optimo Shutter
1	1 $\frac{1}{4}$ in.	5 in.	3 $\frac{1}{4}$ x 4 $\frac{1}{4}$	\$ 35.00	\$ 40.00	\$ 46.00
2	1 $\frac{5}{8}$ "	6 "	4 x 5	42.00	47.00	53.00
3	1 $\frac{5}{8}$ "	7 "	5 x 7	50.00	55.00	62.00
4	1 $\frac{7}{8}$ "	8 $\frac{1}{4}$ "	5 x 8	65.00	70.00	77.00
5	2 $\frac{1}{4}$ "	9 $\frac{1}{2}$ "	6 $\frac{1}{2}$ x 8 $\frac{1}{2}$	89.00	85.00	92.00
6	2 $\frac{3}{4}$ "	12 "	8 x 10	120.00		
7	3 $\frac{9}{16}$ "	15 $\frac{1}{2}$ "	11 x 14	200.00		

The No. 5, 6 and 7 sizes have diffusing adjustment which makes them particularly valuable for portrait and group work.

NOTE—To ascertain cost of Velostigmat in mounts fitted to customer's own shutter, deduct following amounts from list prices in barrel:

No. 1, \$3.00; No. 2, \$4.00; No. 3, \$5.00; No. 4, \$6.00; No. 5, \$7.00; No. 6, \$8.00; No. 7, \$9.00.

The largest size Series II. that can be mounted in Regno shutter is No. 6. No. 5 and the larger sizes can be mounted in our Studio shutter.

Again we say "Let the user judge"



FROM SERIES II.
VELOSTIGMAT NEGATIVES.

Velostigmat Wide Angle, Series III. F:9.5

Your 8x10 Wide Angle Velostigmat is the finest we have ever seen. Morris Carter Photo Supply Co., Galveston, Texas.

We are more than pleased with the 11x14 Velostigmat Wide Angle lens sent us some few weeks ago. Steig & Brown, Washington, D. C.



The Velostigmat Wide Angle lens purchased of you some time ago is giving perfect satisfaction, and I believe it to be one of the best purchases we have ever made in our photographic department.
—Louis Wisa, Mgr. Art Dept., Newark Evening News, Newark, N. J.

THE Series III. is specially adapted to interior, architectural, mechanical and all classes of work where it is necessary to work in confined space or where a fast objective with a wide angle is desired. It gives a perfectly flat field and covers the plate sharp at full aperture, and on account of its speed is most desirable for flash-light work of interiors, etc.

The angle of field is 90 degrees, although a greater angle can be obtained by stopping down and using it on the next size larger plate than it is listed for.

The Series III. can be furnished in barrel with iris diaphragm and cap or with our shutters as listed below.

Angle of Field 90 Degrees

No.	Working Aperture	Equivalent Focus	Plates Covered at Full Aperture F:9.5	Price		
				With Barrel or Regno Shutter	With Autex Shutter	With Optim Shutter
1	.48 in.	4 $\frac{3}{4}$ in.	5 x 7	\$30.00	\$34.00	\$ 42.00
2	.60 "	5 $\frac{1}{2}$ "	6 $\frac{1}{2}$ x 8 $\frac{1}{2}$	40.00	44.00	52.00
3	.66 "	6 $\frac{1}{2}$ "	8 x 10	50.00	55.00	65.00
4	1.00 "	9 $\frac{3}{4}$ "	11 x 14	85.00	90.00	100.00

I am more than pleased with the Verito. It is all you claim for it. It gives a softness, roundness and breadth that cannot be surpassed by any lens.—John Schlitterhard, Newark, N. J.

I have not yet had an opportunity of testing your Verito lens as fully as I should wish. I have examined the image which it projects on the focusing screen, together with the results which it has given in the hands of other workers, and as a result of these investigations (more or less incomplete though they may be) I should be inclined to consider it the most satisfactory objective which has yet been furnished to the photographic artist.—Paul Lewis Anderson, East Orange, N. J.

After pretty thoroughly trying out the Verito and Series II. Velostigmat, I find it impossible to get along without the Verito. It gives a drawing of the image and diffuses the composition with the atmosphere not to be approached by any other type of objective.

I wish to thank you most heartily for your kind and generous assistance and courtesy in the forwarding of lenses and to congratulate you upon the production of such a delightful instrument as the Verito which if I am not mistaken made its initial appearance under the name of the Bodine Pictorial lens.—Joseph Maerz, Syracuse, N. Y.

A Wollensak Lens or Shutter for every purpose

"Let the User Judge"

THAT we guarantee our product is a matter of course—all reputable firms do so, but we go a step farther, and take the attitude that we don't care to make a sale unless it is to a thoroughly satisfied customer, and we don't consider it good business policy to force our goods on anyone. The merits of our products are presented in a truthful, concise manner, no claims being made for them that will not bear out our statements in every respect.

We aim to furnish the prospective customer with all necessary information regarding our product, and will be pleased to arrange a trial period of from ten to thirty days with a customer's dealer, for any of our products they may be interested in, so that they may be tried out intelligently for the work desired and in comparison with competitive articles. We are then content to "Let the User Judge" and purchase whatever suits him best.

When I called at one of our local photo supply stores I learned from the head of the Lens Department, as well as from two other employees, something which ought to please you, and that is the high favor in which they hold your photographic lenses. Not only are your lenses efficient, and well made, but your firm seems to enjoy a very high reputation for integrity and square dealing.

WILFRED A. FRENCH, Boston, Mass., *Editor Photo Era*.

Versar Portrait and View, F:6

It is the best all-around lens I have ever used.—R. M. Wenger, Richmond, Ind.

My 8x10 Versar is a very fine instrument and I am using it for full figures, cabinet work and small groups with the best of satisfaction.—The Fadner Studio, Neenah, Wis.



I am so well pleased with the working of the Versar Lens which I have just sold to one of my customers that I have already recommended it to several others and hope to own one myself at an early date.—W. F. Oliver, Baldwinsville, Mass.

THE *Versar* is similar in construction to our three-focus Symmetrical, but larger in diameter and shorter in focal length. The two elements are of the same focal length being about double the equivalent focus, and can be used separately. *Versars* mounted in shutters are furnished with two sets of stops, the lower set for the double lens, the upper for the single lens. Only the best optical glass is used in its construction and the grinding and polishing, etc., is done with the utmost care.

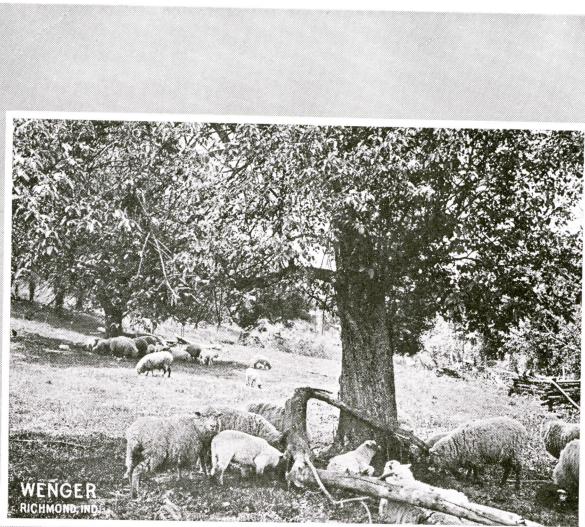
The *Versar* is a general purpose objective moderate in price and has met with a large sale. The high speed of the *Versar* makes it desirable for Studio work for busts, full lengths and groups, and because of its small size is a practical objective for home portraiture. Very satisfactory view work can be done with the *Versar* when slightly stopped down, and its construction is such that it is very desirable for enlarging, copying, etc.

The *Versar* is mounted in polished and lacquered barrels with iris diaphragm and cap, or can be fitted with various shutters as listed below. We recommend the *Versar* to anyone desiring a compact inexpensive lens for all classes of work. The *Versar* will not give fine definition to the extreme corners of the size plate for which it is listed unless stopped down.

No.	Size	Diameter	Equivalent Focus	Mounted in Barrel	With Regno or Studio Shutter	With Autex Shutter
1	4 x 5	1 1/4 in.	6 1/2 in.	\$16.00	\$17.00	\$19.00
2	5 x 7	1 1/2 " "	8 1/4 "	19.00	20.00	22.00
3	6 1/2 x 8 1/2	1 3/4 "	9 1/4 "	25.00	27.00	30.00
4	8 x 10	2 "	11 3/4 "	33.00	35.00	
5	10 x 12	2 1/2 "	14 3/4 "	42.00	45.00	
6	11 x 14	2 7/8 "	16 1/2 "	54.00	57.00	
7	14 x 17	3 1/8 "	18 1/4 "	70.00	75.00	
8	17 x 20	3 3/4 "	22 1/2 "	90.00	95.00	

NOTE—No. 5 is the largest size that can be mounted in Regno shutter. No. 3 and the larger sizes can be mounted in our Studio shutter.

Wollensak on a lens is a guarantee of perfection



WENGER
RICHMOND, IND.



© HARRIS-EWING
WASHINGTON, D.C.

FROM VERSAR NEGATIVES.

Verito Diffused Focus, F:4 (True to life)

The Verito is great.—
L. Newman, New York,
N. Y.

The Verito is a wonderful lens.—William H. Towles, Washington, D.C.

I have two other soft focus lenses, but prefer yours—C. A. Yont, Denver, Colo.



I like it very much.—
William H. Rau, Philadelphia, Pa.

We could not get along without it.—Knauff & Brother, Knoxville, Tenn.

The Verito surely makes pictures as the eye sees—
Henry Sihler, Mount Vernon, N. Y.

SINCE its introduction the *Verito* lens has met with a most welcome reception by the best known workers in artistic portrait and landscape photography, because of the fact that it is a practical objective for the worker desiring a tool that will allow him to put individuality into his work.

The first *Verito* placed upon the market had a speed of F: 5, but after a thorough series of investigations and experiments we have improved upon the original formula and increased the speed to F: 4, at the same time eliminating all ghost and flare.

The amount of definition now obtained with the *Verito* at F: 4 is about the same as obtained with the first models at F: 6, making it more desirable for the average user.

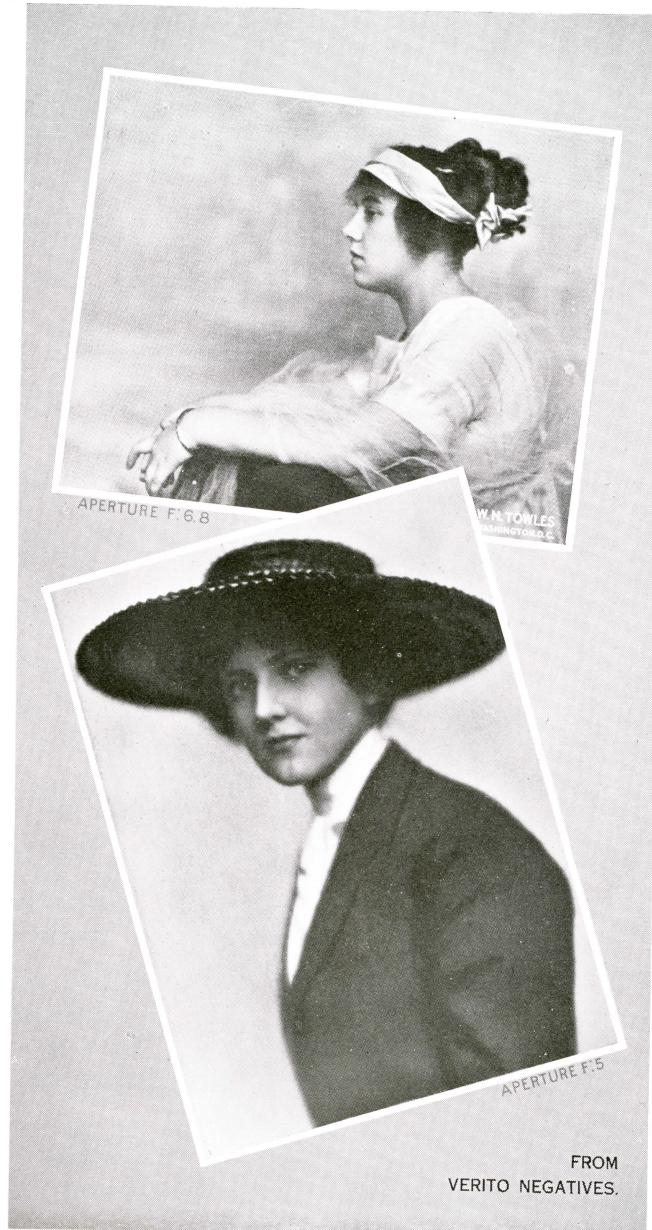
The *Verito* is a distinctive lens isolated from single objectives sold for diffused focus work, inasmuch as it is a specially designed double lens made on an original formula, which, while it gives the desired diffused or soft effect, shows no distortion, double lines or other optical imperfections, and being rectilinear gives an even definition over the entire plate.

The owner of a *Verito* can make portraits, groups and landscapes "as the eye sees," but it will not make sharp negatives with wiry definition unless stopped down to F: 8.

It is furnished mounted in polished and lacquered brass barrels, trimmed in black enamel, equipped with our between-the-lens Studio shutter.

NO.	SIZE	EQUIVALENT FOCUS	DIAMETER OF LENS	PRICE WITH STUDIO SHUTTER
1	5 x 7	9"	2 $\frac{1}{4}$ "	\$25.00
2	6 $\frac{1}{2}$ x 8 $\frac{1}{2}$	11 $\frac{1}{2}$ "	3"	35.00
3	8 x 10	14 $\frac{1}{2}$ "	3 $\frac{1}{2}$ "	50.00
4	11 x 14	18"	4 $\frac{1}{16}$ "	70.00

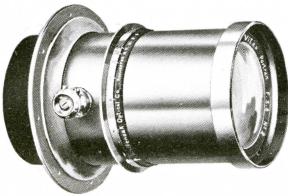
The Wollensak line is a complete line



FROM
VERITO NEGATIVES.

Vitax Portrait, F:3.8

To say I am pleased with the Vitax Lens for portrait, bust and other work is putting it mildly. The diffusing attachment in this lens really does the work.—Manly W. Tyree, Raleigh, N. C.



I consider my No. 3 Vitax superior in every respect to any of the lenses I have ever had costing even two or three times its price. — The Fadner Studio, Neenah, Wis.

THE success of the *Vitax* for general studio work has been very marked, and it has become the favorite objective of many of the leading workers in this country. Used wide open for head and bust work at the extreme high speed of F:3.8, fast exposures are possible on those dull dark days when a slower lens would be of no value.

By stopping down slightly, and the use of its simplified diffusing adjustment, it can be used for full lengths and group work as this adjustment equalizes the definition.

The diffusing adjustment is simple and effective, the front lens only of the rear system being movable, so that the optical formula is preserved thereby enabling the operator to secure an image with that beautiful roundness and softness both free from wiry definition and objectionable fuzziness.

Herr Dührkoop of Berlin, Germany, the noted photographer, selected a No. 3 *Vitax* for use in his demonstrations at the St. Paul Convention of the Photographers' Association of America in 1911.

The *Vitax* is handsomely finished in lacquered brass with black enamel trimmings and can be furnished either in barrel with iris diaphragm and cap or mounted with our Studio shutter.

No.	Diameter of Lens	Equivalent Focus	Outside Diameter of Flange	Price
1	3 in.	10 in.	5 $\frac{3}{8}$ in.	\$ 70.00
2	3 $\frac{1}{2}$ "	13 "	6 $\frac{1}{2}$ "	90.00
3	4 $\frac{7}{8}$ "	16 "	7 $\frac{5}{8}$ "	125.00

List prices if equipped with Wollensak between the lens Studio shutter:
No. 1, \$78.00; No. 2, \$100.00; No. 3, \$137.00.

Ask questions, we like to answer them



FROM
VITAX NEGATIVES.

Vesta Portrait, F:5

I am using your Series A Portrait lens and find it O.K. C. S. Greninger, Renova, Pa.

I use a Series A lens for portrait work, enlarging, etc., and it gives entire satisfaction.—W. A. Horner, Weldon, Iowa.



It is the best lens I have ever used.—J. W. DeWolf, Sebring, O.

The Series A is the best lens for the money I have ever seen.—E. H. Western, Tropico, Calif.

THE *Vesta* was formerly called the Series A Portrait Lens, and as such is giving the best of satisfaction in hundreds of studios both large and small. We have re-named it without changing its optical construction to make the name coincide with our other lenses.

The *Vesta* is a moderate priced studio lens fast enough for all ordinary work and equally suitable for busts, standing figures and groups. Negatives made with the *Vesta* have a snap and sparkle that has made it a favorite with many operators.

The front combination is corrected for use alone thereby giving the owner really two lenses, but the single combination is considerably slower than the complete lens as it requires stopping down to cover the plate. To use the same, unscrew the rear combination and put the front one in its place. The focus when used in this way is as follows:

No. 1, 9 inches; No. 2, 11; No. 3, 14; No. 4, 17; No. 5, 21.

The *Vesta* is mounted in polished and lacquered brass barrels with black enamel trimmings, and is supplied with iris diaphragm and cap or can be mounted with our Studio shutter.

No.	Size	Diameter of Lens	Equivalent Focus	Outside Diameter of Flange	Price
1	$3\frac{1}{4} \times 4\frac{1}{4}$	$1\frac{5}{8}$ in.	6 in.	$3\frac{1}{4}$ in.	\$15.00
2	4×5	$1\frac{7}{8}$ "	7 "	$3\frac{3}{4}$ "	20.00
3	5×7	$2\frac{1}{2}$ "	10 "	4 "	25.00
4	$6\frac{1}{2} \times 8\frac{1}{2}$	$2\frac{1}{2}$ "	12 "	$4\frac{1}{2}$ "	35.00
5	8×10	3 "	14 "	$5\frac{1}{4}$ "	50.00

List prices if equipped with Wollensak between the lens Studio shutter:
No. 3, \$32.00; No. 4, \$42.00; No. 5, \$58.00.

If you cannot decide, ask us for advice



FROM
VESTA NEGATIVES.

Three Focus Symmetrical, F:8

I am using your Three Focus Symmetrical with entire satisfaction. R. S. McConnell, Beaches Cor-ners, N. Y.

I have used a good many lenses but never in my life saw a better one than your Symmetrical.—V. A. Ulrich, Spokane, Wash.



I would not part with my Symmetrical lens for three times the price I paid.—F. Ketterer, Detroit, Mich.

I am using one of your 8 x 10 Symmetrical and it does as good work as many lenses that cost three times as much. Would like to have another size of the same kind.—Chas. W. Knight, Detroit, Mich.

OUR *Three Focus Symmetrical* Lens is suitable for general photographic work (being of the Convertible type), as both elements are corrected for use separately. It is composed of two combinations of imported glass each one consisting of a crown and flint accurately ground, polished and cemented together.

While lacking the speed of the Versar it is more compact and is therefore suitable for the ordinary hand camera. This objective can be used for copying, enlarging and view work and for portraiture and groups where light conditions are ideal.

This objective really combines three lenses in one, but the single combinations are considerably slower in speed than the complete objective and must be stopped down to give covering power.

Furnished in lacquered and polished brass barrels, trimmed with black enamel with iris diaphragm and cap, or fitted with our various shutters as listed below.

This lens will not cover the size plate for which it is listed to the extreme corners unless stopped down slightly.

No.	Size	Diameter	Equivalent Focus	Mounted in Barrel	With Regno Shutter	With Autex Shutter
1	3 1/4 x 4 1/4	3 1/4 in.	5 in.	\$ 8.00	\$ 9.00	\$11.00
2	4 x 5	1 1/4 in.	6 1/4 in.	9.50	10.50	12.50
3	5 x 7	1 1/2 in.	8 in.	11.00	12.00	14.00
4	6 1/2 x 8 1/2	1 1/2 in.	10 1/2 in.	16.00	17.50	20.00
5	8 x 10	1 3/4 in.	12 1/2 in.	22.00	23.50	26.00
6	10 x 12	2 in.	16 in.	30.00	32.00	
7	11 x 14	2 1/4 in.	18 1/2 in.	40.00	43.00	
8	14 x 17	2 3/4 in.	22 in.	54.00		
9	17 x 20	3 1/4 in.	26 in.	70.00		

Focus of Separate Combinations when Used Singly

Size	Rear Lens	Front Lens	Size	Rear Lens	Front Lens
3 1/4 x 4 1/4	8 1/4 in.	11 1/2 in.	10 x 12	26 in.	38 in.
4 x 5	10 1/2 in.	14 1/2 in.	11 x 14	31 in.	43 in.
5 x 7	14 in.	18 in.	14 x 17	37 in.	51 in.
6 1/2 x 8 1/2	17 1/2 in.	23 1/2 in.	17 x 20	44 in.	60 in.
8 x 10	20 in.	28 1/2 in.			

Our products are sold through dealers only

Wide Angle, F:16

THESE lenses are equal in every respect to any of their type and price, but must be stopped down to cover the size plates for which they are listed to the extreme corners. Where a fast Wide Angle objective is desired we advise the purchase of our Velostigmat Series III, F:9.5.

Either the Symmetrical or Extreme Wide Angle are furnished in barrel with iris diaphragm and cap or in mounts to fit our shutters. These lenses can also be furnished in mounts to fit any standard make of shutter on the market in which case it is necessary to state name and size of shutter when ordering.

To secure perfect results it is advisable to send shutter to factory for fitting.

SYMMETRICAL WIDE ANGLE, F:16

	4 x 5	5 x 7	6 1/2 x 8 1/2	8 x 10	10 x 12	11 x 14	14 x 17
In barrel	\$ 8.00	\$10.00	\$13.00	\$16.00	\$20.00	\$24.00	\$28.00
In mounts	5.00	6.50	9.00	11.00	14.00	17.00	20.00
Focal length	4 in.	5 1/4 in.	6 1/2 in.	7 1/2 in.	9 in.	10 1/2 in.	13 in.

EXTREME WIDE ANGLE, F:16

	4 x 5	5 x 7	6 1/2 x 8 1/2	8 x 10	10 x 12	11 x 14	14 x 17
In barrel			\$13.00	\$18.00	\$23.00	\$28.00	\$33.00
In mounts			9.00	12.00	15.00	20.00	25.00
Focal length			4 in.	5 in.	6 in.	7 1/2 in.	8 in.

Special Lenses

ON the foregoing pages we have given full particulars of our standard line of objectives. In addition to these we manufacture lenses for surgical instruments, rifle telescopes, reflectoscopes, and other types of opaque projectors, and for many other purposes. Our complete factory equipment and years of experience in optics enables us to make lenses of every description, and we are pleased at all times to submit samples and prices upon receipt of the necessary specifications. Our experience is at the disposal of our customers as we will act in an advisory capacity, no charge being made for such services unless it is necessary to do research and experimental work along new lines.

Lenses of larger sizes than listed in this catalogue can be made to order. Inquiries for this work should be accompanied by full particulars of just what is desired.

Wollensak on a shutter is a guarantee of quality

Photographic Shutters

THE manufacture and sale of photographic shutters is confined to a comparatively few concerns on account of the fact that the design and manufacture of an effective shutter is an extremely difficult matter, and also because basic patents cover most of the mechanical movements.

As this company holds a number of such patents, it gives us a decided advantage, and enables us to produce shutters which are simple, reliable and effective and at the lowest possible cost. Our line now embraces twenty-eight different styles and sizes covering the amateur and professional fields in their various branches. Every precaution is taken in the construction and finish to produce only perfect goods. We have concealed all working parts within the cases thereby protecting the mechanism from dust and injury, and as a consequence their reliability has been increased accordingly. Each shutter is described and illustrated separately on the following pages, the light aperture and lens opening determining the size necessary for any specified lens.

On page 30 will be found weights, dimensions, etc., of our complete line.

A careful record is kept of each shutter manufactured and should there be necessity for repairs or adjustment within six months from date of shipment, no charge will be made for putting them in perfect condition.

Wollensak shutters can be obtained of any dealer in photo supplies and with any camera or lens by specifying them when placing the order. Prices given are for shutters complete with flange, bulb and tube as well as screws for attaching to camera front board.

I find your Velostigmat Series II. Lens most satisfactory for Portraiture. In fact I find in it a combination of a large and small lens. On this account it is especially well adapted for Home Portraiture.

Since I have been using it, I have almost entirely discontinued two high grade lenses which I formerly found necessary to meet Studio condition for large and small work.

It has great speed, and the arrangement for diffused focus gives great latitude in the work.—William Shewell Ellis, Philadelphia, Pa.

I am pleased to state that after a very severe test of nine different lenses I have decided in favor of your 11 x 14 Velostigmat Series II. Lens.

In my judgment I believe this lens combines more of the essential qualities for portrait work than any other, namely: softness, roundness, great depth combined with speed, a lens that is equally satisfactory for bust, figure and group work and especially adapted for photographing children.—D. D. Spellman, Detroit, Mich.

Ask our Promotion of Trade Department about it

Optimo

The only shutter which ever gave me entire satisfaction.—W. J. Sherwood, Tacony, Pa.

I was among the first, as you will see by your books, to use the Optimo and consider it the best shutter made.—T. Stanberry Golding, San Francisco, Calif.



The Optimo shutter is perfection.—J. E. Taylor, Baltimore, Md.

Your Optimo shutter is certainly fine, and I find that I get much fuller exposures by its use than by any others.—Dr. W. E. Ziegenthal, Detroit, Mich.

THE *Optimo* has been on the market for several years during which time it has given universal satisfaction and upheld the claims made for it.

It was the result of several years' study to design and perfect a between-the-lens shutter working with sufficient speed to photograph rapidly moving objects successfully yet simple in operation, compact in size and reliable in action. That the *Optimo* does this work is demonstrated by the fact that thousands have been sold and have given perfect satisfaction to the purchasers.

The *Optimo* has been justly called—"The shutter of shutters." The five leaves revolve in making the exposure, one end passing from the opening and the other end taking its place, which makes high speed possible. In opening and closing it shows a star-shaped aperture the points of the star reaching to the edges of the opening—thus giving the greatest possible illumination to the plate.

In addition to bulb and time it has a range of exposures from one second to 1-300 of a second, the latter speed being sufficiently fast to cover any emergency. It sets easily by a push button and can be released by push button, bulb or finger, without recoil or jar. Adjustment is rapidly made for any desired exposure by means of a large milled disc on which is engraved an arrow indicator. The iris diaphragm is regulated by a separate indicator.

A much higher speed is claimed for some shutters, but we believe the *Optimo* to be fast enough for all practical purposes. The principal working parts are made of German silver, and it is as fine mechanically as a watch. The *Optimo* is now made of metal alloy making it considerably lighter in weight than former models, and is finished in black enamel with gold engraving, making it handsome in appearance and durable as well.

No.	Light Aperture	Price	No.	Light Aperture	Price
1	3/4 in.	\$14.00	3	1 1/8 in.	\$18.00
1A	7/8 in.	15.00	4	1 1/4 in.	20.00
2	1 in.	16.00			

Your dealer is a Wollensak dealer

Autex

It is without a fault and has never failed yet.—W. C. Hodges, Augusta, Mich.

I can speak of your shutters in the highest praise, as I have been using one for six years and it has never given me any trouble.—M. G. Warner, Monroe, O.



I am using three of your shutters and they are giving the best of satisfaction.—F. C. Vierus, Cat Spring, Tex.

I am using one of your shutters and find it first class in every respect.—Henry W. Hodges, Brooklyn, N. Y.



HIS company placed the first self-setting shutter upon the market in 1900. A new model with a number of improvements succeeded it in 1902 and was continuously manufactured for six years. Further improvements being made in 1908, it was renamed the *AUTEX*. Since this time we have been working to perfect further improvements and as we have succeeded in so doing, your attention is directed to the new model *Autex* which we believe is as near perfection as an automatic shutter can be made.

All working parts of the *Autex* are now concealed within the case, thereby being protected from dust and injury. The cases are made of a metal alloy having the necessary tensile strength and considerably lighter in weight than brass. Push button releases have taken the place of levers, thereby making the cases absolutely dust-proof, and as well, adding to the beauty and strength of the shutter.

The light apertures have been increased in size, thereby accommodating Anastigmats and other types of lenses requiring a large working aperture. The five-leaf system has been adopted for making exposures. In opening and closing, this system gives a star-shaped aperture, the points of the star reaching to the edge of the plate thereby giving the greatest possible illumination.

The various exposures are governed by an indicator at the top of the shutter, and in addition to time and bulb, it gives three fast and three slow instantaneous exposures and can be opened for focusing by simply pushing the lever to 0. Fitted with iris diaphragm; can be released by finger or bulb; push buttons and levers polished nickel; name plates black enamel with white letters.

The *Autex* automatically sets itself after each exposure and is a thoroughly practical and reliable shutter for general work.

No.	Light Aperture	Price	No.	Light Aperture	Price
1	3/4 in.	\$7.00	2	1 in.	8.00
3	1 1/8 in.	\$10.00	4	1 3/4 in.	12.00

Ask us or your dealer about it

Regno

I can speak only in terms of highest praise for your Regular Shutter.—M. G. Warner, Monroe, Ohio.

In our work we use a good many of your lenses and shutters and we have found them all very satisfactory.—Powers Printing Co., Glen Allen, Va.



I recently purchased one of your shutters and am well pleased with it.—W. N. Pierce, Tatum, S. C.

I am thoroughly convinced that your shutters are the best on the market for view work and the most serviceable for general purposes.—Mat Knapp, Kansas City, Mo.



THE *Regno* is similar in appearance and operation to the *Autex*, excepting that it is necessary to set it before each exposure and it does not have the special focusing device found on the *Autex*. When it is desired to have it stay open for focusing on the ground glass, etc., it must be set on "T."

The *Regno* is made in five sizes, accommodating objectives requiring a working aperture of from $3/4$ to $2\frac{1}{4}$ inches and is by far the most modern shutter on the market selling at a moderate price. It is simple to adjust and sets and releases easily, even in the largest size. It works free from jar or recoil and is recommended for all outfits which are subject to continued use, rough handling and exposure to dust and dirt or decided changes in temperature.

The *Regno* is capable of doing its work satisfactorily under almost any conditions. Like the *Autex*, it is made of metal alloy; has push buttons in place of levers; is fitted with iris diaphragm; can be released with finger or bulb; has the five-leaf exposure system; is beautifully finished in lacquered metal alloy, with black enamel name plates with white letters.

No.	Light Aperture	Price	No.	Light Aperture	Price
1	3/4 in.	\$5.00	4	1 3/4 in.	\$10.00
2	1 in.	6.00	5	2 1/4 in.	14.00
3	1 1/8 in.	8.00			

Under separate cover I am sending you a picture taken with your Series II. F:4.5 Velostigmat on a 3 A Graflex. As fine a piece of lens work as I've ever seen. I am more than pleased with the lens.

Recently while President Taft was touring our State, I was the only one out of hundreds who obtained good photos. The day was dark and dreary and my Wollensak Lens came in mighty handy.—Nick Bruehl, Sherwood, Wis.

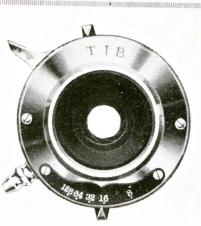
Again we say "Let the user judge"

Victus and T I B



I have used your shutters for several years with perfect satisfaction.—Owen M. Gates, Massfield, Ohio.

I have three of your shutters on my cameras and all are working first class in every respect.—Lewis G. Robins, Box 456, Ayer, Mass.



THE *Victus* is a popular-priced, non-retarding shutter, similar in appearance and construction to the Autex and Regno, but lacking the slow instantaneous exposures. Time, bulb and three fast instantaneous exposures are given automatically with it. Equipped with push button; iris diaphragm; the five-leaf exposure system; made of metal alloy; black enamel name plate with white letters, and can be released by finger or bulb.

A reliable and efficient shutter for small hand cameras, etc.

No.	Light Aperture	Price
1	$\frac{3}{4}$ in.	\$4.00
2	$1\frac{1}{2}$ in.	5.00

T I B

THIS shutter is an improvement on and takes the place of our Junior. It is made in two sizes only, but all ordinary single or double lenses can be fitted to it from size $1\frac{3}{4} \times 2\frac{1}{4}$ to 5×7 . It is automatic; can be operated by finger or bulb release, and is fitted with iris diaphragm.

The *T I B* shutter is adjustable for time, bulb, and one instantaneous exposure only. Adjustments are made for these exposures by moving indicator on top of shutter.

No.	Light Aperture	Price
1	$\frac{1}{2}$ in.	\$2.00
2	$\frac{5}{8}$ in.	3.00

A Wollensak Lens or Shutter for every purpose

Stereoscopic

OUR Stereoscopic shutters show many changes and improvements over previous models. As they are controlled with a single mechanism, uniformity of operation of diaphragm and shutter is assured. The cases are made of metal alloy; trimmings—black enamel with white letters. The new models are absolutely dust-proof. The standard distance from center to center of the openings is $3\frac{1}{4}$ inches, which has become generally accepted as the correct separation for stereoscopic work.

Both the Regno and T I B Stereo shutters are attached to camera front board by jamb nuts screwed on from rear.

The Regno is equipped with push button sets and releases; gives bulb, time and six different speed exposures; has iris diaphragm, and light aperture of 1 inch, and a lens opening of $1\frac{3}{16}$ inches. Exposures can be made with finger or bulb.

The T I B is automatic in action, can be operated by finger or bulb release and has iris diaphragm. Adjustment for time, bulb and instantaneous exposure is made by moving indicator lever.

General descriptions on the single Regno No. 2 and T I B No. 2 shutters are applicable to the *Stereoscopic*—the only difference being that two shutters are built together so that a single mechanism controls both.

T I B Stereo	Shutter	With R. R. F:11 4×5	With R. Sym. F:8 $3\frac{1}{4} \times 4\frac{1}{4}$
		\$8.00	\$15.00

Regno Stereo	Shutter	With R. Sym. F:8 4×5	With Series I. Velostigmat $3\frac{1}{4} \times 4\frac{1}{4}$	With Series II. Velostigmat 4×5
		\$15.00	\$30.00	\$60.00

Your new model Verito is the very best lens I know of for getting the broad painting effect so much desired by the best clientele. The speed of the lens is entirely satisfactory, and it seems to me much quicker than you claim for it. I predict a large sale of these beautiful instruments.—Howard D. Beach, Buffalo, N. Y.

I have had the No. 2 Vitax in use for several weeks and have done all my Holiday portrait work with it, and also a few full length pictures and three small groups. I have used the lens at the largest aperture, making heads $1\frac{1}{2}$ to $2\frac{1}{2}$ inches. Have worked the lens within 5 feet of the sitter. (I enclose sample prints) and the retouching required has been almost nil and no distortion. I consider this remarkable.—W. S. Chapman, St. Petersburg, Fla.

Wollensak on a lens is a guarantee of perfection

Studio

It certainly is the best shutter for the Studio I ever used.—Louis F. Stephany, Pittsburgh, Pa.

I consider your Studio Shutter to be the best mechanical appliance on the market for use by professional photographers.—I. F. Brillianti, Jerez, Mexico.



We believe your Studio shutter to be far ahead of them all.—Osgood Photo Sup. Co., Galesburg, Mich.

We have now fitted both of our lenses with your Studio shutters and they are certainly all that can be desired for Studio work.—The Brubaker Studio, Grand Rapids, Mich.



BETWEEN the lens shutter for studio use that is giving perfect satisfaction in the best known studios throughout the country.

The *Studio* shutter has ten leaves, is equipped with iris diaphragm, is practically noiseless as it has cushions at all points of contact in the mechanism. Exposures are made by bulb, making it possible to give instantaneous exposures from 1-5 of a second up to any desired length of time.

This shutter was primarily intended for our portrait lenses as it is only necessary to unscrew the barrel and screw on the shutter in place of the iris diaphragm without special fitting. Almost any make of portrait lens on the market can be used with the *Studio* by having them fitted specially.

Cases are made of metal alloy with black enamel trimmings. A thoroughly efficient shutter for the professional photographer—positive in action, light in weight, and simple in operation.

As exposures are made with the leaves opening and closing to the center (thereby diaphragming) the depth of focus is greater with this style shutter than with wing shutters when using the lens at the same aperture.

No.	Outside Diameter	Light Opening	Will fit Portrait Lenses as follows:		Price
			Vesta	Vitax	
1	3½ in.	2½ in.	No. 3		\$10.00
2	4¼ "	2½ "	No. 4		12.00
3	4¾ "	2½ "	No. 5		14.00
4	5½ "	3½ "		No. 2	16.00
5	6¾ "	4½ "		No. 3	18.00

The Wollensak line is a complete line

Skyshade

To say that I am pleased with the Skyshade shutter I recently purchased is putting the matter in a mild light, and I believe it is your duty to call the good qualities of this shutter to the attention of every worker in artistic photography, both in this country and abroad.—Dr. M. D. Miller, Boston, Mass.



I have mailed you under separate cover a 16 x 20 enlargement showing a beautiful cloud effect made with your Skyshade shutter.

We have a duplicate of this picture framed on display in Wanamaker's Camera Department and it is attracting a great deal of attention.—C. Welsh, Philadelphia, Pa.



LTHOUGH this shutter has been upon the market for several years, its good qualities have not been realized until recently. It is a well-known fact that a sensitized plate or film which is given a uniform exposure over its entire area will always show an overexposed sky and correctly exposed foreground, or vice versa. In other words—it was impossible to make a negative that would give cloud or sky values and foreground prints without dodging, retouching, etc. Ray Filters with orthochromatic plates remedied the matter to a certain extent, but the *Skyshade* shutter overcomes all these difficulties and eliminates all chance in making negatives of this kind.

A single leaf rises from the bottom of the opening and is so regulated that about three-fifths, or foreground, receive about four times the exposure that the balance or sky has, without showing a dividing line. The shutter is automatic in action and gives time, bulb and six instantaneous exposures. The *Skyshade* is equally suitable for home portraiture, interiors, landscapes or any subject where the lighting is unequal. It is instantly and firmly attached to the front mount of lens barrel by an automatic clamp and can be used with lens mounted in barrel or fitted with shutter. It has no iris diaphragm and the light aperture used must be larger than the working aperture of the lens or it will not illuminate the corners of the plate properly. When lenses are mounted in barrel having a hood on the front, this should be removed and in ordering shutters the exact diameter of barrel or front mount must be given to insure correct fitting.

The *Skyshade* is furnished in velvet-lined leather cases, finished in black enamel, with nickel trimmings, and is recommended to the pictorial or artistic worker in landscape or portrait photography. It makes a desirable and valuable addition to any photographic equipment.

No.	Light Opening	For lenses with Free Diameter of	Will fit barrels or mounts with Diameter of	Price
1	1½ in.	Up to 1 in.	1¼ to 1½ in.	\$10.00
2	1¾ "	1½ to 1¾ in.	1½ to 2½ "	12.00
3	2½ "	1½ to 1¾ in.	2½ to 2¾ "	15.00

Ask questions, we like to answer them

Mounting Lenses

WE have a special department for the accurate fitting and mounting lenses of all makes. This department is in charge of skilled workmen and we guarantee perfect satisfaction and the highest quality work.

Lenses having a separation of $2\frac{1}{2}$ mm ($\frac{1}{8}$ of an inch) or more can be mounted in Wollensak shutters and the barrel is left intact so the lens can be used in either the barrel or shutter.

It is advisable in every instance to send lenses in their original barrel or shutter for fitting.

Tables giving dimensions of our various shutters can be found on page 30, and will enable anyone to determine the size necessary for any objective. On the same page will be found prices charged for mounting, fitting, special focusing scales, caps, etc.

Special Order Work

WE are equipped to make anything in the lens or shutter line. This, coupled with our years of practical experience, complete equipment of labor and time-saving machinery, etc., enables us to produce anything in these lines of manufacture in the shortest possible time and at the minimum cost. We are prepared to accept orders for any article which we are equipped to make, either in the lens or shutter departments, and will be pleased to submit samples and prices upon receipt of proper specifications.

We are pleased to receive samples of work made with our lenses, especially those of unusual interest or quality, suitable for reproduction, framing and other purposes.

It may interest you to know that for some time past I have been doing considerable commercial work requiring very sharp definition over a great depth of field and have had trouble trying to get negatives that were brilliant and free from flare as well as sharp all over, on account of the internal reflections in the lenses when used with small stops. Have been testing all kinds of lenses for this work and among them was your Velostigmat Series II., 12-inch focus, working at F:4.5. While this lens was intended for portrait work, it proved to be just as perfectly adapted to this critical definition work; in fact it did the work just as well as the best special lens I could get and which was only adapted to that particular kind of process work.

In my tests I found the field of the lens to be perfectly flat, the image absolutely rectilinear, crisp and brilliant and free from flare at all apertures. The color correction is very good and the negatives, therefore, have a delicacy of gradation that cannot be secured with lenses not so well corrected. These features, together with its high speed (F:4.5) and the diffusion device for portraiture make it an ideal all-around lens and one that should be invaluable to every photographer.—William H. Kunz, Boston, Mass.

If you cannot decide, ask us for advice

Terms

NO GOODS are sent on consignment, but every article shipped is subject to our broad guarantee, and if unsatisfactory can be returned for credit within thirty days from date of shipment.

While no goods are sent on consignment we will send any of our lenses for trial and charge on memorandum. Goods sent in this way will be charged to the dealer's regular account 30 days from date of shipment unless previously returned.

Complete shipping instructions should accompany all orders, but when not specified we will use our best judgment routing shipments to save time and carriers' charges as much as possible.

We do not sell at retail, all products being sold through regular dealers in photo supplies; therefore, any dealer can supply Wollensak products, but should difficulty be encountered in obtaining same we would appreciate a letter to that effect, giving us at the same time the name of dealer who could not supply our products, and we will immediately arrange to have your order taken care of without further delay.

All goods are carefully packed and delivered to transportation companies, after which we cannot be responsible for damage during transit.

All prices quoted are F. O. B. Rochester, no charge being made for packing.

Our products are regularly stocked and sold by dealers throughout the United States, Canada and Mexico, but we will be pleased to take up the matter of trade discounts with any bona fide dealer in photo supplies desirous of adding Wollensak Products to their line.

An envelope containing complete set of screws for attaching lens flange or shutter to front board of camera is sent with each lens or shutter when shipped.

The Little Lens, (No. 1 Vitax) you sent, I am using for Autochromes, I am making full timed Autochromes 5x7 with 60 grains powder, works perfectly. I am arranging electric light screens for same and expect to make Autochromes with Cooper Hewitt tubes and limelight in 4 seconds.—Frank Scott Clark, Detroit, Mich.

The Optimo Shutter is a "peach". For simplicity of adjustment, smooth working, and results, it is not in my opinion, excelled by anything on the market at much higher prices. I find no trouble in taking athletic games and believe it has speed sufficient for any ordinary requirement if the instructions for using focal plane shutters are followed.—T. R. Kemper, Richmond, Va.

Our products are sold through dealers only

Table Showing Weights, Dimensions and Openings of Shutters

Shutter	Weight	Outside Diameter	Diameter Flange	Light Opening	Lens Opening
T I B No. 1	1 1/2	2 1/8 x 2 1/8	1 1/2	1/2	3/4
T I B " 2	2	2 1/4 x 2 1/4	1 1/6	5/8	1 1/6
Regno " 1	1 1/8	1 1/8 x 1 1/8	1 1/5	3/4	1 1/6
Regno " 2	2 1/2	2 1/4 x 2 1/4	1 2/3	1	1 1/6
Regno " 3	2 5/8	2 7/8 x 2 7/8	2 1/5	1 3/8	1 3/4
Regno " 4	7	3 5/8 x 3 5/8	3 3/8	1 3/4	2 3/8
Regno " 5	12	4 5/8 x 4 5/8	4 3/8	2 1/4	3
Optimo " 1	3	2 1/4 x 2 1/4	1 3/2	3/4	1 1/6
Optimo " 1A	3 3/4	2 5/8 x 2 5/8	1 3/2	7/8	1 3/6
Optimo " 2	4 7/8	2 7/8 x 2 7/8	2 1/2	1	1 1/6
Optimo " 3	7 1/4	3 5/8 x 3 5/8	2 1/3	1 3/8	1 1/6
Optimo " 4	12	4 5/8 x 4 5/8	3 3/2	1 3/4	2 1/7
Stereoscopic Regno	6	2 1/4 x 5 1/2		1	1 1/6
Stereoscopic T I B	4 1/4	1 3/2 x 5 3/8		5/8	1 1/6

The size and openings of the Autex and Victus shutters are the same as the Regno. The weight of the Autex is the same and of the Victus about ten per cent. less.

NOTE—Weights given in ounces, dimensions in inches.

Wollensak Ray Filters

 THE advantage of the ray filter is too generally known to require repetition here. Wollensak Ray Filters are made of fine imported optical glass, mounted in hand-spun brass mounts, with three adjusting screws, which enable the operator to secure the filter in perfect plane with the lens on which it is used. The color dyes used are of the highest grade possible to obtain; the coating is done by hand, and is free from striae and other imperfections. Wollensak Ray Filters require an increase in exposure of but four times, and are therefore suitable for work requiring fast exposures.

Each filter is packed in a durable case, and the range of sizes is such that they fit all objectives of our manufacture, as well as other standard makes.

No.	Will Fit Lens Mounts from	Price	No.	Will Fit Lens Mounts from	Price
1	1 5/8" to 1 13/16"	\$2.00	6	2 3/8" to 2 5/8"	\$4.50
2	1 3/8" to 1 13/16"	2.25	7	2 1/6" to 3"	5.25
3	1 1/8" to 1 3/2"	2.50	8	3 1/8" to 3 1/2"	6.75
4	1 1/8" to 2"	3.00	9	3 1/8" to 4 1/2"	7.50
5	2 1/6" to 2 5/8"	3.75	10	4 1/6" to 4 5/8"	9.00

I now have a trio of your lenses. Can't say which I like the better, but cannot think of parting with any of them. We use the Vitax for almost all regular portrait work, and Velostigmat for all home portraiture, and for many things in the studio, and now I am practicing with the Verito, and am delighted with the results. I believe these three lenses are the best in their class.—Ben Larrimer, Marion, Ind.

Wollensak on a shutter is a guarantee of quality

Distance Required from Lens to Subject with Wollensak Objectives

Name and No. of Lens	Heights of image on ground glass for average standing figures of 68 inches				Heights of image on ground glass for average head of 9 inches			
	4 in.	6 in.	8 in.	10 in.	2 in.	4 in.	6 in.	8 in.
Series II. Velostigmat								
No. 3	126	86			38	25	18	
" 4	148	102	88		45	29	21	17
" 5	171	117	91		53	33	24	20
" 6	216	148	114	94	66	42	30	25
" 7	279	191	148	121	85	54	39	33
Vitax								
No. 1	180	123			55	35	25	
" 2	234	160	124	101	72	46	33	27
" 3	288	197	152	125	88	56	40	34
Vesta								
No. 2	126	86			38	25		
" 3	180	123			55	35	25	
" 4	216	148	114	94	66	42	30	25
" 5	252	173	133	109	77	49	35	29
Versar								
No. 2	160	108			48	30	21	
" 3	175	118	92		51	32	23	
" 4	210	142	110	91	63	40	29	23
" 5	267	182	140	115	81	51	37	31
" 6	297	216	157	129	91	58	41	35
" 7	329	224	173	142	102	64	46	39
Verito								
No. 1	162	111			50	32	23	
" 2	207	141	110		63	40	29	23
" 3	279	179	138	113	80	50	36	30
" 4	324	221	171	140	90	63	45	38

Figures given in above tables are in inches and are the approximate distance from lens to subject.

Fittings, Flanges and Caps

Numbers	1	2	3	4	5	6	7	8	9	10	11	12
Diameter	1 1/8"	1 5/8"	1 9/16"	1 13/16"	2 1/8"	2 1/2"	3"	3 1/2"	4"	4 5/8"	5"	6 1/4"
Mounting & Fitting	\$1.50	\$1.75	\$2.00	\$3.00	\$3.50	\$4.00	\$4.25	\$4.50	\$4.75	\$5.00	\$5.50	\$6.00
Standard Flanges	.50	.60	.75	1.00	1.50	1.70	2.00	2.50	2.75	3.00	3.25	3.50
Special Flanges	1.00	1.25	1.50	2.00	3.00	3.50	4.00	5.00	5.50	6.00	6.50	7.00
Caps	.35	.45	.60	.70	.80	.90	1.00	1.10	1.20	1.30	1.40	1.50

NOTE—Sizes listed are inside diameters for standard and special flanges and caps, and outside diameters of barrels for lens fittings.

Bulbs and tubing, small, 20 cents; medium, 25 cents; large, 40 cents.

Special focus or diaphragm scales, 50 cents.

My little Velostigmat Series II. F:4.5 is a gem,—Howard D. Beach, Buffalo, N. Y.

Ask our Promotion of Trade Department about it

Promotion of Trade Department

 HIS Department is maintained for the exclusive use and benefit of Wollensak dealers and their customers, and since its inauguration a great many dealers and their customers have taken advantage of the service rendered by it, and have shown their appreciation of our efforts in their behalf.

When an inquiry is received from a prospective purchaser of a lens or shutter, our first aim is to ascertain the branch of photography he is interested in, and the class of work he does, or intends to do. When we succeed in obtaining this information, the matter is given individual thought and attention, and an outfit suggested, which in our estimation would be most desirable for his work. In the meantime we refer the inquiry and such information as we have obtained to the person's dealer, so that in reality the prospective customer, his dealer and our Promotion of Trade Department "get together," so to speak, and all concerned are benefitted thereby.

The inquiry is followed up by us and any necessary additional information is furnished in a second letter, and the customer urged to try out the lens we recommend, placing the order of course with his dealer.

Our theory is that a satisfied customer is the best possible advertisement for a product of any kind, and we not only want to use our efforts to make the sale, but also to keep the customer satisfied after the purchase is made.

This is merely one of the numerous services rendered by this Department. Questions pertaining to lenses or shutters addressed to the Department will have careful consideration, and the answers will be honest and impartial. This service is gratis, and places the person making inquiry under no obligations of any kind. We will not, however, make comparisons between our products and competitive lines of any make.

In addition to this catalogue this department has ready at this time a number of special booklets, folders, etc., touching upon our various products in an interesting way, and new booklets, etc., will be issued from time to time, copies of which can be obtained of any dealer in photo supplies or direct, in case he cannot furnish the same.

Address communications to the Promotion of Trade Department, Wollensak Optical Company, Rochester, N. Y.

Your dealer is a Wollensak dealer

