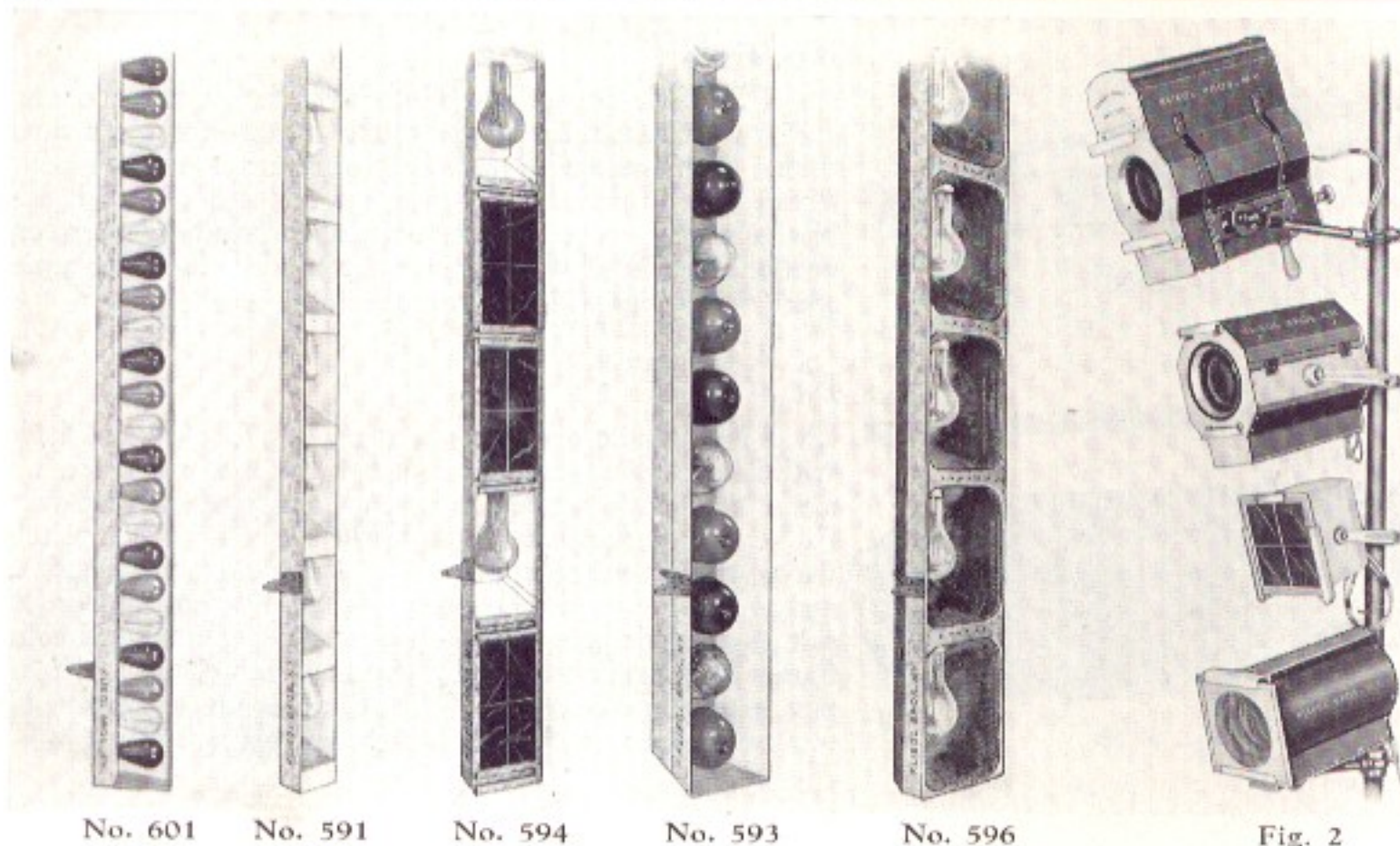


Catalogue M

www.klieglbros.com



PROSCENIUM LIGHTS

KIEGL PROSCENIUM LIGHTS, made in several designs to meet different stage lighting requirements, are of substantial galvanized sheet-iron construction; well ventilated; compact; durable; provided with strap hinges for mounting on proscenium wall (permitting angular variation in direction of light); properly designed for light distribution and maximum efficiency; comply with Underwriters' requirements; and are furnished completely wired, ready for erection, in standard lengths, or any special length desired.

No. 601

Kiegl Proscenium Light No. 601, fitted with a single row of medium-screw-base receptacles, spaced 4-inches between centers; lamps held in a horizontal position; accommodates forty-eight 60-watt Mazda lamps in a 16-foot length; completely wired, usually with three 2-wire circuits for independent control of white, red, and blue lights; splice-box provided for making feeder connections; reflecting surfaces painted a permanent white; furnished with strap hinges for mounting.

No. 591

Kiegl Proscenium Light No. 591, fitted with medium-screw-base receptacles, spaced 8-inches between centers; lamps held in suspended position; accommodates twenty-two 60-watt Mazda lamps in a 15-foot length; completely wired, usually with one 2-wire circuit for white lights; reflecting surfaces painted a permanent white; splice-box provided, at lower end, for making feeder connections; furnished with strap hinges for mounting; also made in 12-foot length, No. 592, accommodating fifteen 100-watt Mazda lamps.

No. 594

Kiegl Proscenium Light No. 594, fitted with medium screw-base receptacles; lamps held in suspended position; accommodates eighteen 200-watt Mazda lamps in 16-foot length; provided with grooves for metal color frames for gelatine mediums; completely wired, usually with three 2-wire circuits for independent control of white, red, and blue lights; reflecting surfaces painted a permanent white; furnished with strap hinges for mounting, and with color frames for red and blue compartments; also made in 16-foot length, No. 595, for fifteen 500-watt Mazda lamps.

No. 593

Kiegl Proscenium Light No. 593, fitted with a row of medium-screw-base receptacles, spaced 5-inches between centers; each receptacle provided with an aluminum reflector and a spring-catch holder for detachable color globes; accommodates thirty-nine 100-watt Mazda lamps in a 16-foot length; completely wired, usually with three 2-wire circuits for independent control of white, red, and blue lights; reflecting surfaces painted a permanent white; splice-



No. 608

No. 608

Kliegl Portable Borderlight No. 608 accommodates 60-watt and 75-watt Mazda lamps; completely wired—for one or three colors; lamps spaced 9 inches between centers; reflecting surfaces painted a permanent white; external surfaces finished in black enamel; pin connector provided for making feeder connections; furnished with 1" pipe batten for hanging; occupies space 5½ inches wide when in position.



No. 617A

No. 617A

Kliegl Portable Borderlight No. 617A, in 9-foot sections fitted with nine medium-screw-base receptacles, and round-face all-metal silvered reflectors; accommodates 100- to 150-watt P. S.-25, and 200-watt P. S.-30 Mazda lamps; completely wired, three 2-wire circuits, three lamps to each circuit, 12 inches of cable from each circuit—extending on right or left side as desired; provided with slide grooves for metal color frames for gelatine mediums; furnished with chains and 1¼" pipe batten, and color frames for red and blue compartments; occupies space 12 inches wide when in position.



No. 618A

No. 618A

Kliegl Portable Border Light No. 618-A, in 9-foot sections, fitted with twelve medium-screw-base receptacles, and square-face all-metal silvered reflectors; accommodates 100- to 150-watt P. S.-25 and 200-watt P. S.-30 Mazda lamps; completely wired, three 2-wire circuits, four lamps to each circuit, 12 inches of cable from each circuit—extending on right or left side as desired; slide grooves for metal color frames for gelatine mediums; furnished with chains and 1¼" pipe batten, and color frames for red and blue compartments; occupies space 11 inches wide when in position.

KLIEGL BORDER LIGHTS

No.	DESCRIPTION	PRICE	WEIGHT PER FT.	CODE WORD
STANDARD TYPES				
600	Borderlight, with chains and pipe batten	*	6½ lbs.	Rabmag
605	Borderlight, with chains and pipe batten	*	6 lbs.	Rabote
611	Borderlight, with chains and pipe batten	*	10¾ lbs.	Raccatto
612	Borderlight, for 200-watt, with chains, pipe batten, color frames	*	9 lbs.	Raccendo
613	Borderlight, for 500-watt, with chains, pipe batten, color frames	*	11 lbs.	Raccolta
614	Borderlight, for 1000-watt, with chains, pipe batten, color frames	*	12 lbs.	Raccours
616	Borderlight, with detachable color globes, chains and pipe batten	*	8 lbs.	Racheamt
617	Borderlight, with chains, pipe batten and color frames	*	11 lbs.	Racheta
618	Borderlight, with chains, pipe batten and color frames	*	8 lbs.	Rachgier
619	Borderlight, with chains, pipe batten and color frames	*	8½ lbs.	Rachilla
606	Cyclorama Borderlight, with diffusing glass and color frames	*	10 lbs.	Rabsaces
PORTABLE TYPES				
608	Portable Borderlight, with pipe batten	*	4½ lbs.	Racaille
617A	Portable Borderlight, with pipe batten, chains and color frames	\$90.00	11 lbs.	Rachever
618A	Portable Borderlight, with pipe batten, chains and color frames	120.00	8 lbs.	Rachidi

Note: Border Lights can be furnished with lamps spaced wider apart than specified in description, or with a greater number of circuits for more colors, or other changes that may be necessitated by particular requirements. When ordering borderlights give length of borderlight (usually about two feet longer than proscenium opening); mention the number of colors desired, number of lamps for each color, and size of lamps that are to be used; also state whether splice-box for making feeder connections is to be on right or left end viewed from a position on the stage facing the audience.

Blue prints for architects and engineers, showing construction details and dimensions of Kliegl Borderlights, available on request.

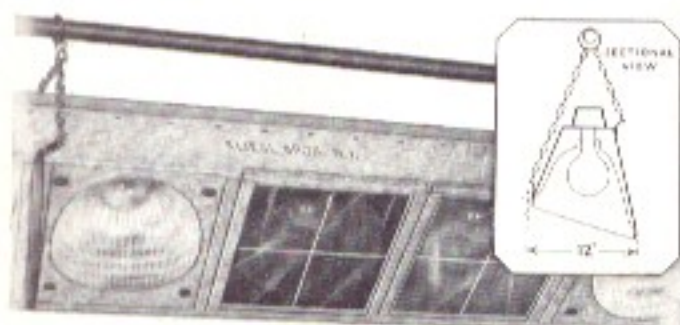
* Price quotations for borderlights furnished on application.



No. 616

No. 616

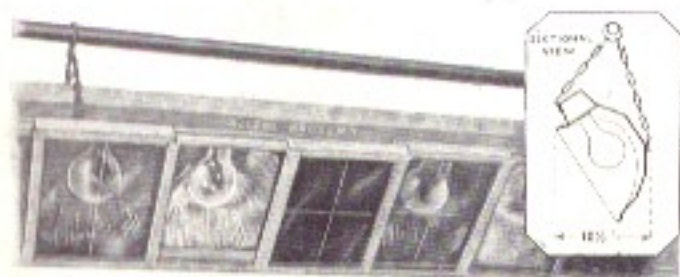
Kliegl Borderlight No. 616, fitted with a single row of medium-screw-base receptacles, spaced 5 inches between centers; accommodates 100- and 150-watt P. S.-25 Mazda lamps; each receptacle equipped with an aluminum reflector and spring-catch holder for detachable color-globes; completely wired—usually for independent control of white, red, and blue lights; reflecting surfaces painted permanent white; splice-box for making feeder-cable connections; furnished with chains and $1\frac{1}{4}$ " pipe batten; occupies space 8 inches wide when in position. Color globes permanently colored blown glass; uniform in color; unaffected by heat of lamps; standardized; interchangeable; furnished in amber, red, blue, and green.



No. 617

No. 617

Kliegl Borderlight No. 617, fitted with a single row of medium-screw-base receptacles, spaced 12 inches between centers, with round-face all-metal silvered reflectors; accommodates 150-watt P. S.-25 and 200-watt P. S.-30 Mazda lamps; slide grooves for metal color frames for gelatine mediums; completely wired—usually for independent control of white, red, and blue lights; splice-box for making feeder-cable connections; furnished with chains and $1\frac{1}{4}$ " pipe batten, and with color frames for red and blue compartments; occupies space 12 inches wide when in position.



No. 618

No. 618

Kliegl Borderlight No. 618, fitted with a single row of medium-screw-base receptacles, spaced 9 inches between centers, with square-face all-metal silvered reflectors; accommodates 100- and 150-watt P. S.-25 and 200-watt P. S.-30 Mazda lamps; slide grooves for metal color frames for gelatine mediums; completely wired—usually for independent control of white, red, and blue lights; splice-box for making feeder-cable connections; furnished with chains and $1\frac{1}{4}$ " pipe batten, and with color frames for red and blue compartments; occupies space 11 inches wide when in position. Also made in larger size, No. 619, for 300- and 500-watt lamps, occupies space 12 inches wide when in position.



No. 606

No. 606

Kliegl Cyclorama Borderlight No. 606, illuminates back drops from shortest possible distance—may be set in flush with stage floor, or on the floor, within three feet of the drop; accommodates 500-watt P. S.-40 Mazda lamps, spaced 10 inches between centers, each receptacle fitted with concave mirrored-glass reflector which directs light to center of drop; diffusing glass screen equalizes light distribution; completely wired—usually for three-color control; provided with color frames for gelatine mediums for red and blue compartments; splice-box for making feeder-cable connections; occupies space 15 inches wide when in position.

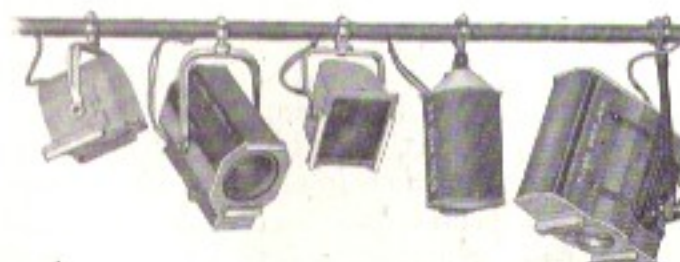


Fig. 1

Fig. 1

Kliegl Spotlight Border, obtained by grouping Kliegl Spotlights in a manner that meets individual requirements; spotlights suitable for this purpose, illustrated on page 41.

BORDERLIGHTS

LISTED BY UNDERWRITERS' LABORATORIES

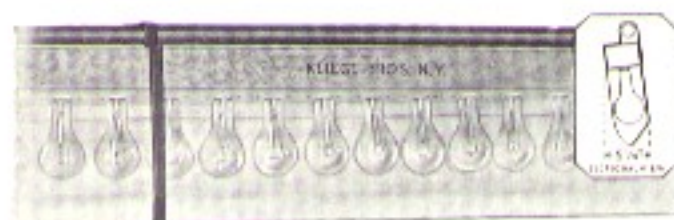
KLIEGL BORDERLIGHTS for stage lighting are available in practically any form desired and are built to accommodate lamps that range from 60 watts to 1000 watts. They are made of galvanized sheet-iron; strong and rigid; well ventilated; properly designed for light distribution and maximum efficiency; comply with Underwriters' requirements and are completely wired in accord with their ruling of "not more than 1320 watts to a 2-wire circuit;" furnished in any length specified.



No. 600

No. 600

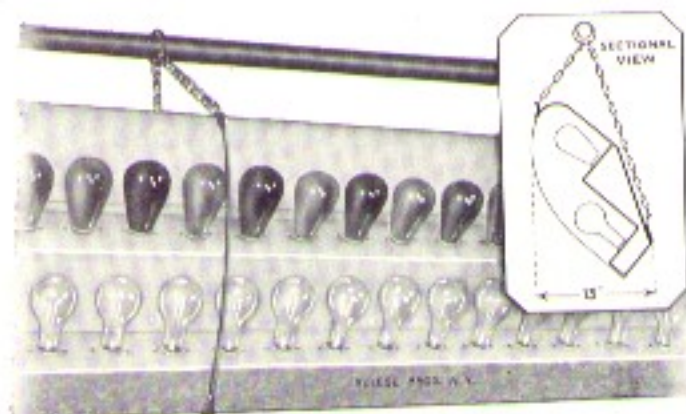
Kliegl Borderlight No. 600, fitted with a single row of medium-screw-base receptacles; accommodates 60-watt to 100-watt Mazda lamps, spaced 3 to 4 inches between centers, depending upon size of lamps to be used; completely wired—usually for independent control of white, red and blue lights; reflecting surfaces painted a permanent white; provided with splice-box for making feeder-cable connections; furnished with chains and $1\frac{1}{4}$ " pipe batten for hanging; occupies space $9\frac{1}{2}$ inches wide when in position.



No. 605

No. 605

Kliegl Borderlight No. 605, fitted with a single row of medium-screw-base receptacles; accommodates 60-watt to 100-watt Mazda lamps, spaced 3 to 4 inches between centers, depending upon size of lamps to be used; completely wired—usually for independent control of white, red, and blue lights; reflecting surfaces painted a permanent white; splice-box provided for making feeder-cable connections; furnished with $1\frac{1}{4}$ " pipe batten for hanging; occupies space $5\frac{1}{4}$ inches wide when in position.



No. 611

No. 611

Kliegl Borderlight No. 611, fitted with two parallel rows of medium-screw-base receptacles, adjacent receptacles spaced 4 inches between centers; accommodates 60-watt and 100-watt Mazda lamps; completely wired—usually for one row of white lights and the other row for red and blue lights; reflecting surfaces painted a permanent white; splice-box provided for making feeder-cable connections; furnished with chains and $1\frac{1}{4}$ " pipe batten for hanging; occupies space 13 inches wide when in position.

No. 612

Kliegl Borderlight No. 612, fitted with a single row of medium-screw-base receptacles, spaced 6 inches between centers, partitioned off in separate compartments, with slide grooves for metal color frames for gelatine mediums; accommodates 100-watt and 150-watt P. S.-25, and 200-watt P. S.-30 Mazda lamps; completely wired—usually for independent control of white, red, and blue lights; reflecting surfaces painted a permanent white; splice-box for making cable connections; furnished with chains and $1\frac{1}{4}$ " pipe batten, and color frames for red and blue compartments; occupies space 10 inches wide when in position. Also made in larger sizes, with mogul-screw-base receptacles, No. 613 for 500-watt and No. 614 for 1000-watt lamps; occupy space 10 inches and 12 inches wide, respectively, when in position.



No. 612

Portable Type Footlights

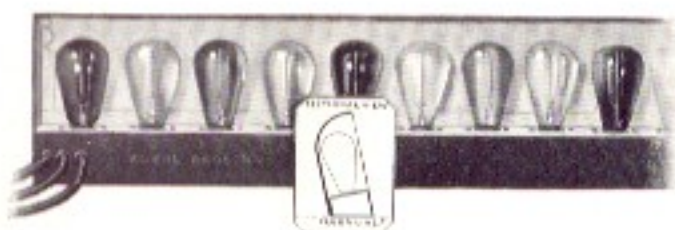
KLIEGL PORTABLE TYPE FOOTLIGHTS—designed for use with a portable stage, and in schools, hotels, show windows, clubs, little theatres, and similar places where a footlight is required temporarily—are made of galvanized sheet-iron, light in weight, compact, and completely wired; (no recess in the floor is necessary—they are intended to be set in position on the stage floor); furnished in any desired length, or in several portable sections.



No. 627

No. 627

Kliegl Portable Footlight No. 627 is fitted with medium-screw-base receptacles, spaced 8-inches between centers; accommodates 60-watt or 100-watt Mazda lamps, in a horizontal position; completely wired with one 2-wire circuit; provided with cable extension and pin connector for making feeder connections; reflecting surfaces painted a permanent white; external surfaces finished in black enamel.



No. 629

No. 629

Kliegl Portable Footlight No. 629 is fitted with a single row of medium-screw-base receptacles, spaced 3-inches between centers; accommodates 60-watt or 75-watt Mazda lamps in a vertical position; completely wired—usually with three 2-wire circuits for independent control of white, red, and blue lights; provided with cable extensions and pin connectors for making feeder connections; reflecting surfaces painted a permanent white; external surface finished in black enamel.

KLIEGL FOOTLIGHTS

No.	DESCRIPTION	PRICE	WEIGHT	CODE WORD
SEMI-FLUSH TYPE				
622	Single-row Open-Trough Footlight	*		<i>Racines</i>
623	Compartment Footlight with color frames	*		<i>Racloir</i>
624	Double-row Open-trough Footlight	*		<i>Racoma</i>
626	Inverted, Single-row, Open-trough Footlight	*		<i>Raddia</i>
632	Single-row Footlight with detachable color globes	*		<i>Radigast</i>
633	Double-row Footlight with detachable color globes	*		<i>Radiola</i>
DISAPPEARING TYPE				
829	Single-row Disappearing Footlight, 5-foot section, oak flooring†	\$50.00	67½ lbs.	<i>Vidalba</i>
828	Double-row Disappearing Footlight, 5-foot section, oak flooring†	80.00	75 lbs.	<i>Vibiones</i>
826	Control Switch for Disappearing Footlight, oak flooring	30.00	20 lbs.	<i>Viadrus</i>
PORTABLE TYPE				
627	Portable Footlight with one color-circuit	*		<i>Radeau</i>
629	Portable Footlight with three color-circuits	*		<i>Radgarn</i>

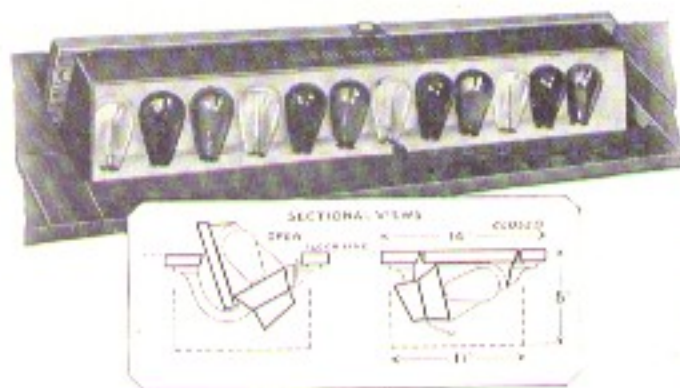
Note: Footlights can be furnished with lamps spaced wider apart than specified in description, or with a greater number of circuits for more colors, or other changes that may be necessitated by particular requirements. When ordering footlights give length of footlight, (usually about four feet shorter than the proscenium opening); state whether it is curved or straight; number of colors desired, number of lamps for each color, and size lamps to be used. Also state whether splice-box for making feeder connections should be located in the center, or at the right end or at the left end of the footlight viewed from a position on the stage facing the audience.

Blue prints for use of architects and engineers planning footlight installations, showing construction details and dimensions of Kliegl Footlights, are available on request.

*Price quotations furnished on application. †Special lengths, or with flooring other than oak—prices on application.

Disappearing Type Footlights

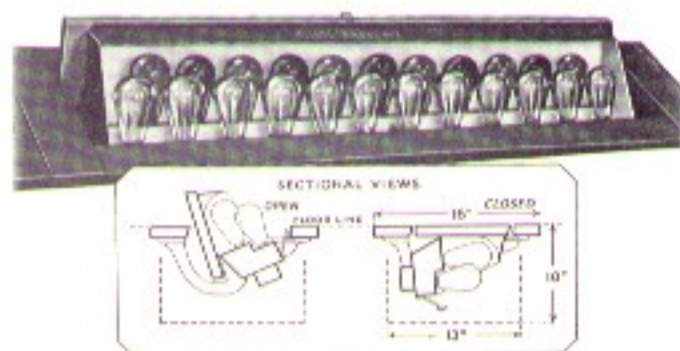
KLIEGL DISAPPEARING TYPE FOOTLIGHTS—for schools, lodge rooms, auditoriums, lecture halls, and wherever a footlight is required only occasionally—are constructed so that when not in use they may be closed down flush with the stage floor. They are furnished in complete standard five-foot sections ready for installation. Lamp receptacles are mounted in an all-metal fireproof trough with pivoted supports attached to a hardwood frame, 60x14 inches overall. A hardwood panel, fastened to the back of the trough, serves as part of the stage floor when footlight is closed. Both frame and panel are substantially made of 1-inch oak flooring in sections notched and glued together in a manner that prevents warping, and will withstand the same treatment to which the rest of the floor is subjected. Each section is provided with a flush ring-pull and lock, and when footlight is open it is held in position by a spring-catch. When so desired a special switch can be furnished for installation in the stage floor near the disappearing footlights which connects the lamp circuits when its panel is opened, and disconnects the lamp circuits when it is closed. Kliegl Disappearing Footlights comply with Underwriters' requirements, can be supplied for straight or curved installation, in special lengths if desired, and with flooring other than oak.



No. 829

No. 829

Kliegl Disappearing Footlight No. 829 is fitted with a single row of medium-screw-base receptacles, spaced $3\frac{1}{2}$ inches between centers; accommodates fifteen 60-watt or 75-watt Mazda lamps; completely wired, for three 2-wire circuits for independent control of white, red, and blue lights; splice-box provided for making feeder connections; reflecting surfaces painted a permanent white; furnished complete, with oak flooring, in five-foot sections.



No. 828

No. 828

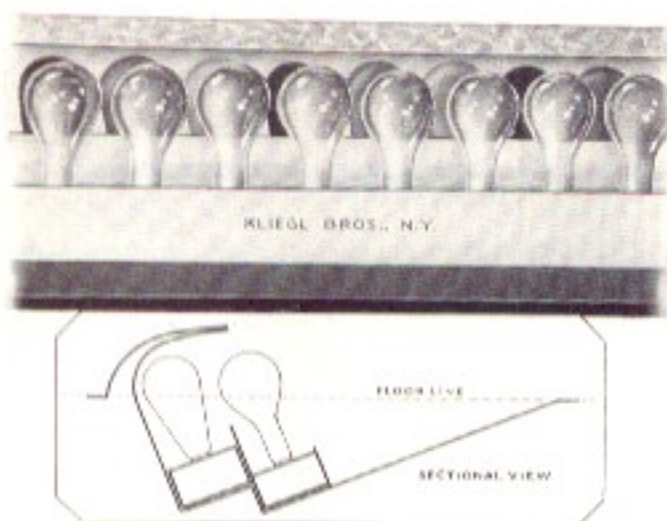
Kliegl Disappearing Footlight No. 828 is fitted with two parallel rows of medium-screw-base receptacles, adjacent receptacles spaced $3\frac{1}{2}$ inches between centers; front row accommodates fifteen 60-watt or 75-watt Mazda lamps, usually wired to a single 2-wire circuit for white lighting; back row accommodates fourteen lamps and is usually wired with two 2-wire circuits for independent control of red and blue lights; reflecting surfaces painted a permanent white; furnished complete, with oak flooring, in five-foot sections.



No. 826

No. 826

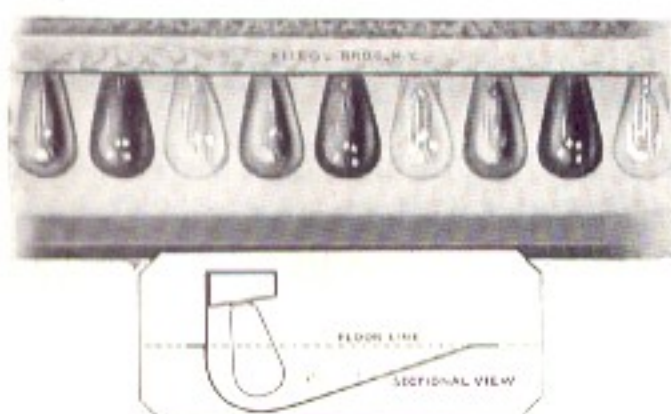
Kliegl Floor switch No. 826 for control of lamp circuits of disappearing footlights; equipped with 30-ampere toggle switches; operated by opening and closing of the panel; furnished complete with oak frame 14x14 inches, and with switches enclosed in a sheet-metal box.



No. 624

No. 624

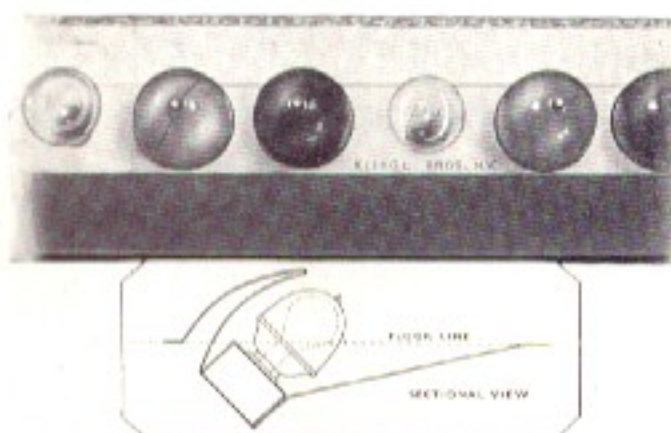
Kliegl Footlight No. 624 is a semi-flush type open-trough footlight fitted with two parallel rows of medium-screw-base receptacles, spaced 4 inches between centers; front row for white lights (75-watt Mazda Lamps), back row for red and blue lights (60-watt Mazda Lamps); completely wired for independent control of white, red, and blue lights; reflecting surfaces painted a permanent white, trough incline dull black; splice-box provided for making feeder connections.



No. 626

No. 626

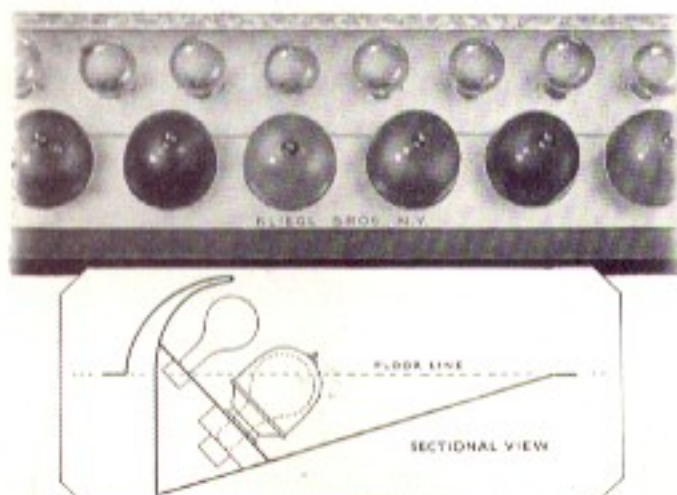
Kliegl Footlight No. 626 is a semi-flush type open-trough footlight fitted with a single row of medium-screw-base receptacles, spaced 4 inches between centers, holding lamps in an inverted or suspended position; accommodates 60-watt and 75-watt Mazda lamps; completely wired—usually for independent control of white, red, and blue lights; reflecting surfaces painted a permanent white, trough incline dull black; splice-box provided for making feeder connections.



No. 632

No. 632

Kliegl Footlight No. 632 is a semi-flush type open-trough footlight fitted with a single row of medium-screw-base receptacles, spaced 5 inches between centers; each receptacle equipped with an aluminum reflector and spring-catch holder for detachable color globes; accommodates 100-watt and 150-watt P. S.-25 Mazda lamps; completely wired—usually for independent control of white, red, and blue lights; reflecting surfaces painted a permanent white, trough incline dull black; splice-box provided for making feeder connections. Color globes are permanently colored, blown glass, unaffected by intense heat of the lamps, uniform in color, standardized, and interchangeable; furnished in amber, red, blue, and green.



No. 633

No. 633

Kliegl Footlight No. 633 is a semi-flush type open-trough footlight fitted with two parallel rows of medium-screw-base receptacles, the lower row is equipped with aluminum reflectors and spring-catch color-globe holders (the same as for Kliegl Footlight No. 632); accommodates 100-watt and 150-watt P. S.-25 Mazda lamps, spaced 5 inches between centers; top row, receptacles spaced 4 inches between centers, accommodates 75-watt Mazda lamps for white lighting; completely wired for independent control of white, red, and blue lights; splice-box provided for making feeder connections; reflecting surfaces painted a permanent white, trough incline dull black.

LIGHTING EQUIPMENT

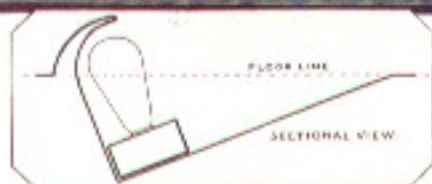
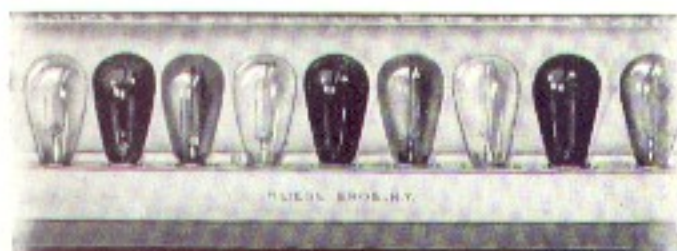
FOOTLIGHTS

LISTED BY UNDERWRITERS' LABORATORIES

KLIEGL FOOTLIGHTS are made in a number of different designs ranging from small portable units to brilliant lighting equipment for the largest and most modern theatre installation. To facilitate selection they are grouped under three classifications: Semi-flush Types, Disappearing Types, and Portable Types. Semi-flush types are installed wherever footlights are used frequently; disappearing types where footlights are required only occasionally, and portable types are intended primarily for temporary stages, display lighting, and traveling entertainers.

Semi-flush Type Footlights

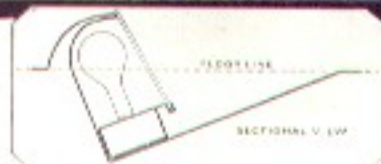
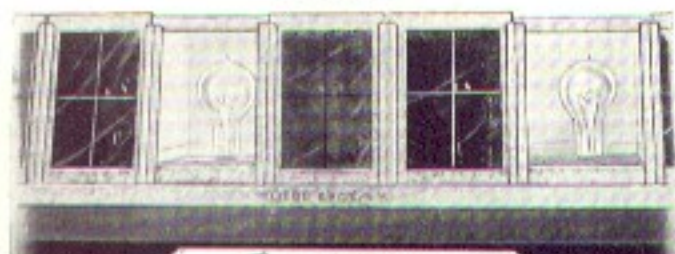
KLIEGL SEMI-FLUSH TYPE FOOTLIGHTS are in the form of a trough, fixed in position, with hood extending $2\frac{1}{2}$ to $3\frac{1}{2}$ inches above the stage floor, protecting the lamps and reflecting the light to the stage; made of galvanized sheet-iron (trough and hood formed from one piece—hood of two thicknesses rolled as one piece and spaced at point of support, making it exceptionally strong and rigid); well ventilated; correctly designed to provide the proper distribution and control of light at maximum efficiency; comply with Underwriters' requirements and are completely wired in accord with their ruling of "not more than 1320 watts to a 2-wire circuit;" furnished in any desired length and curvature. When specified, several Kliegl Connectors, No. 950, can be furnished installed in the footlight trough, with 2-wire control circuits, providing convenient connections for Footlight Spots, illustrated on page 45.



No. 622

No. 622

Kliegl Footlight No. 622 is a semi-flush type open-trough footlight fitted with a single row of medium-screw-base receptacles; accommodates either 60-watt or 75-watt Mazda lamps, 3 to 4 inches between centers—depending upon size of lamps to be used; completely wired—usually for independent control of white, red, and blue lights; reflecting surfaces painted a permanent white, trough incline dull black; splice-box provided for making feeder connections.



No. 623

No. 623

Kliegl Footlight No. 623 is a semi-flush type compartment footlight fitted with a single row of medium-screw-base receptacles, spaced 6 inches between centers, partitioned off in separate compartments, with slide grooves for metal color frames for gelatine color mediums; accommodates 150-watt Mazda lamps; completely wired—usually for independent control of white, red, and blue lights; reflecting surfaces painted a permanent white, trough incline dull black; splice-box provided for making feeder connections.

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KLIEGL BROS

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KLIEGL

THEATRICAL · DECORATIVE · SPECTACULAR

LIGHTING

A COMPLETE LINE of lighting specialties
and lighting effects for the stage, and for
theatres, motion picture studios, window
displays, show rooms, exhibitions, pageants,
outdoor theatricals, outdoor flood-lighting,
spectacular advertising, ball rooms, cabarets,
schools, lodge rooms, and countless
other applications



Catalogue M

KLIEGL BROS

UNIVERSAL ELECTRIC STAGE LIGHTING CO., INC.

ESTABLISHED 1896

321 WEST 50th STREET
NEW YORK, N.Y.

www.klieglbros.com



IN a modern plant just off Broadway, near the center of New York's theatrical district, Kliegl Lighting Specialties and Lighting Effects are planned, designed, and produced—bearing the mark "Kliegl Bros."—a symbol of quality and fine craftsmanship known the world over.

KLIEGL LIGHTING



www.klieglbros.com

box provided for making feeder connections; furnished with strap hinges for mounting, and with red and blue color globes.

No. 596

Kliegl Proscenium Light No. 596, fitted with medium-screw-base receptacles, spaced 11-inches between centers; lamps in suspended position, each receptacle is provided with square-face all-metal silvered reflector and grooves in front for metal color frames for gelatine color mediums; accommodates seventeen

200-watt Mazda lamps in a 16-foot length; splice-box provided for making feeder connections; furnished with strap hinges for mounting, and with color frames for red and blue compartments.

Fig. 2

Kliegl Tormentor Spotlights, arranged by grouping and mounting as desired on pedestal pipe support a number of Kliegl Spotlights. Spotlights suited for this purpose are illustrated and described in detail on page 41.

KLIEGL PROSCENIUM LIGHTS

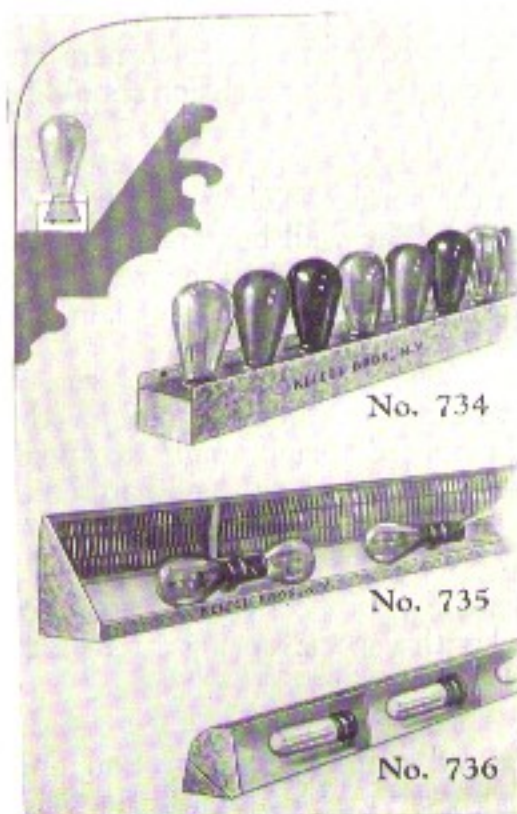
No.	DESCRIPTION	LENGTH	LAMPS	CIRCUITS	PRICE	CODE WORD
591	Proscenium Light	15-ft.	22 60-watt	1 2-wire	\$33.00	Opalin
592	Proscenium Light	12-ft.	15 100-watt	1 2-wire	26.00	Opbod
593	Proscenium Light; 13 red and 13 blue color globes	16-ft.	39 100-watt	3 2-wire	112.00	Opcent
594	Proscenium Light; 12 color frames	16-ft.	18 200-watt	3 2-wire	45.00	Opefice
595	Proscenium Light; 10 color frames	16-ft.	15 500-watt	3 2-wire	78.00	Operant
596	Proscenium Light; silvered reflectors; 12 color frames	16-ft.	17 200-watt	3 2-wire	170.00	Operula
601	Proscenium Light	16-ft.	48 60-watt	3 2-wire	38.00	Rabolao

COVE LIGHT-STRIPS

KLIEGL COVE LIGHT-STRIPS are used for concealed indirect lighting in theatre auditoriums, lobbies, hallways, ball rooms, foyers, churches, lodge rooms, and similar places where the light source is hidden from view. They are metal strips fitted with medium-screw-base receptacles, completely wired, furnished in any length or curvature specified; made for both natural and color lighting effects; designed to be installed in coves, back of panels, around rotundas, under marquees, on cornice tops, and elsewhere.

No. 734

Kliegl Cove Light-strip No. 734 is ordinarily wired for three colors—white, red, and blue; accommodates 60-watt Mazda lamps, usually spaced 4 inches between centers; wiring completely enclosed; frame, 3x2 inches, is made of heavy-gauge galvanized sheet-iron; sets in cove space 8x8 or 8x6 inches, depending on the size of dome.



No. 735

Kliegl Cove Light-strip No. 735 is lined with corrugated mirrored-glass reflectors; used where bright, indirect lighting is desired; accommodates 60-watt Mazda lamps, usually spaced 12 inches between centers; wiring completely enclosed; frame is heavy-gauge galvanized sheet-iron; occupies space approximately $5\frac{1}{2} \times 3\frac{3}{4}$ inches.

No. 736

Kliegl Cove Light-strip No. 736 fits into space $3\frac{1}{2} \times 4$ inches; is designed especially for use where but little room is available; 40-watt tubular lamps are used and usually spaced 12 inches between centers; reflecting surface is half-round and painted a permanent white; wiring completely enclosed; frame is heavy-gauge galvanized sheet-iron.

KLIEGL COVE-LIGHT STRIPS

No.	DESCRIPTION	PRICE	CODE WORD
734	Cove Light-strip, wired for one to three colors	*	Tepore
735	Cove Light-strip, wired for one color	*	Tercol
736	Cove Light-strip, wired for one color	*	Ternera

*Prices on application; specify length of Strip—straight or curved—and number of lights per foot required.

SWITCHBOARDS and PANEL BOARDS

KLIEGL SWITCHBOARDS AND PANEL BOARDS are designed and built to specifications—to meet the ever varying requirements of theatrical service. They are also built for motion-picture and photographic studios, schools, colleges, laboratories, office buildings, amusement parks, et cetera. Usually they are of the dead front type, as recommended by the Underwriters, in which all switches, fuses, and other live parts are mounted on separate panels back of the board, and switches operated by specially constructed insulated handles which extend through the panel to the front of the board. Precautions are taken to insure durability, safety, and efficiency. All electrical parts comply in every detail with the requirements of the

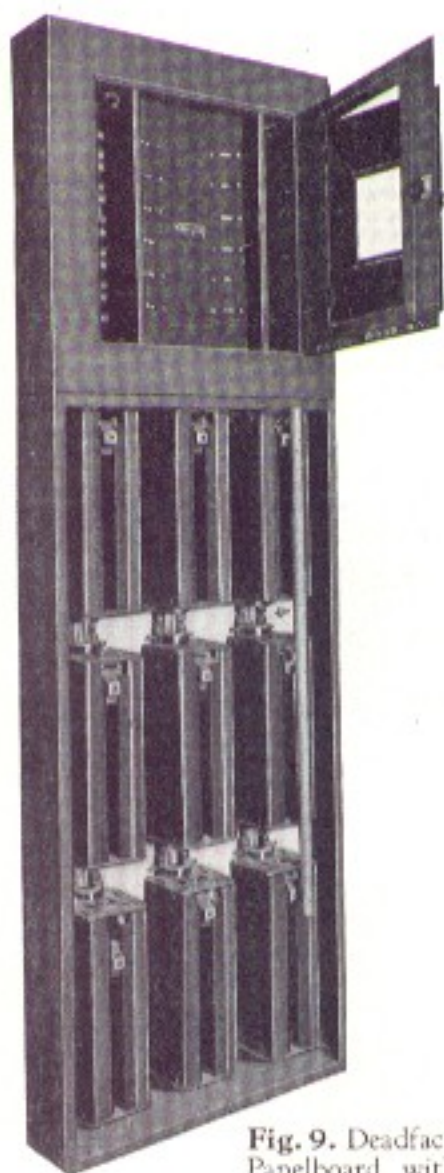


Fig. 9. Deadface Panelboard with Dimmers

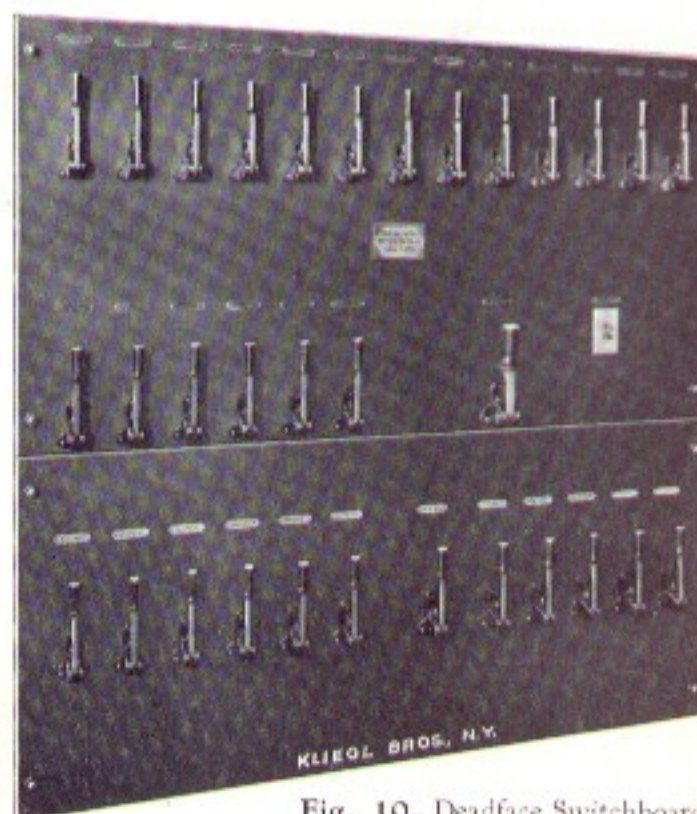


Fig. 10. Deadface Switchboard

National Board of Fire Underwriters and City inspection; workmanship is guaranteed.

Fig. 9 illustrates a Kliegl switchboard designed for lodge rooms, schools, dancing academies, and other similar locations where a small dead-front panel board with dimmer equipment providing flexibility in light control, at a reasonably low cost, is desired. Toggle switches and slider type dimmers control the circuits. Usually white lights in footlight and first and second borderlights are controlled by the first vertical row of dimmers, blue lights by the second row, and red lights by the third row. A master lever permits operations of three dimmers at once. No live parts are exposed. No special attendant is required.

Fig. 10 illustrates a switchboard designed for motion picture theatres, and other locations where more elaborate control for a large number of circuits is required. The handles control 100-ampere 2- or 3-wire type knife switches, mounted on rear of board.

Plans and specifications are prepared and estimates furnished for a complete theatre lighting installation—or any part of the installation; prices are also quoted on individual switchboard requirements.

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PORTABLE DIMMER BOXES

KLIEGL PORTABLE DIMMER BOXES are designed for traveling theatrical companies, outdoor stages, and other occasions where a temporary switchboard is required. They are built in a trunk-like box, with removable front, in which are assembled all the switches, dimmers, plugging receptacles, et cetera, necessary for the operation of stage lamps, border lights, footlights, and other lighting equipment. Traveling companies find Kliegl Portable Dimmer Boxes of inestimable value for special lighting and color-lighting effects, and also useful as an auxiliary to inadequate installations likely to be found in small theatres. They enable road companies to be independent of permanent theatre lighting equipment.

KLIEGL PORTABLE DIMMER BOXES are built of wood, lined with sheet metal; mounted on casters to facilitate transportation; switches,

cutouts and all live parts completely covered; only control handles exposed. They are built in one or more sections, depending on the amount of equipment to be controlled. Each circuit is controlled by a switch with cutout fused to required capacity, and with plugging-pocket or pin-connector outlets—depending upon the current carrying capacity of the circuits; connections can be made and broken quickly and easily; main fuse switch of proper capacity with flexible stage cable for service supply-line is furnished in any desired length, either 2- or 3-conductor.

Dimmers are banked and installed in bottom of box, in any and as many combinations as required, either interlocking or non-interlocking. In case of interlocking, a master lever permitting dimmer control individually and collectively is provided.

One or several circuits may be connected to a single dimmer plate, depending on requirements.

Kliegl Portable Dimmer Boxes operate on either direct or alternating current. Price quotations are furnished on receipt of full information as to the number of circuits and current capacity of circuits to be controlled by dimmers, number of outlets for each circuit, whether dimmers are to be interlocking or non-interlocking, and whether Dimmer Box is to be wired for 2-wire or 3-wire circuits.

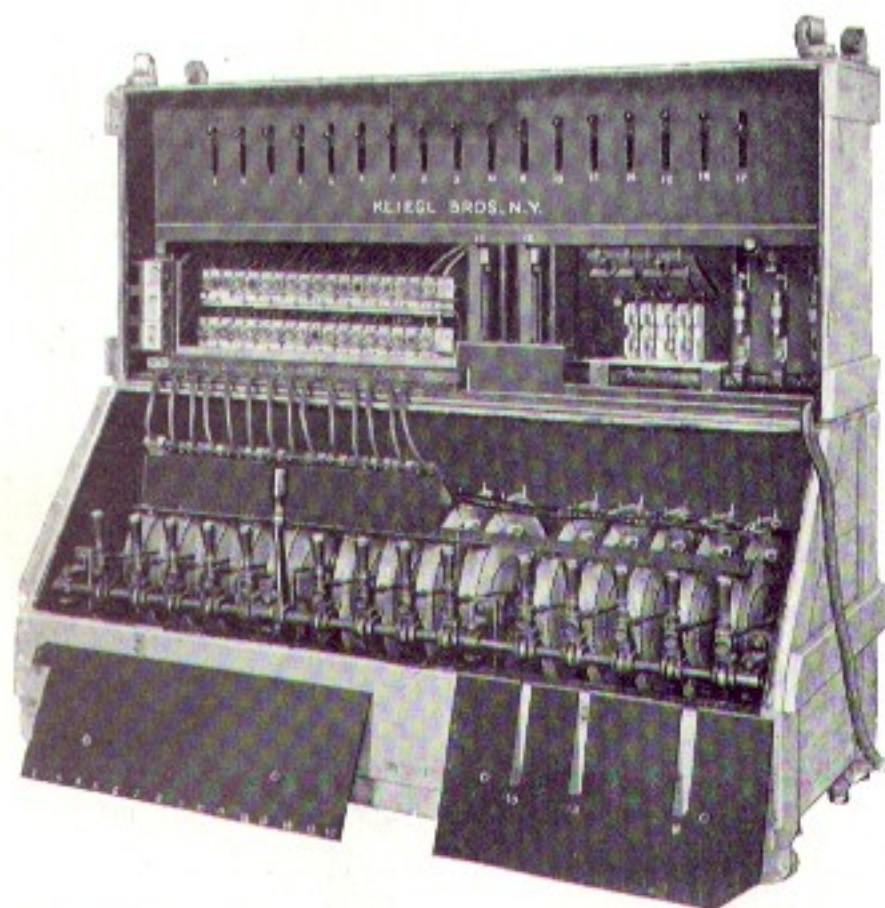
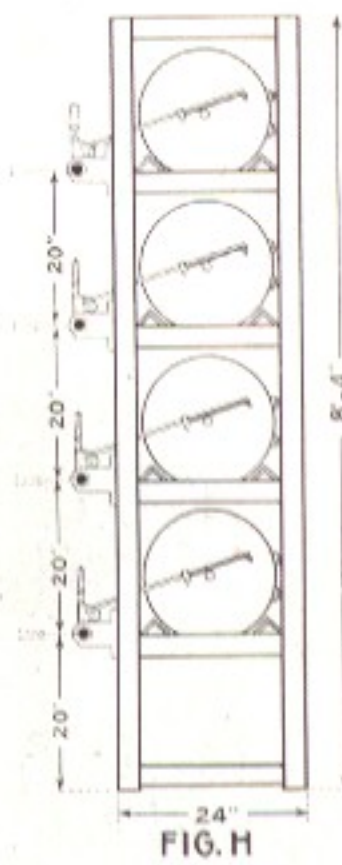
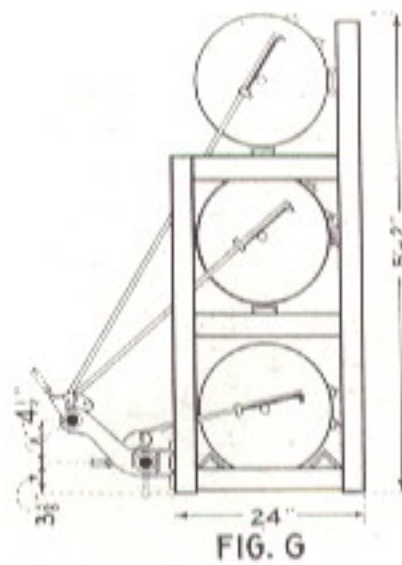
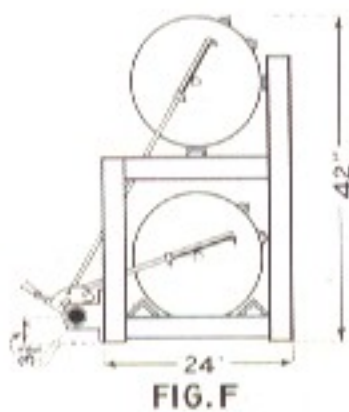
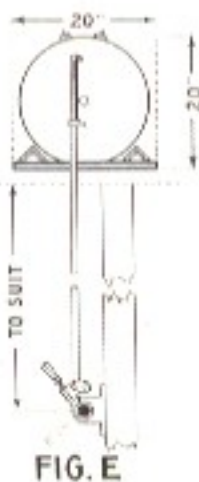
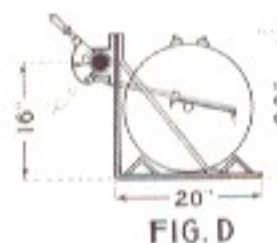
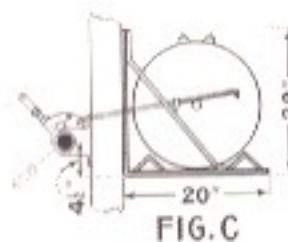
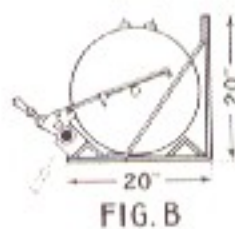
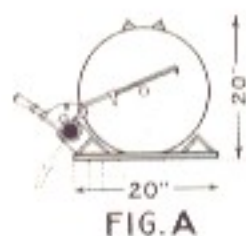


Fig. 8. Portable Dimmer Box with fuse-and-switch covers removed

Average Space Requirements for Dimmers

REFERENCE to the following diagrams will give approximate overall dimensions, height, width, and depth, of any group combination of Kliegl round type dimmer plates, but manufacturer's certified dimensional drawings should be used for final layouts. The side views illustrated are as follows:

- Fig. A—Top of Switchboard mounting, single row
 Fig. B—Wall Mounting, single row
 Fig. C—Rear of Board Mounting, single row
 Fig. D—Floor Mounting, single row
 Fig. E—Floor Mounting with Extension Arm, single row
 Fig. F—Top of Board Mounting, double row
 Fig. G—Top of Board Mounting, Triple row
 Fig. H—Floor Mounting, Multiple row



4 PLATES:
22 INCHES

5 PLATES:
25 INCHES

6 PLATES:
29 INCHES

8 PLATES:
39 INCHES

10 PLATES:
46 INCHES

12 PLATES:
54 INCHES

15 PLATES: 67 INCHES

18 PLATES: 79 INCHES

20 PLATES: 88 INCHES

DIMMER BANKS

WHERE a large number of circuits are to be controlled, as in theatre lighting, Kliegl interlocking dimmers are assembled in banks with master control handle for groups of dimmers, and a grand master that controls the entire bank. They can also be provided with a master control wheel for slow-motion dimmer-control and slow-motion cross-interlocking control. In every case the control is smooth, even, and easy, and individual dimmer plate or dimmer banks, when used at their rated volts and wattage, will dim their load from full-bright to completely out without flickering. Smooth unflickering gradations of lamp brilliancy are procured through one-hundred-and-ten steps of control on each plate.

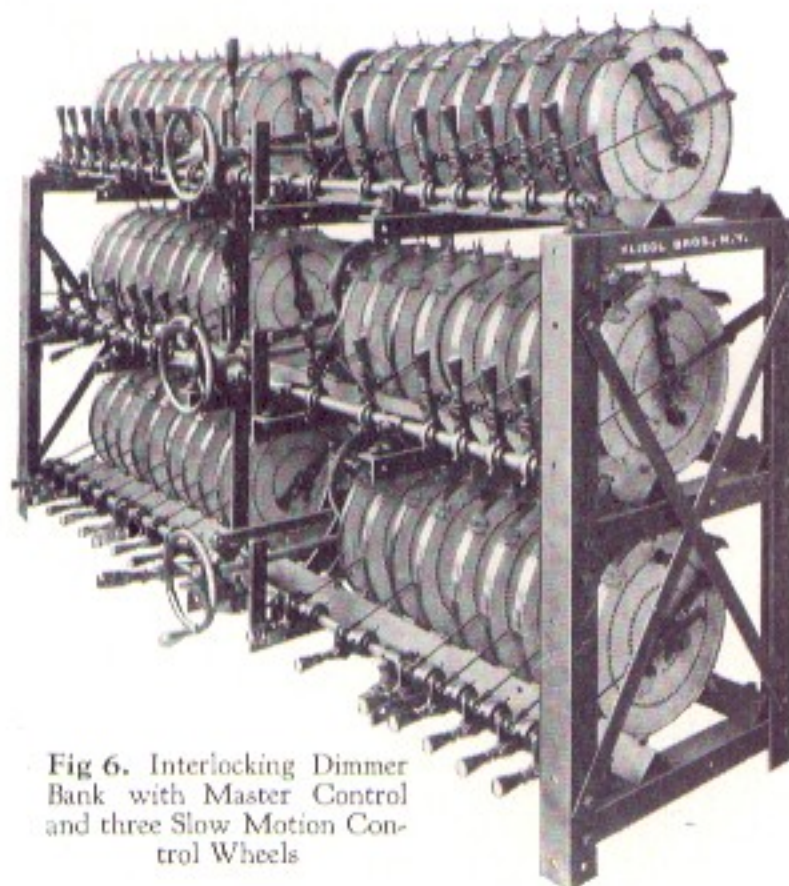


Fig 6. Interlocking Dimmer Bank with Master Control and three Slow Motion Control Wheels

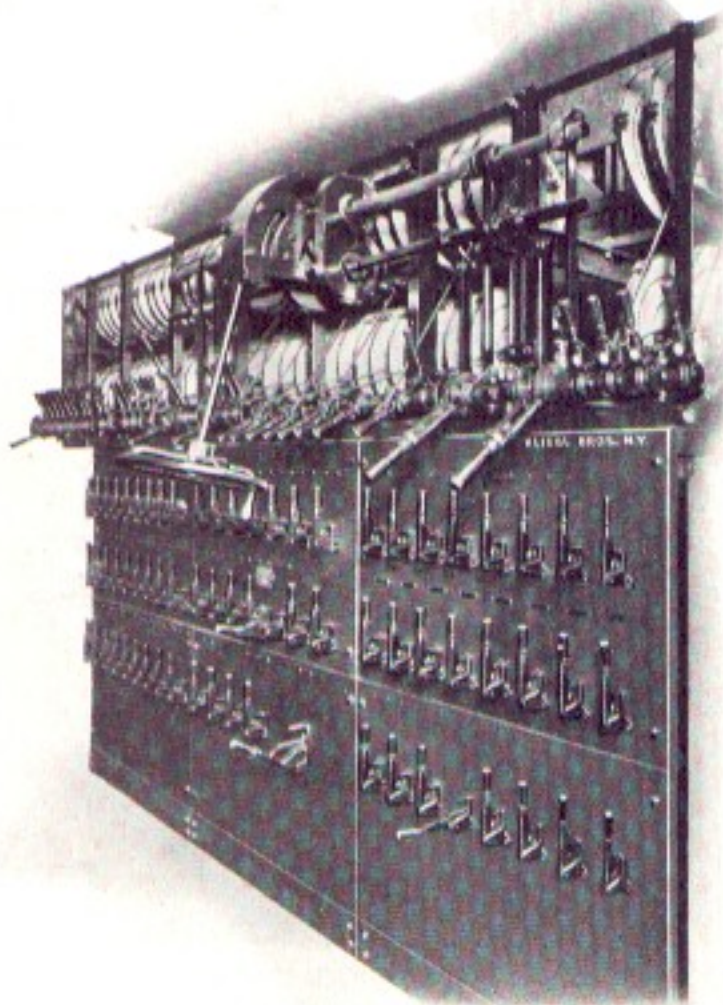


Fig. 7. Interlocking Dimmer Bank with Slow-Motion Cross-interlocking Control Wheel and dead-face Switchboard

When ordering dimmer banks the following information is required:

- 1 Voltage of the circuit.
- 2 Whether dimmer is 2- or 3-wire type.
- 3 Capacity in watts of each dimmer plate.
- 4 Number and type of lamps to be controlled per dimmer plate.
- 5 Sketch showing desired arrangement of dimmer plates.
- 6 Complete information regarding space limitations.
- 7 Number of colors to be controlled on the stage and the number of colors to be controlled in the auditorium.

If interlocking levers are specified, state whether more than one master lever is required, if so, how many, and a rough sketch showing groups of plates to be controlled by each master lever; also state whether slow motion control wheels, like those shown in Fig. 6, are desired, or if a slow-motion cross-interlocking control wheel, like the one shown in Fig. 7, is desired.

With every group of six or more interlocking dimmer plates a master control handle is furnished. The handle on every dimmer plate is provided with two color discs, one in front and the other on top of the handle, so that, irrespective of the position of the handle, they indicate at a glance what color-circuit the dimmer controls. Dimming indicator scale can be mounted on dimmer handle if desired. When remote control is required, single or multiple unit dimmers can be assembled with a motor drive, as shown in Fig. 5.

KLIEGL ROUND PLATE, INTERLOCKING, DIMMERS†
FOR 2-WIRE, 115-VOLT CIRCUITS*

No.	TOTAL WATTS	SIZE AND NUMBER OF PLATES	WEIGHT	PRICE	CODE WORD
1265	750	1-17"	40 lbs.	\$55.00	Nestahk
1266	1200	1-17"	40 lbs.	55.00	Nestchen
1267	1500	1-17"	40 lbs.	55.00	Netbord
1268	2400	1-17"	40 lbs.	55.00	Netelg
1269	2700	1-17"	40 lbs.	55.00	Netimho
1269A	3000	1-17"	40 lbs.	55.00	Netkoraal
1270	3300	2-17"	80 lbs.	99.00	Netleuvers
1271	3600	2-17"	80 lbs.	99.00	Netoide
1272	4200	2-17"	80 lbs.	99.00	Netstok
1273	4800	2-17"	80 lbs.	99.00	Neturi
1274	5400	2-17"	80 lbs.	99.00	Netolies
1275	6000	2-17"	80 lbs.	99.00	Neurada
1276	6600	3-17"	120 lbs.	143.00	Neuroide
1277	7200	3-17"	120 lbs.	143.00	Neuruz
1278	8100	3-17"	120 lbs.	143.00	Neusaap
1279	9000	3-17"	120 lbs.	143.00	Neutos
1280	9600	4-17"	160 lbs.	187.00	Neveda
1281	10200	4-17"	160 lbs.	187.00	Neveros
1282	10800	4-17"	160 lbs.	187.00	Nevisi
1283	12000	4-17"	160 lbs.	187.00	Neviso

†Mounting as shown in Fig. A, page 27.

*Price and details for 3-wire dimmers upon request.

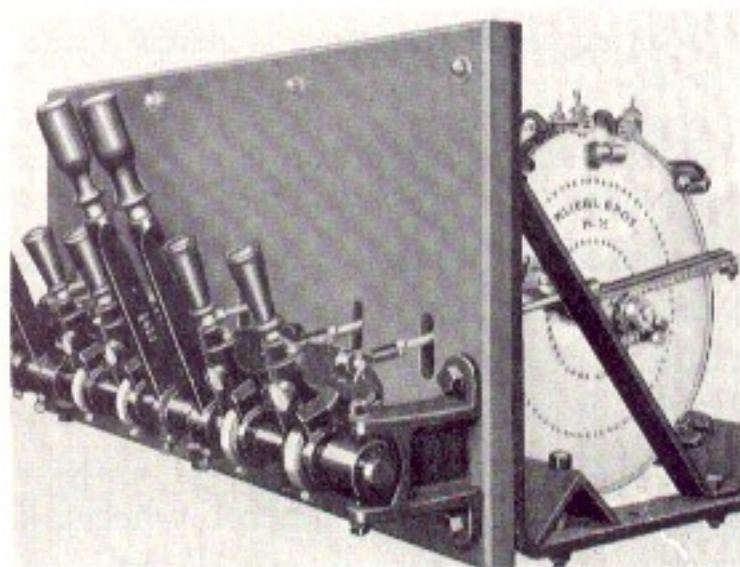


Fig. 4. Group of Interlocking Dimmers mounted on the rear of a panel or switchboard. (Diagram, Fig. C, Page 27.)

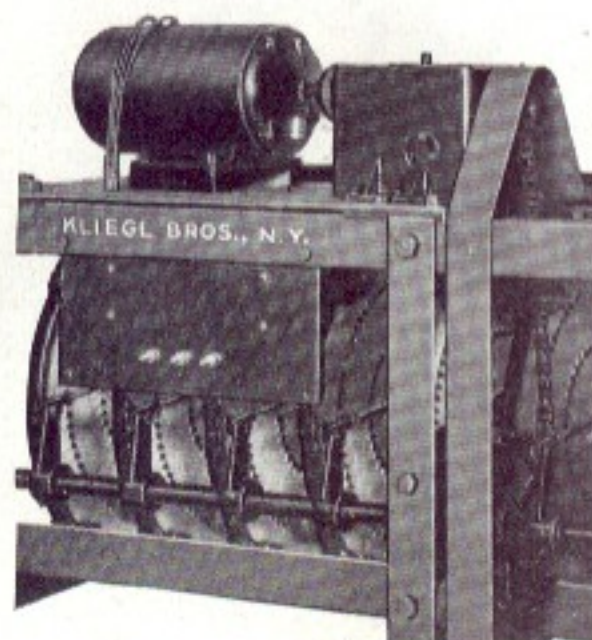


Fig. 5. Interlocking Dimmers with motor drive for remote control

KIEGL ROUND PLATE, NON-INTERLOCKING, DIMMERS

No.	TOTAL WATTS	SIZE AND NUMBER OF PLATES	WEIGHT	PRICE	CODE WORD
FOR 2-WIRE, 115-VOLT CIRCUITS†; WALL MOUNTING*					
1229	60	1- 8"	12 lbs.	\$10.40	Neofiti
1230	110	1- 8"	12 lbs.	10.40	Neogene
1231	220	1- 8"	12 lbs.	10.40	Neologo
1232	330	1- 8"	12 lbs.	10.40	Neomoris
1233	550	1- 8"	12 lbs.	10.40	Neoni
1234	660	1- 8"	12 lbs.	10.40	Neoplase
1235	825	1-12"	23 lbs.	14.00	Neornis
1236	1100	1-12"	23 lbs.	14.00	Neotome
1237	1375	1-15"	40 lbs.	16.00	Nepeta
1238	1650	1-15"	40 lbs.	16.00	Nepheg
1239	2200	1-17"	50 lbs.	27.50	Nephews
1240	2750	1-17"	50 lbs.	27.50	Nephroid
1240A	3000	2-15"	80 lbs.	48.00	Nephrops
1241	3300	2-17"	100 lbs.	57.00	Nephroah
1242	4400	2-17"	100 lbs.	57.00	Nepomuk
1243	5500	2-17"	100 lbs.	57.00	Nepotor
1244	8250	3-17"	150 lbs.	87.00	Nepticula
FOR 3-WIRE, 115-230 VOLT CIRCUITS; WALL MOUNTING*					
1245	440	2- 8"	24 lbs.	\$28.00	Neptuno
1246	660	2- 8"	24 lbs.	28.00	Nepuce
1247	1100	2- 8"	24 lbs.	28.00	Nequior
1248	1320	2- 8"	24 lbs.	28.00	Neratius
1249	1650	2-12"	46 lbs.	35.00	Nerbata
1250	2200	2-12"	46 lbs.	35.00	Nerciat
1251	2750	2-15"	80 lbs.	48.00	Nerezza
1251A	3000	2-15"	80 lbs.	48.00	Nerferer
1252	3300	2-17"	100 lbs.	57.00	Nerinea
1253	4400	2-17"	100 lbs.	57.00	Nerisse
1254	5500	2-17"	100 lbs.	57.00	Nerocile

*For "PERPENDICULAR to the WALL MOUNTING," add \$2.00 to list price.

†220-volt, 2-wire Dimmer prices and details on request.

Interlocking and Non-Interlocking Dimmers

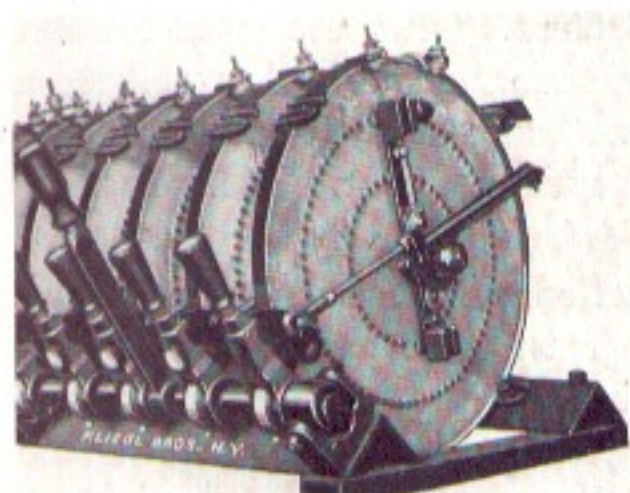


Fig. 3. Group of Interlocking Dimmers arranged for mounting on top of a switchboard or on a wall (Diagram, Fig. A, page 27)

When a number of dimmer plates are required they may be arranged together as a multiple unit for mounting on a wall, on top of a switchboard, or at the rear of a switchboard. They are furnished either non-interlocking (in which case each dimmer plate is independent and individually operated), or interlocking (in which case each dimmer has a lever, which, by a half turn of the handle, can be interlocked with a master control handle permitting any one, any selected group or all dimmer plates to be operated at one time by the master handle).

connection with stationary contacts connected to the resistance element at various points. The number of steps or gradations of light from full-bright to black-out depend upon the particular dimmer used. If a number of lamps are to be controlled in the same way at the same time, they may be connected to the same dimmer. If there are several groups of lamps, or lamps are connected to different circuits, or lamps must be operated independently at times—separate dimmer must be used for each group. The size required may be determined by reference to the table.

KLIEGL RECTANGULAR PLATE DIMMERS

No.	TOTAL WATTS	SIZE OF PLATE	WEIGHT	NUMBER OF PLATES	PRICE	CODE WORD
FOR 32-40 VOLT CIRCUITS						
1220	30	7" x 7" x 3"	4 lbs.	1	\$13.00	Narbas
1221	15	7" x 7" x 3"	4 lbs.	1	13.00	Narcasto
1222	10	9" x 9" x 3"	7 lbs.	1	16.25	Nardoa
1223	7.5	9" x 9" x 3"	7 lbs.	1	16.25	Naroem
1224	5-9	9" x 9" x 3"	7 lbs.	1	16.25	Narrons
FOR 115-VOLT CIRCUITS						
1210	110	5 1/2" x 5 1/2"		1	\$8.50	Nadivo
1211	220	5 1/2" x 5 1/2"		1	8.50	Naenia
1212	440	7" x 7"		1	13.00	Naees
1213	660	7" x 7"		1	13.00	Nafego
1214	830	9" x 9"		1	16.25	Nagelag
1215	1100	9" x 9"		1	16.25	Nagillen
1216	1375	11" x 11"		1	21.00	Nagonz
1217	1650	11" x 11"		1	21.00	Nagtest
1218	2200	14" x 14"		1	30.00	Naimar
1219	2750	14" x 14"		1	30.00	Nakoo
1289	3000	15" x 24"	50 lbs.	1	60.00	Nicasio
1290	4000	15" x 24"	50 lbs.	1	60.00	Nichus
1291	5000	15" x 24"	50 lbs.	1	60.00	Nictage
1292	6000	15" x 24"	100 lbs.	2	124.00	Nidew
1293	8000	15" x 24"	100 lbs.	2	124.00	Nidulor
1294	10000	15" x 24"	100 lbs.	2	124.00	Nierait

Dimmer plates, No. 1289 to No. 1294, can also be furnished interlocking with master control handle—add \$15.00 per plate to list price, which includes cost of master control handle, one for every six plates.

Round Plate Dimmers



No. 1234 No. 1241 No. 1234

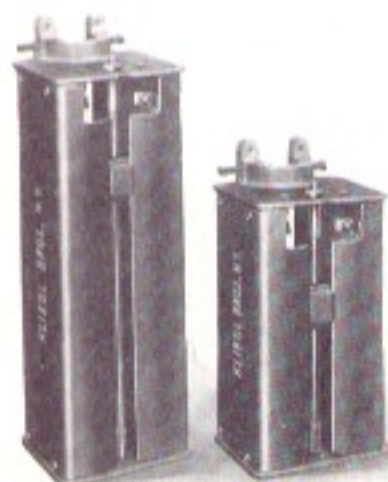
Kliegl Round Plate Dimmers are used in theatres, churches, town halls, lodge rooms, motion picture houses, and wherever light control is required. They are rated for continuous duty, and dimmers range in size and capacity from a small dimmer plate that controls as low as 60-watts (2 lamps) to large dimmer plates that control as high as 6000 watts.

Strong compact construction, with the resistance element thoroughly protected against atmospheric moisture and oxidation by being embedded in a vitreous enamel substance, perfect contact procured by a sliding spring contact, assures long life of service. The design is such that good heat distribution and ventilation is obtained, thus providing dimmers that for their capacity require less space than any other form of construction.

DIMMERS

KLIEGL DIMMERS range from small portable units used with spotlights and stage lamps to large dimmer banks for installation in theatres, schools, and public buildings. There is a Kliegl dimmer for every purpose.

Portable Spotlight Dimmers



No. 1204 No. 1201

Kliegl Portable Spotlight Dimmers are made especially for light control of the high candle power 110-volt incandescent lamps used with spotlights and other stage lamps. Resistance element is embedded in vitreous enamel insulation which thoroughly protects resistance element from all moisture, prevents oxidation, assures long life, and is constructed to withstand rough handling. Slider, with multiple spring contact, provides a smooth range of control from full-bright to black-out without flickering. These dimmers are light in weight, compact, and easily attached to pedestal stand—or can be mounted on a wall or other flat surface; sheet metal case protects the dimmer; wires are brought out through suitable holes in the base.

KLIEGL PORTABLE SPOTLIGHT DIMMERS
FOR 115-VOLT CIRCUITS

No.	TOTAL WATTS	DIMENSIONS	WEIGHT	PRICE	CODE WORD
1201	300	13" x 5 1/4" x 5"	9 1/2 lbs.	\$15.50	Naafgat
1202	500	13" x 5 1/4" x 5"	9 1/2 lbs.	17.50	Nababie
1203	750	17 1/2" x 5 1/4" x 5"	12 1/2 lbs.	23.25	Nablia
1204	1000	17 1/2" x 5 1/4" x 5"	12 1/2 lbs.	23.25	Naboria
1205	2000	26" x 5 1/4" x 5 1/4"	18 lbs.	45.00	Nacarar

Rectangular Plate Dimmers



No. 1291

Kliegl Rectangular Plate Dimmers, most frequently used for theatrical lighting effects, may also be used for other purposes, such as to prolong the life of lamps where they have to be kept burning for long periods of time but not necessarily at their full candle power; to control speed of motors; or to regulate current in practically any kind of an electrical device.

Dimmer plates up to 2750-watt capacity resemble in general appearance the dimmer No. 1217, illustrated. Large capacity dimmer plates, used for controlling several incandescent spotlights and for similar heavy duty, resemble in general appearance the dimmer No. 1291, illustrated.

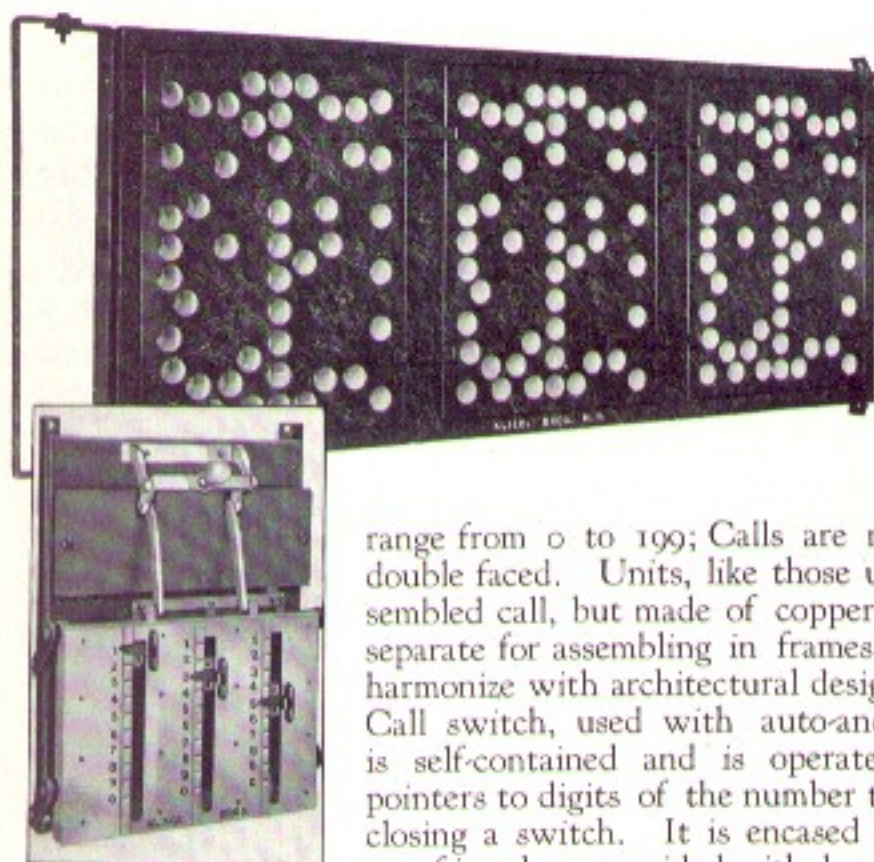


No. 1217

Kliegl Rectangular Plate Dimmers consist of a shallow cast-iron frame-plate with the resistance element embedded in vitreous enamel insulation which thoroughly protects the resistance unit from all moisture, prevents oxidation, and assures unlimited service. A sliding contact on a swinging arm makes

AUTOMOBILE-and-CARRIAGE CALL

KLIEGL AUTOMOBILE-AND-CARRIAGE CALLS are a rapid, quiet and effective means of calling vehicles to doorways of theatres, hotels, department stores, and other public buildings. They obviate confusion and shouting; require no perforated key-cards or other contrivances; are visible day and night; can be distinctly read from a distance of several blocks; and are unaffected by weather conditions.



No. 783

range from 0 to 199; Calls are made single and double faced. Units, like those used in the assembled call, but made of copper are furnished separate for assembling in frames constructed to harmonize with architectural designs. Call switch, used with auto-and-carriage call, is self-contained and is operated by sliding pointers to digits of the number to be called and closing a switch. It is encased in a weather-proof iron box, provided with door, lock and key.

Call is constructed entirely of metal; consists of three units placed side by side in a frame, each unit having receptacles completely wired for lamps which outline numerals. Three units with numeral range from 0 to 9 are used for Call with range from 0 to 999; a narrow unit with the numeral 1, and two standard units are used for Call with



Illustrating Kliegl Automobile and Carriage Call assembled in a special frame, designed by the architect (Saks' Store, Fifth Ave., N. Y.)

KLIEGL AUTOMOBILE-AND-CARRIAGE CALLS

No.	DESCRIPTION	CALL RANGE	PRICE	CODE WORD
782	Single Face Auto-and-Carriage Call, with Call Switch; Call 58"x29 1/2"x6"—140 lbs.	0 to 199	\$377.00	Regadia
783	Single Face Auto-and-Carriage Call, with Call Switch; Call 72"x29 1/2"x6"—180 lbs.	0 to 999	450.00	Regente
784	Double Face Auto-and-Carriage Call, with Call Switch; Call 58"x29 1/2"x11"—280 lbs.	0 to 199	488.00	Regiao
785	Double Face Auto-and-Carriage Call, with Call Switch; Call 72"x29 1/2"x11"—360 lbs.	0 to 999	600.00	Reglage
786	Three separate single face units—made of copper (for assembling in specially designed frames, for single faced Auto-and-Carriage Call), with Call Switch	0 to 199	400.00	Regnait
787	Three separate single face units—made of copper (for assembling in specially designed frames, for single faced Auto-and-Carriage Call), with Call Switch	0 to 999	450.00	Regor
788	Six separate single face units—made of copper (for assembling in specially designed frames, for double faced Auto-and-Carriage Call), with Call Switch	0 to 199	635.00	Regral
789	Six separate single face units—made of copper (for assembling in specially designed frames, for double faced Auto-and-Carriage Call), with Call Switch	0 to 999	735.00	Regsam
790	Cable for Automobile and Carriage Call; 34 conductor; per foot		.50	Reguante
791	Checks, printed with Call Numbers for Owners and Drivers; 2000 checks		6.00	Rehacer

Dimensions listed are for Calls completely assembled in a frame ready for erection. Call-switch cabinets—for call 0-999; box for surface mounting is 22" high x 16" wide x 8" deep; box for flush mounting is 22" high x 16" wide x 8" deep with surface plate 28" high x 22" wide; approximate weight, 91 lbs.;—for call 0-199; box for surface mounting is 22" high x 10" wide x 8" deep; box for flush mounting is 22" high x 10" wide x 8" deep with surface plate 28" high x 16" wide; approximate weight 80 lbs.

Separate units with numeral "1" are 26"x5 1/2"x5" deep; units with numeral range "0" to "9" are 26"x19"x5" deep. When designing frame allow at least 2" spacing between units, and for double faced Calls a space inside between the two calls of at least 5".

Call "0" to "999" requires a 34-conductor cable which can be installed in 1 1/4" conduit.

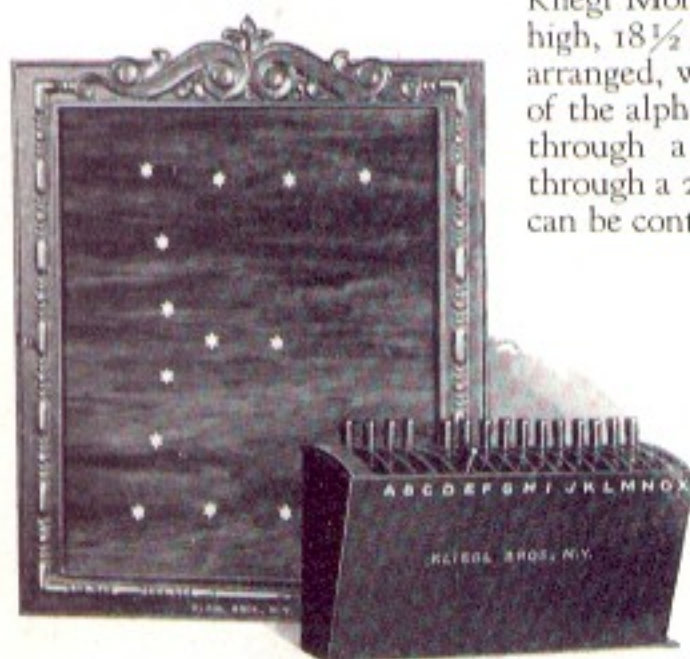
Lamps and cable not included in the list price; 10 watt S. 14 bulb lamps are used (No. 783—call from 0 to 999 takes 141 lamps).

ACT ANNOUNCERS

KLIEGL ACT ANNOUNCERS for vaudeville and motion picture theatres are usually set in proscenium arch, controlled by a keyboard back stage, and illuminated so that names of performers or act announced can be distinctly read from all parts of the house.

Monogram Type

Kliegl Monogram Type Act Announcer is a sheet-metal box, 22 inches high, 18½ inches wide and 5 inches deep, containing lamp receptacles so arranged, wired, and controlled that when illuminated they form letters of the alphabet, "A" to "O" and "X," which appear like stars showing through a beautifully colored glass front. Receptacles are wired through a 21-conductor cable to keyboard back stage. Two announcers can be controlled from one keyboard. Front of act announcer, 25" x 21", is attractively decorated with metal trim and finished in gold; hinged front permits access to lamps and receptacles.



No. 700

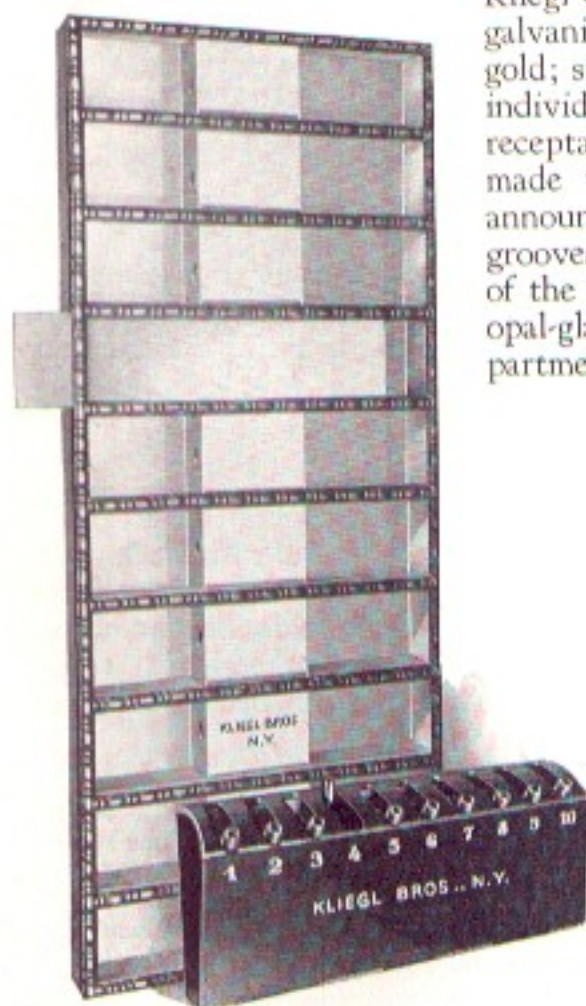
KLIEGL "MONOGRAM TYPE" ACT ANNOUNCERS

No.	DESCRIPTION	PRICE	WEIGHT	CODEWORD
700	One Monogram Type Act Announcer with lamps and one keyboard	\$118.00	56 lbs.	Tatabula
702	Two Monogram Type Act Announcers with lamps and one keyboard	180.00	94 lbs.	Taufonia

Cable not included in list price.

Compartment Type

Kliegl Compartment Type Act Announcer has ten compartments; is made of galvanized sheet-iron with ornamental metal trim and attractively finished in gold; size, 5 feet high, 24 inches wide, and 5 inches deep; each compartment, individually controlled from the keyboard, has two medium-screw-base receptacles completely wired to a splice box in the base where connections are made through an 11-conductor cable to keyboard back stage. Two act announcers may be operated from the one keyboard. Each compartment has grooves for an opal-glass slide and a clear-glass slide. Lettered announcement of the act is painted or pasted on the clear-glass slide and placed back of the opal-glass slide. Wording is invisible to the audience except when the compartment is lighted.



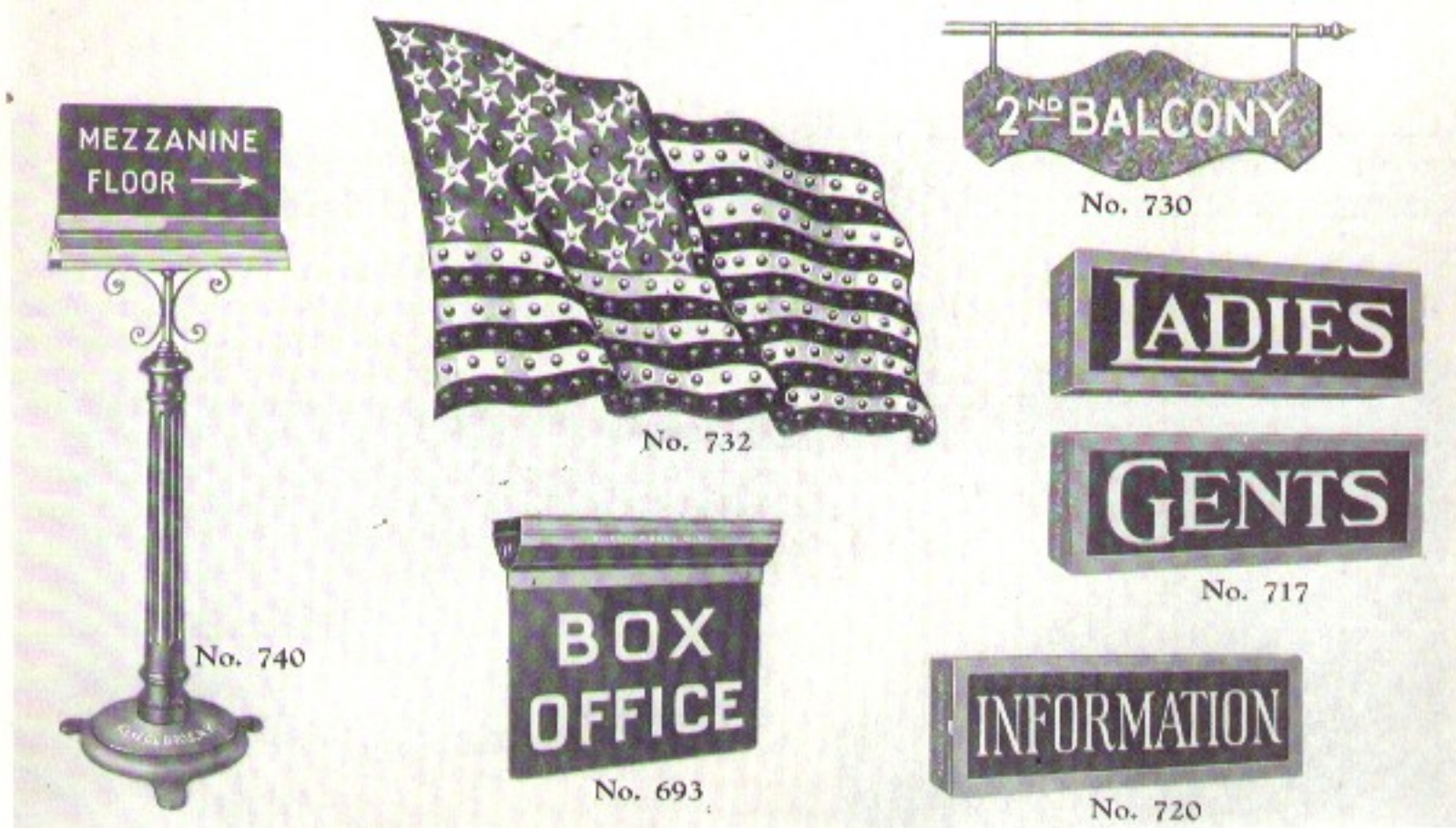
No. 705

KLIEGL "COMPARTMENT TYPE" ACT ANNOUNCERS

No.	DESCRIPTION	PRICE	WEIGHT	CODEWORD
705	One Compartment Type Act Announcer (with 10 compartments); with one keyboard and 10 clear and 10 opal glass slides	\$67.00	61 lbs.	Taurulo
706	Two Compartment Type Act Announcers (each with 10 compartments); with one keyboard and 20 clear and 20 opal glass slides	122.00	112 lbs.	Tauxiar
707	Opal Glass Slides for Act Announcers, 23¼" x 5¾" x 1/8" — each	.90		Tavao
708	Clear Glass Slides for Act Announcers, 23¼" x 5¾" x 1/8" — each	.40		Tavoua
709	Amber-Opal Glass Slides for Act Announcers, 23¼" x 5¾" x 1/8" — each	1.50		Taxador
710	Black paper letters; 4" high; gummed; box of 500, assorted	12.00		Taxillos

Cable not included in list price.

Compartment Type Act Announcer with 16 and more compartments, or wider than 24", can be furnished on special order. Prices on application.



ILLUMINATED SIGNS

KLIEGL ILLUMINATED SIGNS are usually built to meet individual requirements, but several popular standard designs are illustrated above. Illuminated signs of practically every description, and outdoor advertising signs with spectacular and special lighting effects, can be made to specifications. Special signs for lodge rooms, and for degree work of fraternal societies—illuminated emblems, mottoes, et cetera—made to order. Price quotations submitted upon receipt of complete information describing the particular type and characteristics of the sign desired.

No. 740

Kliegl Pedestal-type Clear Glass Illuminated Sign; illuminated through the edge of the glass from a concealed source in the supporting member; mounted on a beautifully designed pedestal; finished in gold; lettering as specified; single and double faced; prices on application.

No. 732

Kliegl Waving American Flag; produced by suitably colored flashing lights; made of galvanized sheet-iron and steel; surface appropriately painted red, white, and blue; weatherproof; completely wired to cut-out box on sign; furnished with motor-driven commutating switch, together with 4-candle-power lamps; red and white lamps are used in the stripes, and a white lamp in each star; made single and double faced. Prices on application; specify size desired.

No. 730

Kliegl double-faced weatherproof sign made of galvanized sheet-iron and steel, enclosing lamp receptacles, completely wired; letters cut out of the sheet metal and backed with white or colored glass. Distinctly readable day or night. Prices on application.

No. 693

Kliegl Clear Glass Illuminated Sign for suspension mounting; illuminated through edge of glass with lamp concealed in supporting member; all exposed metal parts finished in gold; any lettering desired; can be furnished in all sizes, single and double face; prices on application.

No. 717

Kliegl Single-faced box sign; sheet metal; 14"x5"x5"; letters 3 inches high; square corners, with black-glass front-plate; white letters; reading "Gents." All exposed metal parts finished in gold. Similar signs furnished with double face, and others with reading "Ladies", "Information" or other wording that may be specified.

KLIEGL BOX SIGNS

No.	DESCRIPTION	PRICE	CODE WORD
716	Single-face—"Ladies"	\$10.00	Tecaria
717	Single-face—"Gents"	10.00	Teccola
720	Single-face—"Information"	12.00	Tecutle
714	Double-face—"Ladies"	20.00	Teapoy
715	Double-face—"Gents"	20.00	Teatro
721	Double-face—"Information"	24.00	Tedioso

No.	KLIEGL EXIT SIGNS—Continued DESCRIPTION	WORDING	SIZE OF SURFACE PLATE AND DEPTH OF BOX INCHES	H'G'T OF LET- TERS	PRICE	CODE WORD
697W	Ruby-glass face-plate with metal guard; fancy white letters; galvanized sheet-metal box; removable cast-bronze frame with swinging door; dull-bronze finish (for gymnasiums, basket-ball and hand-ball courts, etc., where glass face, if unprotected, is likely to be broken)	Exit	15 3/4 x 9 x 5	4"	17.00	Tapulho
698W	Same construction as 697W	Exit	18 x 12 1/2 x 5	8"	23.00	Tarifar
Suspension Types						
693	Single face; clear glass; white letters; illuminated through edge of glass; lamp concealed in metal supporting member; all exposed metal parts finished in gold	Exit	16 x 8	6"	20.00	Taefelig
6930	Double faced, clear glass, white letters, illuminated through edge of glass; lamp concealed in metal supporting member; all exposed metal parts finished in gold	Exit	16 x 8	6"	30.00	Taenite
Globe Types						
725	Round globe, 4" in diameter, red-glass; with spring-clamp globe holder for mounting on wall over a receptacle containing a 40-watt Mazda lamp; white lettering	Exit		2"	4.50	Teinte
726	Round globe, 6" in diameter, red-colored glass with opening on top for attaching to 3/4" shade holder; white lettering	Exit		2 1/2"	4.50	Telpas
727	Round globe, 6" in diameter, red-colored glass with opening on bottom for attaching to 3/4" shade holder; white lettering	Exit		2 1/2"	4.50	Teluro
728	Flat-round opal-glass globe 8" in diameter, with opening on top for attaching to 3/4" shade holder; red letters	Exit		4"	6.50	Teneis
729	Flat-round opal-glass globe 8" in diameter, with opening on bottom for attaching to 3/4" shade holder; red letters	Exit		4"	6.50	Tenido
Plate Types						
718	Flat steel plate; red enameled background; white letters	Exit	14 x 10	8"	.75	Tecmon
719	Same construction as 718	Exit	9 x 5	4"	.50	Tectona

Where local requirements demand green-colored glass, or other colors, the listed exit signs can be furnished to meet the requirements. Prices on application. Exit signs with specially designed lettering can be furnished, prices on application.

AISLE-LIGHTS and STEP-LIGHTS

KLIEGL AISLE-LIGHTS AND STEP-LIGHTS enable patrons to find their way about in darkened auditoriums and seat themselves without the discomforts and dangers of groping in the dark. They cast a subdued light downward on steps and in aisle ways—a light that does not annoy the audience nor interfere in any way with the performance.



No. 675
Klieg Aisle Spot-light No. 675 is designed for mounting on side of end-seats adjoining aisle ways or on side walls; equipped with lens which controls and properly distributes all the light downward; made of cast aluminum with removable casing; 1/2-inch conduit connection can be made at the bottom or rear; accommodates 10-watt Mazda lamp; is neat and compact, and furnished complete with receptacle and lens; size 6"x3"x2 3/4" deep.



No. 676

No. 676

Klieg Aisle-light No. 676 is a vertical type for flush wall mounting; generally used for illuminating side aisles; consists of a medium-screw-base receptacle mounted in a heavy-gauge galvanized sheet-iron box, size 7 3/4"x4 3/8"x3 1/2" deep, with 1/2-inch knockouts in sides, rear, and bottom; provided with a removable cast-aluminum front, 8 1/4"x4 7/8", of Louver construction, so designed that all the light is directed to the floor; accommodates 40-watt Mazda lamp.

struction, so designed that all the light is directed to the floor; accommodates 40-watt Mazda lamp.



No. 677

No. 677

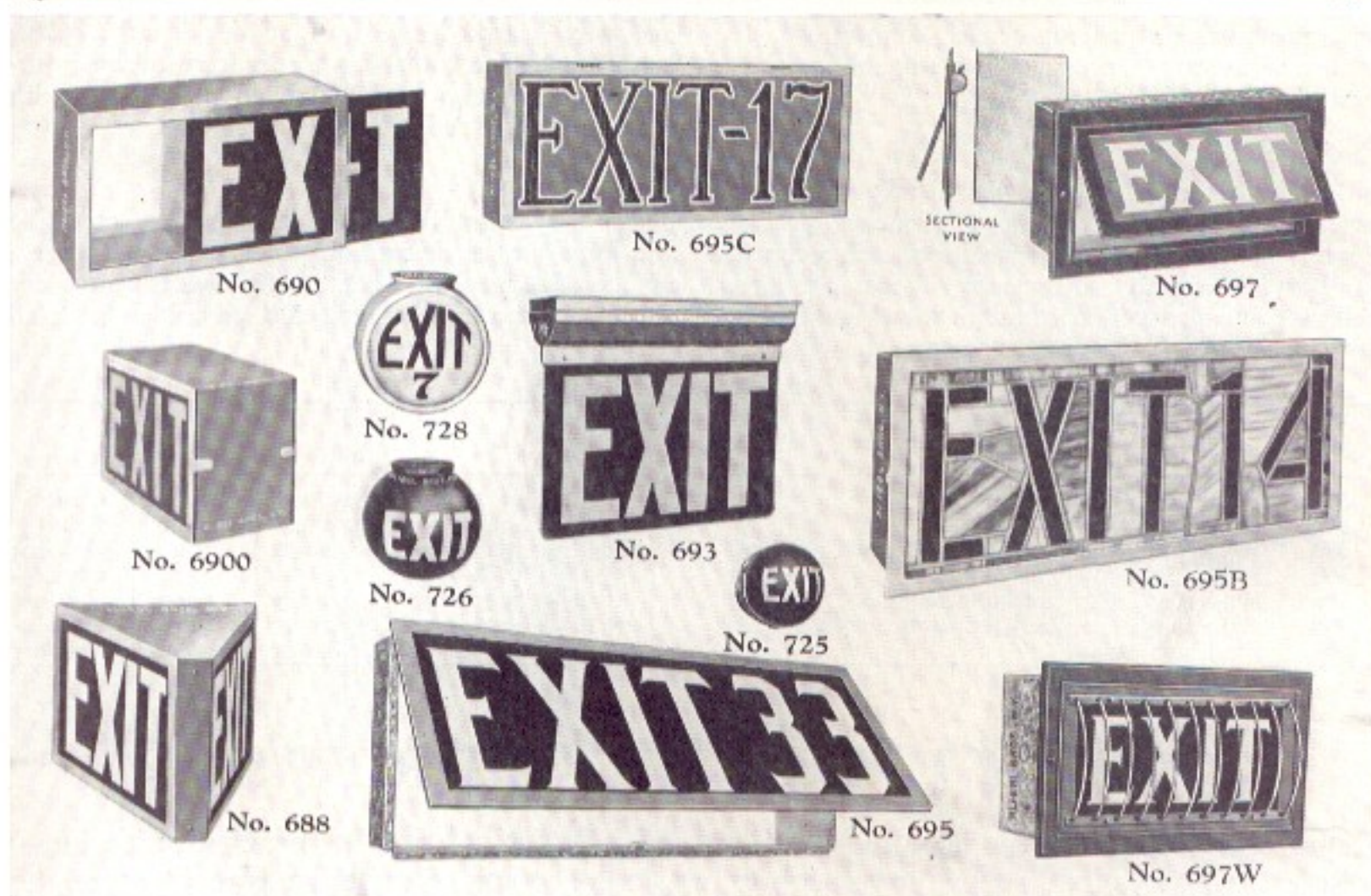
Klieg Step-light No. 677 is a horizontal type designed especially for stairways; is ordinarily set in the step flush with the riser; removable front is cast-

aluminum, 8 1/4"x4 7/8", substantially made to withstand the kicks and knocks of moving feet; Louver openings direct all light to the floor; medium-screw-base receptacle, housed in heavy-gauge galvanized sheet-iron box, 7 3/4"x4 3/8"x3 1/2" deep; 1/2-inch knockouts in sides, rear and bottom; accommodates 40-watt Mazda lamp.

KLIEGL AISLE-LIGHTS AND STEP-LIGHTS

No.	DESCRIPTION	WEIGHT	PRICE	CODE WORD
675	Aisle Spot-Light	13 ozs.	\$4.50	Raptus
676	Aisle-Light	4 lbs.	5.00	Raquel
677	Step-Light	4 lbs.	5.00	Raresco

No.	KLIEGL EXIT SIGNS DESCRIPTION	WORDING	SIZE OF SURFACE PLATE AND DEPTH OF BOX INCHES	H'GT OF LET- TERS	PRICE	CODE WORD
Surface Wall Types						
679	Single face, rectangular; sheet brass box and face plate; dull-brass finish; letters cut out, backed with red translucent insert	Exit	14 1/4 x 4 5/8 x 2 1/4	3"	\$8.50	Tabardo
680	Single face, rectangular; sheet metal box finished in gold with grooved front, open on one side to receive ruby-glass face-plate; white letters	Exit	10 x 5 x 5	3"	3.50	Tabby
685	Same construction as 680	Exit	11 3/8 x 6 3/4 x 5	5"	4.00	Tablet
686	Same construction as 680	Exit	14 x 8 x 5	6"	4.50	Tablier
687	Same construction as 680	Exit	12 x 10 x 5	8"	4.50	Tabloza
690	Same construction as 680	Exit	15 3/4 x 10 x 5	8"	4.75	Tabor
691	Same construction as 680	{Exit with number	15 3/4 x 10 x 5	8"	7.00	Tacques
692	Same construction as 680	{Exit with number	24 1/4 x 10 1/4 x 5	8"	8.50	Tadega
689	Single face, rectangular; sheet metal box finished in gold with grooved front, open on one side to receive opal-glass face-plate; red letters	Fire Escape	15 1/4 x 10 1/4 x 5	3"	7.00	Taboleta
6800	Double faced, rectangular; sheet metal box finished in gold with ruby-glass face-plate on two sides; white letters; grooved sides open on ends for removal of glass and permit access to lamps	Exit	10 x 5 x 5	3"	7.00	Taberd
6850	Same construction as 6800	Exit	11 3/8 x 6 3/4 x 5	5"	8.00	Tablich
6860	Same construction as 6800	Exit	14 x 8 x 5	6"	9.00	Tabliha
6900	Same construction as 6800	Exit	15 3/4 x 10 1/4 x 5	8"	9.50	Tabusi
6910	Same construction as 6800	{Exit with number	15 3/4 x 10 1/4 x 5	8"	14.00	Tacson
6920	Same construction as 6800	{Exit with number	24 1/4 x 10 1/4 x 5	8"	17.00	Tadorn
688	Double faced, triangular; sheet metal box finished in gold with two ruby-glass face-plates; white letters; front end piece detachable, permits removal of glass plates and access to lamp. Small opening on the bottom, covered with frosted glass, directs a subdued light to the floor.	Exit	10 x 8 x 6	5"	9.00	Tabon
Flush Wall Types						
694	Ruby-glass face-plate; white letters; galvanized sheet-metal box; removable hinged front; exposed metal parts finished in gold	Exit	16 x 11 x 5	8"	7.00	Tame
695	Same construction as 694	{Exit with number	24 1/4 x 11 x 5	8"	11.00	Tang
694A	White-opal-glass face-plate; red letters; galvanized sheet-metal box; removable hinged front; exposed metal parts finished in gold	Exit	16 x 11 x 5	8"	9.00	Tamita
695A	Same construction as 694A	{Exit with number	24 1/4 x 11 x 5	8"	12.00	Tangan
694B	Cathedral leaded-amber-and-opal-glass face with ruby-glass letters; galvanized sheet-metal box; removable hinged front; exposed metal parts finished in gold	Exit	16 x 11 x 5	8"	13.50	Tamisage
695B	Same construction as 694B	{Exit with number	24 1/4 x 11 x 5	8"	14.50	Tangente
694C	All-metal face; letters cut out; backed by perforated translucent metal shield; wording appears illuminated in red; galvanized sheet-metal box; removable hinged front; exposed metal parts finished in gold	Exit	16 x 11 x 5	8"	13.00	Tankpis
695C	Same construction as 694C	{Exit with number	24 1/4 x 11 x 5	8"	14.50	Taupo
694D	Sheet-metal face-plate; letters cut out, backed with ruby-glass plate insert; galvanized sheet-metal box; removable hinged front; exposed metal parts finished in gold	Exit	16 x 11 x 5	8"	13.00	Tamojal
695D	Same construction as 694D	{Exit with number	24 1/4 x 11 x 5	8"	14.50	Tankite
697	Ruby-glass face-plate; fancy white letters; galvanized sheet-metal box; removable cast-bronze frame, with swinging door; dull-bronze finish	Exit	15 3/4 x 9 x 5	4"	14.00	Tapigo
698	Same construction as 697	Exit	18 x 12 1/2 x 5	8"	20.00	Tardoz



EXIT SIGNS

KLIEGL EXIT SIGNS are made in a variety of standard styles, and manufactured to specifications when required. They meet all safety requirements of Underwriters and local fire departments. Metal construction is used throughout. They are beautifully finished, and their design perfected in every detail.

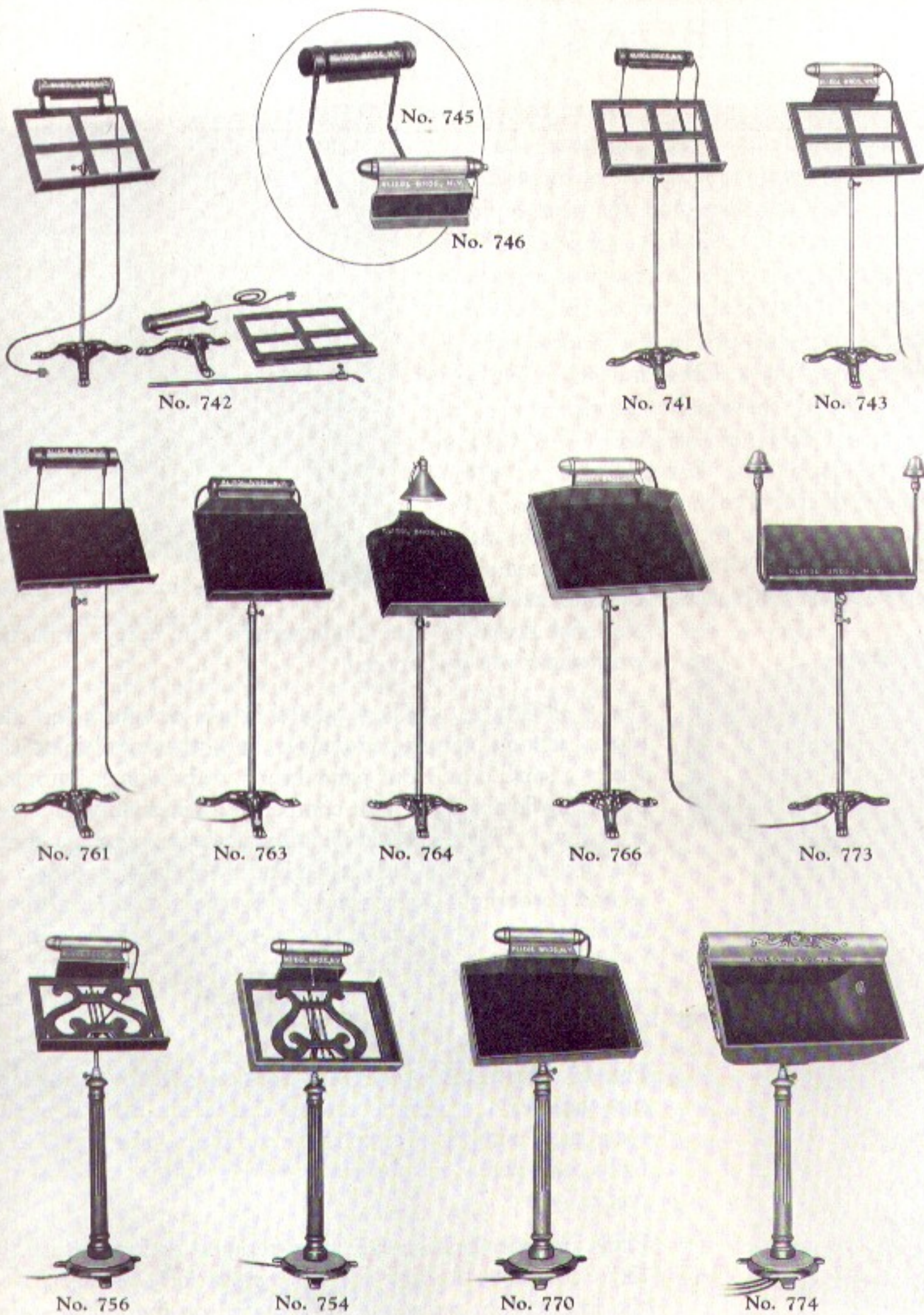
Surface Wall Types are ordinarily mounted on the surface of the wall above the exit; corners are squared; face plate slides in from the side. If box is set in the wall allowance of $\frac{1}{2}$ -inch extension should be made so that glass front can be removed and lamps replaced.

Flush Wall Types are intended for mounting in the wall flush with the surface. They are provided with hinged doors which hold the face plate and permit access to the lamps. The wall box and front are furnished as separate units so that the box can be set during the period of construction and the front with glass face mounted after construction work is completed. This type of exit sign is made with plain and decoratively designed fronts as shown in listing.

Suspension Types are frequently used where space limitation or some other condition prohibits the use of the ordinary type of sign. They may be suspended from the ceiling, mounted at right angles to a wall or post, or set upright on a pedestal, railing or other form of support. They are ornamental, and harmonize with any surroundings.

Globe Types are designed to be attached to any ordinary lighting fixture equipped with a standard $\frac{3}{4}$ -inch lamp-shade holder, with the exception of No. 725 which is provided with a special spring-catch globe holder for mounting on wall over a single lamp receptacle.

Plate Types are not illuminated. They are made of sheet steel with a red enameled background and white letters; and provided with four holes for mounting.



BUNCH LIGHTS



No. 643

KLIEGL BUNCH LIGHTS are used in the wings to throw a flood of light upon the stage in much the same manner that Kliegl Open Box Lights (pedestal type) are used, and are of somewhat similar construction except that they accommodate a number of smaller bulbs instead of one large high-candle-power lamp. They are sometimes preferred to the open-box-lights for the reason that the smaller lamps are less expensive to replace, and if one burns out during the progress of an act it causes no appreciable difference in the lighting effect.

No. 643

Kliegl Bunch Light No. 643, circular reflector with conical center; seven medium-screw-base receptacles; accommodates Mazda lamps from 60- to 100-watts; reflector, polished tin, mounted with an adjustable support on telescopic stand—can be raised, lowered, and set at any angle desired; furnished completely wired—with asbestos leads, connector (which also serves as a switch) and 25-feet of stage cable.

No. 644

Kliegl Bunch Light No. 644, square-shaped box reflector; twelve medium-screw-base receptacles in two parallel rows; accommodates 60- to 75-watt Mazda lamps; provided with grooves for color frame; mounted with an adjustable support on a telescopic stand—can be raised, lowered, and set at any desired angle; furnished completely wired—with asbestos leads, connector (which also serves as a switch), and 25-feet of stage cable; reflecting surfaces painted a permanent white; also made in a larger size to accommodate ten 100-watt Mazda lamps.

KLIEGL BUNCH LIGHTS

No.	DESCRIPTION	PRICE	WEIGHT	CODE WORD
643	Bunch Light, round reflector, for 7 lamps, with connector and 25-ft. of cable; without lamps	\$22.00	39 lbs.	Rainulf
644	Bunch Light, square reflector, for 12 lamps, with connector and 25-ft. of cable; without lamps	24.00	46 lbs.	Rajput
645	Bunch Light, square reflector, for 10 100-watt lamps, with connector and 25-ft. of cable; without lamps	24.00	46½ lbs.	Rakel



No. 644

STRIP-LIGHTS



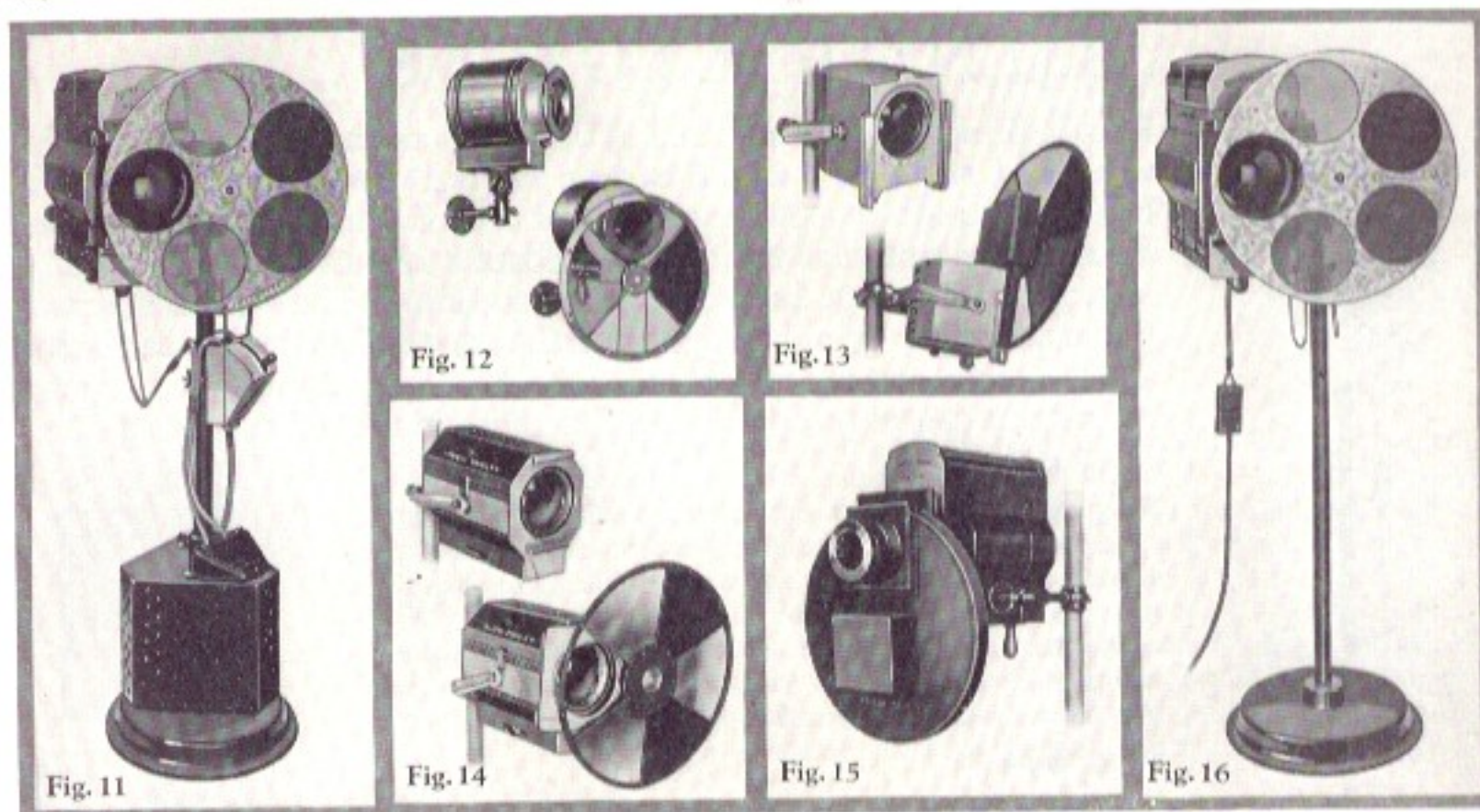
No. 650

ing fully enclosed; special hook for hanging; made in 1½-ft., 3-ft., 5-ft., and 8-ft. lengths; other strip lengths, and strips for more than one color, made to order.

KLIEGL STRIP LIGHTS

No.	DESCRIPTION	PRICE	WEIGHT	CODE WORD
649	Strip-Light, 1½-ft. long, 2 lights	\$3.80	4 lbs.	Rallargo
650	Strip-Light, 3-ft. long, 4 lights	6.50	8 lbs.	Rallagri
651	Strip-Light, 5-ft. long, 6 lights	9.50	11 lbs.	Rallento
652	Strip-Light, 8-ft. long, 10 lights	15.50	17 lbs.	Rallones

KLIEGL STRIP-LIGHTS, used for stage lighting—from the wings, at entrance points, back of transparencies, behind ground rows, and similar locations; are made of galvanized sheet-iron; reflecting surfaces painted white; fitted with medium screw-base receptacles; completely wired, wir-



APPLICATIONS

Of Color Wheels and Effects to Spotlights

The adaptability of Kliegl apparatus is evidenced by the accompanying illustrations. An unlimited number of combinations are made possible by the interchangeability of the various units, purposely designed to meet the ever-varying requirements of the theatrical profession, and equally well suited to meet the increasing demands for novelty and originality in decorative and display lighting. All Kliegl spotlights are so constructed that they can be mounted in every conceivable manner and equipped with many devices for producing attractive lighting and unusual scenic effects.

Fig. 11

Application of Color Wheel No. 22, page 74, to Spotlight No. 5, Page 38. Color Wheel is operated by hand. Spotlight is a 25-ampere standard range "Arc" Spotlight with pedestal mounting. Combination complete, spotlight and color wheel, \$64.50.

Fig. 12

Application of Color Wheel No. 27, page 74, to Spotlight No. 66A, page 57. Color Wheel is operated by a string passing over a pulley. Spotlight can be located high above the floor, for example, in a ballroom, and color wheel operated from the floor by pulling the strings; combination complete, spotlight and color wheel, \$20.00.

Fig. 13

Application of Color Wheel No. 32, page 74, to Spotlight No. 62, page 42. Color Wheel is automatically operated by clockwork, equipped with electro-magnetic release for remote control, suitable for use in theatres, ballrooms, show rooms, et cetera; combination complete, spotlight and color wheel, \$56.00.

Fig. 14

Application of Color Wheel No. 31, page 74, to Spotlight No. 70, page 42. Color wheel is motor driven, obviating necessity for winding, can be controlled from a remote point—for continuous or intermittent change of color as desired; used wherever automatic color wheels are desirable; combination complete, spotlight and color wheel, \$93.00.

Fig. 15

Application of a Scenic Effect (single disc with clockwork, page 65), to Spotlight No. 69, page 42. Aside from theatrical purposes it can be used in displays and window settings to show falling snow, rain, rippling water, and the like; price of combination is dependent upon effect selected, see page 65.

Fig. 16

Application of Color Wheel No. 22, page 74, to Spotlight No. 5-N, page 40. Color Wheel is operated by hand; spotlight is a standard range "Mazda" spotlight with pedestal mounting for a 1000-watt or a 2000-watt concentrated filament Mazda lamp; combination complete, spotlight and color wheel, \$47.50.

trated filament Mazda lamp; hood of Russian iron, thoroughly ventilated, supported by iron bracket fitted with a pipe clamp, can be attached to any size pipe from $\frac{1}{2}$ -inch to $1\frac{1}{4}$ -inch and turned in any direction; furnished complete with asbestos leads and removable color frame for gelatine mediums; can also be furnished with $3\frac{3}{4}$ -inch mirrored-glass reflector back of the lamp bulb to increase the light volume.



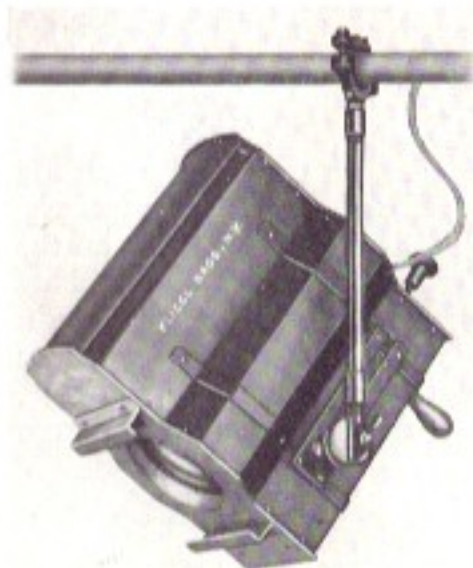
No. 62



No. 68



No. 70



No. 69

No. 62

Kliegl Spotlight No. 62, suspension type "Mazda" spotlight fitted with a medium-screw-base receptacle for 250- or 400-watt concentrated filament Mazda lamp; hood, of cast aluminum, well ventilated, may be swung in any direction; front, fitted with a $4\frac{1}{2}$ -inch condensing lens and slide grooves for color frames, can be removed when lamp is used as as a flood light; receptacle adjustable for focusing; furnished complete with $3\frac{3}{4}$ -inch mirrored-glass reflector, pipe clamp, asbestos leads, and color frame for gelatine mediums.

No. 68

Kliegl Spotlight No. 68, suspension type "Mazda" Spotlight, fitted with a mogul-screw-base receptacle for 500-watt concentrated filament Mazda lamp; cylindrical hood, of Russian iron with aluminum frame front and rear, equipped with a 5-inch condensing lens, and mounted on pivoted support with wing nut and pipe clamp; receptacle mounted on sliding base with an arm extending out back of the hood for focusing; furnished complete with asbestos leads, and color frame for gelatine mediums.

No. 70

Kliegl Spotlight No. 70, suspension type "Mazda" Spotlight fitted with a mogul-screw-base receptacle for 1000-watt concentrated filament Mazda lamp; hood, of Russian iron with aluminum frame front and rear, mounted in trunnion and swivel bearings, swings in any direction, equipped with 5-inch condensing lens, and slide grooves for color frames; receptacle on sliding base, with extension wing nut for focusing, and 5-inch mirrored-glass reflector back of the lamp; furnished complete with pipe clamp and asbestos leads.

No. 69

Kliegl Spotlight No. 69, suspension type "Mazda" Spotlight fitted with a mogul-screw-base receptacle for 1000-watt concentrated filament Mazda lamp; hood, of Russian iron with aluminum frame front and rear, equipped with 5-inch condensing lens, slide grooves for color frames, and an adjustable support with extension arm and pipe clamp; receptacle mounted on sliding base with vertical adjustment for centering light source and arm extending outside the hood for focusing; furnished complete with asbestos leads; can be furnished fitted with mirrored-glass reflector.

KLIEGL "MAZDA" SPOTLIGHTS

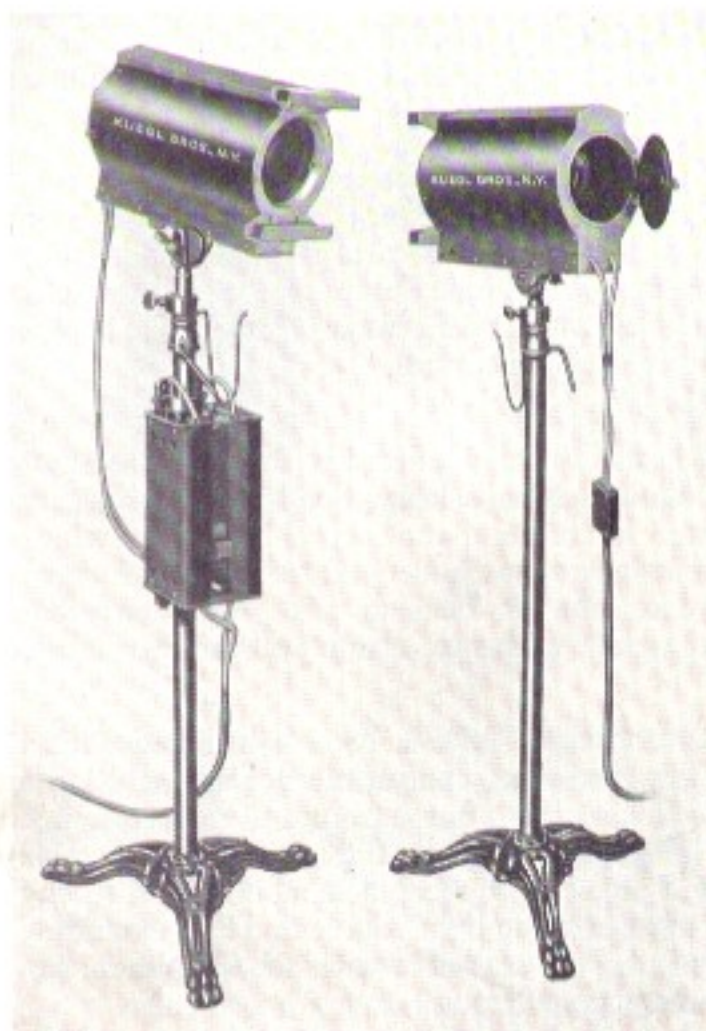
No.	DESCRIPTION	SIZE OF LENS	PRICE	WEIGHT	CODE WORD
Pedestal Types					
STANDARD RANGE					
5N	"Mazda" Spotlight	5"	\$42.00	44 lbs.	Bebrabo
6N	"Mazda" Spotlight	6"	43.00	44 lbs.	Beclipt
7N	"Mazda" Spotlight with Color Wheel	6"	48.50	51 lbs.	Befago
60	"Mazda" Spotlight with Dimmer	5"	43.00	30 lbs.	Chaouch
61	"Mazda" Spotlight without Dimmer	5"	28.00	24½ lbs.	Chapetos
LONG RANGE					
9N	"Mazda" Spotlight	6"	50.00	58 lbs.	Beodos
Suspension Types					
56	"Mazda" Spotlight	4½"	12.00	6¼ lbs.	Chaleur
62	"Mazda" Spotlight	4½"	22.00	8 lbs.	Chasdin
68	"Mazda" Spotlight	5"	24.00	9 lbs.	Chistar
70	"Mazda" Spotlight	5"	33.00	14 lbs.	Chiudi
69	"Mazda" Spotlight	5"	35.00	22 lbs.	Chits
926	Mirrored-Glass Reflector (3¾"), for Spotlight Nos. 60, 61, and 56		3.00	¾ lb.	Shallot
928	Mirrored-Glass Reflector (5¼"), for Spotlight Nos. 5N, 6N, 9N, 68 and 69		5.00	1 lb.	Sharock

Mazda lamps not included in list price, see page 108. Dimmers for Spotlights, page 22. Truck with casters for mounting to round-base Spotlights, page 100.

turned easily in any desired direction. They are made in various sizes to accommodate 250-, 400-, 500-, 1000-, and 2000-watt concentrated filament Mazda lamps; and can be furnished with dimmer, mounted on pedestal stand, for controlling brilliancy of light.

No. 5-N

Kliegl Spotlight No. 5-N is a pedestal type "Mazda" Spotlight designed to accommodate a 1000-watt or 2000-watt concentrated filament Mazda lamp; hood, fitted with a 5-inch condensing lens, is made of Russian iron with aluminum frame front and rear; large self-closing spring-door permits ready access to lamp; mogul screw-base receptacle is mounted on a sliding base with vertical adjustment for centering light source and a focusing arm extending through back of hood—can be furnished with mirrored glass reflector mounted on the focusing arm back of the lamp to increase the light volume about fifty per cent; slide grooves are provided for color frames, color wheels, and effect attachments; furnished complete with pedestal stand, leads, connector—which also serves as a switch—and 25 feet of stage cable; can also be furnished with dimmer attached to pedestal stand, and truck with casters attached to base. A similar spotlight, fitted with 6-inch lens is also furnished, as shown in listing.



No. 60
With Dimmer

No. 61
Without Dimmer

center fading out at edges; cylindrical hood, made of Russian iron with aluminum frame front and rear, is thoroughly ventilated, and equipped with 5-inch condensing lens; slide grooves for color frames provided; door at rear gives access to lamp; receptacle is mounted on an adjustable slide for focusing; set with adjusting support on telescopic wrought-iron stand; furnished complete with asbestos leads, connector—which also serves as a switch, and 25 feet of stage cable; can also be furnished with dimmer mounted on pedestal for controlling brilliancy of the lamp.

No. 9-N

Kliegl Spotlight No. 9-N (illustrated on page 39) is a long range pedestal type "Mazda" Spotlight with mogul-screw-base receptacle; accommodates a 1000-watt or 2000-watt concentrated filament Mazda lamp; hood, fitted with a 6-inch condensing lens, is similar in design and construction to Kliegl Spotlight No. 5-N except that it is much longer to provide focusing from 6-foot spot to a wide spread of light at a distance of 100 feet. It is intended for use from the balcony, gallery, or motion picture booth, and is furnished complete with telescopic stand, asbestos leads, connector, and 25 feet of stage cable.

No. 60

Kliegl Spotlight No. 60 is a pedestal type "Mazda" spotlight with medium-screw-base receptacle, accommodates 250- or 400-watt concentrated filament Mazda lamp; is a small compact light-weight spotlight for short range spot and flood lighting; provides a mild ray of light with strong bright

SUSPENSION TYPES

KLIEGL SUSPENSION TYPE "MAZDA" SPOTLIGHTS are designed for overhead mounting and generally used where the direction of illumination is fixed—as in a motion picture theatre for lighting the orchestra with color effects; a spot border light on the stage; above a ceiling, with opening to allow the light beam to pass; to light bare stages (stages without wings or drops); to light performers in large halls and auditoriums; and for spot-and-flood lighting in show rooms, ball rooms, and window displays. They are made in several designs and various sizes for 250-, 400-, 500-, and 1000-watt concentrated filament Mazda lamps, and can be controlled from a remote point, in conjunction with a dimmer, if desired.



No. 56

No. 56

Kliegl Spotlight No. 56 is a suspension type "Mazda" spotlight, fitted with a medium-screw-base receptacle, adjustable for focusing; accommodates a 250-watt concen-

No.	KLEGL "ARC" SPOTLIGHTS DESCRIPTION	SIZE OF LENS	RATING		PRICE	WEIGHT	CODE WORD
			AMP.	VOLTS			
STANDARD RANGE							
5	"Arc" Spotlight	5"	25	125	\$58.00	63 lbs.	Beber
6	"Arc" Spotlight	6"	25	125	59.00	63 lbs.	Bebrins
7	"Arc" Spotlight with Color Wheel	6"	25	125	64.50	65 lbs.	Bectria
15	"Arc" Spotlight	5"	35	125	58.00	63 lbs.	Bescom
16	"Arc" Spotlight	6"	35	125	59.00	63 lbs.	Betesga
17	"Arc" Spotlight with Color Wheel	6"	35	125	64.50	65 lbs.	Betoken
5A	"Arc" Spotlight	5"	25	250	72.00	76 lbs.	Behais
6A	"Arc" Spotlight	6"	25	250	73.00	76 lbs.	Bebung
7A	"Arc" Spotlight with Color Wheel	6"	25	250	78.50	78 lbs.	Bedagat
15A	"Arc" Spotlight	5"	35	250	72.00	76 lbs.	Besippo
16A	"Arc" Spotlight	6"	35	250	73.00	76 lbs.	Bethuel
17A	"Arc" Spotlight with Color Wheel	7"	35	250	78.50	78 lbs.	Betrim
LONG RANGE							
9	"Arc" Spotlight	6"	35	125	69.00	70 lbs.	Benegro
10	"Arc" Spotlight	6"	50	125	92.00	96 lbs.	Berated
11	"Arc" Spotlight	6"	70	125	120.00	101 lbs.	Bergfels
21	"Arc" Spotlight	8"	120	125	250.00	200 lbs.	Blinky
9A	"Arc" Spotlight	6"	35	250	84.00	83 lbs.	Bentang
10A	"Arc" Spotlight	6"	50	250	130.00	132 lbs.	Beyhim
11A	"Arc" Spotlight	6"	70	250	160.00	140 lbs.	Bergort
21A	"Arc" Spotlight	8"	120	250	365.00	307 lbs.	Blinzler

All Spotlight hoods have the doors on the right side—they can be furnished on the left side without additional cost. Truck with casters for attaching to round-base Spotlights, see page 100. Carbons for Spotlights, see page 104.

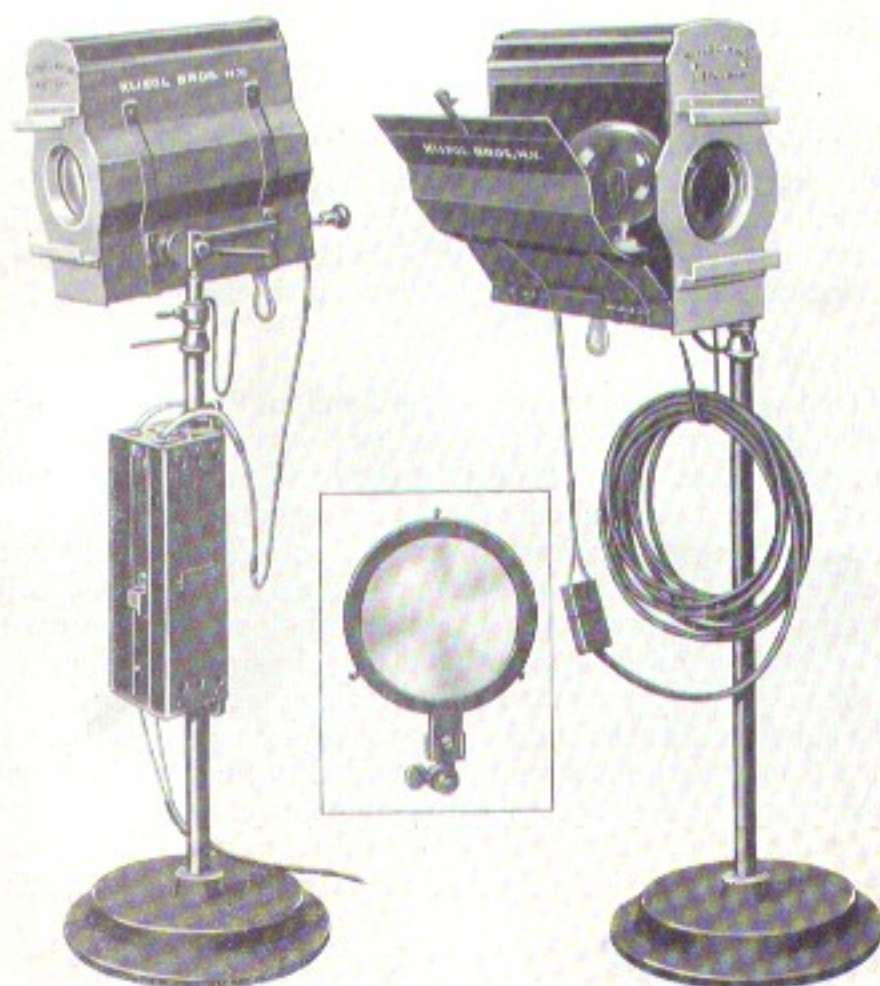
"Mazda" Spotlights

KLIEGL "MAZDA" SPOTLIGHTS are similar to Kliegl "Arc" Spotlights, except they are made to accommodate concentrated filament Mazda lamps in place of arc lamps, and are available with either pedestal-stand or suspension-mountings. Due to absence of arc lamp, rheostat, and switch, "Mazda" Spotlights are exceptionally compact and light

in weight—facilitating easy packing and transportation. They operate equally well on alternating or direct current; light is constant in value without flicker or noise, and can be controlled from a distant point. "Mazda" Spotlights are especially desirable for spot or flood lighting from the wings, or other short range work, such as in motion picture theatres, halls, lodge rooms, cabarets, et cetera, and where direction of illumination is fixed, suspension type "Mazda" Spotlights can be set permanently, in inaccessible places, and controlled from the main switchboard. A "Mazda" spotlight is also made for long range work.

PEDESTAL TYPES

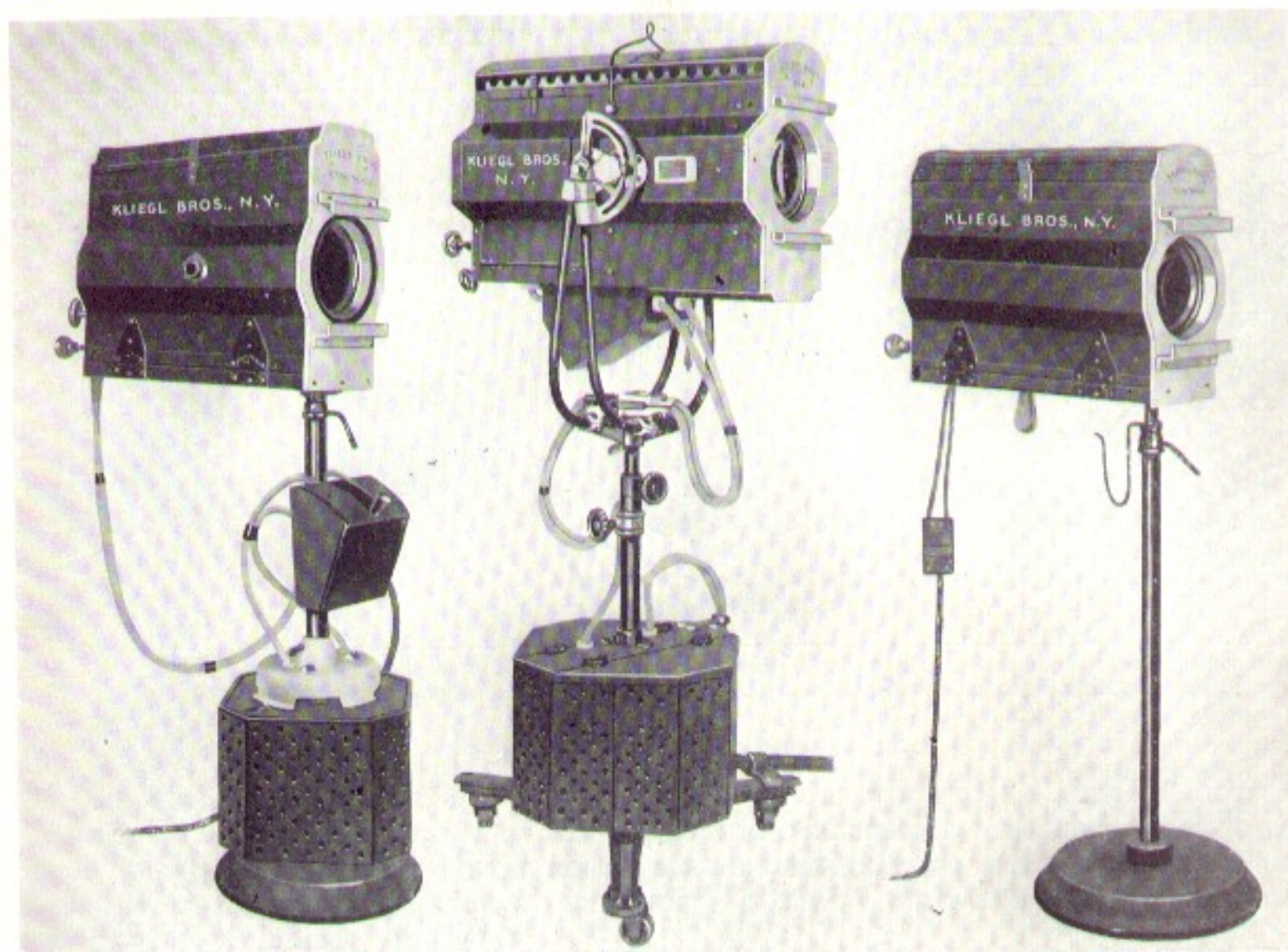
Kliegl Pedestal Type "Mazda" Spotlights are mounted with an adjustable support on a telescopic pedestal stand permitting it to be set at any angle, raised, lowered, and



No. 5-N
With Dimmer

No. 928
Reflector

No. 5-N
Without Dimmer



No. 11

No. 21

No. 9-N

No. 11

Kliegl Spotlight No. 11, is a long range arc type fitted with a 70-ampere, 125-volt arc lamp and 6-inch condensing lens. In design it is similar to Kliegl Spotlight No. 5, except construction is much heavier throughout, hood is of greater length and arc-focusing and arc-control handles extend through rear of hood. It is furnished complete with telescopic stand, resistances, enclosed switch, asbestos leads, and 25 feet of stage cable. Similar spotlights in 35- and 50-ampere sizes are also furnished, as shown in listing.

No. 21

Kliegl Spotlight No. 21 is a long range arc type fitted with a 120-ampere arc lamp and an 8-inch condensing lens. It is a powerful spotlight and focuses from a head spot to a floodlight at 150 feet—gives an intense bright center with subdued edges, and follows with remarkable ease. Arc lamp is of the hand feed type specially constructed to accommodate the large size carbons, can be quickly focused and adjustments of the arc made smoothly and easily. Hood is made of Russian iron with aluminum frame front and rear, double lined with asbestos, thoroughly ventilated, perfectly balanced, moves easily in its bearings—can be swung vertically through an angle of 180 degrees and turned in any desired direction. Large spring-door gives access to lamp for adjusting the carbons and burner. Lens is mounted in a separate casing designed to allow unrestricted expansion and free circulation of air. Slide grooves accommodate color frames, color wheels, and effect attachments. Main switch is enclosed and mounted under the hood. Plug connectors provided permit hood to be detached from the stand. Resistance is mounted on base and provided with two single-pole switches, mounted on the side, which permit apparatus to be used at 60- and 90-amperes as well as at 120-amperes. Arc can thus be started at low current and held at that setting until full strength is required. Stand is provided with casters so that it can be easily moved about. Spotlight is furnished complete, with asbestos leads, and 25 feet of stage cable.

No. 9-N

Kliegl Spotlight No. 9-N is a long range spotlight equipped with a mogul-screw-base receptacle for a Mazda concentrated filament lamp, and is described and listed under "Mazda" Spotlights, page 41.

SPOTLIGHTS

LISTED BY UNDERWRITERS' LABORATORIES

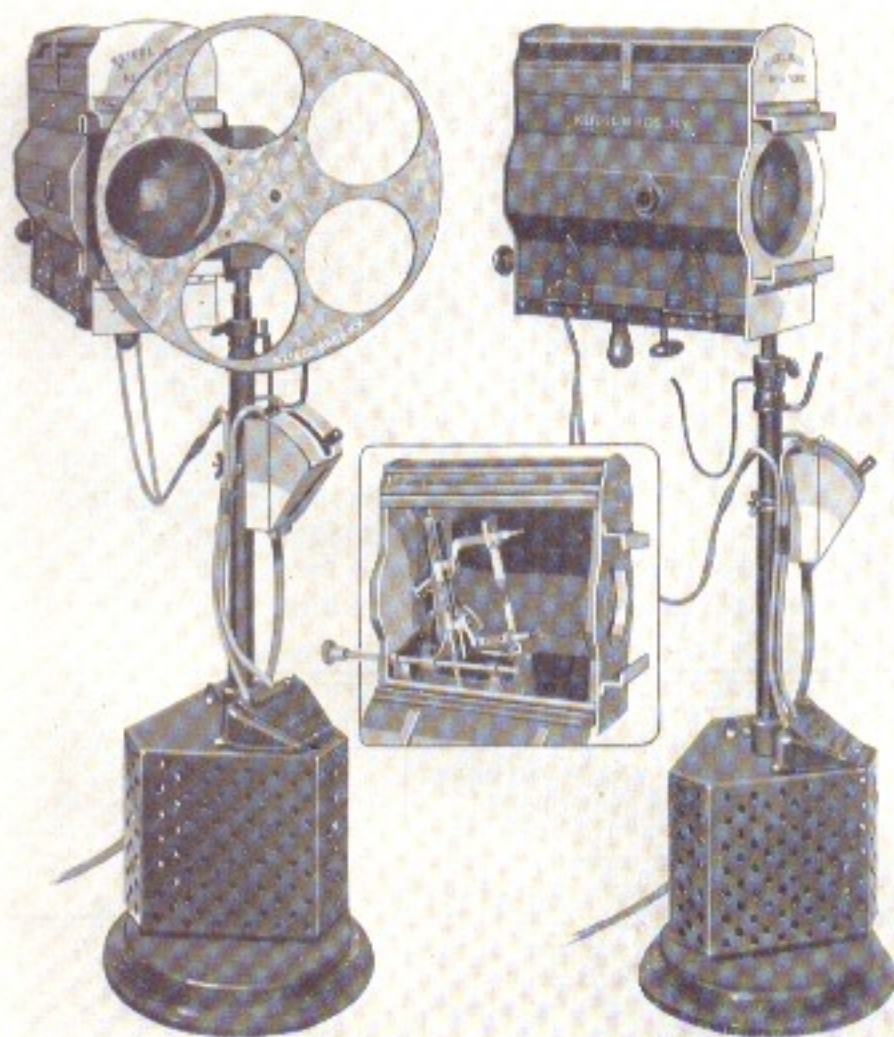
KLIEGL SPOTLIGHTS are made in every conceivable form, in all sizes, in Arc and Mazda types; substantially constructed, portable, and designed to provide flexibility, ease of adjustment, thorough ventilation, and correct lighting at maximum efficiency. They comply with all Underwriters' requirements.

"Arc" Spotlights

KLIEGL ARC SPOTLIGHTS consist of a hand feed arc lamp enclosed in a metal hood, fitted with condensing lens and with slide grooves for color frames, mounted on a telescopic pedestal stand; furnished complete with fixed resistance, enclosed switch, and stage cable; made for standard-range and long-range spot- and flood-lighting; in sizes from 25-amperes to 200-amperes for either 125- or 250-volt circuits, direct or alternating current.

STANDARD RANGE

KLIEGL STANDARD RANGE "ARC" SPOTLIGHTS used on the stage, in ball rooms, and wherever an arc spotlight with an average working distance of approximately 50 feet is desired; they give a 4-foot spot or a wide spread and are made in 25- and 35-ampere sizes.



No. 7

No. 5

No. 5

Kliegl Spotlight No. 5 is a standard range arc type fitted with 25-ampere arc lamp and equipped with 5-inch condensing lens. Hood is light-tight, thoroughly ventilated, made of Russian iron with aluminum frame front and rear, self-closing spring-door provides access to lamp; arc lamp is mounted on slide rails with arm, extending through rear of hood for quickly focusing; carbon holders are rigid in construction and fed by a wooden knob under the hood; lower carbon holder is also adjustable horizontally so that arc crater can be properly positioned in respect to the lens system. Condensing lens is held in place by a split iron ring and so mounted as to allow unrestricted expansion. Slide grooves receive standard sized color frames, color wheels and effect attachments. Hood is mounted with adjustable support on a telescopic iron stand, can be set at any angle, raised, lowered, and turned easily in any desired direction. Spotlight is furnished complete with enclosed fixed resistances mounted on base of stand, enclosed switch, asbestos leads, and 25 feet of stage cable. Spotlights of same design, except for variations in size of lens and lamp or resistance, are shown in listing.

LONG RANGE

KLIEGL LONG RANGE ARC SPOTLIGHTS, designed for long distance projection—from the balcony, gallery, or motion picture booth, are made in 35-, 50-, 75-, and 120-ampere sizes and give a 3-foot spot from a distance of 150-feet—as well as a wide spread of light.

"Mazda" Open-Box Flood Lights—Continued

SUSPENSION TYPES

No. 544

Kliegl Open-Box Light No. 544, square-face suspension type, with chains for hanging; furnished with an all-metal silvered reflector; hood made of sheet metal; fitted with a medium-screw-base receptacle; accommodates a 200-watt, P.S. 30, Mazda lamp; grooves for color frame; completely wired with asbestos covered leads; exterior finished in black enamel; furnished with metal frame for gelatine color mediums.

No. 545

Kliegl Open-Box Light No. 545, square-face suspension type, identically the same as No. 544, except that it is provided with Kliegl pipe clamp, instead of chains for hanging, grips any size pipe from $\frac{1}{2}$ " to $1\frac{1}{4}$ ".

No. 541

Kliegl Open-Box Light No. 541, square-face suspension type with chains for hanging; provided with mogul-screw-base receptacle; accommodates a 1000-watt P.S. 52, Mazda lamp; hood made of sheet metal; interior reflecting surfaces painted a permanent white; exterior finished in black enamel; grooves for color frames; completely wired with asbestos covered leads; furnished with metal frame for gelatine color medium; also made in a smaller size, No. 540, to accommodate a 500-watt Mazda lamp.

No. 543

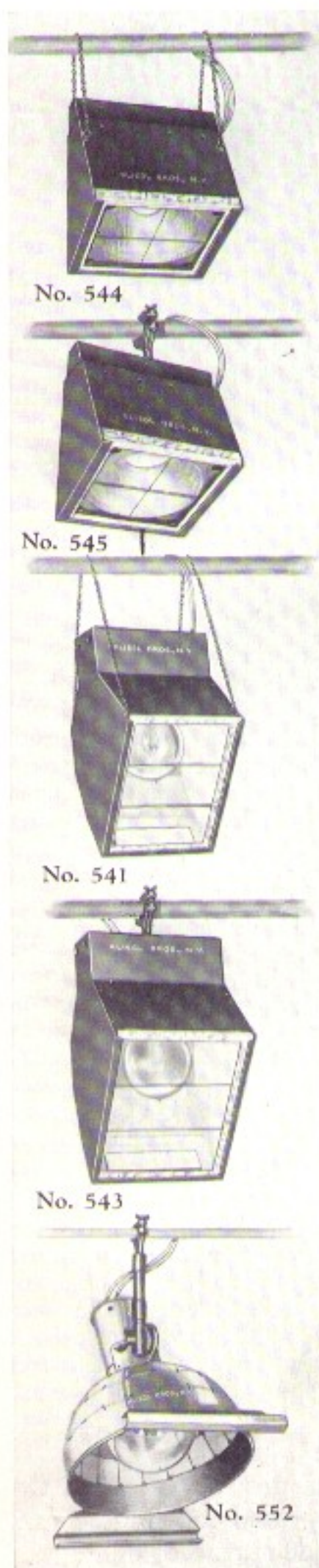
Kliegl Open Box Light No. 543, square-face suspension type, identically the same as No. 541, except that it is provided with Kliegl pipe clamp, instead of chains for hanging, grips any size pipe from $\frac{1}{2}$ " to $1\frac{1}{4}$ ".

No. 552

Kliegl Open-Box Light No. 552, round-face suspension type, with parabolic glass-lined reflector; with extension arm and Kliegl pipe clamp for hanging to any size pipe from $\frac{1}{2}$ " to $1\frac{1}{4}$ "; fitted with a mogul-screw-base receptacle; accommodates a 1000-watt P. S. 52 lamp; hood, 13" in diameter, made of sheet-aluminum lined with white glass to increase the light volume; glass reflector is made of small sections held in place by removable brass pins, in case of damage they can be easily replaced at little cost; slide grooves provided for color frames (16" x 16"); adjustable support permits direction of light at any angle desired; completely wired with asbestos leads; also furnished without glass reflector—reflecting surfaces painted a permanent white.

KLIEGL "MAZDA" OPEN-BOX FLOOD LIGHTS—SUSPENSION TYPES

No.	DESCRIPTION	PRICE	WEIGHT	CODE WORD
541	Open-Box Light, for 1000-watt Mazda lamp, square-face, with chains and color frame.	\$10.50	16 $\frac{3}{4}$ lbs.	Ojalar
543	Open-Box Light, for 1000-watt Mazda lamp, square-face, with pipe clamp and color frame.	12.25	18 lbs.	Oktai
540	Open-Box Light, for 500-watt Mazda lamp, square-face, with chains and color frame.	7.50	7 $\frac{1}{4}$ lbs.	Oirias
542	Open-Box Light, for 500-watt Mazda lamp, square-face, with pipe clamp and color frame.	9.25	8 $\frac{1}{2}$ lbs.	Ojeat
544	Open-Box Light, for 200-watt Mazda lamp, square-face, with silvered reflector, with chains and color frame.	12.00	11 $\frac{1}{4}$ lbs.	Olanin
545	Open-Box Light, for 200-watt Mazda lamp, square-face, with silvered reflector, with pipe clamp and color frame.	13.75	11 $\frac{1}{4}$ lbs.	Oliba
552	Open-Box Light, for 1000-watt Mazda lamp, round-face, with glass lined reflector and pipe clamp.	33.00	8 lbs.	Olivabo
553	Open-Box Light, for 1000-watt Mazda lamp, round-face, with plain white reflector, and with pipe clamp.	22.00	7 lbs.	Olivile



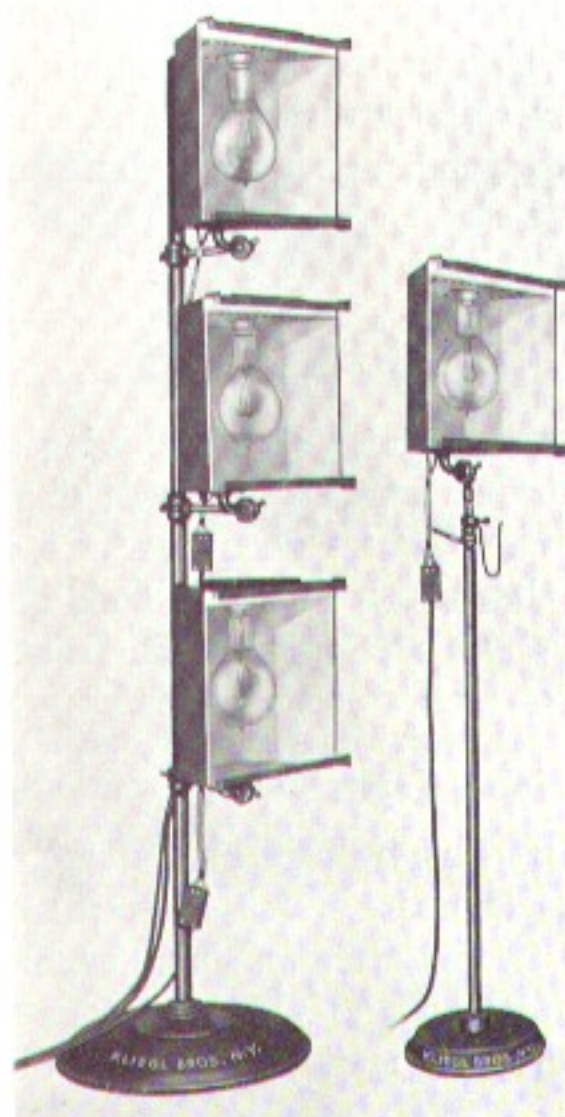
"Mazda" Open-Box Flood Lights—Continued

No. 1-N

PEDESTAL TYPES

Kliegl Open-Box Light No. 1-N is a square-face pedestal type, fitted with a mogul-screw-base receptacle; accommodates a 500-watt, 750-watt, or 1000-watt, P.S.-52, Mazda lamp; reflector or hood is made of sheet metal; well ventilated; properly designed for maximum lighting efficiency; provided with slide grooves for color

frames for glass or gelatine color mediums; adjustable support and telescopic wrought-iron pedestal stand permit hood to be raised or lowered, and set at any angle desired; reflecting surfaces painted a permanent white; exposed metal parts finished in black enamel; furnished completely wired with asbestos leads, 25-feet of approved stage cable, and Kliegl Connector between asbestos leads and cable—also serves as a switch; dimmer for controlling the brilliancy of the lamp may be fastened to the stand. Dimmers suitable for this purpose are described on page 22.



No. 1-N3

No. 1-N

No. 1-N3

Three or more open-box lights, with side brackets, mounted on a single pedestal, as shown in the illustration, can be furnished. This arrangement permits a quick or gradual change of color-lighting effects. Each hood can be fitted with a different colored medium—to change a color effect only necessitates that one lamp be turned off and the other turned on. For gradual changes, like twilight effect, dimmers can be used.

No. 550

Kliegl Open-Box Light No. 550 is a round-face pedestal type fitted with a mogul-screw-base receptacle; accommodates a 500-watt, 750-watt or 1000-watt P.S. 52, Mazda lamp; hood is made of sheet aluminum lined with white glass reflectors which increase the light volume; glass reflectors are made of small sections fastened in place with removable brass pins, in case of breakage they can be replaced easily at little cost; provided with slide

grooves for color frames for glass or gelatine mediums; adjustable support and telescopic pedestal stand permit hood to be raised or lowered, and set at any angle desired; furnished completely wired with asbestos leads, 25-feet of stage cable, and Kliegl Connector, which also serves as a switch.

KLIEGL "MAZDA" OPEN-BOX FLOOD LIGHTS—PEDESTAL TYPES

No.	DESCRIPTION	PRICE	WEIGHT	CODE WORD
1N	Open-Box Light for "Mazda" lamps, square-face, with telescopic stand, asbestos leads, connector, and 25-ft. of stage cable; without lamp.	\$24.00	43 lbs.	Abactor
1N3	Open-Box Light for "Mazda" lamps, square-face, 3-sections, on single pedestal stand, with asbestos leads, 3 connectors, and 75-ft. of stage cable; without lamps.	85.00	120 lbs.	Abaddir
550	Open-Box Light for "Mazda" lamps, round-face, with asbestos leads, connector, 25-ft. of stage cable, telescopic stand; without lamp.	38.00	22 lbs.	Oliere



No. 550

STAGE LAMPS

KLIEGL STAGE LAMPS include every form of lighting apparatus used on the stage—Open Box Lights, Bunch Lights, Spotlights, Strip Lights, Sciopticons, Stereopticons, and special lighting devices; all are in accord with Underwriters' requirements, and embody more than a quarter of a century's experience in the design and manufacture of stage lighting apparatus. The more generally used Stage Lamps, and those in greatest demand, are described and listed in this catalogue. Special lamps and lighting appliances are built to meet individual requirements.

OPEN-BOX FLOOD LIGHTS

KLIEGL OPEN-BOX FLOOD LIGHTS, used to flood light the stage, generally from the wings, with white or colored light, and for twilight and other color-lighting effects, consist of a light source of very high candle power, either an electric arc or incandescent lamp, fitted with reflector designed to throw a flood of light in one general direction; slide grooves are provided in front to receive color-frames with gelatine or glass color mediums.



No. 1

"Arc" Open-Box Flood Lights

Klieg "Arc" Open-Box Flood Lights, furnish a brilliant light of 4000 candle power, evenly distributed, and illuminate an area more than 40-feet wide; consist of a hand feed arc lamp, fitted in an all-metal box reflector with fire-proof screen in front, and slides for color-frames; mounted on telescopic wrought-iron stand, with control switch and fixed resistance.

Arc operates at 25-amperes, direct or alternating current, and is furnished for 125- or 250-volt circuits; lamp parts are of brass, with rigid carbon holders of a special heat-resisting metal alloy; feeds quickly and smoothly, keeps carbons in proper relative positions, and uses a $\frac{5}{8}$ -inch carbon on top and a $\frac{3}{16}$ -inch carbon on the bottom; furnished completely wired, with 25-feet of stage cable.

KLIEGL "ARC" OPEN-BOX FLOOD LIGHTS

NO.	DESCRIPTION	VOLTS	PRICE	WEIGHT	CODE WORD
1	"Arc" Open-Box Flood Light	125	\$45.00	71 lbs.	Abaca
3	"Arc" Open-Box Flood Light	250	56.00	81 1/2 lbs.	Abat

For Special Wire Mesh Hood on top (Chicago Requirement), add \$3.00 to list price. Carbons are listed on page 104.

"Mazda" Open-Box Flood Lights

KLIEGL "MAZDA" OPEN-BOX FLOOD LIGHTS are designed for use with high-candle-power Mazda lamps, several desirable features are thus introduced—light is steady and noiseless; they can be operated in series with a dimmer; are light in weight, easily handled; and, as they are fire-proof, constant attention of an operator is not required.

TIME BEATERS and BATONS

KLIEGL TIME BEATER used by orchestra leaders to beat time for choruses or soloists at a remote point; consists of a keyboard (No. 670), and time indicator (No. 672); keyboard has four piano-like keys, which when played in time with the music score, illuminate corresponding lamps behind transparent numbers, one to four, on indicator; several indicators at different parts of the stage can be operated from one keyboard.



No. 670



No. 672

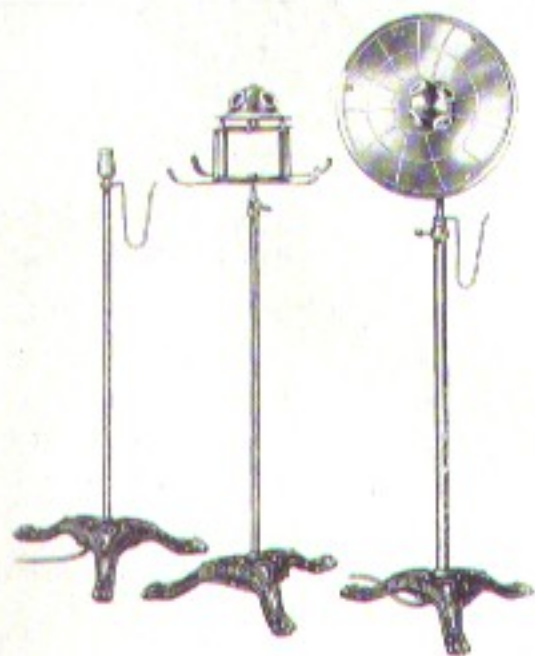
Kliegl Baton for orchestra leaders, is equipped with a small electric light on the extreme outer end of baton so that its movement can be seen in the dark; made entirely of metal; light in weight; furnished complete with battery and lamp.

KLIEGL TIME BEATERS AND BATONS

No.	DESCRIPTION	PRICE	CODE WORD
670	Time Beater Keyboard, 4 keys	\$35.00	Raphon
672	Time Indicator	12.00	Raposo
769	Baton, with electric light and battery	4.00	Recudis

CLEANER STANDS and WORK LIGHTS

KLIEGL CLEANER STANDS AND WORK LIGHTS are portable lights useful wherever a temporary lighting unit is required—as in cleaning theatre auditoriums, repair work in a garage, certain forms of construction work and similar applications. They consist of an iron base with pedestal stand equipped with one or four lamp receptacles.



No. 655

No. 657

No. 658

No. 655

Kliegl Cleaner Stand is made with cast-iron tripod base and $\frac{1}{2}$ " iron pipe pedestal, 36-inches high, on which a single lamp socket is mounted; cable extends through pipe and out at bottom of base; finished in black enamel.

No. 657

Kliegl Cleaner Stand is provided with four lamp receptacles; telescopic stand and cable reel attached to stand which will carry 50-feet of cable; height from floor to the center of cluster, when lowered, 42-inches; finished in black enamel.

No. 658

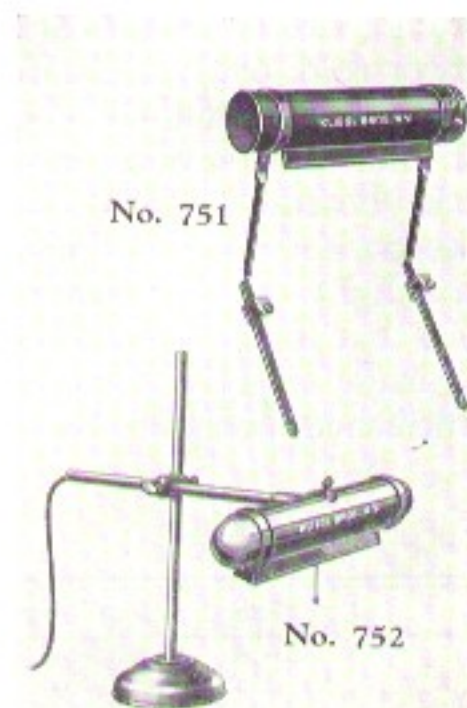
Kliegl Cleaner Stand is of heavy construction for rough use as in a garage or on a construction job; is provided with four lamp receptacles, with 14-inch reflector, and fixed wire-lamp-guard; telescopic stand, for raising or lowering light, at its lowest point it is 36-inches from floor to the center of cluster; cable passes through the pedestal stand and out at bottom of base; finished in black enamel. Kliegl Cleaner Stand No. 659 is of same design and construction as No. 658 except that light cluster and reflector are mounted on a pivoted support permitting adjustment of head to any desired position.

KLIEGL CLEANER STANDS AND WORK LIGHTS

No.	DESCRIPTION	PRICE	WEIGHT	CODE WORD
655	Cleaner Stand, 1 light, at fixed height	\$5.50	7 $\frac{1}{2}$ lbs.	Rambah
656	Cleaner Stand, 4-lights, at fixed height	7.00	8 lbs.	Ramiah
657	Cleaner Stand, 4-lights; telescopic stand; cable reel	16.00	12 $\frac{1}{2}$ lbs.	Ramify
658	Cleaner Stand, 4-lights; telescopic stand; reflector; fixed wire-lamp-guard	10.00	13 $\frac{1}{2}$ lbs.	Ramiro
659	Cleaner Stand, 4-lights; telescopic stand; reflector; swinging head; fixed wire-lamp-guard	13.00	15 lbs.	Ramitis

Cable not included in list price

PIANO and ORGAN LIGHTS

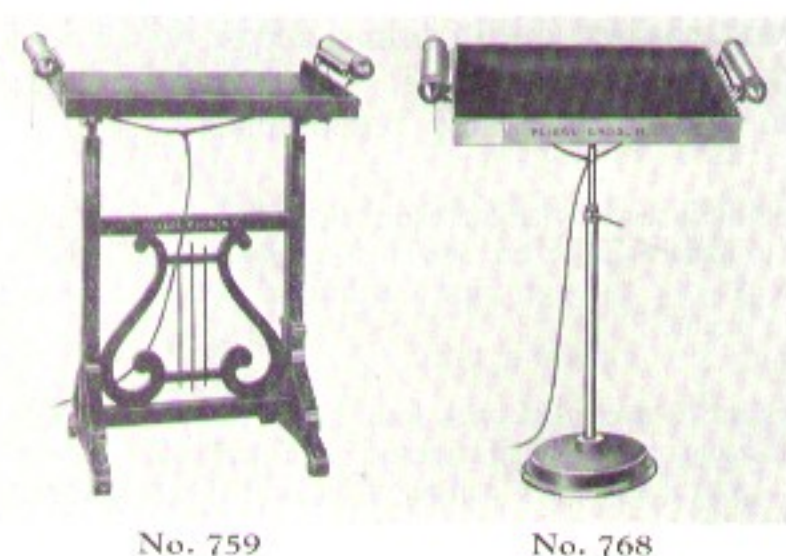


KLIEGL PIANO AND ORGAN LIGHTS are made in two styles, one to be attached to the music rack on the piano or organ, the other a complete stand-lamp adjustable to any desired position.

KLIEGL PIANO AND ORGAN LIGHTS

No.	DESCRIPTION	PRICE	WEIGHT	CODE WORD
751	Piano Light, has a key lamp socket, enclosed in a cylindrical casing of tin with slot opening which directs light to music-rest; end is removable for lamp replacement; two iron brackets with thumb screw clamps provide means for fastening to music-rest; exterior finished in black enamel.	\$3.00	2 1/2 lbs.	Rebanos
752	Piano-and-Organ Light, is a complete stand-lamp with pull-chain twin lamp socket; furnished complete with reflector, stand, and 10-feet of lamp cord; can be adjusted to any desired position; dull brass finish.	14.00	15 lbs.	Rebelim
753	Organ Light; drum base; key socket; finished in gold; furnished with 10-feet of lamp cord	8.50	13 lbs.	Rebimba

LEADER STANDS



KLIEGL LEADER STANDS are made in three styles; equipped with lighting fixtures; arranged for adjusting position of music rest; with abundance of room for music scores. They are solid and substantial, well balanced, not easily overturned, and are properly illuminated—the lighting is bright, diffused, evenly distributed over the entire music rest, soft and comfortable on the eyes. They are attractively finished, serviceable, and practical.

KLIEGL LEADER STANDS

No.	DESCRIPTION	PRICE	WEIGHT	CODE WORD
758	Leader Stand with open wood-frame music-rest, fitted with light fixture having two key sockets; resembles in appearance music stand No. 741 except for increased size of music-rest which is 24"x17", at set incline; cast-iron tripod base; iron pedestal, adjustable; metal parts finished in black; furnished with 10-feet of cable.	\$10.00	17 lbs.	Rebutir
759	Leader Stand, Lyre design, hard wood-frame and rest, mahogany finish; arrangement for adjusting height and incline of music-rest; fitted with two Light Fixtures, No. 746, one on each side of music-rest; provisions made for fastening telephone and signal-lights; furnished with 8-feet of lamp cord; can be finished in gold bronze if desired.	60.00	25 lbs.	Recatr
768	Leader Stand, all-metal, arranged for adjusting height and incline of music-rest; fitted with two light fixtures, No. 746, one on each side of music-rest; round cast-iron, extra-heavy base-plate and iron pedestal; furnished with 12-ft. of cable; finished in gold, except for inside surface of music-rest which is dull black.	22.00	38 lbs.	Rectrix

No.	KIEGL MUSIC STANDS (continued) DESCRIPTION	PRICE	WEIGHT	CODE WORD
763	Music Stand, all-metal, finished in black enamel, with light fixture fitted with key socket for two lamps; music-rest 18"x16½"; cast-iron tripod base; iron pedestal with arrangement for adjusting height and incline of music-rest; wiring passes through center of pedestal and out under base; furnished with 8-feet of cable.	\$13.00	17 lbs.	Reccar
764	Music Stand, all-metal, finished in black enamel; with goose-neck light fixture and shade, permitting adjustment of light as desired; music-rest 18"x16"; cast-iron tripod base; iron pedestal with arrangement for adjusting height and incline of music-rest; wiring passes through center of pedestal and out under base; furnished with 8-feet of cable.	11.00	18½ lbs.	Reccdas
766	Music Stand, all-metal, with light-guard on all four sides of music-rest; fitted with light fixture No. 746; music-rest 24"x15", at set angle; cast-iron tripod base; iron pedestal, adjustable; finished in gold except the inside surfaces of music-rest which are dull black; furnished with 8-feet of cable.	14.00	20 lbs.	Reccran
767	Music Stand, all-metal, with light-guard on all four sides of music-rest; same design, construction, and finish as No. 766, except it is provided with means for adjusting incline of music-rest; furnished with 8-feet of cable.	16.00	22 lbs.	Reccrar
770	Music Stand, with all-metal music-rest, 24"x15", having light-guard on all four sides; fitted with light fixture No. 746 with a pull-chain lamp socket; round cast-iron base; fancy wooden pedestal with arrangement for adjusting height and incline of music-rest; wiring concealed in pedestal and comes out under base; finished in gold except for inside surfaces of music-rest which are dull black; furnished with 12-feet of cable.	22.00	25 lbs.	Redacto
771	Music Stand, same design, construction and finish as No. 770 except fixture has two lights, and is provided with removable color-frames to receive gelatine color-mediums for color-lighting effects; furnished with 12-feet of cable.	25.00	25 lbs.	Rederar
773	Music Stand with wooden music-rest, 23"x15", at a fixed angle, with a vertical light fixture on each side; (light fixture is a lamp socket mounted on end of pipe support and fitted with a specially designed shade which directs all the light to the music-rest); cast-iron tripod base; iron pedestal, adjustable; wiring concealed in pedestal and fixture supports; pull-chain switch; metal parts of stand finished in gold; furnished with 10-feet of cable.	16.00	22 lbs.	Redobra
774	Music Stand with deep-box all-metal music-rest designed to hold music sheets directly in center of rest and on both sides without interference one with the other, and all visible at the same time; equipped with three pull-chain sockets, in light-trough on top, connected to three separate circuits, white, red, and blue; intended for use with a color light control dimmer No. 775, operated by leader so a change of color can be made over the entire orchestra; music-rest, 29"x18"x7½" deep, is attractively decorated with metal scroll work and mounted on a fancy wooden pedestal with metal base and pipe support arranged for adjusting height and inclination of music rest; finished throughout in gold except inside surface of music rest which is dull black; furnished with three 15-foot lengths of cable.	28.00	32 lbs.	Redondo
775	Music-Stand-Control Dimmer Board, for three circuits, used with music stand No. 774, for color lighting effects; control is operated by the leader; operates on 110-volts.	60.00	28 lbs.	Redorais
849	Cable Pull-Back for Music Stands, attached to bottom of pedestal, prevents stand from being upset when cable is pulled accidentally.	.50		Seifia

KIEGL LIGHT FIXTURES FOR MUSIC STANDS

745	Light Fixture for Music Stands is fitted with one key lamp socket, enclosed in a cylindrical casing of tin with slot opening which directs light to music-rest; end of fixture is removable for lamp replacement; two iron brackets provide means for attaching fixture to stand; fixture can be rotated in brackets for proper adjustment of light; exterior surface is finished in black enamel.	\$2.50	2 lbs.	Reannex
746	Light Fixture for Music Stands is fitted with one pull-chain lamp socket, enclosed in a cylindrical casing of tin with bell-shaped ends—removable for lamp replacement; provided with specially formed open trough which directs light to music-rest and also serves as a means for fastening fixture to stand; exterior surface is finished in gold; inside surface of open trough is dull black to prevent improper light reflection.	4.00	1½ lbs.	Reargue

LIGHTING APPARATUS

MUSIC STANDS

KLIEGL MUSIC STANDS are designed to properly illuminate music scores—without strain on the eyes of the musician—or glaring light leaks—annoying to an audience and detrimental to the motion-picture or performance. They are mounted on heavy cast-iron bases to assure equilibrium; equipped with telescopic pedestals so they may be raised or lowered; and made in plain and fancy designs, with music-rests of metal and of wood; with and without lighting fixtures.

In certain designs, shown in listing, wires for lighting fixtures pass through pedestal of stand and out under base; this arrangement prevents stand from being upset if cable should be pulled accidentally. Other stands, like No. 766 and No. 770 were designed especially for motion-picture-theatre orchestras, and others have features which recommend them for traveling and outdoor use. Kliegl designs cover all practical requirements, and for special applications they are made to order.

KLIEGL MUSIC STANDS

No.	DESCRIPTION	PRICE	WEIGHT	CODEWORD
741	Music Stand with open wood-frame music-rest, 20"x14 $\frac{3}{4}$ ", at set angle; fitted with light fixture No. 745; cast-iron tripod-base; iron pedestal, adjustable; metal parts finished in black enamel; furnished with 8-feet of cable.	\$8.00	13 $\frac{1}{2}$ lbs.	Reacti
742	Demountable Music Stand for traveling companies; same design as No. 741 but arranged so that it can be completely dismantled and packed in a small space.	8.00	13 $\frac{1}{2}$ lbs.	Readorn
744	Music Stand without light fixture; open wood-frame music-rest, base and pedestal same design as music stand No. 741.	5.00	11 lbs.	Really
743	Music Stand with open wood-frame music-rest, 20"x14 $\frac{3}{4}$ ", at set angle; fitted with light fixture No. 746; tripod base; iron pedestal, adjustable; metal parts finished in black enamel; furnished with 8-feet of cable.	9.50	13 $\frac{1}{2}$ lbs.	Realco
754	Music Stand, Lyre-design, music-rest with side guards, made of mahogany, 24 $\frac{1}{2}$ "x16 $\frac{1}{2}$ "; fitted with light fixture No. 746 equipped with pull-chain twin-lamp socket; round cast-iron base; fancy wooden pedestal with arrangement for adjusting height and incline of music rack; base and pedestal finished in gold; wiring for light fixture passes through center of pedestal and out under base; furnished with 12-feet of cable.	25.00	24 lbs.	Rebolir
755	Music Stand, same design and construction as No. 754 except that light fixture is provided with removable color-frames to receive gelatine color-mediums for color-lighting effects.	27.00	24 $\frac{1}{2}$ lbs.	Rebours
756	Music Stand, same design as No. 754 except that the music-rest has open ends and is smaller, 20"x14 $\frac{3}{4}$ "; otherwise, identically the same.	23.00	22 lbs.	Rebraco
757	Music Stand without light fixture; Lyre-design music-rest—open ends, mahogany, 20"x14 $\frac{3}{4}$ "—round cast-iron base; fancy wooden pedestal with arrangement for adjusting height and incline of music rack; base and pedestal finished in gold.	19.00	20 $\frac{1}{2}$ lbs.	Rebuff
761	Music Stand, all-metal; finished in black enamel; fitted with light fixture No. 745; cast-iron tripod base; iron pedestal, adjustable; music-rest 20"x14", at set angle; furnished with 8-feet of cable.	8.00	14 lbs.	Rechazo
762	Music Stand without light fixture; all-metal; same design, construction, and finish as No. 761.	5.50	12 lbs.	Recludo

FOOTLIGHT SPOTS

KLIEGL FOOTLIGHT SPOTS are self-contained, easily concealed, small, portable spotlights accommodating 250-watt, G-30 Mazda lamps; are usually placed in the footlight trough to project a concentrated beam of light of uniform intensity upon some person or object on the stage; may also be used in open fireplaces and other settings; can be operated from the wings—and controlled with a dimmer.



No. 66



No. 53

No. 66

Kliegl Footlight Spot No. 66 is a round type with lamp receptacle fixed in position; lens holder adjustable for focusing; equipped with $3\frac{1}{2}$ " lens; furnished with asbestos covered leads; can also be furnished with a $3\frac{3}{4}$ " mirrored-glass reflector back of the receptacle which increases the light volume fifty percent.

No. 53

Kliegl Footlight Spot No. 53 is a square type with support designed for changing angle of inclination; furnished with $4\frac{1}{2}$ " lens; adjustable lamp receptacle for focusing; removable color frame; and asbestos covered leads; can be furnished with $3\frac{3}{4}$ " mirrored-glass reflector back of the lamp receptacle which increases the light volume fifty percent.

KLIEGL FOOTLIGHT SPOTS

No.	DESCRIPTION	PRICE	WEIGHT	CODE WORD
53	Footlight Spot, Square Type without lamp or mirror	\$10.00	5 lbs.	Cervelle
66	Footlight Spot, Round Type without lamp or mirror	12.50	$3\frac{1}{2}$ lbs.	Chirks
926	Mirrored Glass Reflector, $3\frac{3}{4}$ ", for Footlight Spots	3.00	$\frac{3}{4}$ lb.	Shallot

COLUMN LIGHTS

KLIEGL COLUMN-LIGHTS are used for casting a flood of light upward on silk columns, draperies, statuary or other parts of the stage setting, and are designed to be readily concealed behind floral vases, shrubbery, and similar scenic properties.

They consist of a sheet metal bowl-shaped reflector, $13\frac{1}{2}$ " in diameter, with a mogul-screw-base receptacle accommodating a 500- or 1000-watt G-400 and 1000- or 2000-watt G-48 Mazda lamp; reflecting surfaces are either lined with silvered-glass or painted a permanent white. Column-lights are provided with grooves for color frames.

KLIEGL COLUMN LIGHTS



No. 554

No.	DESCRIPTION	PRICE	WEIGHT	CODE WORD
554	Column-Light, Mirror lined reflector, without lamp or cable	\$32.00	8 lbs.	Olymos
555	Column-Light, plain white reflector, without lamp or cable	20.00	7 lbs.	Olore

VERTICAL-LIGHT REFLECTOR

KLIEGL VERTICAL-LIGHT REFLECTOR for fountain and fire dance effects is usually built to order and generally consists of a cylindrical box lined with mirrored-glass reflectors, fitted with arc or high candle power Mazda lamps, and designed to throw the light vertically upward through a glass floor. Various colored mediums are used to produce the desired colored rays.

No.	DESCRIPTION	PRICE	WEIGHT	CODE WORD
No. 293	Kliegl Vertical-Light Reflector, 24"x10"; two pairs of carbons	\$66.00	33 lbs.	Gnash

SIDEWALK PROJECTOR



No. 253

KLIEGL SIDEWALK PROJECTOR is used to project announcements, lettering, and other messages upon the sidewalk, from a show window or other location within the building line. It consists of a small, inexpensive stereopticon, furnished complete with lens, medium-screw-base lamp socket, and 8 feet of lamp cord with attachment plug; accommodates a 100-watt G-25 lamp bulb; and uses slides 2½" in diameter, with stenciled lettering or stenciled designs.

Kliegl Sidewalk Projector

PRICE	WEIGHT	CODE WORD
\$14.00	4 lbs.	Pincap

SIGNBOARD and PICTURE LIGHT

KLIEGL SIGNBOARD AND PICTURE LIGHT is used to illuminate bulletin boards, pictures signs, and similar articles on display; consists of a metal reflector with support for mounting on a frame or wall, fitted with a key socket, accommodates 25-watt tubular Mazda lamp; reflector of tin with reflecting surface highly polished, and external surface finished in gold; furnished complete with 8 feet of lamp cord and attachment plug.



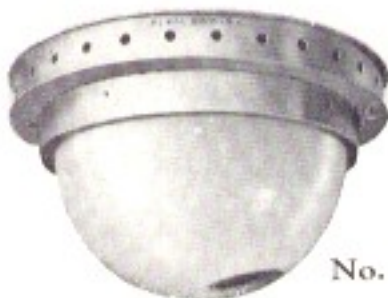
No. 781

Kliegl Signboard and Picture Light

PRICE	WEIGHT	CODE WORD
\$2.00	1 lb.	Refilon

CEILING SPOTLIGHT

KLIEGL CEILING SPOTLIGHT, especially designed for degree work, and also used for display lighting; is arranged for mounting on a ceiling; resembles in general appearance a standard lighting fixture, but when illuminated throws a concentrated beam of light upon an altar, person, or some special object to be emphasized; is made of sheet-metal and steel, exposed metal surfaces finished in gold, with white glass globe, 16 inches in diameter, held in place by a hinged frame; equipped with a 5" lens; furnished complete with Mogul lamp socket, and 500-watt G-40 lamp; means provided for adequate ventilation.



No. 57 Kliegl Ceiling Spotlight

PRICE	WEIGHT	CODE WORD
\$100.00	25 lbs.	Chamulci

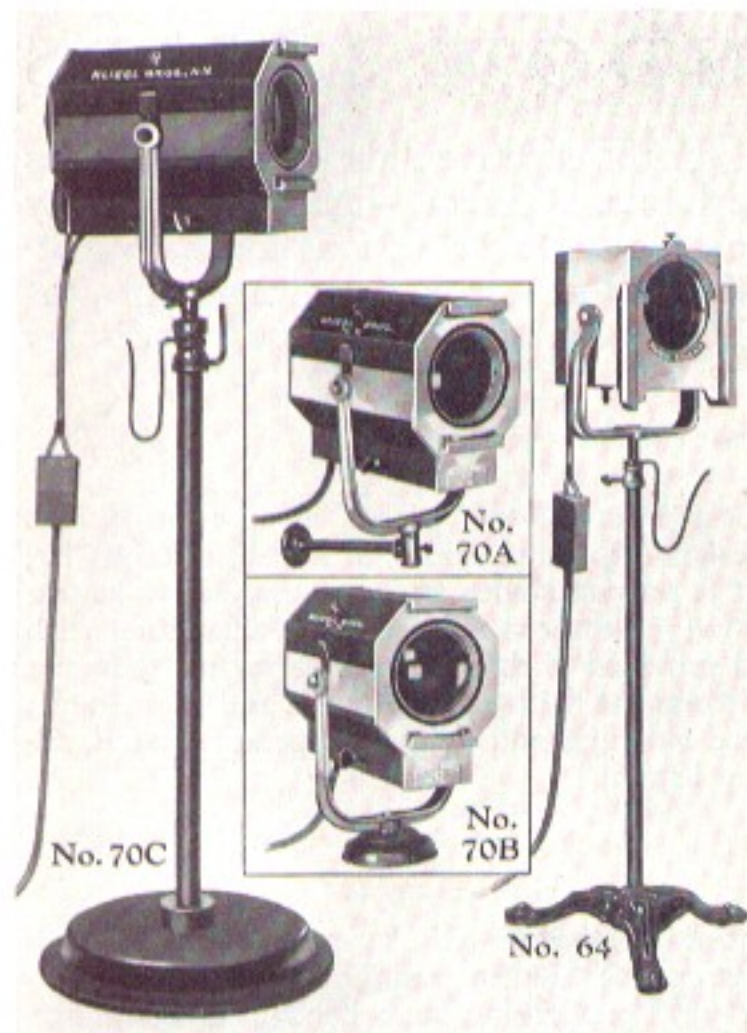
GARAGE WALL-LIGHT



No. 669 Kliegl Garage Wall-Light without Lamp

KLIEGL GARAGE WALL-LIGHT, used to illuminate under bodies of cars being cleaned or repaired, is placed in walls of a garage at height about 2 feet above floor level; consists of a round, galvanized sheet-iron box, 12" in diameter, 8" deep, with a parabolic aluminum reflector, and medium-screw-base lamp receptacle for 150-watt P.S.-25 lamp bulb; is water-and-vapor-proof; has a clear glass front ¼ inch in thickness, and removable frame of cast aluminum.

PRICE	WEIGHT	CODE WORD
\$22.00	7 lbs.	Ramilar



No. 70-C

Kliegl Spotlight No. 70-C, for 1000-watt concentrated filament, G-40, "Mazda" lamp, is fitted with a mogul-screw-base receptacle, mounted on a sliding base with extension wing nut for focusing; hood, equipped with a 5-inch condensing lens, and made of Russian iron, with aluminum frame front and rear, is supported in trunnion and swivel bearings and mounted on a telescopic pedestal stand, permitting any desired adjustment; self-closing door gives access to lamp; 5-inch mirrored-glass reflector mounted back of the lamp; furnished complete with asbestos leads, connector, and 25 feet of stage cable; also furnished with a round base (No. 70-B) or with a wall bracket (No. 70-A), as illustrated and shown in the listing.

No. 64

Kliegl Spotlight No. 64 is identically the same lamp described as No. 63, but mounted on a telescopic pedestal stand, instead of the round base, providing a vertical adjustment of from three to five feet; stand is finished in black enamel.

KLIEGL EXHIBIT AND WINDOW LAMPS

No.	DESCRIPTION	PRICE	WEIGHT	CODE WORD
533	Floodlight Reflector, 11", with wall bracket, for 250-watt G30 Mazda lamp	\$15.00	2 1/2 lbs.	Oebotas
534	Floodlight Reflector, 11", with pedestal stand, for 250-watt G30 Mazda lamp	17.00	13 1/2 lbs.	Oelwage
535	Floodlight Reflector, 11", with wall bracket, for 500-watt G40 Mazda lamp	15.00	3 1/2 lbs.	Ofciar
537	Floodlight Reflector, 14 1/2", with wall bracket, for 1000-watt G40 Mazda lamp	18.00	4 lbs.	Ohmad
66A	Spotlight No. 66, with wall bracket	16.00	4 1/2 lbs.	Chiroter
66B	Spotlight No. 66, with round base	16.00	9 1/2 lbs.	Chirpeth
66C	Spotlight No. 66, with telescopic pedestal stand	20.00	15 lbs.	Chirrias
53A	Spotlight No. 53, with wall bracket	12.00	6 lbs.	Cervinos
54	Spotlight No. 53, with round base	12.00	12 1/4 lbs.	Certona
55	Spotlight No. 53, with telescopic pedestal stand	15.00	17 1/4 lbs.	Cesareo
62A	Spotlight No. 62, with wall bracket	22.00	8 lbs.	Chastiax
63	Spotlight No. 62, with round base	22.00	13 1/2 lbs.	Chata
64	Spotlight No. 62, with telescopic pedestal stand	25.00	18 lbs.	Chaudel
70A	Spotlight No. 70, with wall bracket	33.00	14 lbs.	Chienque
70B	Spotlight No. 70, with round base	33.00	18 1/2 lbs.	Churlato
70C	Spotlight No. 70, with telescopic pedestal stand	36.50	36 lbs.	Chusura
926	Mirrored Glass Reflector, 3 3/4"	3.00	3/4 lb.	Shallot

LONG-RANGE "ATTENTION" SPOTLIGHT

KLIEGL LONG-RANGE "ATTENTION" SPOTLIGHT, used principally in theatres to illuminate ushers at attention, or to spotlight a vase of flowers or other articles of decoration in the lobby or auditorium, is a small long-throw "Mazda" Spotlight designed to be concealed in the ceiling, or at some distant point; accommodates a 250-watt concentrated filament, G-30, "Mazda" lamp with medium-screw-base receptacle fixed in position; lens holder adjustable for focusing; fitted with a 3 1/2" condensing lens, and with a 3 3/4" mirrored-glass reflector mounted back of the lamp; resembles in appearance Spotlight No. 66A illustrated on page 57; furnished complete with bracket for mounting on wall, ceiling, pillar, or floor, with asbestos leads, and color frame for gelatine color mediums.

No. 67 Kliegl Long-Range "Attention" Spotlight

PRICE \$20.00 WEIGHT 6 lbs. CODE WORD Chisel

EXHIBIT and WINDOW LAMPS

KLIEGL EXHIBIT AND WINDOW LAMPS provide means for the effective illumination of articles and merchandise in show rooms, store windows, exhibits, et cetera—lighting the display with all the attractive beauty and color made possible with the various forms of spotlights and floodlight reflectors now available. Many other types of lighting apparatus illustrated in this publication may also be skillfully adapted for purposes of display lighting.



No. 533

No. 533

Kliegl Floodlight Reflector No. 533 for 250-watt, G-30, "Mazda" lamp, is fitted with medium-screw-base receptacle, and designed to be mounted on a wall, beam, pillar, or over windows; supporting bracket is provided with swivel thumb-screw adjustment for swinging light in any direction; reflector is made of spun aluminum, with reflecting surfaces painted white, and provided with slide grooves for metal frames for gelatine color mediums; furnished complete with asbestos leads and color frame; made in larger sizes, and also furnished mounted on a telescopic pedestal stand, adjustable three to six feet, as shown in listing.



No. 66-A

No. 66A

Kliegl Spotlight No. 66A for a 250-watt concentrated filament "Mazda" lamp is fitted with a medium-screw-base receptacle fixed in position; lens holder adjustable for focusing; equipped with $3\frac{1}{2}$ " condensing lens; hood, of Russian iron with aluminum frame front and rear, provided with bracket support and thumb-screw swivel adjustment; can be mounted on wall, ceiling, pillar, or floor; can also be used as a floodlight by simply removing lens; furnished complete with asbestos leads and color frame for gelatine mediums; can also be furnished with $3\frac{3}{4}$ " mirrored-glass reflector mounted back of the lamp to increase light volume about fifty per cent; also with a round base instead of a wall bracket (No. 66B), or mounted on a telescopic pedestal stand adjustable from three to five feet (No. 66C), as shown in listing.



No. 54

No. 54

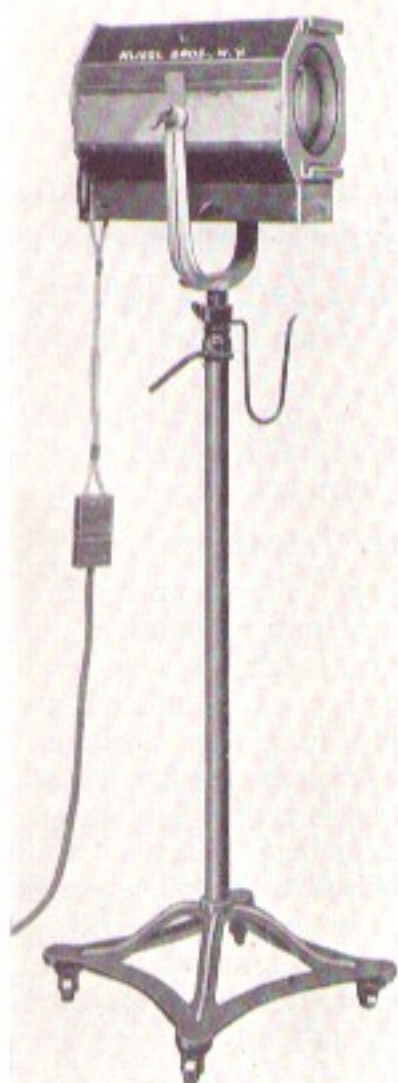
Kliegl Spotlight No. 54 for a 250-watt concentrated filament "Mazda" lamp; is fitted with a medium-screw-base receptacle, adjustable for focusing; hood is made of Russian iron, thoroughly ventilated, fitted with a $4\frac{1}{2}$ " condensing lens; mounted on a round base; furnished complete with removable color frame for gelatine color mediums and asbestos covered lead wires; can be furnished with $3\frac{3}{4}$ " mirrored-glass reflector mounted back of the lamp to increase the light volume about fifty per cent; also furnished mounted on telescopic pedestal stand with adjustment from three to five feet (No. 55) as shown in listing.



No. 63

No. 63

Kliegl Spotlight No. 63 for 250-watt or 400-watt concentrated filament "Mazda" lamp is fitted with a medium-screw-base receptacle, adjustable for focusing; hood, made entirely of cast aluminum, well ventilated, is supported in trunnion and swivel bearings and mounted on a round base; light can be projected in any direction; front, fitted with a $4\frac{1}{4}$ " condensing lens, is removable—lamp may also be used as a floodlight; slide grooves provided for color frames; a $3\frac{3}{4}$ " mirrored-glass reflector mounted back of the lamp; furnished complete with asbestos leads and color frame for gelatine color mediums.



No. 70-D

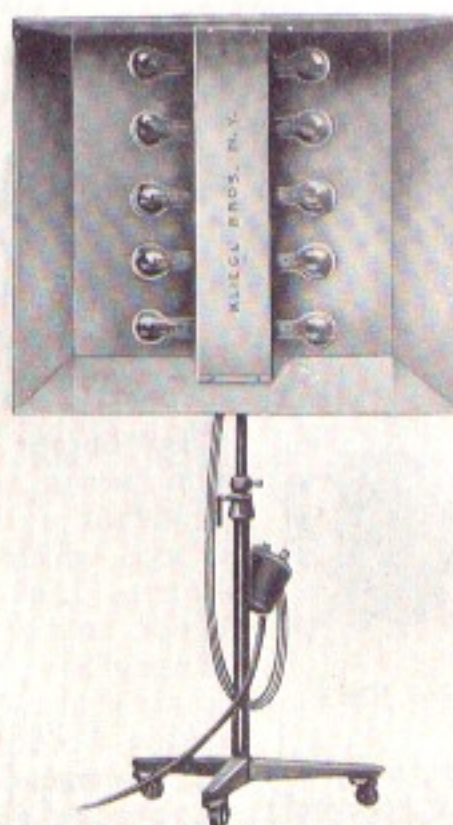
in any direction; base provided with casters; self-closing spring-door gives access to lamp; receptacle is mounted on a sliding base with extension wing nut for focusing, and with 5-inch mirrored-glass reflector mounted back of the lamp; furnished complete with asbestos leads, connector, and 25 feet of stage cable.

No. 59

Kliegl Photographic Studio Spotlight No. 59 is an "Arc" type spotlight with a 21-ampere hand-feed arc-lamp, arranged for operation at 7, 14 and 21 amperes; external knobs provided for focusing arc and feeding carbons; hood, thoroughly ventilated, is made of Russian iron with aluminum frame front and rear, and fitted with a 4½-inch condensing lens; self-closing spring-door gives access to lamp for replacing carbons and making adjustments; hood is mounted on specially designed stand permitting it to swing through an angle of 180 degrees, raised to a height of 7 feet above the floor, or set on the base 12 inches from the floor; base provided with casters; fixed resistance and snap switch, for control of circuits, mounted on pedestal; furnished complete with asbestos leads and 25 feet of stage cable.

No. 532

Kliegl Photographic Studio Floodlight Reflector No. 532 provides a wide spread of evenly diffused light of any desired intensity; reflector (48"x42") is made of sheet aluminum with reflecting surfaces highly polished; fitted with two rows of medium-screw-base receptacles; accommodates ten 200-watt Mazda lamps; receptacles completely wired to two independent circuits of four and six receptacles, evenly distributed and controlled by two separate knife switches; reflector is mounted with adjustable support on a telescopic pedestal stand—may be raised or lowered and set at any angle desired; base provided with casters; furnished complete with asbestos leads and 25 feet of stage cable.



No. 532

No. 70D

Kliegl Photographic Studio Spotlight No. 70-D is a "Mazda" type spotlight fitted with a mogul-screw-base receptacle for 1000-watt concentrated filament Mazda lamp; hood, of Russian iron with aluminum frame front and rear, equipped with a 5-inch condensing lens; supported in trunnion and swivel bearings, and mounted on a telescopic pedestal stand permitting it to swing



No. 59

KIEGL PHOTOGRAPHIC STUDIO LAMPS

No.	DESCRIPTION	PRICE	WEIGHT	CODE WORD
70D	Photographic Studio Spotlight, "Mazda" type	\$48.00	27 lbs.	Chitafou
59	Photographic Studio Spotlight, "Arc" type	85.00		Chanson
532	Photographic Studio Floodlight Reflector for 10 lamps	85.00		Odoin
534	Photographic Studio Floodlight Reflector for 1 lamp	17.00	13 lbs.	Oelwage

SPECIAL ARC LAMPS

For Motion Picture Studios

KLIEGL SPECIAL ARC LAMPS for motion picture studios are used to secure special lighting effects in photography, as the burglar arc lantern for a flash-light or dark-lantern effect; the fixture arc lamp for producing lighted-lamp effects; and the hand arc lamp for lighting performer's face, giving effect of a lighted match.

Burglar Arc Lanterns



No. 1063

Kliegl Burglar Lanterns for motion picture studios are small hand-feed arc lamps enclosed in a hood which resembles a dark lantern. Lamp is entirely enclosed and fitted with a condensing lens; thoroughly ventilated; light tight, and provided with a wooden handle, requires 15 amperes at 125 volts; is furnished complete with rheostat, switch, and 25 feet of flexible stage cable.

Hand Arc Lamps



No. 1070

Kliegl Hand Arc Lamps for motion picture studios are very small arc lamps, designed to be concealed in the performer's hands — arranged with

spring-back thumb-control so that arc can be struck by performer, illuminating the face, producing effect of striking a match.

Fixture Arc Lamps



No. 1068 No. 1066

Kliegl Table Lamp and Fixture Lamp for motion picture studios is a small compact hand-feed arc lamp, in a wire mesh enclosure, designed to be set in table lamps, floor lamps, chandeliers, electric wall fixtures, and similar scenic properties. No. 1068 is fed by a knob at the rear, and No. 1066 is fed from the bottom; No. 1061 is automatic feed arc lamp for table lamps.

KLIEGL SPECIAL ARC LAMPS FOR MOTION PICTURE STUDIOS

No.	DESCRIPTION	PRICE	CODE WORD
1063	Burglar Arc Lantern	\$20.00	Arabus
1064	Burglar Arc Lantern, with resistance and cable	40.00	Aracion
1061	Fixture Arc Lamp, automatic, with resistance	90.00	Arabah
1065	Fixture Arc Lamp, hand feed at bottom, enclosed, with resistance	24.00	Aracope
1066	Fixture Arc Lamp only, enclosed	12.00	Aragale
1067	Fixture Arc Lamp, hand feed at side, enclosed, with resistance	29.00	Arakan
1068	Fixture Arc Lamp only, enclosed	17.00	Arakvat
1070	Hand Arc Lamp	12.00	Aranais
1071	Hand Arc Lamp, with 10-ampere resistance	24.00	Aranata

PHOTOGRAPHIC STUDIO LAMPS

KLIEGL PHOTOGRAPHIC STUDIO LAMPS, designed to meet the exacting requirements of masters in the art of still photography, are made in various forms of spotlights and flood light reflectors, and provide flexibility in lighting arrangements, absolute control of light volume, maximum lighting efficiency—with mobility, compactness, and substantial construction.

No. 534

Kliegl Photographic Studio Floodlight Reflector No. 534 is fitted with a medium screw-base receptacle for one 400-watt G-30 "Mazda" lamp; reflector is made of spun aluminum with reflecting surfaces highly polished, and provided with slide grooves for metal frames for gelatine color mediums; mounted with an adjustable support on a telescopic pedestal stand permitting reflector to be raised or lowered and set at any angle desired; furnished complete, with wiring concealed within the pedestal and coming out under the base—a feature which prevents the lamp from being upset should the cable be pulled accidentally.



No. 534

KLIEGLIGHTS (Continued)

No.	DESCRIPTION	VOLTS	PRICE	WEIGHT	CODE WORD
DIRECT CURRENT (35-AMP.)					
1011	Klieglight, Studio Floodlight, single unit, pedestal type	110	\$140.00	138 lbs.	Aloes
1013	Klieglight, Studio Floodlight, single unit, pedestal type	250	156.00	146 lbs.	Alpen
1021	Klieglight, Studio Floodlight, double unit, pedestal type	110	280.00	212 lbs.	Anthemo
1012	Klieglight, Studio Floodlight, single unit, suspension type	110	130.00	70 lbs.	Alpaca
1014	Klieglight, Studio Floodlight, single unit, suspension type	250	146.00	77 lbs.	Amaas
ALTERNATING CURRENT (35-AMP.)					
1015	Klieglight, Studio Floodlight, single unit, pedestal type	110	140.00	138 lbs.	Ambit
1017	Klieglight, Studio Floodlight, single unit, pedestal type	250	156.00	146 lbs.	Anal
1025	Klieglight, Studio Floodlight, double unit, pedestal type	110	280.00	212 lbs.	Antrace
1016	Klieglight, Studio Floodlight, single unit, suspension type	110	130.00	70 lbs.	Ameer
1018	Klieglight, Studio Floodlight, single unit, suspension type	250	146.00	77 lbs.	Ancon

Carbons for Klieglights, page 104.

"Lilliputs"

KLIEGL "LILLIPUTS" (studio floodlights), in general design and operation, resemble "Klieglights" but are much smaller in size, very compact, light in weight; can be quickly taken apart and packed in a small parcel for transportation. Intended primarily as portable lamps for use by motion picture companies on the road, and for use with "Klieglights" in the studios for special lighting requirements, they are also excellent lighting units for "stills" in photograph galleries, and similar applications.



No. 1050

Lilliputs have two arcs in series; automatically regulated; operate on either direct or alternating current; consume 15 amperes; lamp, rheostat, and hood form a complete unit and is frequently used in this form without floor stand; lamp unit alone is only 23 inches high—mounted on telescopic stand it is 66 inches high; lamp hood is provided with slide grooves for frames holding diffusing glass or other mediums; furnished complete with telescopic stand, 25 feet of stage cable, and metal frame for diffusing glass.

KLIEGL "LILLIPUTS"

No.	DESCRIPTION	VOLTS	PRICE	WEIGHT	CODE WORD
1050	"Lilliput" Studio Floodlight, with stand	110	\$100.00	30 lbs.	Aptope
1051	"Lilliput" Studio Floodlight, without stand	110	93.50	20 lbs.	Aptis
1055	"Lilliput" Studio Floodlight, with stand	220	120.00	35 lbs.	Apyrous
1052	Stand for Lilliput		6.50	10 lbs.	Apuesta

Carbons for "Lilliputs," page 104.

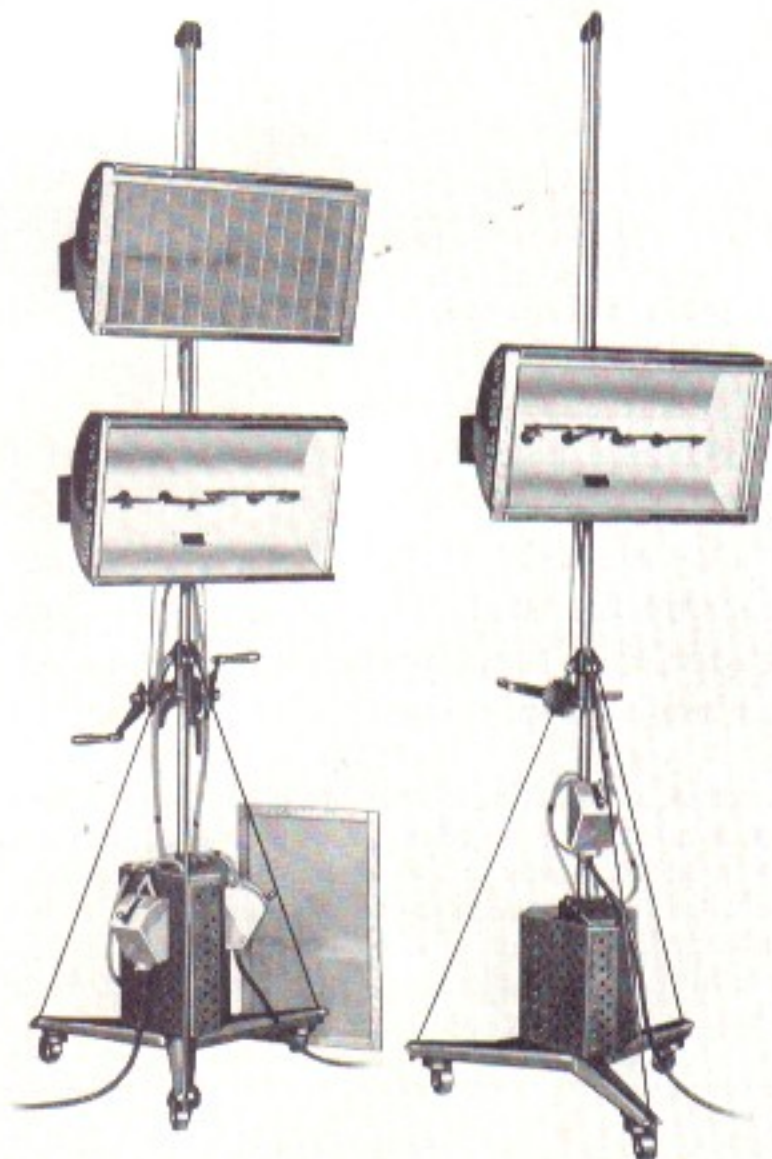
Travelling Cases for "Lilliput" Studio Lights

For travelling purposes, boxes designed to hold two, three, or four "Lilliput" studio lights, together with their stands and cables, can be furnished.

No.	DESCRIPTION	SIZE OF BOX INCHES	WEIGHT	PRICE	CODE WORD
1057	Travelling Case for 2 "Lilliputs"	36 1/2 x 20 x 17 1/2	50 lbs.	\$16.00	Aquella
1058	Travelling Case for 3 "Lilliputs"	36 1/2 x 28 x 17 1/2	70 lbs.	20.00	Aqueux
1059	Travelling Case for 4 "Lilliputs"	36 1/2 x 36 1/2 x 17 1/2	87 lbs.	24.00	Aquinas

"Klieglights"

"KLIEGLIGHTS" (Kliegl studio floodlights) are primarily open-box reflectors fitted with two powerful arc lamps that produce a brilliant flood of light. Slide grooves accommodate prismatic-glass light-screens for thoroughly diffusing the light. They are made as single and double units in both pedestal and suspension types.



No. 1021

No. 1011

bottom hood lowered to 4 feet 2 inches from the floor. This model is an exceptionally efficient studio light; occupies the same floor space as a single unit "Klieglight" but gives double intensity and illuminates a much greater area; furnished complete with asbestos leads, two 25-foot lengths of stage cable, and two metal frames for prismatic-diffusing glass; operates on 120 volts direct current; also furnished for operation on alternating current and on higher voltages, as shown in listing.

No. 1011

"Klieglight" (studio floodlight) No. 1011 is a single unit, pedestal type, fitted with an automatic-double-burner-arc-lamp (two 35-ampere arcs in series); contained in an all-metal hood-reflector; slide grooves in front for frames holding prismatic-diffusing glass or other mediums; hood-reflector is suspended on a steel cable passing over a pulley at top of a wrought iron stand and wound on a small hand windlass near the base; can be raised or lowered from 4-feet to 8-feet above the floor; enclosed thoroughly ventilated fixed resistance and switch are mounted on base; provided with casters so that it can be easily moved about; furnished complete with asbestos leads, 25-feet of stage cable, and metal frame with diffusing glass; operates on 120-volts direct current; also furnished for operation on alternating current and on higher voltage, as shown in listing.

No. 1021

"Klieglight" (studio floodlight) No. 1021 is a double unit, pedestal type, similar in construction to the single unit Klieglight except that it is provided with two hood-reflectors complete with automatic-double-burner-arc-lamps, mounted on a correspondingly heavier stand, with two windlasses, two resistances, and two control switches; lamps are independently controlled and adjusted; top hood can be raised 8 feet 4 inches above the floor and



No. 1012

No. 1012

"Klieglight" (open box studio flood light) No. 1012 is a single unit, suspension type, having a hood-reflector of the same identical construction as that of the pedestal type No. 1011, but without stand and unattached to the resistance or switch—so arranged that hood may be suspended overhead and resistance with switch set elsewhere, usually somewhere on the floor; a hinged frame is provided in front of hood for holding prismatic diffusing glass; furnished complete with hangers, resistance, switch, and 50 feet of stage cable; operates on 120 volts direct current; also furnished for operation on alternating current and on higher voltages, as shown in listing, and in banks of two or more units when so required.



No. 21

the base and provided with a switch so that lamp can be operated at both 35 amperes and 70 amperes; furnished complete with enclosed main switch, asbestos leads, and 25 feet of approved stage cable. The 100-ampere spotlight No. 19 is of similar but heavier construction, equipped with an 8-inch lens.

No. 21

Kliegl Spotlight No. 21 is fitted with a 120-ampere arc lamp, equipped with an 8-inch condensing lens; hood—with front, rear; and base of aluminum, and sides of Russian iron—is double lined with asbestos, thoroughly ventilated, mounted on telescopic stand, perfectly balanced, follows with remarkable ease, can be swung vertically through an angle of 180 degrees, and turned in any desired direction; plug connectors permit hood to be detached from the stand, and slide grooves accommodate color frames, color wheels, and effect attachments. Large spring-door gives access to lamp for adjusting carbons and burner. Arc lamp is of the hand-feed type specially constructed to accommodate the large size carbons, and made of manganese bronze to withstand the heat; can be quickly focused, smoothly and easily; lens is fastened in a separate casing designed to allow free circulation of air and unrestricted expansion; resistance is mounted on the base, and provided with two single-pole switches, permitting apparatus to be used at 60- and 90-amperes as well as at 120 amperes—arc can thus be started at low current and held at that setting until full strength is required; main switch is enclosed and mounted under the hood; stand is provided with casters so that it can be easily moved about; furnished complete with asbestos leads, and 25 feet of stage cable. The 200-ampere Spotlight No. 14 is of similar but heavier construction, equipped with a 10-inch lens.

KIEGL MOTION-PICTURE-STUDIO SPOTLIGHTS

No.	DESCRIPTION	SIZE OF LENS	AMP.	VOLTS	PRICE	WEIGHT	CODE WORD
11	Studio Spotlight	6"	70	125	\$120.00	101 lbs.	Bergfels
19	Studio Spotlight	8"	100	125	220.00	163 lbs.	Bicuda
21	Studio Spotlight	8"	120	125	250.00	200 lbs.	Blinky
29	Studio Spotlight	10"	200	125	450.00	263 lbs.	Bohrahl

Spotlights for higher voltage can be furnished.

Carbons for Studio Spotlights, page 104. Iris diaphragm shutter for spotlights, page 81. Standard range, stage spotlights, page 38.

Truck with casters for round base spotlights, page 100.

FLOODLIGHTS

For Motion Picture Studios

KIEGL STUDIO FLOODLIGHTS ("KIEGLIGHTS" AND "LILLIPUTS") are used to floodlight scene settings and subjects for motion-picture photography, still photography, and photo-engraving processes. They provide an exceptionally brilliant clear-white light, evenly distributed. Arcs are fed automatically, maintaining a constant light value. They are portable, of compact and durable construction, and furnished for operation on direct or alternating current. "Kieglights" are the larger studio lamps used for floodlighting wide areas. "Lilliputs" are much smaller and extremely compact units for "close up" floodlighting.

MOTION-PICTURE-STUDIO LAMPS

KLIEGL MOTION-PICTURE-STUDIO LAMPS are highly developed lighting units for photographic work. "Klieglights," known the world over, are used in practically all American Studios—"Klieg," their name abbreviated, is a familiar trade word in the motion picture industry. They are powerful spotlights and floodlights, which, for economy, durability, and flexibility in lighting arrangements, are unsurpassed—signified by their extensive use in the largest of studios—Famous Players-Lasky, First National, Fox, Selznick, Realart, Goldwyn, Griffith, Metro, Morosco and others. Outside the studios they are used for taking motion pictures in theatres, hospitals, factories, convention halls, and similar places, also by photo-engravers and commercial photographers. They are all of the electric arc type using chemically treated carbons which give a brilliant white light several times greater in intensity than any other known source of artificial illumination, and a spectrum rich in actinic rays—rays which are all-important for photographic work and give a reflection that photographs with perfect definition—and the electric arc permits the design of lighting units which are not easily broken or put out of service.

SPOTLIGHTS

for Motion Picture Studios

KLIEGL MOTION-PICTURE-STUDIO SPOTLIGHTS are used for intense spotlighting, directive or follow-up flood lighting, back lighting (illuminating back of head and body of performers, usually from some elevated point behind the setting, for the purpose of giving greater depth to the picture), cross lighting (spotting or flooding from the sides or wings of the setting to eliminate facial shadows) and many special effects are obtained by use of mediums, screens, iris shutters, et cetera, which fit into slide grooves provided on all Kliegl Spotlights.

They are high-power, hand-feed, long-range, arc spotlights made in 70-, 100-, 120-, and 200-ampere sizes, operate on either direct or alternating current, 125 volts, and built for higher voltages when required.

No. 11

Kliegl Spotlight No. 11 is fitted with a 70-ampere hand-feed arc lamp; equipped with 6-inch condensing lens; hood, thoroughly ventilated, with front, rear, and base of cast aluminum and sides of Russian iron; lens mounted in a separate aluminum ring, supported at three points, with free air space all around for ventilation and unrestricted expansion; a large self-closing side door gives access to lamp for adjusting carbons and burner; arc lamp is mounted on slide rails with focusing arm and knob for feeding the arc extending through the rear of the hood; hood is mounted with an adjustable support on a telescopic pedestal stand, can be set at any angle, raised, lowered, swung in any direction; resistance is mounted on



No. 11

SKETCH LAMPS and OPAQUE PROJECTORS

KLIEGL SKETCH LAMPS AND OPAQUE PROJECTORS are used to throw upon a screen, cartoons and sketches while actually being drawn, and to project, in all detail and color, opaque objects such as photographs, drawings, paintings, live insects, and the like. Projectors are made in transparent and opaque types, with arc or Mazda lamps.



No. 251

Transparent Types

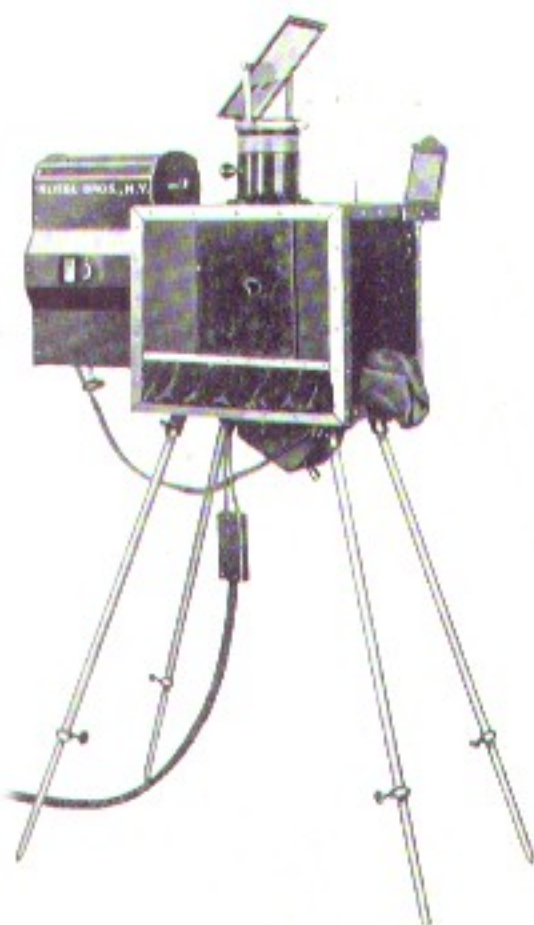
Kliegl Projector No. 251 is a transparent type, especially well suited for cartoon and sketching acts; cartoon or sketch is drawn on a five-inch circular glass plate coated with a black substance; lines, as drawn, are projected on the screen; at a distance of 15 feet from the screen it projects a picture 12 feet x 15 feet.

Apparatus consists of a small table, with a light-tight hand-feed arc lamp concealed underneath, and fitted with lenses, reversing mirror, and other optical apparatus required for projecting the sketches. Arc lamp operates at 25-amperes on 125-volts—either direct or alternating current; and is controlled from the top of the table. Apparatus is light in weight, portable, and furnished complete with switches, fixed resistance, connectors, and 25-feet of stage cable. Transparent type projectors are also furnished fitted with a mogul-screw-base receptacle to accommodate a 1000-watt or 2000-watt concentrated filament Mazda lamp, instead of an arc lamp.

Opaque Types

Kliegl Projector No. 252 is an opaque type for projecting photographs, maps, printed matter, drawings, paintings, small live animals, insects, and similar opaque subjects—also sketches and cartoons while they are being drawn; all detail and color values are retained; from the subject area, 6 inches x 8 inches, it projects a picture 8 feet by 10 feet on the screen at a distance of 15 feet.

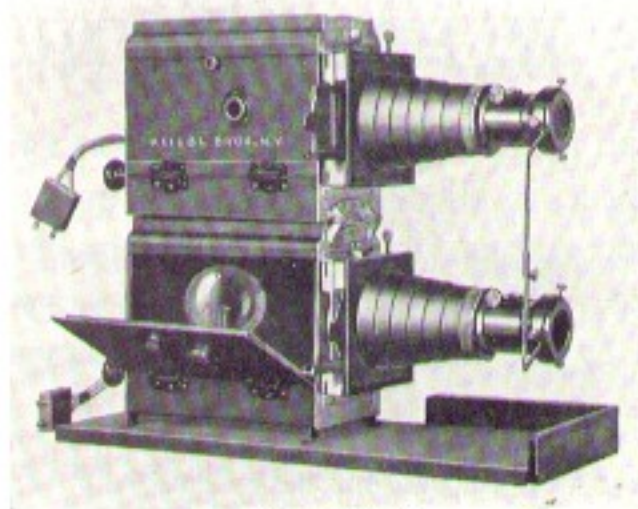
Apparatus consists of a hand-feed arc lamp attached to a box fitted with lenses, reversing mirror, and other apparatus necessary for the projecting of the subjects chosen; suitable openings for the hands are provided, and a window to enable the operator to see within the box; furnished complete with arc lamp for 25 amperes, 125 volts, which operates on either alternating or direct current, adjustable stand, rheostats, lenses, switches, connectors, and 25 feet of approved cable. Opaque type projectors are also made fitted with a mogul-screw-base receptacle to accommodate a 1000-watt or 2000-watt concentrated filament Mazda lamp instead of an arc lamp.



No. 252

KLIEGL SKETCH LAMPS AND OPAQUE PROJECTORS

No.	DESCRIPTION	PRICE	WEIGHT	CODE WORD
251	Transparent Type Projector, with arc lamp	\$265.00	61 lbs.	<i>Fimbria</i>
251N	Transparent Type Projector, with "Mazda" lamp	250.00	41 lbs.	<i>Fimnetson</i>
252	Opaque Type Projector, with 1 arc lamp	325.00	87 lbs.	<i>Fimage</i>
252N	Opaque Type Projector, with 1 "Mazda" lamp	325.00	74 lbs.	<i>Fmarv</i>



No. 255-N

to the stereopticon, are provided, with enclosed switches, asbestos covered leads, connectors, and two 25-foot lengths of stage cable; stereopticon can also be furnished with a floor stand having adjustable legs.

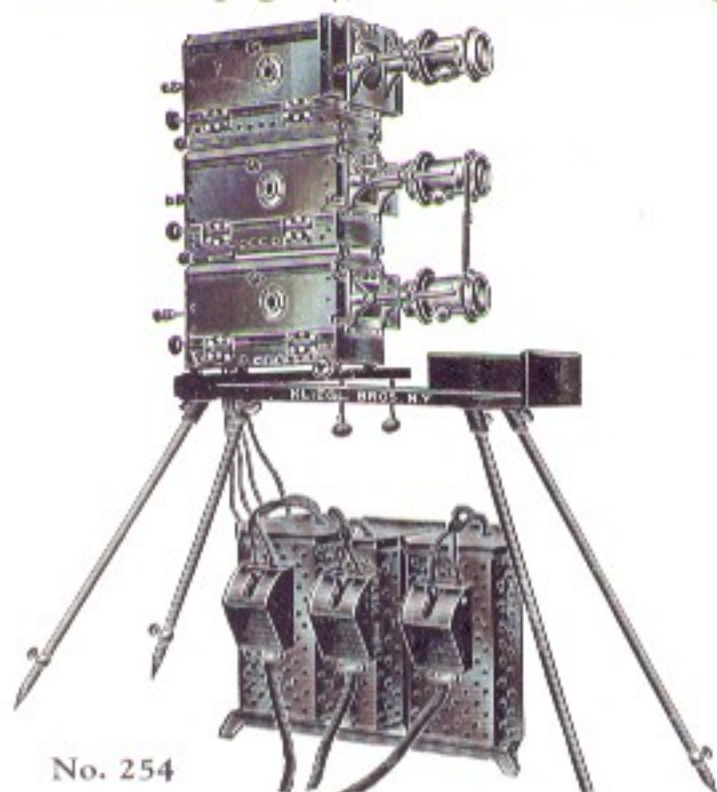
No. 255-N

Kliegl Double Dissolving Stereopticon No. 255N is a "Mazda" type, with iris dissolver; hoods fitted with mogul-screw-base receptacles to accommodate 1000-watt concentrated filament Mazda lamps; furnished complete with condensing and objective lenses and slide carriers, mounted on an oak base, and provided with asbestos leads, connectors, and two 25-foot lengths of approved stage cable; can also be furnished with a floor stand having adjustable legs.

Triple Dissolving

KLIEGL TRIPLE DISSOLVING STEREOPTICONS, used principally with Pose Plastic Acts (described on page 67), consist of three single stereopticons, mounted one above the other; two

are fitted with an iris dissolver and used to project special hand painted slides upon the body of posers clad in white tights, third stereopticon projects effects such as falling snow, rising flames, flying birds, and the like, as an interlude between the pose slides.



No. 254

No. 254

Kliegl Triple Dissolving Stereopticon No. 254 is an arc type fitted with three 25-ampere, 125-volt hand-feed arc lamps, that operate on either direct or alternating current; whole mounted on a floor stand with adjustable legs; means are provided for adjusting the angle between the lamps so that all focus on the same spot; handle—projecting back of the lamp hood—permits adjustment of the arc lamp; furnished complete with three fixed resistances assembled together, but unattached to the stereopticon, with enclosed switches; connectors, and three 25-foot lengths of stage cable; objective lenses of any desired focus.

KLIEGL STEREOPTICONS

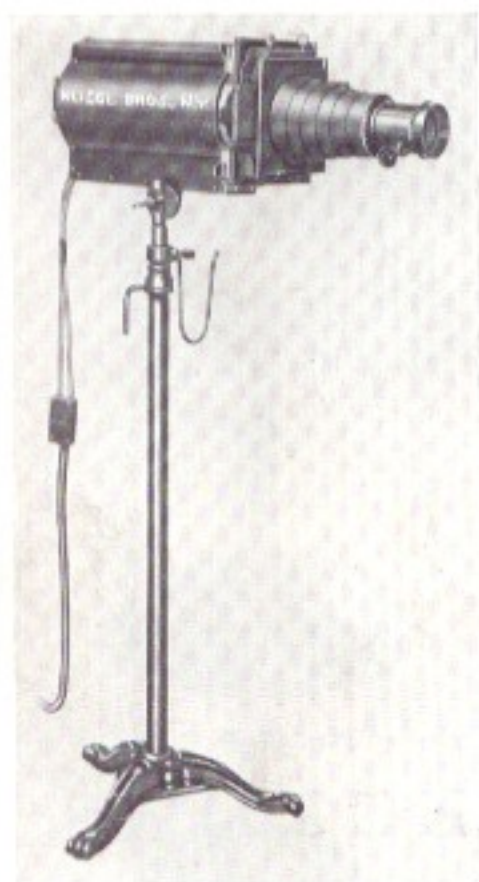
No.	DESCRIPTION	PRICE	WEIGHT	CODE WORD
65	Single Stereopticon, "Mazda" type for 400-watt lamp	\$63.00	43 lbs.	Chinse
260	Single Stereopticon, Arc type, 25-amperes, 125-volts	83.00	66 lbs.	Finiras
260A	Single Stereopticon, Arc type, 25-amperes, 150-volts	97.00	79 lbs.	Finitos
260N	Single Stereopticon, "Mazda" type, for 1000-watt lamp	68.00	40 lbs.	Finitura
255	Double Dissolving Stereopticon, arc type, 25-amperes, 125-volts	230.00	80 lbs.	Findest
255A	Double Dissolving Stereopticon, arc type, 25-amperes, 125-volts, with floor stand and adjustable legs	255.00	114 lbs.	Findfaul
255N	Double Dissolving Stereopticon, "Mazda" type, for 1000-watt lamp	185.00	43 lbs.	Findlaye
255NS	Double Dissolving Stereopticon, "Mazda" type, for 1000-watt lamp, with floor stand, and adjustable legs	210.00	73 lbs.	Finedraw
254	Triple Dissolving Stereopticon, arc type, 25-amperes, 125-volts, with floor stand and adjustable legs	375.00	72 1/2 lbs.	Findbar

"Mazda" lamps not included in the list price; listed on page 108

Carbons for Stereopticons listed on page 104.

STEREOPTICONS

KLIEGL STEREOPTICONS, for projection of lantern slides and effects, in theatres, schools, lecture halls, and private gatherings, are made as single units, double dissolving and triple dissolving—in both arc and “Mazda” types; equipped with $4\frac{1}{2}$ ” condensing and $\frac{1}{2}$ ”-size objective lenses, carefully inspected for optical perfection.



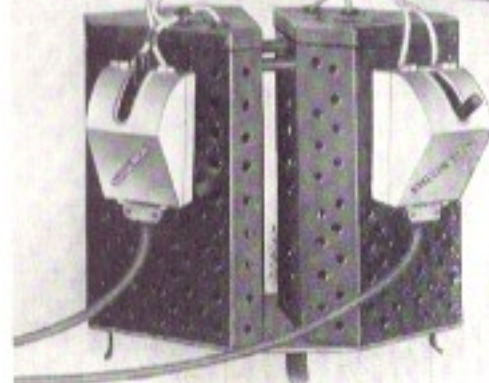
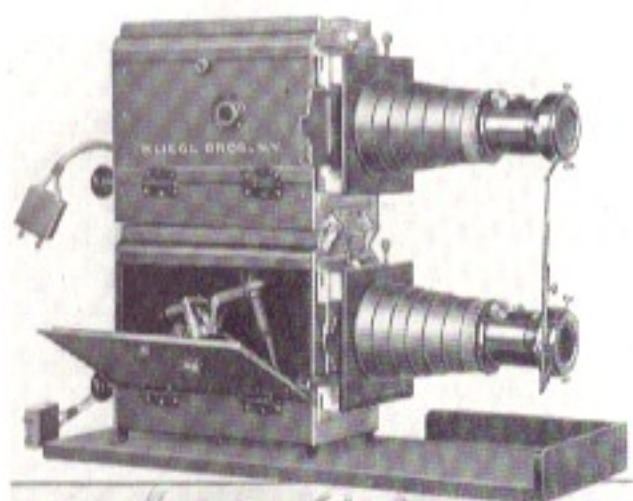
No. 65

No. 65

Kliegl Stereopticon No. 65 is a single unit “Mazda” type—a small spotlight, fitted with a medium-screw-base receptacle, accommodates a 250- or 400-watt concentrated filament “Mazda” lamp; is mounted with adjustable support on a telescopic pedestal stand; and is provided with a condensing lens and lens holder, slide carrier, and objective lens with adjustable brass mounting. Stereopticon furnished complete with asbestos covered leads, connector—which also serves as a switch, and 25-feet of stage cable.

No. 260

Kliegl Stereopticon No. 260 is a single unit, arc type, fitted with a hand feed arc lamp (like one shown with Double Dissolving Stereopticon No. 255) mounted on a telescopic pedestal stand; a fixed resistance on the base, and enclosed switch attached to stand; furnished with objective lens and two condensing lenses, one positioned in the hood casing, the other in a condensing lens holder; (condensing lens holder fits into slide grooves on the hood, accommodates the slide carrier, and the objective lens holder); furnished complete with asbestos leads and 25-feet of stage cable. Stereopticon can be used as a spotlight by removing the condensing lens holder; color frames can be inserted in the slide grooves. Arc lamp requires 25-amperes and operates on 125-volts, alternating or direct current; can be furnished for operation on 250-volts; can also be furnished with hood fitted with mogul-screw-base receptacle to accommodate a 1000-watt concentrated filament Mazda lamp instead of the arc lamp.



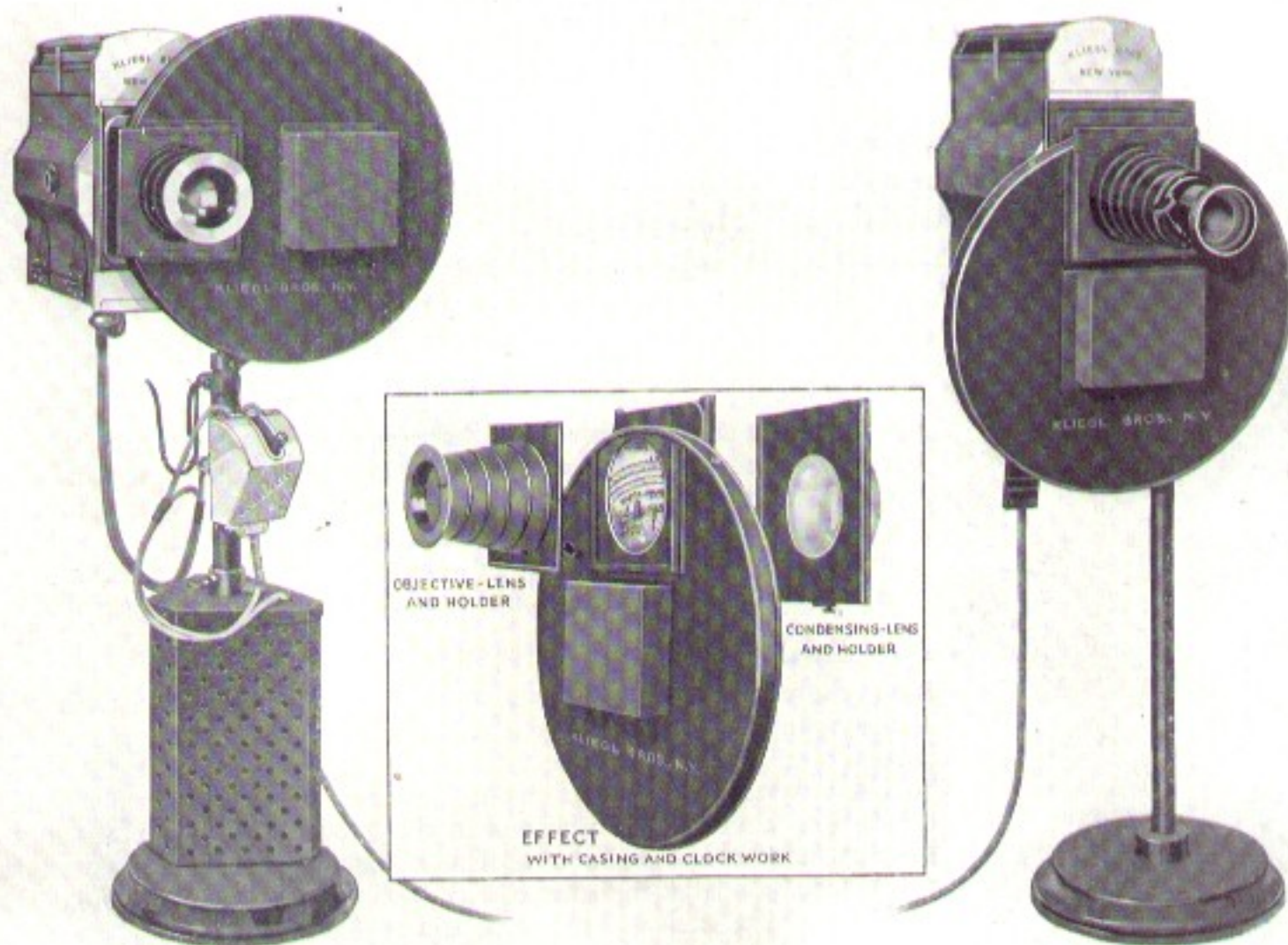
No. 255

Double Dissolving

Kliegl Double Dissolving Stereopticons are so constructed that slides can be projected on a screen without loss of time or darkening of the screen between slide changes; used in theatres and schools, and by educational societies and professional entertainers. Two hoods are mounted one above the other and fitted with an iris dissolver; means are provided for adjusting angle between hoods so that both focus on the same spot.

No. 255

Kliegl Double Dissolving Stereopticon No. 255 is an arc type fitted with two 25-ampere, 125-volt, hand feed arc lamps; adjusted by a knob projecting from the rear of the hood, operate on either direct or alternating current; each hood furnished with objective lens and two condensing lenses—one positioned in the hood, the other in a condensing lens holder which fits into slide grooves on the hood and accommodates the slide carrier and the objective lens; an iris dissolver is fitted to the objective lenses. Stereopticon furnished complete, mounted on an oak base, intended to be set on a table or similar support. Fixed resistances assembled together, but unattached



No. 75

No. 75-N

SCENIC-EFFECT PROJECTORS

KLIEGL SCENIC-EFFECT PROJECTORS (SCIOPTICONS) are used principally in theatres to produce moving scenic effects—rippling water, moving clouds, rising flames, flying birds, et cetera—projected from rear of a transparent drop, from the wings, or from the balcony.

Apparatus consists of an arc, or high-candle-power "Mazda" lamp enclosed in a metal hood fitted with a condensing lense and slide grooves to receive effect holder. Effect holder is also fitted with a condensing lens and with slide grooves for holding effect in position. Effect is hand painted on a clear mica disc, enclosed in a sheet-iron casing, and is rotated by clock-driven or motor-driven mechanism. An objective lens fits slide grooves on front of effect casing (objective lens used depends upon the distance sciopticon is located from the drop, and the size of picture to be projected).

No. 75

Kliegl Sciopticon No. 75, arc type, 30-ampere, 125-volt hand-feed arc lamp, operates on direct or alternating current; rheostat, adjustable from 60-volts to 125-volts; furnished complete with condensing and objective lenses, telescopic pedestal stand, enclosed switch, asbestos leads, and 25-feet of stage cable; also furnished for 250-volt circuits.

No. 75-N

Kliegl Sciopticon No. 75-N is a "Mazda" type; fitted with a mogul-screw-base receptacle for 1000-watt con-

centrated filament Mazda lamp. This type is specially well suited for motion picture theatres where effects are shown during an overture or as a prologue to feature pictures. Several sciopticons located at different points can be controlled by the electrician from the switchboard without aid of other operators. When used with dimmers effects can be faded on and off producing striking novelties. Sciopticon is furnished complete with condensing and objective lenses, pedestal stand, asbestos lead wires, connector, and 25-feet of stage cable, and with or without dimmers.

KLIEGL SCENIC EFFECT PROJECTORS (SCIOPTICONS)

No.	DESCRIPTION	PRICE	WEIGHT	CODE WORD
75	Sciopticon, Arc type, 30-amperes, 125-volts	\$92.00	78 lbs.	Cicada
76	Sciopticon, Arc type, 30-amperes, 250-volts	106.00	89 lbs.	Citadel
75N	Sciopticon, "Mazda" type, 1000-watt, without dimmer	70.00	44 lbs.	Chalcum

Price includes one sciopticon objective lens, Cat. No. 280 to No. 284, page 78. Specify catalogue number of objective desired.
Dimmers for Sciopticon No. 75-N, page 22. Effects are listed separately on page 65.

SCENE PROJECTOR

KLIEGL SCENE PROJECTOR (Linnebach Lamp) is a device used on the stage for projecting scenery on a drop curtain. The desired scene is painted on a large glass slide, $28\frac{1}{2}$ inches x $40\frac{1}{4}$ inches and projected in all detail and color upon a white muslin or linen drop specially prepared for the purpose (drop is treated with a preparation that closes all holes

between the weave of the cloth, and gives a glazed finish to the curtain; curtain can be rolled without injury to the special finish). A scene 30 feet wide can be projected from a distance of 10 feet back of the drop. Projecting apparatus consists of an enclosed arc lamp or high candle power "Mazda" lamp fitted to a large sheet-metal hood, provided with slide grooves to accommodate the painted slide, and mounted on a telescopic floor stand with means for adjusting the height and angular setting of projection apparatus.



No. 247

No. 247

Klieg Scene Projector No. 247 is fitted with a 25-ampere 125-volt arc lamp, operates on direct or alternating current; furnished complete with fixed resistance, switch, connector, and 25-feet of stage cable.

No. 248

Klieg Scene Projector No. 248 is fitted with a mogul-screw-base receptacle; for a 1000-watt concentrated filament Mazda lamp; furnished complete with asbestos leads, connector, and 25-feet of stage cable.

KLIEGL SCENE PROJECTOR

No.	DESCRIPTION	PRICE	WEIGHT	CODE WORD
247	Scene Projector, arc type	\$175.00	110 lbs.	<i>Empracar</i>
248	Scene Projector, "Mazda" type	160.00	88½ lbs.	<i>Empreita</i>
249	Painted Slide for Scene Projector; hand painted, with wooden frame	85.00	14 lbs.	<i>Empress</i>

Transparent drops—specially prepared, can be furnished any size; prices on application.

SHADOWGRAPH

KLIEGL SHADOWGRAPH, used for silhouette screen work, consists of an "arc" open-box light, fitted with a 25-ampere, hand feed, arc lamp, for operation on 125-volts, direct or alternating current, mounted on a pedestal stand, and provided with a special opaque shutter with a small opening in the center; providing a brilliant light source suitable for producing shadows on a drop or screen. Other designs, such as a shadowgraph fitted with color wheels for producing illusions in three dimensions, are made to order.

No. 246 Kliegli Shadowgraph with arc burner and shutter

PRICE \$50.00 CODE WORD *Empoter*

FACE-O-GRAPH

KLIEGL FACE-O-GRAPH is a device for projecting an enlarged image of the human face upon a screen. It is used principally upon the stage, and lends itself to many novel variations in the hands of accomplished professional entertainers. It consists of a metal box fitted with two 50-ampere, 125-volt arc lamps, and the necessary lenses required for projecting the face in all its natural color and characteristics upon the screen. It is furnished complete with fixed resistance, switches, and 50 feet of stage cable.

No. 250 Kliegli Face-O-Graph, arc type

PRICE \$275.00 CODE WORD *Emprant*

OUTDOOR FLOODLIGHTS

KLIEGL OUTDOOR FLOODLIGHTS used for the illumination of buildings, statues, pageants, playgrounds, open-air theatrical productions, and countless other requirements, are designed both for close-range and long-range lighting, and Kliegl Brothers also contract to plan and erect complete floodlight installations for:

Race Tracks
Pugilistic Rings
Skating Rinks
Bathing Beaches
Playgrounds
Tennis Courts
Band Stands

Convention Hall Interiors
Outdoor Theatricals
Pageants
Expositions
Waterfalls
Statues
Signboards

Buildings
Railroad Yards
Underground Excavations
Night Construction Work
Flying Flags and Banners
Boat Landings
Aerodromes, etc.

Estimates, Designs and Terms furnished on request.

KLIEGL OUTDOOR FLOODLIGHTING UNITS are substantially constructed, weatherproof, thoroughly ventilated, and correctly designed to give the proper distribution of light, for the service intended, as described under their respective headings.



No. 560

No. 560

Kliegl Outdoor Floodlight No. 560, used to light theatre fronts, display signs, and similar applications, provides a brilliant flood of light spread over a wide area and evenly diffused; parabolic reflector, of sheet aluminum, is lined with white glass of high reflecting qualities; glass lining is made in small sections and fastened in place with removable brass pins—in case of breakage they can be replaced easily at little cost. Reflector is fitted with a mogul-screw-base receptacle for 500- and 1000-watt G-40 or 1000- and 2000-watt G-48 Mazda lamp; and is completely enclosed, with a water-tight heat-resisting curved-glass front; furnished mounted with an adjustable support on a short tripod stand permitting hood to be set at any desired angle.



No. 561

No. 561

Kliegl Outdoor Floodlight No. 561, used for illuminating buildings from marquees and countless other applications; also suitable for illuminating sunken gardens, shrubberies, outdoor performances, et cetera, provides an extremely wide spread of brilliant light, evenly diffused; consists of a galvanized sheet-iron box (20" long x 15" high x 13 1/2" deep) with an inclined wire-glass front; contains two mogul-screw-base receptacles with all-metal, silvered reflectors for two 500-watt P. S.-40 Mazda lamps, and so arranged that incline of the lamps and reflectors can be altered within the box to suit projection requirements; thoroughly ventilated; weatherproof; external surfaces painted a waterproof gray.

No. 562

Kliegl Outdoor Floodlight No. 562 is a gigantic reflector for two 1000-watt P. S.-52 Mazda lamps; used to floodlight great open spaces, as stadiums, parks, pugilistic rings, tennis courts, and so forth, as well as

building fronts, signboards, and the like. They project an extremely wide spread of light without a blinding glare—a feature of great importance where athletic events are to be illuminated; base of reflector is made of cast aluminum with weatherproof coverings which house the mogul-screw-base receptacles and designed to allow free circulation of air; base is also fitted with an adjustable bracket permitting it to be mounted on a pole or other means of support (usually mounted about 40 feet from the ground); reflector hood is made of gal-

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To facilitate placing of orders by telegraph, reduce the cost of messages, and avoid mistakes, a code word has been assigned to each article listed in this catalogue; and code words devised for shipping instructions. Customers are invited to make use of the code, and confirm all telegraph orders by sending a duplicate copy of the message by mail.

SHIPPING INSTRUCTIONS

	CODE WORD
Ship by freight C. O. D.	Yacare
Ship by express C. O. D.	Yacca
Ship by express	Yahoo
Ship by freight	Yaksha
Can you ship from stock	Yapock
We are in a great hurry.	Yaup
If you are unable to ship soon, wire us at our expense	Yelad
Quote us prices on	Yean
Add to our order.	Yerba
When will you ship our order of	Yodel
Have you received our order of.	Yojan

ANSWERS

	CODE WORD
We beg to quote you the following prices	Yourts
Order not received	Yopaina
Order received too late for goods to reach you in time	Yopestam
Give better shipping instructions	Yrian.
Can ship at once	Yurga
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GENERAL INFORMATION

Price Quotations

Prices quoted in this catalogue are subject to discount, are subject to change without notice, and supersede all previous quotations. Net price quotations furnished upon request. List prices do not include crating, expressage, or postage—which will be charged at cost. All shipments are made from New York City.

Placing the Order

To avoid possible errors, give complete details when placing your order: mention catalogue number and name of article (or code word if ordered by telegraph) together with any other information such as size, color, finish, etc., that may be essential.

Shipping Instructions

Customers are requested to give shipping instructions with their orders. If not given, our best judgment is used in the selection of routes. When ordering goods for shipment to traveling companies make a sufficient allowance of time for shipment to reach destination. Experienced packers are employed, therefore our responsibility ceases when material is receipted for in good condition by transportation company. Consignees must hold carrier responsible for breakage, damage, loss or delay in transit.

Terms of Payment

Terms of payment are net cash, except to parties of established credit, to whom they are net 30 days. All remittances must be made in New York funds, in the form of Post Office Money Order, Express Money Order, or New York Draft. We cannot hold ourselves responsible for remittances lost in transit.

Goods will be sent C.O.D. if a deposit of not less than 25% of the purchase price is remitted with the order. Shipment will be forwarded by freight. Draft for balance due, with bill of lading attached, will be sent to bank designated by purchaser, so that, on payment of draft, goods will be delivered at destination.

Guarantee

All Kliegl equipment, apparatus and effects are sold with full guarantee. Any defects in material or workmanship will be promptly rectified provided claims are made within 10 days of receipt of goods, and defective parts returned to us for examination, charges prepaid. No other claims for damages, labor or material will be allowed.

Return of Goods

Do not return goods before receiving our approval. When writing mention the date and number of original invoice. Goods returned must be properly marked, sent prepaid, and are subject to a charge for handling.

Rental of Apparatus

A selected stock of lighting apparatus and effects for stage, motion picture studio and display lighting are kept on hand for rental at contract rates. Expert operators can also be furnished when required. Rental charges for apparatus must be paid in advance. Unless New York City security is furnished, a cash payment must be made for full value of the goods, and when apparatus is returned, rental and express charges will be deducted from payment made and check for the balance returned. All transportation charges are to be paid by the rental party.

Freight Rates

The following freight rates may be used to estimate the cost of transportation: New York to—

Cleveland, Ohio, per 100 lbs.,	\$1.12
Detroit, Mich., per 100 lbs.,	1.23
Chicago, Ill., per 100 lbs.,	1.57
Atlanta, Ga., per 100 lbs.,	2.18
Buffalo, N. Y., per 100 lbs.,	.86
St. Louis, Mo., per 100 lbs.,	1.84
Boston, Mass., per 100 lbs.,	.74
San Francisco, Cal., per 100 lbs.,	6.66
Dallas, Tex., per 100 lbs.,	2.74

fused switch, enclosed in a No. 12 gauge iron box, having 3 separately bushed 2" holes on the bottom, to be known as Company Switch. Studs on this switch should be extra long, and provided with wing nuts. It shall be wired direct to Meter Board.

Music Pit: Fourteen (14) Musicians' outlets shall be furnished and installed in the musicians' pit where shown on plans. Each outlet shall consist of a fused rosette in an outlet box provided with a bushed cover, and with 8" of stage cable protruding from the outlet, terminating in a Kliegl Connector, No. 950. These outlets shall be controlled by a switch on toggle-section of the stage switchboard.

Aisle Lights: Kliegl Aisle Spotlights, No. 675, shall be provided and installed on aisle side of end seats where designated on auditorium plan.

Step Lights: Kliegl Step Lights, No. 677, shall be provided and installed where designated on auditorium plan.

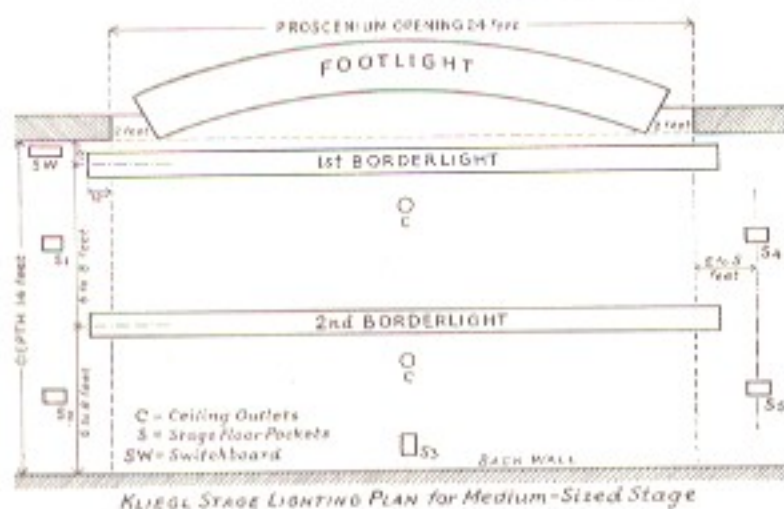
Exit Signs: At each of the exits, except back of

the curtain line, there shall be furnished and installed a Kliegl Exit Sign No. 695B. The 24"x10"x5" galvanized iron outlet box, made of No. 20 gauge steel, open at the front, must be set in the wall with the open front flush with the finished wall. The wiring to the exit signs shall terminate in porcelain receptacles installed in standard iron outlet boxes. The hinged doors of the exit signs are to be fitted with Cathedral leaded, amber-and-opal-glass face, with Ruby-glass letters, numbers 8 inches high.

Cove Lights: Cove lighting shall be furnished and installed in Main Dome, Mezz. Well, Lobby Ceiling, etc., as shown on plans. It shall consist of Kliegl Cove Light Strip, No. 734, shall extend around the full length of the coves, and be arranged as per architectural detail.

Automobile & Carriage Call: Provide and install a Kliegl Automobile and Carriage Call, No. 783; the Call to be installed in location shown on plans, and the Call Switch to be placed in the outer lobby.

Specifications for Medium-Sized Stage



Footlight: Kliegl, No. 622—20-ft. long, wired for:
 22 60-watt White lights, 1 2-wire circuit—1320-watt Dimmer
 22 60-watt Red lights, 1 2-wire circuit—1320-watt Dimmer
 22 60-watt Blue lights, 1 2-wire circuit—1320-watt Dimmer
 Or in place of No. 622—Kliegl Disappearing Type

Footlight, No. 829,—4 5-ft. sections wired for:

20 60-watt White lights, 1 2-wire circuit—1200-watt Dimmer
 20 60-watt Red lights, 1 2-wire circuit—1200-watt Dimmer
 20 60-watt Blue lights, 1 2-wire circuit—1200-watt Dimmer

Borderlights: Kliegl, No. 600,—each 24 ft. long wired for:

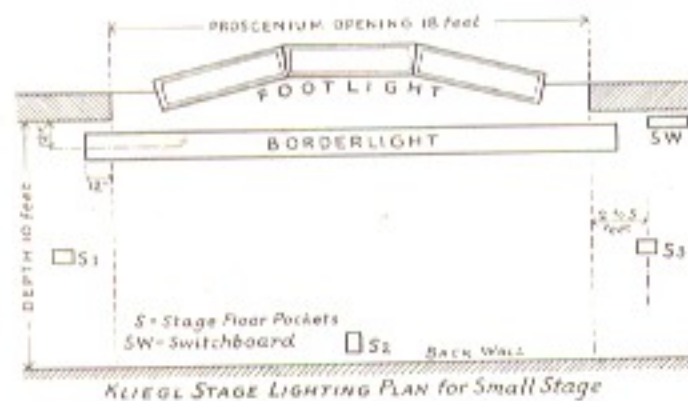
44 60-watt White lights, 2 2-wire circuits—2690-watt Dimmer
 22 60-watt Red lights, 1 2-wire circuit—1320-watt Dimmer
 22 60-watt Blue lights, 1 2-wire circuit—1320-watt Dimmer

Stage Pockets: Kliegl, No. 651, with plugs, capacity of each, 25-amp., 110-volts.

Switchboard: Kliegl, Fig. 9, Deadface Type, with 30-amp. toggle switches: Dimmer Bank, Kliegl, Fig. 3, mounted on top of Switchboard.

Sw. Nos. 1, 2, 3—Foot and Borderlights, White, 3 Dimmers
 Sw. Nos. 4, 5, 6—Foot and Borderlights, Red, 3 Dimmers
 Sw. Nos. 7, 8, 9—Foot and Borderlights, Blue, 3 Dimmers
 Switches Nos. 10 to 15—Stage Pockets
 Switches Nos. 16, 17—Ceiling Outlets
 Switch No. 18—Musicians' Outlet
 Switches Nos. 19, 20—Spare

Specifications for Small Stage



Footlight: Kliegl Disappearing Type, No. 829—3 5-ft. sections, wired for:
 15 60-watt white lights—1 2-wire circuit
 15 60-watt red lights—1 2-wire circuit
 15 60-watt blue lights—1 2-wire circuit

Borderlight: Kliegl, No. 600—17 ft. long, and wired for:

20 50-watt white lights—1 2-wire circuit
 20 50-watt red lights—1 2-wire circuit
 20 50-watt blue lights—1 2-wire circuit

Stage Floor Pockets: Kliegl, No. 351, with plugs, capacity of each, 25-amp., 110-volts.

Switchboard: Kliegl, Fig. 9—Deadface type with 30-amp. toggle switches and Slider type Dimmers.

Sw. Nos. 1, 2—Foot and Borderlight, White, 2 Dimmers.
 Sw. Nos. 3, 4—Foot and Borderlight, Red, 2 Dimmers.
 Sw. Nos. 5, 6—Foot and borderlight, Blue, 2 Dimmers.
 Switches Nos. 7, 8, 9—Stage Pockets
 Switch No. 10—Spare

on plans 8 4-section Kliegl Stage Floor Pockets, No. 354, each equipped as follows:

- 3 25-amp. receptacles for Incandescent White, Red, and Blue lighting (No. 12 wiring).
- 1 40-amp. receptacle for Arc lighting (No. 6 wiring).

Each receptacle shall contain a Kliegl plug, and shall be connected with a separate circuit to its respective fuse section on the Magazine Panel.

Bridge Arcs: Provide and install 1 2-section, Kliegl Wall Pocket, No. 317, with Plugs, on each bridge (Right and left) to be known as Bridge Arcs.

Balcony Spotlights (Inc.): Provide and install on front wall of balcony, as shown on plans, 9

3-section, Kliegl Wall Pockets, No. 318, with plugs (for 1000-watt spotlights), divided into 3 groups with 3 circuits for each group, to be known as Balcony White, Red, and Blue, Incandescent Spots.

Moving Picture Booth: Provide and install on front wall of booth, 6 50-amp. Kliegl Wall Pockets, No. 310, Flush Type, with Plugs, to be known as Gallery Arcs, and 1 100-amp. Kliegl Wall Pocket, No. 1310, Flush Type, with Plug, to be known as Moving Picture Machine Outlet.

Company Switch: Provide and install on switchboard side of stage one 3-pole, 300-amp.,

"KIEGL STANDARD" CONTROL CHART

CIRCUITS CONTROLLED	LAMPS	SWITCHES	NUMBER OF MAGAZINE PANEL CIRCUITS	DIRECTS		INDIVIDUAL CONTROL HANDLES	MASTER CONTROL HANDLE	GRAND MASTER CONTROL HANDLES
				NUMBER AND SIZE OF PLATES	TOTAL CAPACITY WATTS			
STAGE MAIN		1, 3P, 1200 Amp.						
WHITE, STAGE LIGHTS, MASTER								
Balcony, Inc.		1, 2P, 100 Amp.	3	3—3000	9000	3		
Footlight	80—75-watt	1, 2P, 100 Amp.	6	2—3000	6000	2		
Concert Borderlight	44—75-watt	1, 2P, 100 Amp.	3	1—3300	3300	1		
1st Borderlight	24—300-watt	1, 2P, 100 Amp.	6	3—1400	7200	1		
2nd Borderlight	24—300-watt	1, 2P, 100 Amp.	6	3—1400	7200	1		
3rd Borderlight	24—300-watt	1, 2P, 100 Amp.	6	3—1400	7200	1		
4th Borderlight	24—300-watt	1, 2P, 100 Amp.	6	3—1400	7200	1		
Stage Pockets, Inc., Right		1, 2P, 100 Amp.	4	4—1000	4000	4		
Stage Pockets, Inc., Left		1, 2P, 100 Amp.	4	4—1000	4000	4		
Valance Borderlight	40—150-watt	1, 2P, 100 Amp.	2	2—3000	6000	2		
Proscenium Lights	24—100-watt	1, 2P, 100 Amp.	2	1—1400	2400	1		
RED, STAGE LIGHTS, MASTER								
Balcony, Inc.		1, 2P, 100 Amp.	3	3—3000	9000	3		
Footlight	80—60-watt	1, 2P, 100 Amp.	4	2—2400	4800	2		
Concert Borderlight	44—60-watt	1, 2P, 100 Amp.	2	1—2640	2640	1		
1st Borderlight	12—300-watt	1, 2P, 100 Amp.	3	2—1800	3600	1		
2nd Borderlight	12—300-watt	1, 2P, 100 Amp.	3	2—1800	3600	1		
3rd Borderlight	12—300-watt	1, 2P, 100 Amp.	3	2—1800	3600	1		
4th Borderlight	12—300-watt	1, 2P, 100 Amp.	3	2—1800	3600	1		
Stage Pockets, Inc., Right		1, 2P, 100 Amp.	4	4—1000	4000	4		
Stage Pockets, Inc., Left		1, 2P, 100 Amp.	4	4—1000	4000	4		
BLUE, STAGE LIGHTS, MASTER								
Balcony, Inc.		1, 2P, 100 Amp.	3	3—3000	9000	3		
Footlight	80—60-watt	1, 2P, 100 Amp.	4	2—2400	4800	2		
Concert Borderlight	44—60-watt	1, 2P, 100 Amp.	2	1—2640	2640	1		
1st Borderlight	12—300-watt	1, 2P, 100 Amp.	3	2—1800	3600	1		
2nd Borderlight	12—300-watt	1, 2P, 100 Amp.	3	2—1800	3600	1		
3rd Borderlight	12—300-watt	1, 2P, 100 Amp.	3	2—1800	3600	1		
4th Borderlight	12—300-watt	1, 2P, 100 Amp.	3	2—1800	3600	1		
Stage Pocket, Inc., Right		1, 2P, 100 Amp.	4	4—1000	4000	4		
Stage Pocket, Inc., Left		1, 2P, 100 Amp.	4	4—1000	4000	4		
ARC POCKETS								
Stage		1, 3P, 200 Amp.	8	none				
Bridge		1, 3P, 100 Amp.	4	none				
Gallery Arcs and M. P. Machine		1, 3P, 200 Amp.	2	none				
TOOLBOX CIRCUITS (Twelve)		1, 3P, 100 Amp.	12	none				
HOUSE MASTER								
Main Ceiling Fixture		1, 2P, 100 Amp.	6	2—1800	3600	2		
Main Ceiling Cove		1, 2P, 100 Amp.	6	2—3600	7200	2		
Two Box-Fixtures		1, 2P, 100 Amp.	4	1—2000	2000	1		
Rear Ceiling Fixtures		1, 2P, 100 Amp.	2	1—2000	2000	1		
Balcony and Box Sofas		1, 2P, 100 Amp.	8	2—1800	3600	2		
Orchestra Brackets		1, 2P, 100 Amp.	4	1—1000	1000	1		
Balcony Brackets		1, 2P, 100 Amp.	5	1—1000	1000	1		
Fan Outlets		1, 2P, 100 Amp.	6	none				

Type, mechanically operated by strongly built lever handles, equipped with an approved switch interlock at front of board. Over each lever handle there shall be provided a neatly engraved name-plate, indicating the lights it controls. Knife switches and fuses shall be mounted at the rear of the board on individual slate slabs. No single pole switches to be used. No knife switches shall be less than 100 ampere (for mechanical strength). Bus bars shall be rigidly supported at rear of board and switch connections made thereto. All conductors at back of switchboard from switches to trough shall be copper rod or bar rigidly supported and terminating in proper lugs at top of switchboard (for connections to dimmers). An accessible trough built of No. 12 gauge steel shall extend from the top of switchboard to top of magazine panel. All wires crossing from magazine panel to switchboard shall be run in this trough and crossing of various conductors shall be made in the trough.

In addition to the switches listed on schedule there shall be provided on the switchboard a twelve-circuit toggle-switch section, which shall be controlled by the stage-main switch and by an individual switch also mounted on the switchboard. These toggle circuits shall apply to work lights on borders, stage chandelier outlet, attachment receptacles in footlights, switchboard pilot lights, and musicians' lights.

Magazine Panel: On the wall back of the stage switchboard there shall be installed a magazine panel constructed of $1\frac{1}{4}$ " slate base (b. m. f.) and $\frac{1}{2}$ " barriers, enclosed in a No. 12 gauge cabinet with heavy spring hinges and latch; said panel shall contain no branch switches—but shall contain fuses for all branch circuits for all auditorium and stage lights.

Dimmers: Over the stage switchboard and set on a strong angle iron frame there shall be furnished, installed, and connected to the switchboard, dimmers (Kliegl Bros., Fig. 7), as listed in schedule. Each plate shall be equipped with not less than 110 steps; shall be connected together in gangs with master and single control; gangs equipped with a handle for each dimmer, master handle for each color for stage control, master handle for house control, and grand master wheel for entire equipment.

Dimmer bank shall be so arranged that incandescent stage pockets can be dimmed individually or collectively. All dimmer handles are to be so marked that the color of the circuits can be easily distinguished and shall be provided with ample mechanical strength so as to withstand severe and constant use. Care shall be exercised in designing said dimmers so that all lights may be operated from full bright to dark out. All dimmers shall be rated for continuous duty. Dimmer Bank shall be provided with a substantially built shed extending over the top.

Contractor must submit a layout of dimmer control and stage switchboard to the architect for his approval before equipment is ordered.

Footlights: A Kliegl Footlight, No. 624, semi-flush type, 42 ft. long, 2 ft. wide, having a double row

of receptacles, so arranged that lamps will furnish a uniform flood of light on the stage without dark spots on the floor, shall be furnished and installed. The hood shall be double thickness rolled as one piece and spaced at point of support, in a manner that provides sufficient rigidity for protection of the lamps and strength to withstand mechanical injury. The lamp receptacles shall be wired as follows:

80 75-watt white lights on 6 circuits—front row	
80 60-watt red lights on 4 circuits—	} rear row
80 60-watt blue lights on 4 circuits—	

Wiring shall be No. 12. Circuits are to extend the full length of the trough, terminate in a splice-box at the switchboard end of the footlight trough, and then be extended in conduit to Magazine Panel.

Four (4) Kliegl Pin Connectors No. 950 are to be provided and installed in front of the receptacle strip, evenly spaced along the length of the footlight, and are to be controlled by four switches on the toggle-switch section of the stage switchboard.

Border Lights: The following Kliegl Borderlights shall be furnished and installed:

Valance Border—shall be a Kliegl Borderlight, No. 606, 44 feet long, wired for:

40 150-watt white lights on 6 circuits

Concert Border—shall be a Kliegl Borderlight, No. 605, 34 feet long, wired for:

44 75-watt white lights on 3 circuits
44 60-watt red lights on 2 circuits
44 60-watt blue lights on 2 circuits

Border No. 1—shall be a Kliegl Borderlight, No. 612, 48 feet long, wired for:

24 300-watt white lights on 6 circuits
12 300-watt red lights on 3 circuits
12 300-watt blue lights on 3 circuits

Borders Nos. 2, 3, and 4—shall be Kliegl Borderlights, No. 612, each 49 feet long, each wired for:

24 300-watt white lights on 6 circuits
12 300-watt red lights on 3 circuits
12 300-watt blue lights on 3 circuits
1 300-watt, at center, for work light

Borderlights are to be furnished complete with slide grooves, color frames, and pipe hangers.

The Valance Border shall be fixed in position on the soffit of the proscenium arch between the valance and asbestos curtain, and shall be concealed from view of audience.

All the wiring shall be carried straight across the Borderlights from end to end, and the various color groups must be placed accordingly. A suitable splice-box, equipped with a hinged cover, shall be provided at the switchboard end of each Borderlight for making connections to the Borderlight cables.

Proscenium Light: A Kliegl Proscenium Light No. 594, shall be installed right and left of proscenium opening, on stage side, and concealed from view of the audience. Each strip shall contain 12 100-watt receptacles wired alternately on two circuits. Each lamp shall be in a separate compartment fitted with slide grooves and metal frames for color gelatines.

Stage Pockets: Furnish and install where shown

DATA SECTION

Theatrical Lighting Specifications

THE following paragraphs will be helpful in preparing specifications for installation of lighting systems in theatres, schools and auditoriums and wherever theatrical lighting is required. As a basis for these specifications, an average theatre, completely equipped has been selected. The stage has a proscenium opening of 48 feet and a depth of approximately 30 feet. Modifications can readily be made in the specifications to meet particular requirements. Architects are invited to avail themselves of the services of our Engineering Department, when planning lighting installations.



KLIEGL STAGE LIGHTING PLAN for Average Theatre

Specifications for Average Theatre

General: The contractor shall furnish all labor and material for the complete installation of all Electrical work herein specified, in accord with the National Electrical Code. He shall obtain and deliver to owner Certificates of Inspection from the Board of Fire Underwriters and City Department having jurisdiction. All material and equipment must be as specified to be acceptable, and contractor shall complete the work to the satisfaction of the Architect.

Wiring: All wiring shall be run in conduit. Only approved wire of proper size to be used. Branch

circuits for Borderlights, Footlights, Proscenium lights, Cove lights, and exterior lighting shall be wired with No. 12 wire.

Switchboard: An interlocking switchboard of theatre duty type (Kliegl Bros., Fig. 7), shall be furnished and installed on stage as shown on plans.

Switchboard shall be built of $1\frac{1}{2}$ " slate panels (black marine finish) with sub-base mounted on a strong angle-iron frame, having mounted thereon the various switches for control of lights listed in schedule. Switches shall be approved "Dead Front"

FUSES

LINK FUSES

2½-inch centers

5 to 30 ampere	each \$.06
35 to 60 ampere	each \$.08
65 to 100 ampere	each \$.10

CARTRIDGE FUSES

N. E. C. STANDARD

10 to 30 ampere	each \$.20
35 to 60 ampere	each \$.30
65 to 100 ampere	each \$.90

PLUG FUSES

5 to 30 ampere	each \$.07
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INCANDESCENT LAMP SUNDRIES

Miniature Metallic Filament Lamps of all voltages.

Candelabra Base Lamps.

Carbon Lamps of 2, 4, 8, 16 and 32 candlepower, 110 volts.

Mazda Lamps, 25, 40, 60, 100, 200, 500, 1000 and 2000 watts, 110 volts.

Miniature and Candelabra Base Sockets.

Mica Socket with grooves for lamp guards for festoon lighting, flowers, etc.

Lamp Guards for Candelabra Sockets.

MISCELLANEOUS SUNDRIES

A Complete Stock of Sundries Is Carried, Including:

Receptacles
Key Sockets
Pull Chain Sockets
Wire, Rubber Covered
Wire, Slow Burning
Switches, all sizes
Porcelain Rollers
Porcelain Insulators

Tin Cups for Insulator
Mica Insulators
Stage Screws
Stage Braces
Mica Washers
Binding Posts
Friction Tape
Rubber Tape



SOLDERLESS COPPER TERMINALS

KLIEGL SOLDERLESS COPPER TERMINALS, made of stamped copper, are a patented lug specially designed for use as terminal ends for stage cable or asbestos-covered wires connected to an arc lamp, resistor, or wherever terminals are exposed to heat. They are easily attached, without soldering, to any flexible or solid wire. Wire end is first passed through a hole in a center strip, as illustrated (Fig. 18), then bent back, with the insulated end of the wire between the wings (Fig. 19), wing clamps are then closed tight around the wire and insulation, with pliers or hammer (Fig. 20), thus providing an excellent contact, and a terminal that holds the insulation neatly in place and is unaffected by heat. Wires can not possibly drop out as is frequently the case where solder type terminals, exposed to the heat, are used. Specially designed pliers for closing the lugs can be furnished. They are particularly useful where a quantity of terminals are used—to save time and close terminals neatly.

KLIEGL SOLDERLESS COPPER TERMINALS

No.	DESCRIPTION	PRICE	CODE WORD
450	Kliegl Solderless Terminals for No. 10 and 12 asbestos cable; 25 amperes, per 100	\$6.00	Perrice
460	Kliegl Solderless Terminals for No. 8 and 6 asbestos cable; 50 amperes, per 100	9.60	Perricu
461	Kliegl Solderless Terminals for No. 4 and No. 2 asbestos cable; 100 amperes, per 100	16.00	Perricu
470	Special Pliers for Terminals No. 450	2.75	Perricu
471	Special Pliers for Terminals No. 460 and 461	4.75	Perricu

COPPER TERMINAL LUGS

for Soldering



KLIEGL COPPER TERMINAL LUGS for soldering are stamped from pure copper tubing, and will hold the hot solder without leaking.

No.	AMPERES	WIRE HOLE SIZE IN INCHES	PRICE EACH	CODE WORD
462	50	$\frac{9}{16}$	\$0.06	Perricuo
463	70	$\frac{5}{8}$	.08	Perricuo
464	90	$\frac{3}{4}$	.10	Perricuo
465	125	$\frac{7}{8}$	.12	Perricuo
466	175	$\frac{1}{2}$	.20	Perricuo
467	225	$\frac{1}{2}$	.30	Perricuo
468	400	$\frac{1}{2}$	.50	Perricuo

Natural Colored Glass Bulbs

WATTS	VOLTS	BULB	SCREW BASE	COLOR	PRICE	CODE WORD
60	120	S-21	Medium	Red	\$.97	Veianus
60	120	S-21	Medium	Blue	.77	Veilig
75	120	PS-22	Medium	Red	1.45	Veinant
75	120	PS-22	Medium	Blue	1.00	Veirado
100	120	PS-25	Medium	Red	1.70	Velacho
100	120	PS-25	Medium	Blue	1.15	Velanca
150	120	PS-25	Medium	Red	1.85	Veldrat
150	120	PS-25	Medium	Blue	1.30	Veldtuig
200	120	PS-30	Medium	Red	2.40	Veieira
200	120	PS-30	Medium	Blue	1.60	Veilles



LAMP GUARDS

KLIEGL LAMP GUARDS for mica sockets used for festoon lighting, flowers, etc., designed for 10-, 25-, and 60-watt lamps, are fastened solid to mica socket, but allow lamp to be replaced through the front of the guard.

No. 796 Kliegl Wire Lamp Guard for Mica Sockets PRICE \$.30 CODE WORD Reimpor

FLAME-SHAPED GLOBES

No.	DESCRIPTION	SIZE OF SHADE HOLDER	PRICE	CODE WORD
797	5 1/2-inch High Flame	2 1/4 inches	\$1.50	Reinol
798	8-inch High Flame	3 1/4 inches	2.50	Reisbau
799	16 1/2-inch High Flame	4 inches	7.00	Reitero

KLIEGL-PLUG RECEPTACLES

KLIEGL-PLUG RECEPTACLES are made of porcelain with copper contact parts and lugs, and are used in the construction of Kliegl stage pockets, wall pockets, panel pockets, plugging boxes, and portable dimmer boxes. They are supplied separately, as listed, for repair purposes. Each receptacle is furnished complete ready for installation.



P-449



P-95



P-96



P-97



P-93



P-97A

No.	DESCRIPTION	RATING			USED IN KLIEGL APPARATUS CAT. NO.	PRICE	CODE WORD
		AMPERES	VOLTS	NUMBER OF CIRCUITS			
P-449	Kliegl-Plug Receptacle	50	250	2-wire	308 to 313; 351 to 354	\$2.00	Lactabat
P-95	Kliegl-Plug Receptacle	50	250	2-wire	317 to 319; 350; 355; 360; 365	2.00	Lactato
P-95A	Kliegl-Plug Receptacle	50	250	2-wire	390 to 395 Plugging Boxes	2.00	Lacteal
P-95C	Kliegl-Plug Receptacle	100		1-wire	3307; 3310; 3350; 338	3.00	Lactemus
P-96	Kliegl-Plug Receptacle	50	250	2-wire	305 to 307; 337	2.00	Lacteoli
P-97	Kliegl-Plug Receptacle	100	125	2-wire	1307, 1310, 1350	5.50	Lactose
P-97A	Kliegl-Plug Receptacle	30	125-250	3-wire	2307, 2310, 2350	5.50	Lacturni
P-97C	Kliegl-Plug Receptacle	200		1-wire	322, 340	7.50	Lacune
P-93	Kliegl-Plug Receptacle	200	125	2-wire	4307, 4310, 4350	8.50	Lactucic
P-93C	Kliegl-Plug Receptacle	400		1-wire	324, 327, 342	10.50	Lactumen



Mazda Lamps—Types "B" and "C"—For General Lighting

In all Kliegl Borderlights, footlights, proscenium lights, open-box lights, bunch lights, strip lights, and for general lighting in the theatre and elsewhere, the following "Mazda" lamps are used and recommended. Lamps above 100-watts should be burned with the bulb downward.

Naturally colored red and blue lamps in sizes from 60-watt to 300-watt (permanently colored in the process of manufacture) can be used in place of "dipped" lamps.

Flame-shaped bulbs are frosted white glass formed to represent a flame, and are used for torches, candelabra, and decorative lighting.

DISTRIBUTED FILAMENT TYPE "B" AND "C" MAZDA LAMPS

WATTS	VOLTS	BULB	LIGHT CENTER LENGTH	MAX. OVERALL LENGTH	STAND. PACE QUAN.	SCREW BASE	PRICE	CODE WORD
10	120	S-14		4 1/8"	100	Medium	\$0.27	Vaidoso
10	120	S-17		4 7/8"	100	Medium	.27	Vaiglaa
15	120	S-17		4 7/8"	100	Medium	.27	Vaigrage
25	120	S-17		4 7/8"	100	Medium	.27	Vailers
40	120	S-19		5 1/8"	100	Medium	.27	Vamere
50	120	S-19		5 1/8"	100	Medium	.27	Vameroz
60	120	S-21		5 1/2"	100	Medium	.31	Vamena
75	120	PS-22	4 1/8"	6 7/8"	50	Medium	.45	Vaniato
100	120	PS-25	5 1/8"	7 1/8"	24	Medium	.50	Vatron
150	120	PS-25	5 1/8"	7 1/8"	24	Medium	.61	Vavem
200	120	PS-30	6"	8 1/8"	24	Medium	.80	Vakerig
300	120	PS-30	7"	9 3/4"	24	Mogul	1.25	Valable
400	120	PS-40	7 1/2"	10 1/2"	12	Mogul	1.00	Vallbrug
750	120	PS-52	9 1/2"	13 3/8"	8	Mogul	3.50	Vainho
1000	120	PS-52	9 1/2"	13 3/8"	8	Mogul	3.75	Valerol
1500	120	PS-52	9 1/2"	13 3/8"	8	Mogul	5.00	Valinch
25	120	T-10		5 7/8"	100	Medium	.45	Valkye
40	120	T-8		12"	50	Medium	1.15	Vallaire
250	220	G-30	3 1/2"	5 1/2"	24	Medium	3.50	Veador
400	220	G-30	3 1/2"	5 1/2"	24	Medium	5.25	Veberes
500	220	G-40	4 1/4"	7 1/4"	12	Mogul	5.25	Veeval
1000	220	G-45	5 3/4"	8 3/8"	12	Mogul	10.50	Vedicut
500	220	PS-40	7 1/2"	10 1/2"	12	Mogul	2.40	Vegeto
1000	220	PS-52	9 1/2"	13 3/8"	8	Mogul	4.50	Vegrade
4	120	CP Bung-hole Carbon Lamp				Medium	.35	Vallayas
20	120	CP Flame Bulb				Medium	.45	Valliosa

COLORINE REMOVER



No. 1945

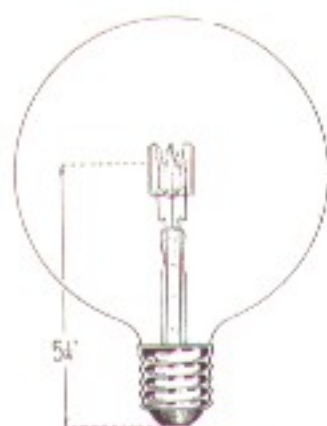
KLIEGL COLORINE REMOVER

KLIEGL LAMP COLORINE REMOVER instantaneously removes old color coatings from electric lamp bulbs. It will not injure or affect the hands, and is non-inflammable—simply dissolve compound in hot water and dip lamps in the solution. One pound of Colorine Remover makes $2\frac{1}{2}$ gallons of solution.

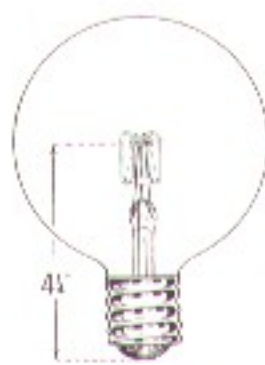
No.	DESCRIPTION	PRICE PER LB.	CODE WORD
1945	Lamp Colorine Remover, one pound carton	35c	Supelo
1946	In 10-lb. lots	30c	Superbe
1947	In 25-lb. lots	25c	Supernal

INCANDESCENT LAMPS

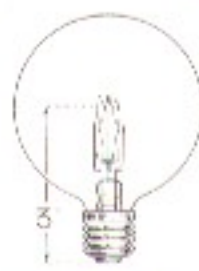
MAZDA LAMPS are recommended for use with Kliegl apparatus. In type "C" lamps the tungsten filament operates in an inert gas, in type "B" in a vacuum. Designations—the 1st letter indicates the shape of the bulb and the figure its diameter in eighths of an inch. Thus S-19 bulb is straight-sided, $19/8$ (or $2\frac{3}{8}$ ") in diameter. "G" indicates a round bulb; "T" a tubular bulb; and "P" or "PS" a pear-shaped bulb.



G-48 Bulb
1000-watts
2000-watts



G-40 Bulb
500-watts
1000-watts



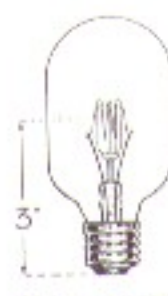
G-30 Bulb
250-watts
400-watts



G-25 Bulb
100-watts



T-20 Bulb
1000-watts



T-20 Bulb
400-watts

Concentrated Filament Type "C" Mazda Lamps—For Projection Apparatus

In all Kliegl "Mazda" type Spotlights, stereopticons, projectors, and apparatus with a lens system, concentrated filament type "C" Mazda lamps are used. Round bulb "G" lamps can be burned in any position except bulb downward within 45 degrees of the vertical. Tubular bulb "T" lamps should always be burned vertically upward, never in any other position.

CONCENTRATED FILAMENT TYPE "C" MAZDA LAMPS

No.	WATTS	VOLTS	BULB	LIGHT CENTER LENGTH, INCHES	MAX. OVERALL LENGTH, INCHES	STAN. PACK. QUAN.	SCREW BASE	PRICE	CODE WORD
800	100	120	G-25	3	5	50	Medium	\$1.00	Vaatjes
802	250	120	G-30	3	5 1/2	24	Medium	1.75	Vachery
803	400	120	G-30	3	5 1/2	24	Medium	3.00	Vacilado
804	400	120	T-20	3	5 1/2	6	Medium	2.75	Vacisco
805	500	120	G-40	4 1/4	7 1/4	12	Mogul	3.25	Vacunar
807	1000	120	G-40	4 1/4	7 1/4	12	Mogul	6.75	Vadosas
806	1500	120	G-40	4 1/4	7 1/4	12	Mogul	9.00	Vadeaba
808	1000	120	G-48	5 1/4	8 7/8	12	Mogul	8.50	Vafrous
809	2000	120	G-48	5 1/4	8 7/8	12	Mogul	13.00	Vagary
812	1000	120	T-20	4 1/4	9 1/2	6	Mogul	6.50	Vaguear

220-volt Mazda lamps can be furnished from stock.

Opalescent Lamp Coloring

OPALESCENT LAMP COLORING is a quick-drying high-grade lamp coloring unaffected by the elements, and will last several months outdoors. Lamps are dipped "cold," then the current is turned on for a few minutes to dry the solution. It is furnished in seven colors and white opal, as shown in the listing. For interior decoration and home use it is also made in delicate colors with an opal froster. Special colors are made to order.

KLEGL OPALESCENT LAMP COLORING

Color No.	Description	PINT		QUART	
		Price	Code Word	Price	Code Word
OP-1	White Opal	\$1.50	Suboval	\$2.80	Subpolar
OP-6	Yellow	1.50	Subvasos	1.80	Subrepe
OP-10	Light Amber	1.50	Subvial	2.80	Subyogo
OP-12	Dark Amber	1.50	Subvial	2.80	Subacuz
OP-16	Red	1.50	Subvial	2.80	Subatalo
OP-19	Pink	1.50	Subrend	2.80	Subtomic
OP-31	Blue	1.50	Subtutor	2.80	Suburb
OP-39	Green	1.50	Subvenir	2.80	Subvert

Signaloid (Transparent) Lamp Coloring

SIGNALOID LAMP COLORING for use indoors is a solution and process which is simple and instantaneous; dipping the lamp, with the current on, in the solution and immediately withdrawing it produces a brilliant and durable color transparency that will not crack, peel, or chip off; gives lamp the appearance of being made of colored glass; stocked in the various colors shown in the listing. Special colors made to order. Each quart bottle is packed in a separate carton with dipping cup.



One quart will color five hundred 40-watt lamps. Reducer for toning down colors also furnished in pint and quart bottles.

KLEGL SIGNALOID LAMP COLORING

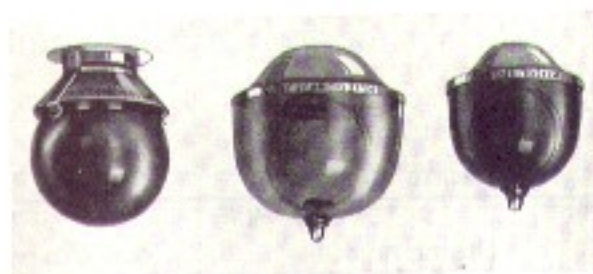
Color No.	Description	PINT		QUART	
		Price	Code Word	Price	Code Word
ST-1	Prostine	\$1.50	Sucidas	\$2.80	Sudation
ST-6	Yellow	1.50	Sudeiro	1.80	Sudorez
ST-10	Amber	1.50	Suedost	2.80	Suegra
ST-16	Red	1.50	Sueldo	2.80	Suerfeln
ST-19	Pink	1.50	Suevao	2.80	Sufada
ST-22	Purple	1.50	Sufocas	2.80	Sufolero
ST-31	Blue	1.50	Sufrago	2.80	Sughera
ST-39	Green	1.50	Sugnoio	2.80	Sutons
ST-42	Moonlight Blue	1.50	Sulcaria	2.80	Sulfato

KLEGL SIGNALOID REDUCER

No.	Description	Price	Code Word
1940	Signaloid Reducer, pint bottle	\$1.50	Sultanat
1941	Signaloid Reducer, quart bottle	2.80	Sumico

COLOR GLOBES and COLOR CAPS

KLIEGL COLOR GLOBES AND COLOR CAPS for detachable-color-globe type border lights, footlights, and proscenium lights, are naturally-colored blown-glass—permanently colored when manufactured; unaffected by intense heat; standardized, interchangeable, and uniform in color—new globes or caps match those previously secured; colors, amber, red, blue, and green. Color Globes have a round smooth top, and are held in place over the lamp by spring-catch globe holder (with reflector) that grips the base of the globe.



No. 1961 No. 1971 No. 1967

Color Caps are provided with spring wire clamp attached inside of the cap which grips the lamp bulb and holds the cap in place; a separate aluminum reflector which fits over the base of the lamp is also furnished with color caps.

KLIEGL COLOR GLOBES AND COLOR CAPS

No.	DESCRIPTION	PRICE	CODE WORD
1960	Color Globe, amber, for 150-watt, P.S.-25 Mazda lamp	\$1.10	Socairo
1961	Color Globe, red, for 150-watt, P.S.-25 Mazda lamp	1.10	Socavar
1962	Color Globe, blue, for 150-watt, P.S.-25 Mazda lamp	1.10	Soceder
1963	Color Globe, green, for 150-watt, P.S.-25 Mazda lamp	1.10	Sociabo
1964	Color Globe Holder with aluminum reflector	1.10	Socinian
1966	Color Cap, amber, with spring clamp and reflector; for 75 to 150-watt Mazda lamp	2.00	Sodagha
1967	Color Cap, red, with spring clamp and reflector; for 75 to 150-watt Mazda lamp	2.00	Sodann
1968	Color Cap, blue, with spring clamp and reflector; for 75 to 150-watt Mazda lamp	2.00	Soeben
1969	Color Cap, green, with spring clamp and reflector; for 75 to 150-watt Mazda lamp	2.00	Soestro
1971	Color Cap, amber, with spring clamp and reflector; for 200- and 300-watt Mazda lamps	2.50	Sofolie
1972	Color Cap, red, with spring clamp and reflector; for 200- and 300-watt Mazda lamps	2.50	Sofrear
1973	Color Cap, blue, with spring clamp and reflector; for 200- and 300-watt Mazda lamps	2.50	Sogdier
1974	Color Cap, green, with spring clamp and reflector; for 200- and 300-watt Mazda lamps	2.50	Sogines

COLORING for LAMPS

KLIEGL COLORING SOLUTIONS for incandescent lamps are made in several different grades. "Weatherproof" is recommended for permanent coloring of lamps exposed to the weather; "Opalescent" for use outdoors where it is desired that the color last for a period of several months; and "Signaloid" for stage lighting and other lamps used indoors.

Weatherproof Lamp Coloring

WEATHERPROOF LAMP COLORING is a transparent non-fading solution for outdoor use made in five colors and white opal. Lamp is dipped and dried "cold" (no current used). Requires three days to dry. Guaranteed not to chip, blister, or wash off during the life of the lamp.

KLIEGL WEATHERPROOF LAMP COLORING

COLOR No.	DESCRIPTION	HALF PINT		PINT		QUART	
		PRICE	CODE WORD	PRICE	CODE WORD	PRICE	CODE WORD
W-1	White Opal	\$1.80	Suabia	\$3.00	Subcarre	\$5.40	Subendo
W-6	Yellow	1.80	Suadora	3.00	Subcilie	5.40	Suberate
W-10	Amber	1.80	Suarista	3.00	Subdean	5.40	Subfusk
W-16	Red	1.80	Suavite	3.00	Subdiale	5.40	Subicis
W-31	Blue	1.80	Subalar	3.00	Subdole	5.40	Subimos
W-39	Green	1.80	Subasto	3.00	Subdaxos	5.40	Subitoso

GELATINE COLOR MEDIUMS

KLIEGL GELATINE COLOR MEDIUMS are strong, uniformly colored sheets of gelatine, 10" x 21", stocked in a wide range of colors, and also available in fancy combinations of colors. Order by color number and use code words for telegraph orders. Gelatines may be taken in assorted colors. Boxing and packing at cost. On all orders for less than \$5.00 worth, to be sent Parcel Post, a charge of 15c will be made for packing—plus the amount for postage. One hundred sheets weigh 5½ lbs.

KLIEGL GELATINE COLOR MEDIUMS

Color No.	Description	Code Word	Color No.	Description	Code Word
G-0	Clear	Calicut	G-22	Rose Purple	Canter
G-1	Frosted	Calicut	G-23	Dark Purple	Canthus
G-2	Straw	Calicut	G-27	Dark Violet	Caning
G-3	Light Lemon	Cacao	G-28	Light Violet	Capful
G-6	Medium Lemon	Cacinae	G-29	Very Light Blue	Caputa
G-9	Dark Lemon	Calcify	G-30	Light Blue	Caplar
G-10	Light Amber	Calcine	G-31	Medium Blue	Caplin
G-12	Medium Amber	Caliph	G-35	Dark Blue	Capex
G-13	Dark Amber	Calion	G-36	Green Blue	Caputan
G-14	Orange	Caloric	G-37	Light Green	Carat
G-15	Light Red	Calotte	G-38	Medium Green	Carrel
G-16	Medium Red	Caltrap	G-39	Dark Green	Caraway
G-17	Dark Red	Calve	G-41	Very Dark Green	Carbes
G-18	Chocolate	Calvar	G-42	Moonlight Blue (blue green)	Cardia
G-19	Rose Pink	Canella	G-45	Rainbow Color Combination	Carib
G-20	Dubarry Pink	Canons	G-55	Spotted Fancy Color Combination	Carrot
G-21	Magenta	Canтата			

Price: gelatine sheets Color No. G-0 to G-42, twenty cents per sheet; No. G-45 to G-55, one dollar per sheet.

CARRYING CASES for GELATINE MEDIUMS

KLIEGL CARRYING CASES for gelatine color mediums can be used to store an extra supply of gelatines while on the road, and protects the mediums from damage when being transported.

No.	Description	Price	Code Word
48	Kliegl Gelatine Carrying Case, 4-inch, round, galvanized sheet iron	\$1.00	Cartel
49	Kliegl Gelatine Carrying Case, square, size 12"x22"x1", galvanized sheet iron	1.75	Cartog

GELATINE ANNOUNCEMENT SLIDES

KLIEGL GELATINE ANNOUNCEMENT SLIDES, used for projecting special announcements on a screen in a theatre or elsewhere, are clear sheets of gelatine; fit slide carriers of projection apparatus; and wording can be typewritten or hand written on their surface.

No.	Description	Price Per 100	Code Word
58	Kliegl Announcement Slides, 3¼" x 4"	\$1.00	Cetus

CARBONS

IMPORTED AND DOMESTIC CARBONS are carried in stock in large quantities. They produce a brilliant white light; burn steadily, noiselessly and with maximum efficiency. The best results are obtained when carbons are used in accordance with the following schedule:

Chart Showing Proper Use of Carbons With Arc Lamps

CURRENT AMPERES	DIRECT CURRENT		ALTERNATING CURRENT	
	LOWER CARBONS NEGATIVE "OROTIP"	UPPER CARBONS POSITIVE "PROJECTOR"	LOWER CARBONS "WHITE FLAME"	UPPER CARBONS "PROJECTOR"
25 to 45	$\frac{5}{16}$ "x6" solid	$\frac{5}{8}$ "x12" cored	$\frac{5}{8}$ "x6"	$\frac{5}{8}$ "x12" cored
45 to 60	$\frac{11}{32}$ "x6" solid	$\frac{3}{4}$ "x12" cored	$\frac{5}{8}$ "x6"	$\frac{3}{4}$ "x12" cored
60 to 75	$\frac{3}{8}$ "x6" solid	$\frac{3}{4}$ "x12" cored	$\frac{3}{4}$ "x6"	$\frac{3}{4}$ "x12" cored
75 to 90	$\frac{1}{16}$ "x6" cored	$\frac{7}{8}$ "x12" cored	$\frac{3}{4}$ "x6"	$\frac{7}{8}$ "x12" cored
90 to 125	$\frac{1}{2}$ "x6" cored	1"x12" cored	$\frac{7}{8}$ "x6"	1"x12" cored
150 to 200	$\frac{5}{8}$ "x6" cored	1 $\frac{1}{2}$ "x12" cored		

White Flame Projector Carbons, CORED

SIZE	PRICE PER 100	PRICE PER 1000	SIZE	PRICE PER 100	PRICE PER 1000
$\frac{3}{8}$ "x4" cored	\$3.50	\$26.20	$\frac{5}{8}$ "x12" cored†	\$12.15	\$97.90
$\frac{3}{8}$ "x12" cored	7.93	63.10	$\frac{3}{4}$ "x12" cored	16.95	150.00
$\frac{1}{2}$ "x4 $\frac{3}{4}$ " cored	4.44	34.76	$\frac{7}{8}$ "x8" cored	15.50	132.00
$\frac{1}{2}$ "x12" cored	9.25	76.42	$\frac{7}{8}$ "x12" cored	21.60	193.00
$\frac{1}{2}$ "x12" cored*	9.77	81.67	1"x8" cored	18.19	160.00
$\frac{5}{8}$ "x6" cored	7.50	66.00	1"x12" cored	26.80	240.00
$\frac{5}{8}$ "x12" cored	13.65	119.50			

* Silvertip

† Special large core

Projector Carbons

POSITIVE (TOP)			NEGATIVE (BOTTOM)		
SIZE	PRICE PER 100	PRICE PER 1000	SIZE	PRICE PER 100	PRICE PER 1000
$\frac{1}{2}$ "x12" cored	\$7.74	\$66.50	$\frac{1}{2}$ "x6" solid	\$4.50	\$40.00
$\frac{5}{8}$ "x6" cored	5.28	45.00	$\frac{3}{8}$ "x6" solid	4.88	42.50
$\frac{5}{8}$ "x12" cored	10.35	89.50	$\frac{5}{16}$ "x6" solid*	6.90	61.50
$\frac{3}{4}$ "x6" cored	6.75	58.50	$\frac{11}{32}$ "x6" solid*	7.18	64.00
$\frac{3}{4}$ "x12" cored	13.38	117.50	$\frac{3}{8}$ "x6" solid*	7.55	66.75
$\frac{7}{8}$ "x12" cored	17.75	158.00	$\frac{1}{16}$ "x6" cored*	8.42	74.00
1"x12" cored	22.68	202.50	$\frac{1}{2}$ "x6" cored*	9.15	78.50
			$\frac{3}{8}$ "x6" cored*	13.80	114.50

*Orotip (Silvertip) Carbons

U. V. Carbons

Carbons chemically prepared to produce a light rich in Ultra-violet Rays

No.	SIZE	PRICE PER 100	CODE WORD
1184	$\frac{9}{16}$ "x12"	\$10.00	Atopard

BORDER LIGHT CABLE

KLIEGL BORDER LIGHT CABLE is approved flexible cable made up of three or more conductors. Border Light Cable of three, four, six, eight, and twelve conductors of No. 12 flexible cable carried in stock; other sizes and combinations of approved cable made to order; prices on application; specify number of conductors, size of wire, and, length of cable required.

SIZE OF CABLE B & S No.	DESCRIPTION	NUMBER OF CONDUCTORS	PRICE PER 100 FEET	CODE WORD
12	Border-Light Cable	3	\$18.00	Slimed
12	Border-Light Cable	4	24.00	Slinger
12	Border-Light Cable	6	36.00	Slatero
12	Border-Light Cable	8	48.00	Sina
12	Border-Light Cable	12	72.00	Slobber
12	Border-Light Cable	16	96.00	Sloop

ASBESTOS COVERED FLEXIBLE CABLE

KLIEGL ASBESTOS COVERED FLEXIBLE CABLE is a single-conductor stranded cable with double covering of asbestos braid; is in accordance with the latest Underwriters' rulings, and especially well suited for stage lighting apparatus.

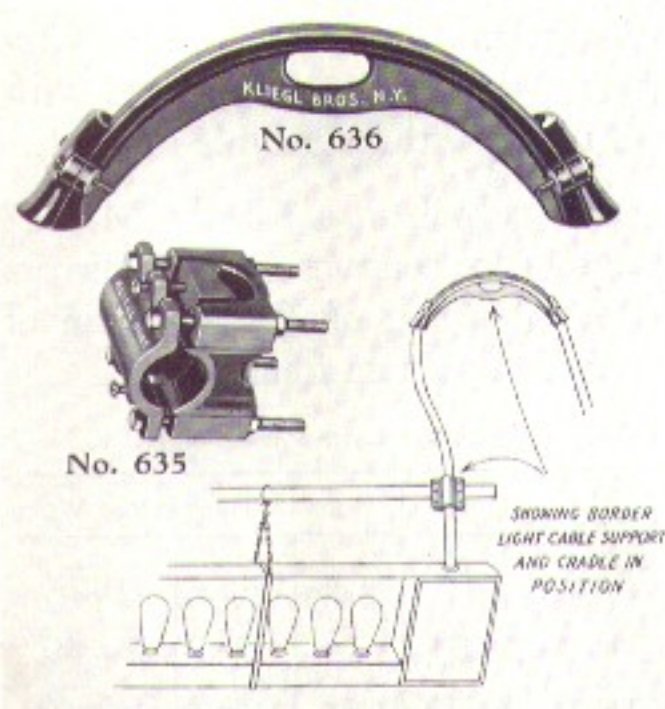
SIZE OF CABLE B & S No.	DESCRIPTION	CARRYING CAPACITY AMPERES	PRICE PER 100 FEET	CODE WORD
16	Asbestos Covered Flexible Cable	10	\$7.00	Sunk
14	Asbestos Covered Flexible Cable	20	9.00	Sluipen
12	Asbestos Covered Flexible Cable	25	10.00	Sunga
10	Asbestos Covered Flexible Cable	30	12.00	Surf
8	Asbestos Covered Flexible Cable	40	15.00	Slurred
6	Asbestos Covered Flexible Cable	50	22.00	Slutart
4	Asbestos Covered Flexible Cable	60	30.00	Slutava
2	Asbestos Covered Flexible Cable	135	40.00	Slyness

RUBBER COVERED FLEXIBLE CABLE

KLIEGL ALL-RUBBER COVERED FLEXIBLE CABLE is a twin-conductor stranded cable with a very durable, all-rubber covering made to withstand the harsh treatment to which cables connected to portable lighting apparatus are subjected.

SIZE OF CABLE B & S No.	DESCRIPTION	NUMBER OF CONDUCTORS	RUBBER COVERING	PRICE PER 100 FEET	CODE WORD
18	All-Rubber-Covered Flexible Cable	2	Thin	\$10.00	Slofhak
18	All-Rubber-Covered Flexible Cable	2	Heavy	13.60	Slogando
16	All-Rubber-Covered Flexible Cable	2	Heavy	15.20	Slogatura
14	All-Rubber-Covered Flexible Cable	2	Heavy	22.00	Slogavate
10	All-Rubber-Covered Flexible Cable	2	Heavy	38.00	Sloggio

BORDER LIGHT CABLE SUPPORTS



KLIEGL BORDER LIGHT CABLE SUPPORTS relieve the border light of all cable strains and support the flexible cable so that it will not be injured by its own weight or by being frequently raised and lowered. They take any size border-light cable from $\frac{5}{8}$ -inch to $1\frac{3}{4}$ -inches in diameter; cable clamp is designed to grip a $1\frac{1}{4}$ -inch pipe support. Both cable clamp and cradle are made of cast-iron; finished in black enamel.

KLIEGL BORDER LIGHT CABLE SUPPORTS

No.	DESCRIPTION	PRICE	CODE WORD
635	Border-Light Cable-Clamp	\$3.50	Radloch
636	Border-Light Cradle-Support	3.50	Radnaaf

STAGE CABLE

KLIEGL STAGE CABLE is an exceptionally flexible and substantial cable—specially made to meet the severe service requirements of stage lighting; Standard of the National Electric Code, and approved by the City Departments; made up of a large number of fine copper strands bound together, and insulated with rubber and a tough braided covering—without stiffening compounds of any kind.

KLIEGL STAGE CABLE

SIZE OF CABLE B&S No.	DESCRIPTION	CARRYING CAPACITY AMPERES	PRICE PER 100 FEET	CODE WORD
18	2-Conductor Stage Cable	3	\$3.80	Slaaf
16	2-Conductor Stage Cable	6	5.00	Slaags
14	2-Conductor Stage Cable	15	7.50	Slaggy
12	2-Conductor Stage Cable	20	10.00	Slano
10	2-Conductor Stage Cable	25	13.75	Slatto
8	2-Conductor Stage Cable	35	19.50	Slave
6	2-Conductor Stage Cable	50	30.00	Sleazy
4	2-Conductor Stage Cable	70	38.00	Sleek
2	2-Conductor Stage Cable	90	55.00	Sleety
1	2-Conductor Stage Cable	100	68.30	Sleight
0	2-Conductor Stage Cable	125	78.80	Slempen
00	2-Conductor Stage Cable	150	105.60	Sletvink
0000	2-Conductor Stage Cable	225	134.00	Sleurtrant
8	3-Conductor Stage Cable	70	29.50	Sleutels
4	3-Conductor Stage Cable	140	55.00	Sleuwen
1	3-Conductor Stage Cable	200	94.70	Slibowi
00	3-Conductor Stage Cable	300	131.00	Slikken

"MAZDA" SPOTLIGHT LAMP PARTS

KLIEGL BURNER No. 930, for use with Kliegl 1000-watt "Mazda" Spotlights consists of a mogul-screw-base receptacle on a sliding base, with focusing arm, and means for revolving and adjusting height of socket to permit centering of lamp filament to lens; also fitted with $5\frac{1}{4}$ -inch Kliegl Mirrored-Glass Reflector in aluminum frame with adjustable bracket.

Kliegl Mirrored-Glass Reflector No. 926, placed back of a bulb in a Kliegl "Mazda" Spotlight increase the light volume fifty per cent. Reflectors are concave silvered mirrors in aluminum frames with adjustable bracket, ready for mounting on focusing arm of lamp; also furnished without aluminum frame.



No. 932



No. 926

No. 929

Kliegl "Mazda" Type Spotlights Lamp Parts					
No.	DESCRIPTION	SIZE	PRICE	WEIGHT	CORE WORD
926	Reflector for "Mazda" type Spotlight, with aluminum mounting	$3\frac{1}{4}$ "	\$3.00	$\frac{3}{4}$ lb.	Shallot
927	Reflector for "Mazda" type Spotlight, with aluminum mounting	$4\frac{1}{2}$ "	4.25	1 lb.	Shamble
928	Reflector for "Mazda" type Spotlight, with aluminum mounting	$5\frac{1}{4}$ "	5.00	1 lb.	Sharock
929	Reflector for "Mazda" type Spotlight, without aluminum mounting	$3\frac{1}{4}$ "	1.00	6 ozs.	Shashat
930	Reflector for "Mazda" type Spotlight, without aluminum mounting	$4\frac{1}{2}$ "	2.40	7 ozs.	Shedew
931	Reflector for "Mazda" type Spotlight, without aluminum mounting	$5\frac{1}{4}$ "	3.00	7 ozs.	Shelgl
932	Burner for 1000-watt "Mazda" type Spotlight, with reflector		13.00		Sheloon
933	Burner for 1000-watt "Mazda" type Spotlight, without reflector		8.00		Shervat

PIPE CLAMPS



No. 876



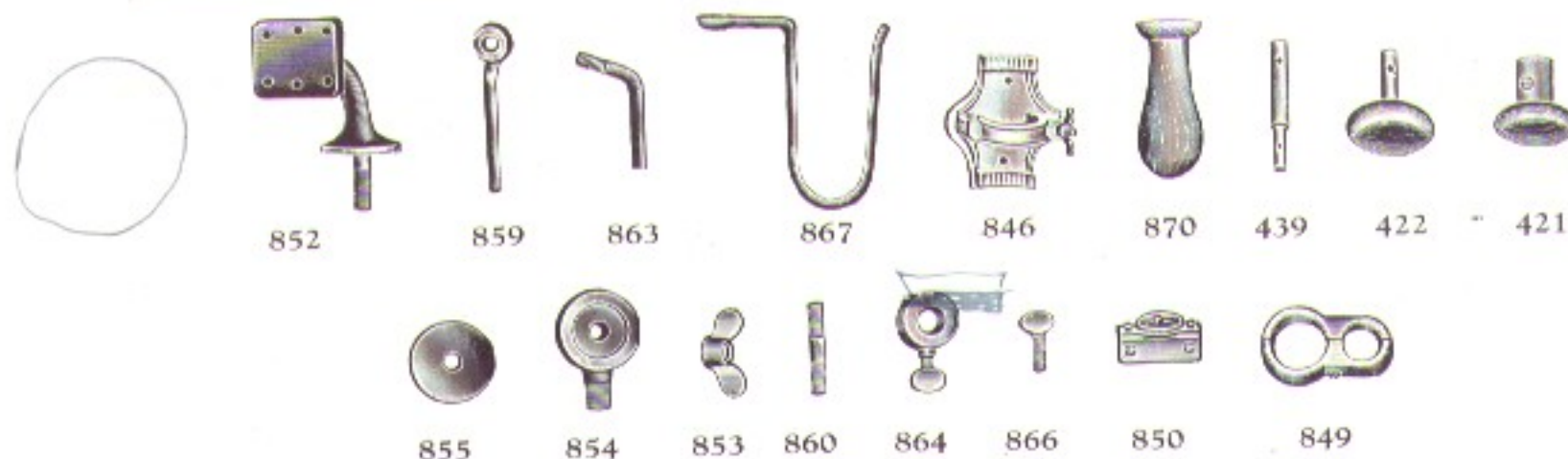
No. 875



KLIEGL PIPE CLAMPS facilitate the mounting of spotlights and open-box lights on pipes and battens in any position at any angle desired. They are quickly and easily attached; grip the pipe firmly, and hold the lamp securely in place. They fit any size pipe from $\frac{1}{2}$ -inch to $1\frac{1}{4}$ -inches—wide range is obtained by reversible top, one end of which is slotted so that clamp may be removed from pipe without removing clamp screws; made of cast brass; finished in black enamel; in three styles—one with a threaded stem for pipe coupling connection; another with flange and thumb nut for pivoted mountings; and a third with a flat-bottom stem and screw for fastening to Spotlight No. 62.

Kliegl Pipe Clamps

No.	DESCRIPTION	PRICE	WEIGHT	CORE WORD
875	Pipe Clamp with threaded stem for $\frac{1}{2}$ -inch pipe coupling	\$1.75	$1\frac{1}{2}$ lbs.	Semnal
876	Pipe Clamp with flange and thumb nut	1.75	$1\frac{1}{2}$ lbs.	Sentata
877	Pipe Clamp with smooth stem and screw	1.75	$1\frac{1}{2}$ lbs.	Senticar

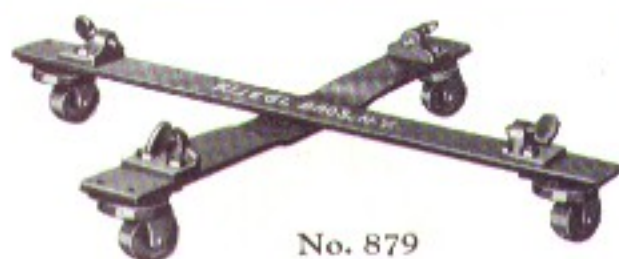


MISCELLANEOUS PARTS for SPOTLIGHTS

No.	DESCRIPTION	PRICE, EACH	CODE WORD
838	Effect Holder, with 5-inch Condensing Lens, aluminum, for 5-inch Spotlight	\$ 8.50	Seance
837	Effect Holder, with 5-inch Condensing Lens, for 8-inch Spotlight	11.00	Saeldis
839	Slide Carrier, with metal frame attachment for Sciopticon	3.50	Sebago
840	Peep Hole Frame for Spotlight	.10	Sebenta
841	One set of Red and Green Glasses for peep hole	.20	Sebaso
843	Adapter for 8" Spotlight, to hold 5" lens, without lens	3.75	Secesso
844	Adapter for 8" Spotlight, to hold 6" lens, without lens	3.75	Secolo
845	Adapter for 6" to 5" lens, for Spotlight, without lens	1.75	Secxi
846	Aluminum Switch Holder for 1" Pipe	1.00	Sedeo
847	Aluminum Switch Holder for 1 1/4" Pipe	1.00	Sedosa
848	Aluminum Cable Pullback for Bunch Light Stand	.60	Segala
849	Aluminum Cable Pullback for Music Stands	.50	Seifa
850	Aluminum Cable Clamp for No. 10 Cable	.50	Semo
851	Aluminum Cable Clamp for No. 6 Cable	.70	Seisma
852	Goose Neck Bracket with Stud for Bunch Light	1.25	Seitens
853	Wing Nut for same	.40	Seivosa
854	Cast Iron Swivel Joint for top of Stand	.90	Sejour
855	Leather Washer	.10	Sejingo
858	Bracket with Stud for Spotlight, Nos. 5 to 11	3.00	Selloa
859	Lever Handle for Spotlight Hoods	.40	Selvato
860	Stud for Bracket	.35	Semear
863	Set Screw for Stand Pipe	.22	Semma
864	Collar for 1/2" Stand Pipe	.60	Semoto
865	Collar for 3/4" Stand Pipe	.60	Sempar
866	Thumb Screws for Collars, Nos. 864 and 865	.10	Senagia
867	Cable Hook for Stand	.35	Sencillo
869	4 1/2-inch Lens Ring	.25	Senecio
870	Grip Handle for Spotlight Hood, with screw	.45	Senfoel
871	5-inch Lens Ring	.25	Senhor
872	6-inch Lens Ring	.25	Senoleo
873	8-inch Lens Ring	.30	Sensate
875	1 1/4-inch Pipe Clamp for 1/2-inch Pipe Coupling	1.75	Sensual
876	1 1/4-inch Pipe Clamp with Flat Flange	1.75	Sentais
877	1 1/4-inch Pipe Clamp with Screw	1.75	Senticar

TRUCK for SPOTLIGHTS

KLIEGL TRUCK FOR SPOTLIGHTS is a steel cross-frame fitted with four ball-bearing casters and four thumb-screw clamps; provides means for moving lighting apparatus about quickly and easily. It is designed to be attached to the round base of pedestal type Kliegl Spotlights and other similar apparatus having a round base 14 1/4 inches in diameter.



No. 879

No.	PRICE	WEIGHT	CODE WORD
879 Klieg Truck for Spotlights	\$5.00	10 lbs.	Senzala



No. 511



No. 510



No. 496



No. 500

RESISTANCES and RHEOSTATS

KLIEGL RESISTANCES AND RHEOSTATS for spotlights and projection apparatus, the same as those regularly furnished with Kliegl Spotlights and Projectors, are furnished in fixed and adjustable types, for 125-volt and 250-volt circuits.

In both fixed and adjustable types, resistance element is a special resistance wire (specific resistance four times greater than that of German silver) supported by porcelain insulators mounted on a triangular frame, completely enclosed in a metal case, with perforated sides to provide thorough ventilation. Capacity of resistance wire used is such that resistances never attain an excessive temperature under rated conditions. Ends of resistance wires are fastened with set screws to terminals in a terminal box on top of casing. These terminals also serve for making external connections. Casing is designed for mounting on pedestal stands of standard stage lamps.

Kliegl Fixed Resistances, No. 495, No. 496, and No. 497, have knife switches mounted on the side of the casing when installed on spotlights to furnish means for obtaining a wide range of current values in these large capacity resistances. Resistances are furnished without switches, as illustrated.

Kliegl Adjustable Resistances are the same as those regularly furnished with Kliegl Sciopticons, and are designed for use with stage lamps that require a variable voltage adjustment. They can be regulated to suit any voltage requirement from 50 to 125 and 250 volts, and have a capacity for 25 amperes. The variation of resistance is obtained by a sliding spring contact; otherwise they are of same general construction as the fixed resistances previously described.

KLIEGL RESISTANCES AND RHEOSTATS

No.	DESCRIPTION	RATING		PRICE	WEIGHT	CODE WORD
		VOLTS	AMPERES			
495	Fixed Resistance	125	200, 150, 100	\$118.00	93 lbs.	Raamaes
496	Fixed Resistance	125	100, 75, 50	48.00	52 lbs.	Raaploof
497	Fixed Resistance	125	70-35	30.00	30 lbs.	Raaskop
498	Fixed Resistance	125	50	26.00	28 lbs.	Rabacal
499	Fixed Resistance	125	35	12.00	13 3/4 lbs.	Rabalde
500	Fixed Resistance	125	25	12.00	13 3/4 lbs.	Rabalva
501	Fixed Resistance	125	15	11.00	13 3/4 lbs.	Rabato
502	Fixed Resistance	125	10	10.00	10 lbs.	Rabbuh
503	Fixed Resistance	250	10	20.00	20 lbs.	Rabbelire
504	Fixed Resistance	250	15	26.00	26 1/2 lbs.	Rabbiche
505	Fixed Resistance	250	25	26.00	26 1/2 lbs.	Rabbardo
506	Fixed Resistance	250	35	26.00	26 1/2 lbs.	Rabbuffo
507	Fixed Resistance	250	50	64.00		Rabdoide
508	Fixed Resistance	250	70	74.00		Rabeasta
509	Fixed Resistance	250	100	120.00		Rabeira
511	Adjustable Rheostat	50 to 125	25	14.00	14 lbs.	Rabbino
515	Adjustable Rheostat	50 to 250	25	28.00	26 1/2 lbs.	Rabello

Fixed resistances of greater capacity in volts or amperes made to order.

No.	PARTS FOR KLIEGLIGHTS—Continued DESCRIPTION	PRICE EACH	CODE WORD
Arc Lamps—Continued			
1115	Coil Adjusting Spring	\$.15	Ascetico
1116	Horseshoe Spring Adjuster	.24	Aschera
1117	Pivot Pins, for Carbon Holder new Type	.30	Ascidia
1118	Sleeve with ball bearing for Pivot Pin	.25	Ascome
1119	Copper wire connection, very flexible	.10	Asdod
1120	Magnet Coil—A. C.	6.00	Aseos
1121	Magnet Coil—D. C.	6.00	Asepide
Stand and Accessories			
1130	Base with three casters	14.50	Asoticos
1131	Casters only	.75	Aspalis
1132	Steel Tubing, 63 inches, slotted and arranged for holding pulley block	5.60	Asperga
1133	Top Pulley Block for single Lamp, No. 1011	2.50	Aspicio
1134	Top Pulley Block for double Lamp, No. 1021	6.50	Aspona
1135	3/4-inch Steel Cable, with snap hook	1.20	Aspout
1136	Crank Handle	5.00	Asriel
1140	Red and green glasses for Hood, size 1 15/16 x 2 13/16"	.24	Assenza

PARTS for LILLIPUTS

No.	DESCRIPTION	PRICE	CODE WORD
1157	Top Carbon Holder, complete, for No. 1051	\$4.50	Astemo
1158	Bottom Carbon Holder complete	2.50	Asterenk
1159	Bottom Carbon Holder, front part	1.25	Astholz
1160	Bottom Carbon Holder, rear part	1.25	Astifero

ENCLOSED SWITCHES

For Pedestal Mounting

KLIEGL ENCLOSED SWITCHES FOR PEDESTAL MOUNTING are double-pole, single-throw, non-fused 125-volt knife-blade switches, on a slate base enclosed in an approved metal box, provided with a hinged clamp and swinging wing-nut for fastening switch box to stand pipe of arc spotlights and other stage apparatus.



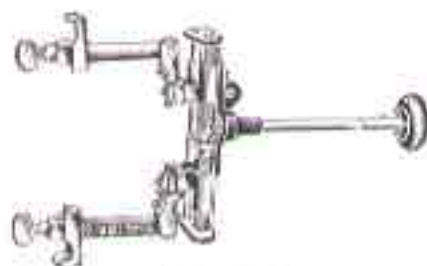
No. 525

They are made in 30-, 60-, and 100-ampere sizes with pipe clamps for 1-inch and 1 1/4-inch pipes. Box is provided with special cable clamp and bushing which grips outer insulation of cable firmly, securely holding it in place. Special bushings hold the asbestos wire in position, thus permitting stage cable and asbestos wires to be connected permanently to switches. Slotted hinged cover allows access to the switch. Thirty-ampere switch box is made entirely of aluminum; other sizes are made with cast-aluminum base and sheet metal housing; finished in black enamel.

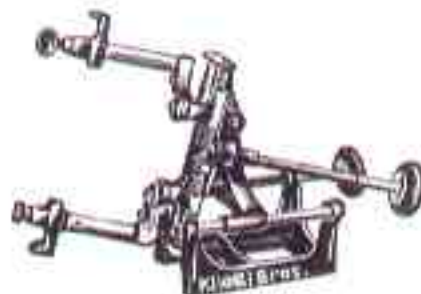
KLIEGL ENCLOSED SWITCHES FOR PEDESTAL MOUNTING

No.	DESCRIPTION	AMP.	VOLTS	PRICE	CODE WORD
525	Switch and Switch Box with pipe clamp for 1-inch pipe	30	125	\$4.75	Rabicoel
526	Switch and Switch Box with pipe clamp for 1-inch pipe	60	125	6.00	Rabidity
527	Switch and Switch Box with pipe clamp for 1-inch pipe	100	125	9.00	Rabilarga
528	Switch and Switch Box with pipe clamp for 1 1/4-inch pipe	30	125	4.75	Rabiosas
529	Switch and Switch Box with pipe clamp for 1 1/4-inch pipe	60	125	6.00	Rabiosuh
530	Switch and Switch Box with pipe clamp for 1 1/4-inch pipe	100	125	9.00	Rabirius

No.	ARC LAMP PARTS—Continued DESCRIPTION	PRICE	CODE WORD
PARTS FOR 120 AMP. ARC LAMP No. 1480—Continued			
1512	Feed Rod	\$.25	Jombar
1513	Aluminum Handles	.50	Joshah
1514	Focusing Rod	.25	Jotham
1515	Bottom Gear Rack	1.00	Jouez
1516	Back of Bottom Carbon Holder and Lug Support	1.00	Jouiras
1517	Split Sleeve Bottom Carbon Holder	1.50	Joutai
1518	Thumb Screw for bottom carbon holder	.15	Joven
1519	Bottom Carbon Holder, Front Part	2.50	Jovial
1520	Clamping Screw for bottom carbon holder split sleeve	.05	Jotmai
1521	Set Screws for focusing guide rods	.10	Joyance
1522	Front Focusing Frame	1.50	Joyero
1523	Left Focusing Guide Rod	.25	Jozabad
1524	Right Focusing Guide Rod	.25	Jozate
1525	Bottom Guide Rod Spacer	.60	Juanete
1526	Bottom Carbon Holder Guide	2.00	Juarda
1527	Back Focusing Frame	1.50	Jubado
1528	Lug for asbestos wire	.15	Jufelde
1529	Feed Gear only	1.00	Juhemus
1530	Top Carbon Holder complete with mica insulation	7.50	Jublen
1531	Bottom Carbon Holder complete with mica insulation	9.50	Jucinda



No. 480



No. 481



No. 482

ARC LAMPS for STEREOPTICONS

No. 480 illustrates the Kliegl Stereopticon Hand Feed Arc Lamp for use on either direct or alternating current. Both carbons are adjustable by means of a wooden knob. In general construction and design they are similar to the Kliegl Arc Lamp No. 411, illustrated.

No. 481 shows a Kliegl Stereopticon Arc Lamp, No. 480, mounted on focusing frame provided with a brass spindle which projects from the back of the lamp hood for focusing the lamp. The lamp itself is fastened to the focusing frame by an automatic swinging joint allowing the lamp to be adjusted vertically by the handle of the arc lamp without the customary set screws or additional adjustment handles.

No. 482 shows a Kliegl Stereopticon Hand Feed Arc Lamp, operates on 10- to 20-amperes, direct or alternating current; carbons are mounted at right angles, and adjusted individually by two knobs on a single extension.

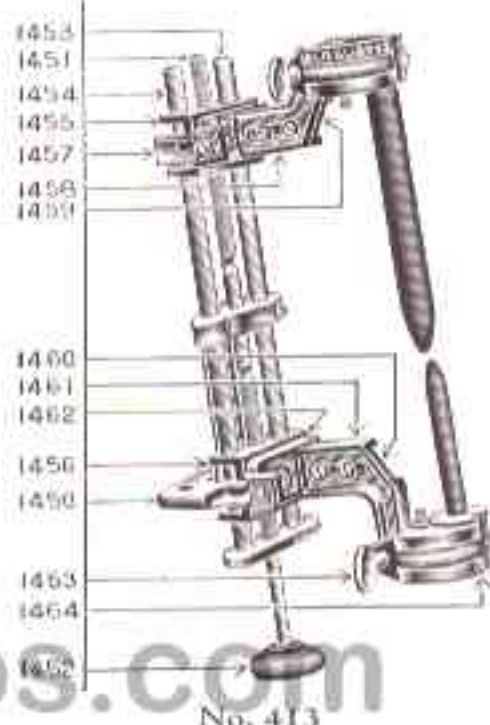
KIEGL ARC LAMP FOR STEREOPTICONS

No.	DESCRIPTION	PRICE	CODE WORD
480	Arc Lamp, 15 to 30 amp.	\$15.00	Pesais
481	Arc Lamp, 15 to 30 amp.	20.00	Pescan
482	Arc Lamp, 10 to 15 amp.	15.00	Pescota
483	Arc Lamp, 20 to 25 amp.	25.00	Pescuno

PARTS for KLIEGLIGHTS

No.	DESCRIPTION	PRICE EACH	CODE WORD
Arc Lamps			
1112	Carbon Holder for Klieglight, No. 1011	\$1.50	Asaltar
1113	Fibre Center Pieces	.35	Asbolus
1114	Flat Tension Springs with Fibre Piece	.30	Azalon

ARC LAMP PARTS—Continued		PRICE	CODE WORD
No.	DESCRIPTION		
PARTS FOR 35 AMP. ARC LAMPS—Continued			
436	Mica Insulation, per lamp	\$.60	Jalofo
437	Focusing Frame	2.50	Jalysus
438	Iron Focusing Rod	.50	Jambart
439	Wood Focusing Handle	.30	Jameigo
440	Focusing Guide Rod	.45	Jammern
441	Focusing Bracket	1.80	Jamones
442	Focusing Frame complete for 35 amp. Arc Lamp	5.50	Janasse
PARTS FOR 50 AMP. ARC LAMPS, NO. 412 (Are the same as for No. 411, except Carbon Holders are heavier)			
427	Top Carbon Holder, 50 amp., complete with mica insulation	3.00	Jagden
429	Bottom Carbon Holder, 50 amp., complete with mica insulation	3.30	Jahoz
431	Front Part of Bottom Carbon Holder, 50 amp.	2.10	Jairo
433	Clamping Plate for No. 427, Top, or No. 429, Bottom Carbon Holder	.50	Jalap
435	Thumb Screws for 50 amp. Carbon Holder	.10	Jalemus
443	Focusing Frame complete for 50 amp. Arc Lamp	6.50	Jangada
PARTS FOR 70 AMP. ARC LAMP, NO. 413			
1450	Support Frame for Feed Spindle	3.50	Jarabe
1451	Brass Feed Spindle	2.50	Jaraude
1452	Wood Feed Handle with Brass Sleeve	.65	Jarcias
1453	Iron Guide Rod, Right	.45	Jardinal
1454	Iron Guide Rod, Left	.45	Jarig
1455	Carbon Holder Guide Top	2.50	Jarmuk
1456	Carbon Holder Guide Bottom	2.50	Jaroah
1457	Solderless Lugs for Asbestos Wire	.15	Jaropes
1458	Top Carbon Holder complete with mica insulation	4.50	Jarrafa
1459	Front Part of Top Carbon Holder	2.50	Jarreta
1460	Front Part of Bottom Carbon Holder	2.50	Jarveys
1461	Bottom Carbon Holder complete with mica insulation	4.50	Jashub
1462	Mica Insulation, per lamp	1.00	Jaslei
1463	Thumb Screw for 70 amp. Carbon Holder	.10	Jasmund
1464	Adapter for 3/8-inch Silvertip Carbons	1.00	Jaspige
1465	Focusing Frame	5.00	Jastof
PARTS FOR 100 AMP. ARC LAMP, NO. 414			
1480	Front Part of Top Carbon Holder complete, for No. 19, 100 amp. Spotlight	4.00	Joahaz
1481	Front Part only	2.20	Joanete
1482	Ringbolt for 1-in. Carbons for Front Carbon Holders	1.50	Jobates
1483	Wing Nut for Ringbolt	.25	Jobelot
1484	Brass Washer for Ringbolt	.10	Jocabor
1485	Front Part of Bottom Carbon Holder, complete	4.00	Jocista
1486	Front Part only	2.20	Jodocus
1487	Adapter for 3/16-in. Silvertip Carbons	1.00	Jofaina
PARTS FOR 120 AMP. ARC LAMP, NO. 1489			
1489	120 Amp. Arc Lamp Burner	36.00	Jogalis
1490	Focusing Frame with support complete for No. 1489	9.00	Jograo
1491	Lug for asbestos wire	.16	Joguete
1492	Lug Clamping Screws	each .10	Johlen
1493	Set Screw for guide rod spacer	each .10	Joiada
1494	Top Spacer for guide rods	.60	Joiaro
1495	Mica Insulation	per lamp 2.00	Jojakin
1496	Clamping Screws for back of top and bottom carbon holders	each .10	Jokish
1497	Split Sleeve for top carbon holder	1.50	Joktan
1498	Top Carbon Holder front part	2.50	Jolaos
1499	Thumb Screw for top carbon holder	.15	Joliger
1500	Clamping Screw for top carbon holder split sleeve	.05	Jollas
1501	Clamping Screws for top and bottom carbon holders	each .10	Joltau
1502	Top rear carbon holder with lug support	2.00	Jolof
1503	Left Rod for carbon holder guide	.25	Joncero
1504	Top Gear Rack	1.00	Jongens
1505	Right Rod for carbon holder guide	.25	Jonglais
1506	Top Carbon Holder Guide	2.00	Jonico
1507	Screws for feed gear housing	each .05	Jonque
1508	Feed gear housing	2.50	Jopici
1509	Thumb Screw for up and down swivel	.10	Jorfe
1510	Focusing bracket	2.50	Joribas
1511	Universal Joint on feed rod	1.50	Jornada



No. 1488 illustrates the Kliegl 120-ampere Arc Lamp which is the latest type embracing automatic expansion carbon holders which prevent slipping and bad contact; is properly equipped for quick focusing, and the burner moves in a slide, controlled by a handle that extends outside of the hood; is constructed throughout of manganese bronze to withstand the heat, and designed so that working parts move freely at all times.

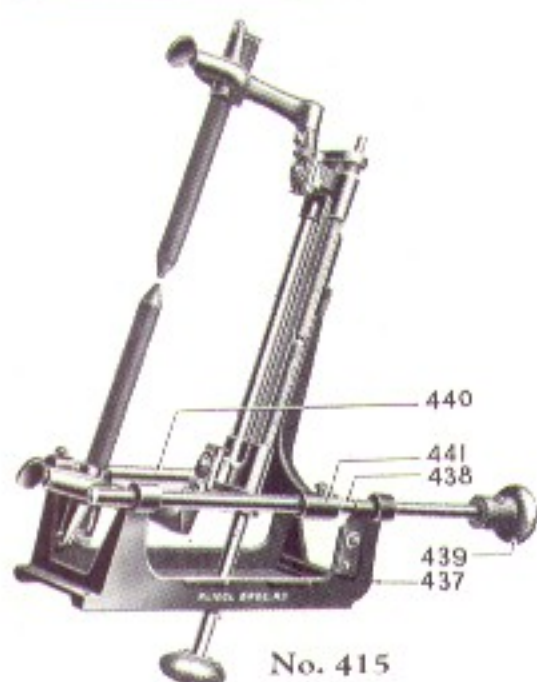
KING AND LAMIS FOR SECRETARIES

No.	Description	AMPERES	PRICE	Code Word
411	Arc Lamp, Bottom Feed	35	\$13.00	Jagpad
412	Arc Lamp, Bottom Feed	50	14.00	Juandag
413	Arc Lamp, Bottom Feed	70	21.00	Jaaya
413A	Arc Lamp, Rear Feed	70	21.00	Jabalot
414	Arc Lamp, Rear Feed	100	45.00	Jabari
1489	Arc Lamp, Rear Feed	120	36.00	Jogalis
415	Arc Lamp No. 411 with "Focusing Frame" for 35 amp. Spotlight No. 5		17.00	Jabler
418	Arc Lamp No. 411 with "Focusing Frame" for 35 amp. Spotlight No. 9		18.00	Jacebas
416	Arc Lamp No. 412 with "Focusing Frame" for 50 amp. Spotlight		26.00	Jabroer
417	Arc Lamp No. 413 with "Focusing Frame" for 70 amp. Spotlight		26.00	Jacamar
1488	Arc Lamp No. 1489 with "Focusing Frame" No. 1490		45.00	Jogador

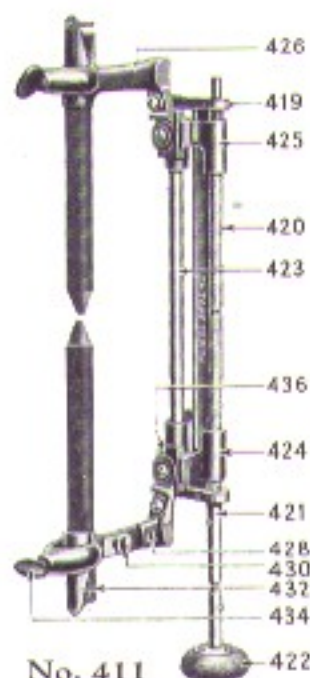
ARC LAMP PARTS

No.	DESCRIPTION	PRICE	CODE WORD
	PARTS FOR 35 AMP. ARC LAMP, NO. 414		
419	Support Frame for Feed Spindle	\$2.00	Jachten
420	Brass Feed Spindle	2.25	Jachlate
421	Extra Sleeve	.40	Jaconas
422	Wood Feed Handle with Brass Sleeve	.65	Jacteis
423	Iron Guide Rod	.30	Jaculi
424	Carbon Holder Guide, Bottom	1.10	Jadeas
425	Carbon Holder Guide, Top	1.10	Jaden
426	Top Carbon Holder, 35 amp., complete with mica insulation	2.00	Jagaca
428	Bottom Carbon Holder, 35 amp., complete with mica insulation	2.20	Jagonca
430	Front Part of Bottom Carbon Holder, 35 amp.	1.00	Jahdiel
432	Clamping Plate for Bottom Carbon Holder, No. 428	.10	Jakob
432A	Clamping Plate for Top Carbon Holder, No. 426	.05	Jakouai
434	Thumb Screw for 35 amp. Carbon Holder	.05	Jakda-do

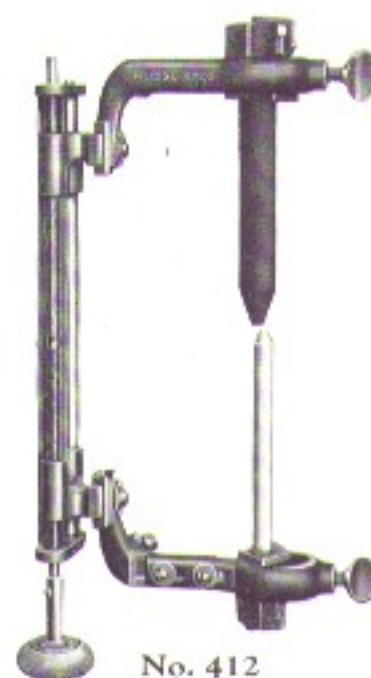
PARTS and SUPPLIES



No. 415



No. 411



No. 412

ARC LAMPS for SPOTLIGHTS

KLIEGL HAND FEED ARC LAMPS are used in all Kiegl stage lighting apparatus. The mechanism is simple and designed for use on both direct and alternating current. In the 35-ampere size, No. 411, lamp parts are made of brass; carbon holders of a special heat resisting alloy; spindle for feeding the carbon holders is turned out of solid brass; top part has a quadruple thread, while lower has a triple thread permitting quick feeding of the arc lamp and at the same time keeps the arc in the center of the lens system without further adjusting devices; upper carbon holder is stationary and takes a $\frac{5}{8}$ " carbon; lower carbon holder is adjustable and takes from $\frac{5}{16}$ to $\frac{5}{8}$ " carbons. They are provided with carbon drops and set screws with plates for terminals, as shown in part No. 428, illustrating the lower carbon holder adjustment.



No. 428

No. 415 shows the Kiegl Arc Lamp with focusing frame as furnished with the Kiegl "Arc" Spotlights described on page 38. The focusing frame is designed, and carbons properly inclined, so that all the light of the positive crater, from which most of the light emanates, is projected directly through the lens system, as illustrated by Figure 17. The center of the crater must also be in the optical axis and at the principal focus of the lens.

No. 412 illustrates the Kiegl 50-ampere arc lamp used in the long distance arc Spotlights, described on page 38.

No. 413 illustrates the mechanism of the Kiegl 70-ampere arc lamp used for motion picture studio Spotlights and long distance Spotlights, described on pages 39 and 51, respectively. The mechanism is of extra heavy construction and designed to fit the slide rails cast integral with the hood of the 70-ampere spotlight. No. 413-A is identically the same lamp as No. 413 except that the handle for feeding the arc extends out to the rear from the center of lamp instead of at bottom.

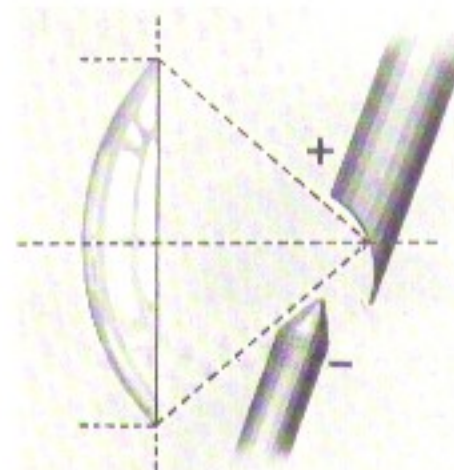


Fig. 17

Battery Charging Connectors

LISTED BY UNDERWRITERS LABORATORIES

KLIEGL BATTERY CHARGING "INDESTRUCTIBLE" CONNECTOR is a non-reversible, 50-ampere, 125-volt, 2-pole, split-pin type connector especially well adapted for use in garages for charging storage batteries and similar applications; all live parts are embedded in a solid composition block of high insulating qualities; completely enclosed in aluminum casing which affords full protection from short circuits or mechanical injury; intended for use with No. 6 duplex cable, connections being made, as shown, by soldering the wires in lug terminals provided; as cover is clamped in place, teeth grip the cable insulation, preventing it from being pulled out of the connector, and relieves connections of all possible strains.



No. 965

No.	AMP.	VOLTS	PRICE	WEIGHT	CODE WORD
965	50	125	\$7.70	1.94 lbs.	Parting

www.klieglbros.com

Chandelier Connectors and Box

KLIEGL CHANDELIER CONNECTING BOX provides a convenient means for disconnecting the circuits of a large chandelier—permitting it to be lowered for relamping; consists of several Klieg 5-ampere, 125-volt connectors (No. 950) fastened together, and placed in a metal box having a slide cover, and openings for passage of the wires; made for four, six and eight circuits, and, on special order, furnished for any number of circuits desired.



No. 998

KLIEGL CHANDELIER CONNECTORS

No.	DESCRIPTION	PRICE	WEIGHT	CODE WORD
997	Chandelier Connecting Box for 3 circuits	\$7.00	4 lbs.	Plaisir
998	Chandelier Connecting Box for 4 circuits	9.50	5 lbs.	Phalga

Single-Pole Pin-Connectors

KLIEGL SINGLE-POLE PIN-CONNECTORS, used with interchangeable electric-sign letters (Connector No. 971), and other electrical devices which require time-saving, interchangeable, single-pole connectors; consist of a brass split-pin fitted to a brass sleeve; both parts encased in fibre; holes in the outer ends for the insertion of wires, and screw to hold the wire in place (larger sizes provided with lugs for wires); made in various sizes from 5 amperes to 200 amperes.



No. 971

KLIEGL SINGLE-POLE PIN-CONNECTORS

No.	DESCRIPTION	AMP.	VOLTS	PRICE	CODE WORD
971	Single-Pole Pin-Connector	5	250	\$0.24	Pincer
972	Single-Pole Pin-Connector	15	250	1.50	Pinceux
973	Single-Pole Pin-Connector	30	250	2.50	Pinnage
974	Single-Pole Pin-Connector	60	250	3.50	Pavola
975	Single-Pole Pin-Connector	100	250	6.50	Pavari
976	Single-Pole Pin-Connector	200	250	13.00	Pavonia

Low Voltage Connectors

KLIEGL LOW VOLTAGE CONNECTORS are designed for use with dry batteries and other low voltage systems. They are two-pole, split-pin connectors, thoroughly insulated, light in weight, compact, and useful for connecting battery-operated stage effects and other low voltage devices; made in 2-, 5-, and 10-ampere sizes.

KLIEGL LOW VOLTAGE CONNECTORS

No.	DESCRIPTION	AMP.	PRICE	CODE WORD
984	Low Voltage Connector	2	\$0.50	Perilles
985	Low Voltage Connector	5	.70	Periodo
986	Low Voltage Connector	10	.60	Perixati



No. 984

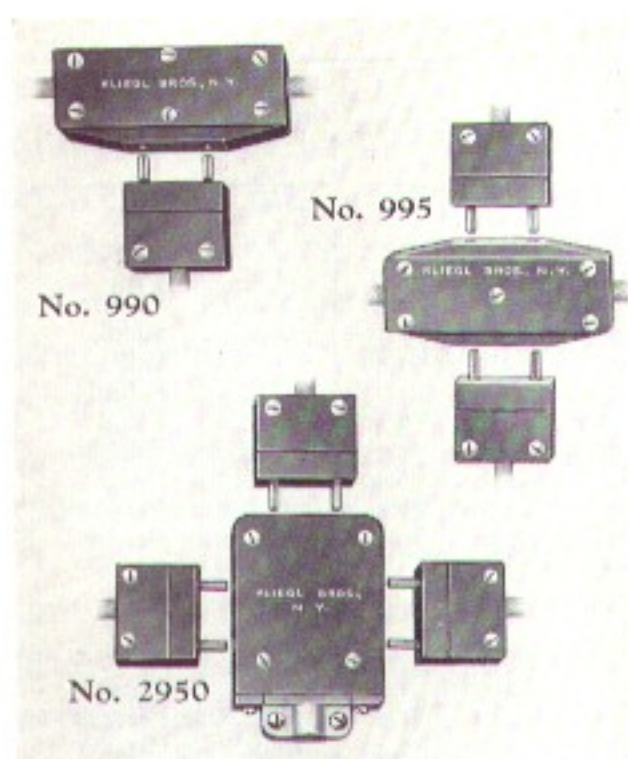


No. 985



No. 986

Multiple Circuit and Branch-Off Connectors



KLIEGL MULTIPLE CIRCUIT AND BRANCH-OFF "INDESTRUCTIBLE" CONNECTORS are designed to provide several separate circuits from one feeder cable. Multiple Circuit Connectors (No. 2950, 2951, 2955) are attached to the end of the cable; body of connector is fitted with three pairs of brass sleeves, interconnected, which receive three separate two-pole male-end pin-connectors, thus providing for three separate two-wire circuits; made in two sizes for 5 amperes and 15 amperes per circuit; body of connector also receives male-ends (reversible type) of other Klieggl connectors of the same rated capacity; cable clamps on cover plates relieve connections and terminals of all possible strains.

Branch-Off Connectors (No. 990 and 995) are attached to the feeder cable at one or more places along its length, permitting several circuits to be obtained from one cable without making splices (splices in stage cable are undesirable; they weaken the cable and frequently give trouble in short circuits or broken wires). Cable passes through the full length of the connector, and connections are made with binding screws—without cutting the wire. Body of the connector is fitted with brass sleeves to receive 2-pole male-end, 5-ampere (reversible type) pin-connectors. Made in single- and double-branch; they are very useful on the stage for connecting scene brackets, fans, music stands, garlands, et cetera; indispensable to road companies; a serviceable connector for commercial photographers for "setting off" flashlights—and for countless other applications.

KLIEGL MULTIPLE CIRCUIT AND BRANCH-OFF "INDESTRUCTIBLE" CONNECTORS

No.	DESCRIPTION	R. = REVERSIBLE	FOR CABLE SIZE		AMP.	VOLTS	PRICE	WEIGHT	CODE WORD
			MAIN	OUTLETS					
2950	Multiple Circuit Connector	R.	No. 12	No. 14	5	250	\$3.60	12 oz.	Pathul
2951	Multiple Circuit Connector	R.	12	16	5	250	3.60	12 oz.	Patois
2955	Multiple Circuit Connector	R.	8	14	15	250	5.00	1 1/4 lbs.	Patoja
990	Single Branch-off Connector	R.			5	250	2.75	6 oz.	Perlato
995	Double Branch-off Connector	R.			5	250	3.50	8 oz.	Phacoid



Connector for Armored Cable

KLIEGL "INDESTRUCTIBLE" CONNECTOR FOR ARMORED (B X) CABLE is a two-pole, 15-ampere connector with insulating parts of solid fibre, split-pin connectors of brass fitted to one half and brass sleeves in the other, and provided with aluminum end pieces designed to grip securely the flexible steel armor of No. 14 B X Cable.

No.	AMP.	VOLTS	PRICE	WEIGHT	CODE WORD
No. 977	15	250	\$3.30	10 oz.	Pawl

the wires and female section a single opening for the duplex cable; (3) for connecting asbestos covered leads or other single-conductor wires to both sections of the connector—two openings are provided for wires in each section.

Kliegl Two-Pole "Indestructible" Connectors

No.	DESCRIPTION	R = REVERSIBLE N.R. = Non- REVERSIBLE	FOR CABLE SIZE	AMP.	VOLTS	PRICE	WEIGHT	CODE WORD
FOR CONNECTING DUPLEX CABLE								
950	Two-Pole Connector	R.	No. 14	5	250	\$1.10	4 oz.	Pack
950-N	Two-Pole Connector	N.R.	14	5	250	1.35	4 oz.	Pacome
951	Two-Pole Connector	R.	10	5	250	1.10	4 oz.	Paddle
955	Two-Pole Connector	R.	12	15	250	1.50	6 oz.	Pall
955-N	Two-Pole Connector	N.R.	12	15	250	1.75	6 oz.	Palleal
956	Two-Pole Connector	R.	10	30	250	1.40	10 oz.	Pallid
956-N	Two-Pole Connector	N.R.	10	30	250	2.65	10 oz.	Pallola
957-N	Two-Pole Connector	N.R.	6	60	250	6.00	18 oz.	Pallor
958-N	Two-Pole Connector	N.R.	2	100	250	10.50	2½ lbs.	Palony
959-N	Two-Pole Connector	N.R.	000	200	250	19.80	6 lbs.	Pander
FOR CONNECTING TWO (ASBESTOS COVERED) SINGLE CONDUCTORS TO DUPLEX CABLE								
950-AC	Two-Pole Connector	R.	14	5	250	1.10	4 oz.	Pamero
955-AC	Two-Pole Connector	R.	12	15	250	1.50	6 oz.	Pamocer
956-AC	Two-Pole Connector	R.	10	30	250	1.40	10 oz.	Pasador
957-AC	Two-Pole Connector	N.R.	6	60	250	6.00	18 oz.	Pasada
958-AC	Two-Pole Connector	N.R.	2	100	250	10.50	2½ lbs.	Pasment
FOR CONNECTING ONE PAIR OF (ASBESTOS COVERED) SINGLE CONDUCTORS TO ANOTHER PAIR								
950-AA	Two-Pole Connector	R.	14	5	250	1.10	4 oz.	Partent
955-AA	Two-Pole Connector	R.	12	15	250	1.50	6 oz.	Partens
956-AA	Two-Pole Connector	R.	10	30	250	1.40	10 oz.	Partgri
957-AA	Two-Pole Connector	N.R.	6	60	250	6.00	18 oz.	Pascto
958-AA	Two-Pole Connector	N.R.	2	100	250	10.50	2½ lbs.	Pasans



No. 3950

Three-Pole and Four-Pole Connectors

KLIEGL THREE-POLE AND FOUR-POLE "INDESTRUCTIBLE" CONNECTORS are similar in design and construction to the Two-Pole Connectors, except they are provided with either three or four split-pins and a corresponding number of sleeves, and made with opening in the cable-ends for three- or four-conductor cable; reversible and non-reversible as shown in listing.

Kliegl Three-Pole and Four-Pole "Indestructible" Connectors

No.	DESCRIPTION	R = Reversible N.R. = Non- Reversible	FOR CABLE SIZE	AMP.	VOLTS	PRICE	WEIGHT	CODE WORD
3950	Three-Pole Connector	R.	No. 14	5	125-250	\$2.40	½ lb.	Pang
3955	Three-Pole Connector	R.	14	15	125-250	3.00	¾ lb.	Parade
3956	Three-Pole Connector	N.R.	10	30	125-250	5.00	1½ lbs.	Parch
3957	Three-Pole Connector	N.R.	6	60	125-250	7.00	1¾ lbs.	Parole
3958	Three-Pole Connector	N.R.	2	100	125-250	19.80	3½ lbs.	Paroma
4950	Four-Pole Connector	N.R.	14	5	150	4.00	¾ lb.	Paropter
4955	Four-Pole Connector	N.R.	12	15	150	5.00	1 lb.	Parowu
4956	Four-Pole Connector	N.R.	10	30	150	6.40	1¼ lbs.	Parusel
4957	Four-Pole Connector	N.R.	6	60	150	14.00	2¼ lbs.	Parundo

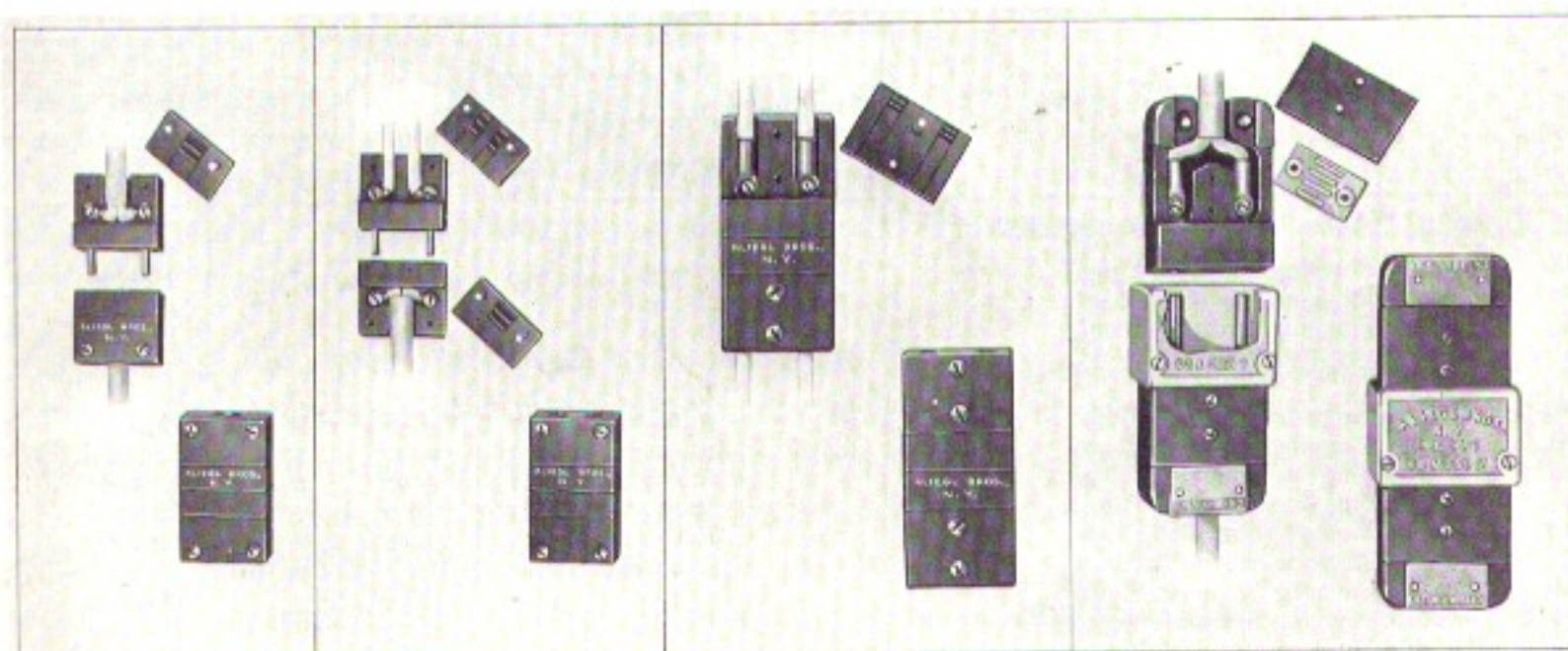
INDESTRUCTIBLE CONNECTORS

LISTED BY UNDERWRITERS' LABORATORIES

Kliegl "Indestructible" Connectors, used with stage lighting apparatus, portable lighting units, portable machines, and other electrical devices—in theatres, photographic studios, industrial plants, garages, show rooms, and countless other places, permit electrical connections to be made quickly and securely, and are so constructed as to withstand the most severe service. They are made of a solid fibre, in two principal parts, one-half (the male section) is provided with heavy brass split-pins, which fit tightly and with perfect contact into brass sleeves in the other half (the female section) of the connector; spacing between pins, and other structural details are in accord with Underwriters' requirements. All live parts are completely embedded in the fibre—a perfect insulator. A removable fibre plate gives access to terminals for making connections. Cable extends well into the body of the connector, and teeth on the cover plate grip the cable firmly by the outer insulation, thus relieve the binding screws and connections of all possible strains, and prevents insulation from unravelling. They are made in various sizes which range from 5-amperes to 200-amperes, in 2-, 3-, and 4-pole types, and also as multiple-circuit and branch-off connectors. Above 30-amperes capacity connectors are provided with lugs for wire ends; above 60-ampere capacity they have an aluminum collar, where sections join, which protects the pins and provides additional strength for these extra-heavy sizes. Connectors are furnished reversing and non-reversing as shown in the listings.

Two-Pole Connectors

KLIEGL TWO-POLE "INDESTRUCTIBLE" CONNECTORS for two-wire circuits have two brass pins and corresponding sleeves, and are made in three styles: (1) for duplex cable wherein both the male and female sections have but a single opening in the cable ends of the connector for entrance of the cable; (2) for connecting asbestos-covered leads or other single-conductor wires to duplex cable wherein the male section has two openings for



No. 950

No. 950-AC

No. 956-AA

No. 957-N

inate possibility of bending contact out of shape, but with sufficient leverage for pliability.

Kliegl Plug No. 389 is a 100-ampere, 2-wire plug designed especially for portable plugging boxes; consists essentially of two 50-ampere plugs like No. 301, assembled in a single handle and spaced to fit two adjoining plug receptacles, thus providing for the increased current capacity.



KLIEGL INTERCHANGIBLE (CARTRIDGE-LINK FUSE) TYPE PLUGGING BOXES

No.	DESCRIPTION	NUMBER OF POCKETS	RATING—OUTLET		PRICE	WEIGHT	CODE WORD
			AMPERES	VOLTS			
2-WIRE MAIN; 2-WIRE OUTLET							
390	Portable Plugging Box with Plug	2	10 to 30	250	\$14.20	9½ lbs.	Latch
391	Portable Plugging Box with Plugs	4	10 to 30	250	27.00	14 lbs.	Laund
392	Portable Plugging Box with Plugs	6	10 to 30	250	40.00	19 lbs.	Laten
393	Portable Plugging Box with Plugs	8	10 to 30	250	54.00	24 lbs.	Lean
394	Portable Plugging Box with Plugs	10	10 to 30	250	67.50	31 lbs.	Levyne
395	Portable Plugging Box with Plugs	12	10 to 30	250	81.00	42 lbs.	Liege
396	Portable Plugging Box with Plugs	4	35 to 60	250	27.00	20 lbs.	Ligados
397	Portable Plugging Box with Plugs	6	35 to 60	250	40.00	25 lbs.	Ligeras
3-WIRE 125-250 VOLT, MAIN; 2-WIRE OUTLET							
398	Portable Plugging Box with Plugs	4	35 to 60	125	29.00	21 lbs.	Ligniss
399	Portable Plugging Box with Plugs	6	35 to 60	125	42.00	27 lbs.	Lignis
386	Portable Plugging Box with Plugs	4	75	125	43.00	22 lbs.	Lartius
387	Portable Plugging Box with Plugs	6	75	125	65.00	31 lbs.	Lartines

KLIEGL LINK FUSE TYPE PLUGGING BOXES

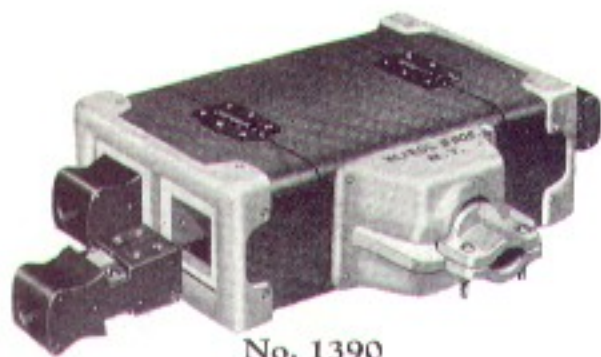
No.	DESCRIPTION	NUMBER OF POCKETS	RATING—OUTLET		PRICE	WEIGHT	CODE WORD
			AMPERES	VOLTS			
2-WIRE MAIN; 2-WIRE OUTLETS							
1390	Portable Plugging Box with Plugs	2	100	250	\$46.00		Hopbine
1391	Portable Plugging Box with Plugs	4	100	250	63.00		Hopear
1392	Portable Plugging Box with Plugs	6	100	250	138.00		Hopfen
3-WIRE, 125-250 VOLT MAIN; 2-WIRE OUTLETS							
380	Portable Plugging Box with Plugs	2	10 to 50	125	15.00	11 1/2 lbs.	Laddow
381	Portable Plugging Box with Plugs	4	10 to 50	125	29.00	17 lbs.	Lagunoa
382	Portable Plugging Box with Plugs	6	10 to 50	125	43.50	23 lbs.	Lakende
383	Portable Plugging Box with Plugs	8	10 to 50	125	58.00	31 lbs.	Lamech
384	Portable Plugging Box with Plugs	10	10 to 50	125	72.50	42 1/2 lbs.	Lascier
385	Portable Plugging Box with Plugs	12	10 to 50	125	87.00	50 lbs.	Lapuz
1380	Portable Plugging Box with Plugs	2	100	125	48.00		Hondala
1381	Portable Plugging Box with Plugs	4	100	125	94.00		Hondyes
1382	Portable Plugging Box with Plugs	6	100	125	141.00		Honesto

PORTABLE PLUGGING BOXES

LISTED BY UNDERWRITERS' LABORATORIES

KLIEGL PORTABLE PLUGGING BOXES provide means for quickly and conveniently connecting several lighting units to a single outlet—furnishing extra plugging facilities and permitting independent arrangement of circuits to suit requirements—on the stage several bunchlights, strip lights, music stands, et cetera, may be thus connected to a single stage-floor pocket; in the motion picture studio a bank of lamps may be connected to a single wall-outlet.

Substantially made throughout Kliegl plugging boxes will withstand hard knocks and rough usage; they consist of plug receptacles in groups of 2, 4, 6, 8, 10, or 12, mounted in an asbestos-lined wooden case, reinforced with aluminum end frames; each receptacle fused independently; positive and negative bus bars and fuse connections on separate slate panels mounted on opposite sides of the box to eliminate possibility of short circuits; self-closing doors with spring hinges provide access for making connections; feeder cable enters box through a special clamp on top which securely grips the outer insulation of cable and prevents possible strains on connections when box is handled or pulled over the floor.



No. 1390

They are made for both 2-wire and 3-wire feeder mains, 2-wire outlets, in two types; one, interchangeable for use with either cartridge or link fuses (converted by the insertion or removal of fuse clips); the other for link fuses only. Interchangeable type enables travelling theatrical companies to meet requirements of city inspection departments, wherein certain cities require cartridge fuses in plugging boxes, and others require link fuses. No. 390 to 395 accommodates 10- to 30-ampere cartridge fuses and link fuses (2" long) of the same capacity; No. 396 to 399 accommodate 35- to 60-ampere cartridge fuses and link fuses (3" long) of the same capacity; No. 386 and 387 accommodate 75-ampere, knife blade type cartridge fuses and link fuses.



301 389

Portable plugging boxes for three-wire mains and three-wire outlets and for three-phase circuits, for lecture rooms and experimental laboratories of schools and universities are built to order.

Kliegl Plug No. 301, furnished with Portable Plugging Boxes, is a 50-ampere, 2-wire plug; body is made of solid fibre, practically indestructible and a perfect insulator; cable extends well into the handle; cable clamp with teeth grips outer insulation of the cable, thus relieves connections and binding screws of all possible strains, and prevents insulation from unravelling; contact strips are heavy copper, one fixed in position, the other floating and backed with a spiral spring so as to expand in the receptacle insuring perfect contact, lower end of the floating contact rests in a groove in the plug to elim-

BATTERY CHARGING POCKET and PLUG

LITTON, or UNDERWOOD'S LABORATORIES



No. 305

KLIEGL BATTERY CHARGING POCKET AND PLUG is used extensively in garages for connecting storage batteries to charging circuits; is also useful in theatres on the fly floor, bridges, balcony, or stage wall. It consists of a plug receptacle, enclosed in a cast-iron case, with opening for plug protected by a self-closing drop-door; capacity 50 amperes, 250 volts; furnished complete with plug, in two models, one arranged for 1" conduit entrance at the bottom, the other for entrance at the top; plugs are non-reversible.

KLIEGL BATTERY CHARGING POCKETS AND PLUGS

No.	Description	Price	Weight	Code Word
305	Battery-Charging Pocket and Plug, 50 amperes, 250 volts; conduit at bottom	\$10.00	9 lbs.	Hunch *
306	Battery-Charging Pocket and Plug, 50 amperes, 250 volts; conduit at top	10.00	9 lbs.	Hyd

PLUGS



301 302 303 389 1301 4301 2301 3301 331

KLIEGL PLUGS are furnished with floor pockets, wall pockets, and portable plugging boxes, but extra plugs are sometimes required. Plug is made of a solid block of fibre, practically indestructible and a perfect insulator; cable extends through handle well into plug and is held firmly by a metal clamp bar which grips cable by the outer insulation, thus removes all strain from the terminal connections; contact strips are of heavy copper, one strip fixed in position, other floating backed with a spiral spring to insure perfect contact at all times.

KLIEGL PLUGS

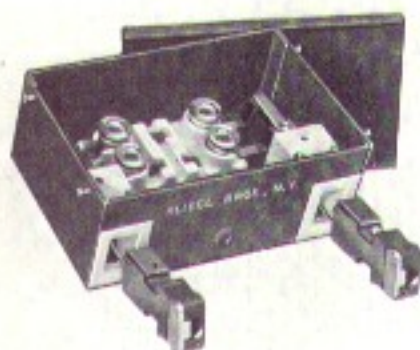
No.	RECEPTACLE—RATING			*	FOR USE WITH KLIEGL APPARATUS, CATALOGUE NO.			Price	Wgt.	Code Word
	AMPS.	Wire	VOLTS		FLOOR POCKETS	WALL POCKETS	PLUGGING BOXES			
301	50	2	250	R.		{ 375, 377, 374 375, 378	380-387, 390-399	\$1.00	3/4 lb.	Harsh
302	25	2	250	N.R.	351-354	305, 313		2.00	3/4 lb.	Hinc
303	50	2	250	N.R.	351-354-500	317-319		2.00	1/2 lb.	Humd
389	100	2	250	R.			380-387, 390-399	6.40	1 1/2 lbs.	Lastous
1301	100	2	250	R.	304, 1350	1307, 1310	1380-1382, 1390-1392	7.50	3/4 lb.	Hemp
4301	200	2	125	R.		4307, 4310		14.00	1 3/4 lbs.	Hybaro
328	400	2	250	R.		327		44.00		Hector
2301	50	3	125-250	N.R.	200	2307, 2310		7.50	1 lb.	Holly
2302	50	3	125-250	N.R.		2308, 2311		12.00	2 lbs.	Holnite
3301	100	3	125-250	N.R.		3307, 3310		14.00	2 lbs.	Holperig
323	200	3	125-250	N.R.		327		44.00		Hebillas
331	50	2	500	R.		334, 337		5.00	1 1/2 lbs.	Hondah
339	100	2	500	R.		335		6.50	1 lb.	Huchert
341	200	2	500	R.		340		40.00		Hueron
1331	50	4	250-500	N.R.		1334, 1337		9.40	1 1/2 lbs.	Hippes

*R. means plug is reversible in receptacle. N. R. means it is non-reversible.

PANEL POCKETS and PLUGS

LISTED BY UNDERWRITERS' LABORATORIES

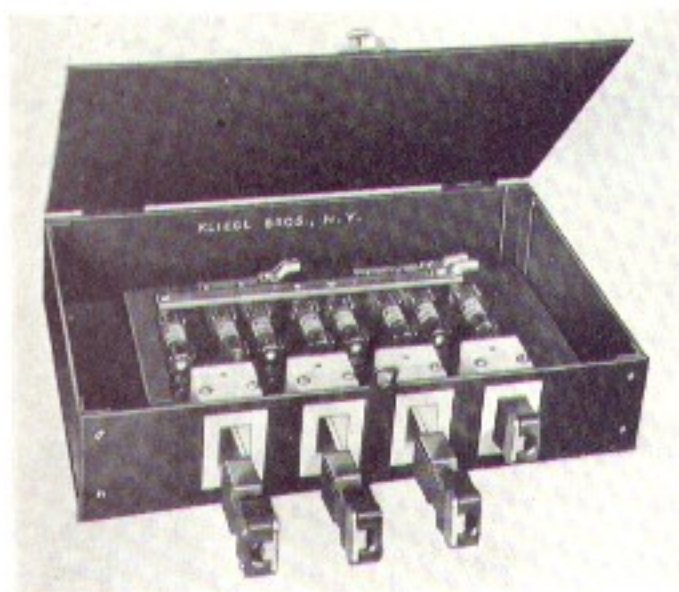
KLIEGL PANEL POCKETS consist of a metal cabinet or box fitted with Kliegl plug-receptacles completely wired to a panel, having bus bars and fuses—or to a branch cut-out.



No. 370

No. 370

KLIEGL PANEL POCKET No. 370, particularly useful around machine shops, shipping terminals, and other places where portable motor equipment is used; is fitted with two 30-ampere plug-receptacles, and a double-branch fused cut-out, three-wire to two-wire; for plug fuses; completely wired; enclosed in a weatherproof sheet-iron case with detachable cover; furnished complete with Kliegl Plugs, No. 301 (reversible). A similar design, Panel Pocket No. 372, is fitted with 50-ampere plug-receptacles and 50-ampere cartridge fuses.



No. 374

No. 374

KLIEGL PANEL POCKET No. 374, used primarily in balconies of theatres, on border bridges, in moving picture booths, photographic studios, et cetera, for connecting spotlights, sciopicons, stereopticons, and other lighting apparatus; is fitted with four 50-ampere plug-receptacles and a slate panel with main bus bars two- or three-wire, arranged for and furnished with cartridge fuses, or for link fuses if desired; completely wired; enclosed in iron cabinet with hinged door having a snap lock; furnished complete with Kliegl Plugs, No. 301 (reversible); also made with six or eight outlets, and can be furnished with still greater number of outlets on special order.

KLIEGL PANEL POCKETS AND PLUGS

No.	DESCRIPTION	NUMBER OF POCKETS	RECEPTACLE—RATING			DIMENSIONS			PRICE	CODE WORD
			AMPS.	WIRE	VOLTS	LENGTH	WIDTH	DEPTH		
370	Panel Pocket and Plugs	2	30	2	250	11"	7"	4 1/2"	\$17.00	Labacol
372	Panel Pocket and Plugs	2	50	2	250	15"	8"	3 1/2"	28.00	Label
374	Panel Pocket and Plugs	4	50	2	250	20"	13 1/4"	3 3/4"	64.00	Labrus
376	Panel Pocket and Plugs	6	50	2	250	28"	13 1/4"	3 3/4"	100.00	Lack
378	Panel Pocket and Plugs	8	50	2	250	36"	13 1/4"	3 3/4"	132.00	Lackey

Plugs are included in price of pockets.

Extra plugs furnished separately as listed, page 87; 50-ampere plug also fits 30-ampere pocket.



Flush Wall Type Pockets

KLIEGL FLUSH WALL TYPE POCKETS, set in the wall flush with the surface, consist of Kliegl porcelain plug-receptacles, with copper current carrying parts and terminal lugs, fitted in a cast-iron box, suited for making conduit connections, and made in two styles—one with a brass detachable face plate (single pocket only), the other with a cast-iron detachable face plate (one to four pockets); both types having hinged self-closing door, and can be furnished with or without lock and key; pockets are furnished with Kliegl plugs; all two-wire plugs are reversible in the receptacle (except when ordered non-reversing); all 3-wire and 4-wire plugs are non reversing.

KLIEGL FLUSH WALL TYPE POCKETS AND PLUGS

No.	Description	No. of Pockets	RECEPTACLE RATING			DIMENSIONS					Price	W'G'T. LBS.	CODE WORD
						BOX			SURFACE PLATE				
			AMP.	WIRE	VOLTS	HEIGHT	WIDTH	DEPTH	HEIGHT	WIDTH			
308	Flush Wall Type Pocket with Plug, Brass face plate*	1	50	2	250	5 3/4"	4 1/2"	3 3/4"	7"	5"	\$13.00	6 3/4	Huddle
309	Flush Wall Type Pocket with plug, Brass face plate†	1	50	2	250	5 3/4"	4 1/4"	3 3/4"	7"	5"	11.50	6 3/4	Huge
310	Flush Wall Type Pocket with plug, iron face plate†	1	50	2	250	5 3/4"	4 1/4"	3 3/4"	7 1/2"	6"	10.00	8	Haven
311	Flush Wall Type Pocket with plugs, iron face plate†	2	50	2	250	6"	7 3/4"	4"	7 1/4"	9"	20.00	11 1/2	Hawk
312	Flush Wall Type Pocket with plugs, iron face plate†	3	50	2	250	6"	8 1/2"	4"	7 1/4"	10 1/4"	30.00	15	Hawser
313	Flush Wall Type Pocket with plugs, iron face plate†	4	50	2	250	6"	10 1/4"	4"	7 1/4"	12 3/4"	40.00	18 1/2	Haze
1310	Flush Wall Type Pocket with plug, iron face plate†	1	100	2	250			7"	7 3/4"	6 3/4"	18.00	17	Herb
4310	Flush Wall Type Pocket with plug, iron face plate†	1	200	2	125			7"	7 3/4"	11 3/8"	27.00	19	Hygeni
2310	Flush Wall Type Pocket with plug, iron face plate*	1	30	3	125-250			7"	7 1/2"	6 3/4"	19.00	17	Honey
2311	Flush Wall Type Pocket with plug, iron face plate†	2	50	3	125-250	6"	8 1/2"	6"	7 1/4"	10 1/4"	27.00	15	Hongos
3310	Flush Wall Type Pocket with plug, iron face plate†	1	100	3	125-250	6"	8 1/2"	6"	7 3/8"	10 3/4"	32.00	23	Heedily
334	Flush Wall Type Pocket with plug, iron face plate†	1	50	2	500			7"	7 1/4"	11 3/8"	20.00	21	Hourly
1334	Flush Wall Type Pocket with plug, iron face plate†	1	50	4	250-500			7"	7 1/4"	11 3/8"	24.00	21	Hirpos

*With lock and key.

†Without lock and key.

Lock and key can also be furnished for pockets with iron face plate—add \$1.50 to list price (code word—Hazelty).

Extra plugs listed on page 87.

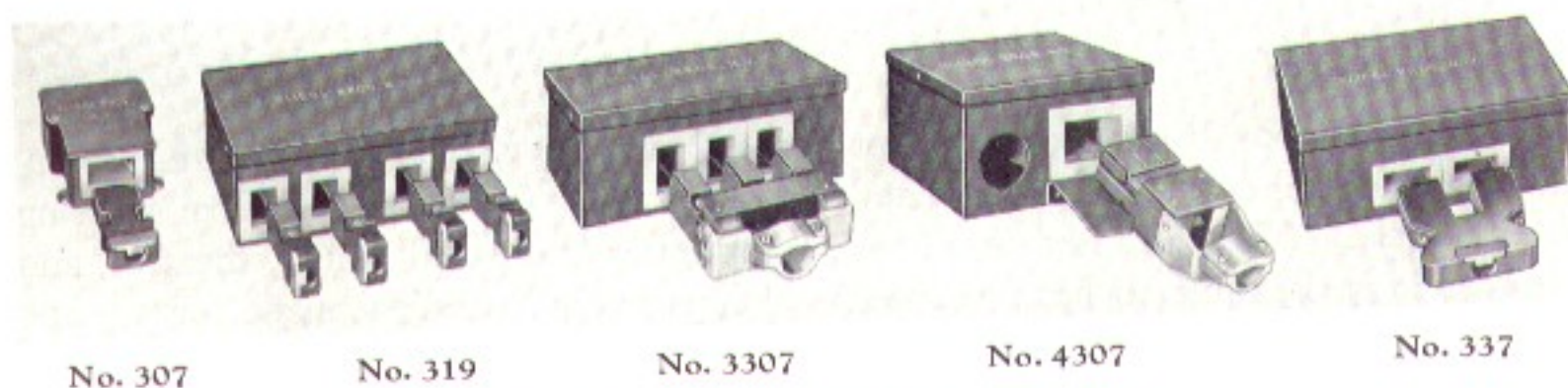
WALL POCKETS and PLUGS

LISTED BY UNDERWRITERS' LABORATORIES

KIEGL WALL POCKETS, intended primarily for use in theatres and motion picture studios, are also adaptable for use in schools, hotels, banquet rooms, assembly halls, industrial plants, and other places where heavy current temporary connections are required. They are made in both surface and flush wall types, in sizes which range from 30 amperes to 400 amperes; 2-, 3-, and 4-wire; for 125-, 250-, and 500-volt circuits.

Surface Wall Types

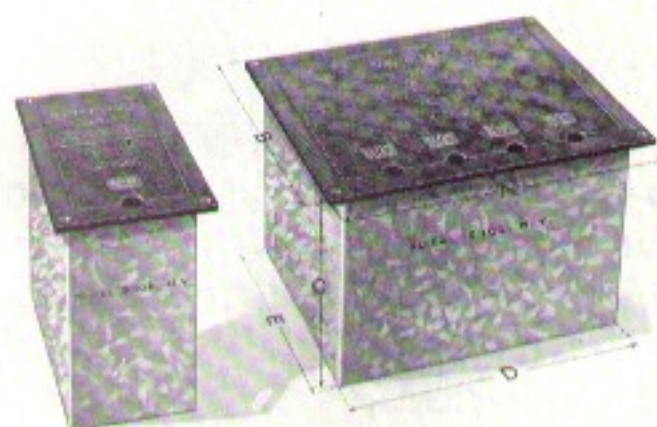
KIEGL SURFACE-WALL TYPE POCKETS, for mounting on the surface of the wall, extend from $2\frac{1}{4}$ " to 6" from the wall, depending upon the rated capacity, and can be mounted in a horizontal, vertical, or angular position; consist of Kiegl porcelain plug-receptacles, with copper current carrying parts and terminal lugs, fitted in a weatherproof iron box, suited for making conduit connections, and provided with a detachable cover. Single pocket is made with a cast-iron box and cover, all other sizes have sheet-iron boxes. Kiegl Plugs are furnished with the pockets; all two-wire plugs are reversible in the receptacle (except when ordered non-reversible); all 3-wire and 4-wire plugs are non-reversing.



KIEGL SURFACE WALL TYPE POCKETS AND PLUGS

No.	DESCRIPTION	NO. OF POCK- ETS	RECEPTACLE—RATING			DIMENSIONS			PRICE	W'G'T LBS.	CODE WORD
			AMPS.	WIRE	VOLTS	H'G'T	WIDTH	DEPTH			
307	Surface Wall Type Pocket with plug	1	50	2	250	6"	4 $\frac{3}{8}$ "	2 $\frac{1}{4}$ "	\$8.00	6	Howl
317	Surface Wall Type Pocket with plugs	2	50	2	250	7"	11"	4 $\frac{1}{2}$ "	14.00	12	Hazubah
318	Surface Wall Type Pocket with plugs	3	50	2	250	7"	11"	4 $\frac{1}{2}$ "	21.00	16	Heapest
319	Surface Wall Type Pocket with plugs	4	50	2	250	7"	11"	4 $\frac{1}{2}$ "	28.00	20	Heartlet
1307	Surface Wall Type Pocket with plug	1	100	2	250	6 $\frac{1}{2}$ "	5 $\frac{1}{4}$ "	3 $\frac{3}{4}$ "	16.00	7 $\frac{1}{2}$	Huracan
4307	Surface Wall Type Pocket with plug	1	200	2	125	7"	11"	4 $\frac{1}{2}$ "	25.00	13 $\frac{1}{2}$	Hydrome
327	Surface Wall Type Pocket with plug	1	400	2	250	11"	15"	6"	80.00		Hedvige
2307	Surface Wall Type Pocket with plug	1	30	3	125-250	7 $\frac{1}{2}$ "	5 $\frac{1}{4}$ "	3 $\frac{3}{4}$ "	17.00	7 $\frac{1}{2}$	Homonyx
2308	Surface Wall Type Pocket with plug	1	50	3	125-250	7"	11"	4 $\frac{1}{2}$ "	25.00	14	Hompelde
3307	Surface Wall Type Pocket with plug	1	100	3	125-250	7"	11"	4 $\frac{1}{2}$ "	30.00	14 $\frac{1}{2}$	Holostei
322	Surface Wall Type Pocket with plug	1	200	3	125-250	11"	15"	6"	80.00		Hebescit
337	Surface Wall Type Pocket with plug	1	50	2	500	7"	11"	4 $\frac{1}{2}$ "	17.00	12	Hozes
338	Surface Wall Type Pocket with plug	1	100	2	500	7"	11"	4 $\frac{1}{2}$ "	19.50	12	Huayua
340	Surface Wall Type Pocket with plug	1	200	2	500	11"	15"	6"	60.00		Hueless
1337	Surface Wall Type Pocket with plug	1	50	4	250-500	7"	11"	4 $\frac{1}{2}$ "	22.50	12	Hispa

Extra plugs listed on page 87.



DIMENSIONS OF KIEGL STAGE-FLOOR POCKETS

No.	A	B	C	D	E
351	6 $\frac{3}{8}$ "	11 $\frac{1}{8}$ "	9 $\frac{5}{16}$ "	5 $\frac{1}{8}$ "	9 $\frac{7}{8}$ "
352	9 $\frac{1}{4}$ "	11 $\frac{1}{8}$ "	9 $\frac{5}{16}$ "	7 $\frac{3}{4}$ "	9 $\frac{7}{8}$ "
353	12"	11 $\frac{1}{8}$ "	9 $\frac{5}{16}$ "	10 $\frac{1}{4}$ "	9 $\frac{7}{8}$ "
354	14 $\frac{1}{2}$ "	11 $\frac{1}{8}$ "	9 $\frac{5}{16}$ "	13 $\frac{3}{16}$ "	9 $\frac{7}{8}$ "
1350	7"	8"	9"		

No. 351

No. 354

KIEGL STAGE-FLOOR POCKETS AND PLUGS

No.	DESCRIPTION	NUMBER OF POCKETS	RECEPTACLES—RATING			PRICE	WEIGHT	CODE WORD
			AMPERES	WIRE	VOLTS			
351	Stage-floor Pocket and Plug	1	1-50	2	250	\$10.00	17 lbs.	Hulagu
352	Stage-floor Pocket and Plugs	2	{1-50}	2	250	20.00	27 lbs.	Hulotte
353	Stage-floor Pocket and Plugs	3	3-25	2	250	30.00	32 lbs.	Hulsean
354	Stage-floor Pocket and Plugs	4	4-25	2	250	40.00	38 lbs.	Hululer
1350	Stage-floor Pocket and Plug	1	100	2	250	20.00	22 lbs.	Hedge

Plugs are included in price of Pockets. Extra plugs furnished separately as listed, page 87.

WATERPROOF FLOOR-POCKETS and PLUGS

LISTED BY UNDERWRITERS' LABORATORIES

KIEGL WATERPROOF FLOOR-POCKET is set in the floor flush with the surface and is provided with special cover which prevents water and other foreign matter from entering the receptacle. They are used in schools, laboratories, industrial plants, theatres, and wherever it is desirable to have a waterproof floor-pocket—and are made for 50- and 100-ampere 2-wire, 250-volt circuits, and 30-ampere, 3-wire, 125-250 volt circuits.



No. 300

The floor box, of cast-iron, is drilled for 1" conduit; surface plate and cover are made of brass; two covers are furnished—one, bell-shaped, which fits over the cable connected to the plug and is screwed into the surface plate when plug is in place making outlet water-tight, the other a screw disc cover, used to close the box water-tight when the outlet is not in use. A Kiegl porcelain plug-receptacle with copper current carrying parts and terminal lugs is mounted in the floor box, and can be readily removed for making connections. A Kiegl Plug is furnished with the floor pocket.

KIEGL WATERPROOF FLOOR-POCKETS AND PLUGS

No.	DESCRIPTION	PRICE	WEIGHT	CODE WORD
299	Waterproof Floor-Pocket with plug, 3-wire, 30-ampere, 125-250 volts	\$31.00	19 lbs.	Hadbote
300	Waterproof Floor-Pocket with plug, 2-wire, 50-ampere, 250 volts	18.00	11 lbs.	Hadoram
304	Waterproof Floor-Pocket with plug, 2-wire, 100-ampere, 250 volts	30.00	19 lbs.	Haedox

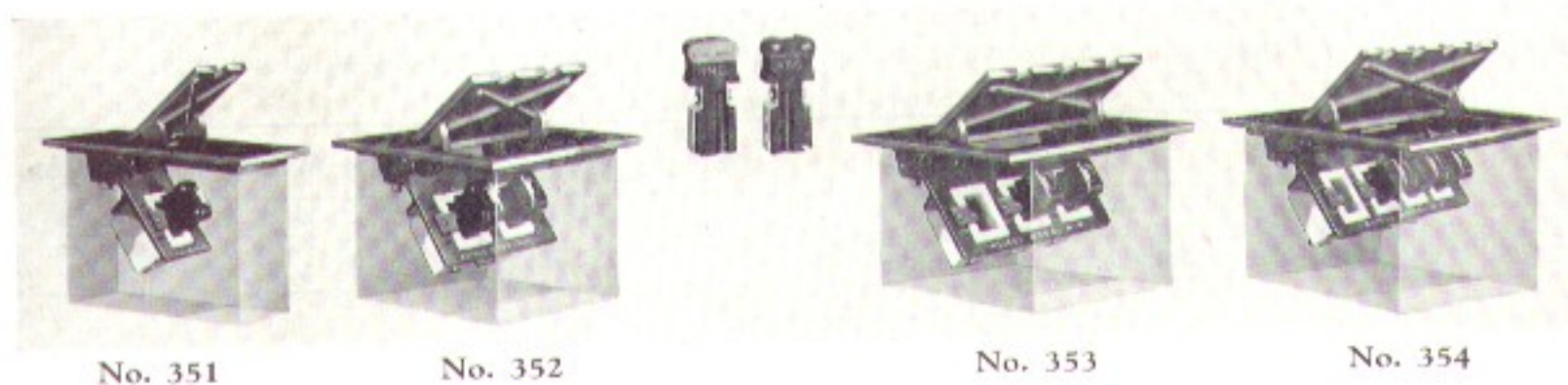
Extra plugs furnished separately as listed on page 87.

ELECTRICAL FITTINGS

KLIEGL ELECTRICAL FITTINGS consist of a complete line of stage-floor pockets, wall pockets, portable plugging boxes, connectors, and other devices for quickly making connections, to stage lighting apparatus, studio lamps, et cetera, in theatres and motion picture studios—and also used in hotels, schools, industrial plants, photograph galleries, garages, terminals and wherever electrical outlets (30- to 400-amperes) or connectors (2- to 200-amperes) are required. They are substantially made, liberally designed, and meet all Underwriters' requirements. For nearly thirty years Kliegl Brothers have been foremost in the development of electrical fittings of this character.

STAGE-FLOOR POCKETS and PLUGS

LISTED BY UNDERWRITERS' LABORATORIES



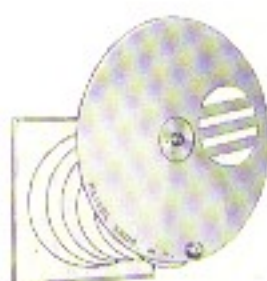
KLIEGL STAGE-FLOOR POCKETS provide means for connecting stage lamps and other portable electrical devices to supply circuits. They set in the floor flush with the surface, have a hinged self-closing cover notched for cable—cover is always closed whether pocket is or is not in use; made in four sizes with 1, 2, 3, and 4 plug-receptacles (50-amperes for arc circuits, 25-amperes for incandescent circuits); furnished with detachable sheet-iron box having conduit knockouts in three sides; surface plate and cover are made of cast-iron, and cast-iron frame, attached to the under side, supports porcelain receptacles at a convenient angle; position of receptacles and opening at base prevent dirt and other foreign matter from lodging therein; opening in bottom of box allows sweepings to fall through.

KLIEGL PLUGS (No. 303, 50-ampere, for arc lamp circuits, and No. 302, 25-ampere, for incandescent lamp circuits) are furnished with stage pockets. A tongue attached to the receptacle frame indicates whether receptacle is intended for arc or incandescent lamps; tongue fits a corresponding groove in the plug, thus preventing the insertion of an arc plug in an incandescent receptacle, or an incandescent plug in an arc receptacle—and allows incandescent circuits to be fused lighter than arc circuits; plates on cover also indicate rated capacity of individual pockets; any desired combination, from one to four, of arc and incandescent pockets, can be furnished.

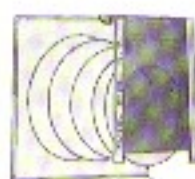
Lightning Shutters



No. 237



No. 238



No. 239

KLIEGL LIGHTNING SHUTTERS, for producing a sudden, momentary flash of bright light characteristic of lightning, are designed for use with Spotlights and Sciopticons.

No. 237

Kliegl Lightning Shutter No. 237 is used with Spotlights; consists of a square sheet-metal tube

containing a revolving shutter operated by a handle which when turned allows intermittent flashes of light to be projected; fits grooves on all standard spotlights.

No. 238

Kliegl Lightning Shutter No. 238 is used with Sciopticons in conjunction with a Zigzag Lightning Effect (No. 122); consists of a circular aluminum disc pivoted at the center with a clamp permitting it to be attached to the objective lens holder on the sciopticon; so balanced that normally no light is projected except when disc is turned through one complete revolution, as openings in the disc pass the objective lens, sharp, quivering flashes of zigzag lightning appear.

No. 239

Kliegl Lightning Shutter No. 239 is used with Sciopticons in conjunction with Cloud Effect (No. 138); consists of a hinged frame for holding a sheet of blue gelatine, with a clamp permitting it to be attached to the objective lens holder on the sciopticon, and provided with a finger grip; quick twists of the wrist produce flashes of bright white light giving the appearance of lightning occurring in the clouds.

KLIEGL LIGHTNING SHUTTERS

No.	DESCRIPTION	PRICE	WEIGHT	CODE WORD
237	Lightning Shutter for Spotlights	\$12.00	4 lbs.	Enalcide
238	Lightning Shutter for Sciopticons, used with zigzag lightning effect	3.50	3/4 lb.	Enamour
239	Lightning Shutter for Sciopticons, used with cloud effect	3.50	1/2 lb.	Enaser

Iris Shutter



No. 257

KLIEGL IRIS SHUTTER, for spotlights and motion picture cameras, controls the light from a pin point to full intensity; fits grooves on spotlights and is used for dimming and increasing the light volume, and for spotting objects with a ray of light before projecting full strength of light beam, and with motion picture cameras for fading pictures on and off. It is made with cast aluminum frame and diaphragm leaves of brass; provided with a lever for controlling diaphragm opening.

KLIEGL IRIS SHUTTERS

No.	DESCRIPTION	PRICE	WEIGHT	CODE WORD
257	Iris Shutter, 6" opening	\$15.00	1 3/4 lbs.	Finerra
258	Iris Shutter, 8" opening	25.00	5 1/2 lbs.	Fingiras

Iris Shutter with 10" and 12" openings made to order.

Iris Dissolver



No. 256

KLIEGL IRIS DISSOLVER, used with double dissolving stereopticon, permits a gradual transition from one view to another without darkening the screen at any time. It consists of two iris shutters operated by a single rod in such a way that as one diaphragm opens the other closes, and vice versa. It is simple, practical, and easy to operate; made entirely of metal, and fits long distance objective lenses.

No. 256 Kliegl Iris Dissolver, for 1/2 size objectives

PRICE \$30.00

CODE WORD *Fineless*

SLIDE CARRIERS and ATTACHMENT



No. 261



No. 839

KLIEGL SLIDE CARRIERS for projection apparatus, permit slides to be changed quickly and conveniently; are made of wood and of metal; hold two ordinary lantern slides, inserted through openings in top of carrier.

KLIEGL SLIDE CARRIERS

No.	DESCRIPTION	PRICE	CODE WORD
261	Slide Carriers, of wood, hold slides $3\frac{1}{4}'' \times 4''$	\$1.50	Finnen
262	Slide Carriers, of wood, hold slides $4\frac{3}{4}'' \times 5\frac{3}{8}''$	2.50	Finnos
263	Slide Carriers, of wood, hold slides $6\frac{1}{4}'' \times 5\frac{3}{8}''$	3.50	Finora
264	Slide Carriers, of metal, hold slides $3\frac{1}{4}'' \times 4''$	2.50	Fioche

KLIEGL ATTACHMENT FOR SLIDE CARRIERS permits regular lantern slides to be used with sciopicons; consists of a metal frame that fits grooves in front of Effect Holder on sciopicons; holds slide carrier, and is provided with grooves in front to hold objective-lenses.

No. 839 Kliegl Attachment with Slide Carrier No. 261

PRICE \$5.00 CODE WORD Sebago

SHUTTERS and BLINDERS

KLIEGL SHUTTERS AND BLINDERS, for spotlights, projection apparatus and motion picture cameras, are used for controlling and framing light areas, for producing lightning flashes, and for fading off and fading on lighting effects; fit grooves on all standard apparatus.

Framing Shutters and Blinders

KLIEGL FRAMING SHUTTERS frame stage openings or parts of drop curtain when light-and-stage effects are projected; furnished complete in various forms illustrated.



No. 33



No. 33A



No. 33B



No. 33D



No. 33F



No. 33G

Kliegl Curtain Shutter, No. 241, for light effect on musicians or scene setting, has a movable mica diffusing plate for fading on or fading off the light horizontally with the curtain line as the curtain is raised or lowered; is usually operated from the projection booth, and fits grooves on 8" spotlight.

Kliegl Pose Slide Shutter, No. 259, of metal, opens out to the right and left from the center, revealing poser first.

KLIEGL FRAMING SHUTTERS AND BLINDERS

No.	DESCRIPTION	PRICE	CODE WORD
33	Framing Shutter, sheet metal, for effects	\$1.50	Bolgios
33A	Framing Shutter, sheet metal, for Water Ripple Effect	1.50	Bolheid
33B	Framing Shutter, sheet metal, 9" x 8", for 5" spotlight	1.00	Bolicoso
33C	Framing Shutter (similar 33B), 11" x 10", for 8" spotlight	2.00	Bolidem
33D	Framing Shutter, sheet metal, 12" x 8", for 5" spotlight	2.50	Bolinga
33E	Framing Shutter (similar 33D), 15" x 11", for 8" spotlight	4.50	Bolivar
33F	Blinder, mica, for effects	2.50	Bollava
33G	Blinder, tin, for effects	.50	Bollero
241	Curtain Shutter, mica	55.00	Empofia
259	Pose Slide Shutter, sheet metal	8.50	Finical



No. 278

Polyscope Objective Lenses

Kliegl Polyscope Objective Lens, used with any stereopticon, permits projection of the same size picture, from a distance of 40 to 80 feet, simply by adjusting a thumb screw—very useful for traveling outfits.

No. 278

Kliegl Polyscope Lens

Price

\$ 54.00

Code Word

Fuma

Condensing Lenses



No. 890

Kliegl Condensing Lenses, for use with spotlights, stereopticons, motion picture machines and other projection apparatus, are plano-convex, made of carefully selected optical glass, and properly ground to accurate size and focus. The Special Heat Resisting Condensing Lenses are tempered to withstand extreme changes of temperature without cracking.

STANDARD LENSES

No.	DIAMETER, INCHES	FOCUS, INCHES	PRICE	CODE WORD
890	4 1/2	6 1/2	1.00	Sesfol
891	4 1/2	8 1/2	1.00	Sescent
892	4 1/2	10 1/2	1.00	Sesfice
896	5	8 1/2	2.00	Stamaya
897	5	10 1/2	1.80	Stasom
898	5	12	1.80	Stavili
899	5	14	1.80	Sfende
901	6	7	4.40	Sferic
902	6	8	3.90	Sferapo
903	6	10	2.50	Sfeso
904	6	12	2.50	Sfobbio
905	6	14	2.40	Sfdare
906	6	16	2.50	Sfigmico
909	8	8	8.80	Sfoena
910	8	10	7.50	Sfogare

STANDARD LENSES

No.	DIAMETER, INCHES	FOCUS, INCHES	PRICE	CODE WORD
911	8	10	55.00	Sforgia
912	8	12	6.00	Sforno
913	8	14	6.50	Sforno
914	8	16	8.40	Sforno
915	8	18	9.50	Sforno
917	10	12	15.00	Sforno
918	12	18	28.00	Sforno
919	14	21	47.00	Sforno

SPECIAL HEAT RESISTING LENSES

No.	DIAMETER, INCHES	FOCUS, INCHES	PRICE	CODE WORD
920	4 1/2	6 1/2	16.00	Sfornata
921	4 1/2	8 1/2	6.00	Sfornata
922	4 1/2	10 1/2	6.00	Sfornata
923	5	8	7.40	Sfornata
924	6	8	10.00	Sfornata
925	8	10	21.00	Sfornata

EFFECT HOLDER



No. 838

KLIEGL EFFECT HOLDER WITH CONDENSING LENS fits slide grooves on spotlights and sciopicons, is provided with grooves for holding Effects in position, and is fitted with a 5-inch condensing lens, held in place by a split ring; holder is made of cast aluminum and has a spring ring-collar which prevents light leakage.

No. 838 Kliegl Effect Holder with Condensing Lens

Price
\$8.40Weight
4 1/4 lbs.Code Word
Sesnee

EXTENSION LENS



No. 878

KLIEGL EXTENSION LENS FOR SPOTLIGHTS, used to increase the projection range of standard range 5" and 6" spotlights, gives a 3-foot spot at a distance of 100 feet, is made of sheet metal, fits slide grooves on spotlights, is provided with slide grooves for color frames, and accommodates a condensing lens which is held in place by a split ring; furnished complete with 6" lens.

No. 878 Kliegl Extension Lens (6") for 5" or 6" Spotlights

Price
\$7.40Weight
2 1/4 lbs.Code Word
Sesnah

LENSES

KLIEGL LENSES are carefully selected and tested for optical perfection—clear crystal glass is ground to accurate size and focus; free from flaws, carefully annealed; they are tough, clear, transmit light beams without affecting or changing colors, and accurately control the light rays. They are stocked in a wide variety of sizes for stereopticon, sciopticon, spotlight, and other stage lamps and projection apparatus.

Sciopticon Objective Lenses



No. 283

No. 280

Kliegl Sciopticon Objective Lenses used with sciopticons for projecting scenic and fantastic effects, are intended primarily for use on the stage where the distance from the projection apparatus to the screen or drop is comparatively short. They produce a picture in a ratio of one to two feet in diameter for every foot of distance from the screen. When it is desired to cover entire stage opening from balcony or front of theatre Objectives No. 280 and No. 281 are generally used. They are furnished complete, lenses mounted in adjustable brass tube with holder that fits slide grooves on Effects and projection apparatus.

No.	FOCUS, INCHES	SIZE OF PROJECTION ON SCREEN		PRICE	CODE WORD
		AT DISTANCE OF 15 FT.	AT DISTANCE OF 50 FT.		
280	12	6—10 feet	24—34 feet	\$20.00	Fisgado
281	10	8—12 feet	32—42 feet	20.00	Fisgar
282	8	14—18 feet	38—54 feet	20.00	Fisgona
283	6	20—34 feet		20.00	Fismoll
284	4	40—60 feet		20.00	Fisode
285	4	12—16 feet	54—60 feet	35.00	Fispel

Stereopticon Objective Lenses



No. 268

Kliegl Stereopticon Objective Lens, used in projecting slides and scenic effects on a scene or drop, is composed of a series of lenses mounted in an adjustable brass tube with holder to fit slide grooves in front of projection apparatus and effects.

No.	SIZE	FOCUS INCHES	DISTANCE FROM SCREEN IN FEET												PRICE	CODE WORD
			10	20	30	40	50	60	70	80	90	100	110	120		
			SIZE OF PROJECTION ON SCREEN IN FEET													
265	1/4	4	7	14	21										\$12.00	Fioler
266	1/4	6	5	10	15	20									12.00	Fiorile
267	1/2	8	4	8	12	16	20	24							25.00	Fiosso
268	1/2	10		6	9	12	15	18	21	24					25.00	Fircus
269	1/2	12			7	10	13	16	19	22	23	25			25.00	Firkin
270	1/2	15			6	8	10	12	14	16	18	20	22	24	25.00	Firmar

Long-Distance Objective Lenses

Kliegl Long-Distance Objective Lenses are similar to the stereopticon objective lenses above except that they are mounted in longer tubes to provide for long distance focusing.

No.	DIAMETER OF LENS, INCHES	FOCUS, INCHES	DISTANCE FROM SCREEN IN FEET												PRICE	CODE WORD
			50	60	70	80	90	100	110	120	130	140	150			
			SIZE OF PROJECTION ON SCREEN IN FEET													
271	2 ¹ / ₁₆	18	8	10	11.5	13	15	17	19	21	22.5	24	26	\$25.00	Firmicus	
272	2 ³ / ₁₆	20	7.5	9	10.5	12	13.5	15	16.5	18	19.5	21	22.5	25.00	Firuz	
273	2 ¹ / ₂	24	6	7.5	8.75	10	11	12.5	14	15	16	17.5	19	28.00	Fiscalm	
274	2 ⁷ / ₁₆	30	5	6	7	8	9	10	11	12	13	14	15	30.00	Fiscella	
275	2 ⁷ / ₁₆	36			6	6.5	7	8	9	10	10.5	11	12	32.00	Fischere	

COLOR-BOXES

KLIEGL COLOR-BOXES OR BOOMERANGS, used with spotlights, permit a quick change of color and protect the gelatine color mediums against damage from rough usage; consist of a metal box fitted with six color-frames—any desired combination of colors, arranged to be quickly placed in or out of position. If desired two or more colors may be used at the same time. An attachment, which fits into slide grooves on the spotlight, holds the color-box in place.



No. 25



No. 26

No. 25

Kliegl Color-Box, for 5- and 6-inch spotlights, is provided with handles for shifting color frames; box, 16" x 10 1/2" x 4 1/4", has aluminum frame with galvanized sheet-iron back and open front.

No. 26

Kliegl Color-Box, for 6- and 8-inch spotlights, is provided with pull strings for shifting color frames; sheet-metal box, 24" x 12" x 3 1/2", enclosed on four sides, finished in black enamel.

No. 20

Kliegl Four-Section Color-Box, for use with battery of four spotlights—set side by side, permits instantaneous and uniform change of color, or flood of light. Each color-box has six color-frames and one blinder; assembled in a wooden frame; pull strings, the same as on color-box No. 26, operate the color-frames and blinders.

KLIEGL COLOR-BOXES

No.	DESCRIPTION	PRICE	WEIGHT	CARE WORD
25	Color-Box for 5- or 6-inch spotlights	\$18.00	9 3/4 lbs.	Bugs
26	Color-Box for 6- or 8-inch spotlights	22.00	14 lbs.	Bugle
20	Four-Section Color-Box for battery of four 5" or 6" spotlights	48.00		Bugs

DIFFUSING SCREENS

KLIEGL DIFFUSING SCREENS are furnished with prismatic glass or frosted gelatine; fitted into metal frame; made in sizes to fit slide grooves of Klieglights, Lilliputs, Open-Box Lights, Bunch Lights, and Spotlights. The prismatic glass screen absorbs only 2% of the light value and is recommended for use in photographic and motion picture studios and wherever thoroughly diffused illumination of high efficiency is desired.

KLIEGL DIFFUSING SCREENS

No.	DESCRIPTION	PRICE	WEIGHT	SIZE	CARE WORD
1044	Diffusing Screen for Klieglights; metal frame with prismatic glass	\$6.00	11 1/2 lbs.	26" x 15 1/2"	Aptan
1046	Prismatic Glass without frame	2.50	8 1/2 lbs.	24 1/4" x 14 1/4"	Aptaham
1054	Diffusing Screen for Lilliputs; metal frame with prismatic glass	4.50	4 1/2 lbs.	15" x 14 1/4"	Aptam
1053	Prismatic Glass without frame	2.00	3 lbs.	14 3/4" x 12 1/2"	Aptam
1047	Diffusing Screen for 8" Spotlight (Cat. No. 21); metal frame with frosted gelatine	6.00	1 1/2 lbs.	11" x 11"	Aptam
1048	Diffusing Screen for 8" Spotlight (Cat. No. 19); metal frame with frosted gelatine	85	1 1/2 lbs.	11" x 10"	Aptam
1049	Diffusing Screen for 6" Spotlight (Cat. No. 11); metal frame with frosted gelatine	40	1 1/2 lbs.	9" x 8"	Aptam

TWILIGHT-EFFECT COLOR-FRAMES



No. 45

KLIEGL TWILIGHT-EFFECT COLOR-FRAME, for producing the varying colors of twilight, and used with open-box lights or bunch lights, consist of two supplementary frames—one an oak frame, 20" x 18", fitted with a frosted gelatine medium; the other a much larger frame, 20" x 51", fitted with three gelatine color mediums, amber, red, and blue. The smaller frame slides into the grooves provided on all open-box lights or bunch lights, and the larger frame slides vertically in grooves attached to the oak frame; both frames are furnished with guard wires to protect the gelatine mediums. Twilight effect is accomplished by sliding the larger color frame up or down, the light changing from bright amber to dark blue, or vice versa.

KLIEGL TWILIGHT COLOR-FRAMES

No.	DESCRIPTION	PRICE	CODE WORD
45	Twilight Effect Color-Frames, complete with gelatine color mediums	\$6.50	<i>Bouffe</i>
46	Twilight Effect Color-Frame, 20" x 51", separate, without gelatine mediums	2.00	<i>Boulli</i>
47	Twilight Effect Color-Frame, 20" x 18", separate, without gelatine mediums	3.50	<i>Bourn</i>

COLOR-ROLLS

KLIEGL COLOR-ROLLS, used to produce twilight and other color-lighting effects, consist of an oak frame, 20" x 18", with a roller on top and bottom; a silk color medium, 12 ft. in length, is wound around the rollers; silk is prepared throughout its length with colors



No. 50

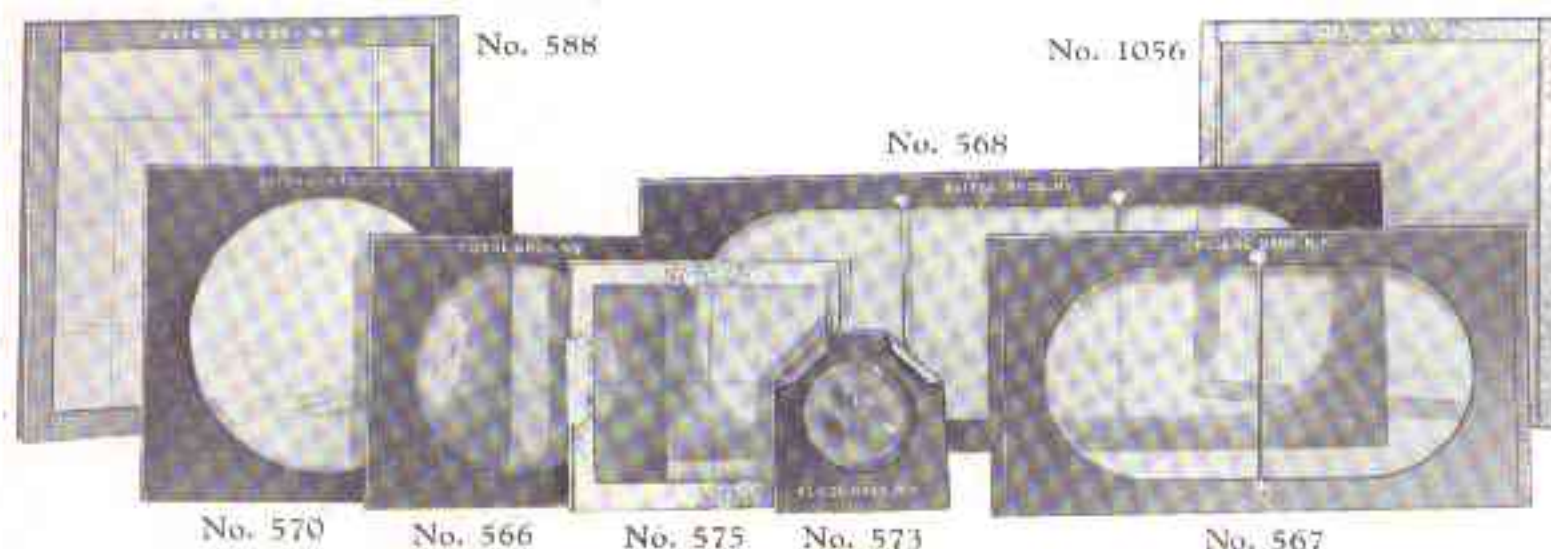
in the following sequence: white, lemon, amber, light red, dark red, light blue, dark blue, and black; adjoining colors are skillfully blended together; arrangement permits movement of colors in either direction from light tones to dark tones or vice versa; wooden frame fits in the slide grooves on open-box lights.

Klieg Color-Rolls give a mild, evenly distributed, beautifully colored light. Silk medium will not shrink, fade in color, or break with the heat—it lasts indefinitely.

Klieg Color-Rolls are also made in 7½-foot lengths with five colors for open-box lights; and also a smaller design, with seven colors, for use with spotlights.

KLIEGL COLOR-ROLLS

No.	DESCRIPTION	PRICE	CODE WORD
50	Color-Roll, 8 colors; complete with frame; for open-box lights	\$40.00	<i>Cento</i>
51	Color-Roll, 5 colors; complete with frame; for open-box lights	35.00	<i>Certes</i>
52	Single Sheets of Silk Medium, any color, in frame 18" x 20"; for open-box lights	3.00	<i>Certima</i>
243	Color-Roll, 7 colors; complete with frame for spotlights	25.00	<i>Empopen</i>



COLOR-FRAMES

KLIEGL COLOR-FRAMES, for use with open-box lights, bunch lights, spotlights, and other stage, studio, exhibit and window lamps, are made in all standard sizes for both gelatine and glass color mediums, and special sizes or designs are made to order.

For open-box lights, bunch lights, and similar stage and studio lamps, Color-Frame No. 588 is frequently used with a gelatine color medium; consists of two wooden frames clamped together with wood screws and fitted with guard wires. The gelatine medium is placed between the two sections.

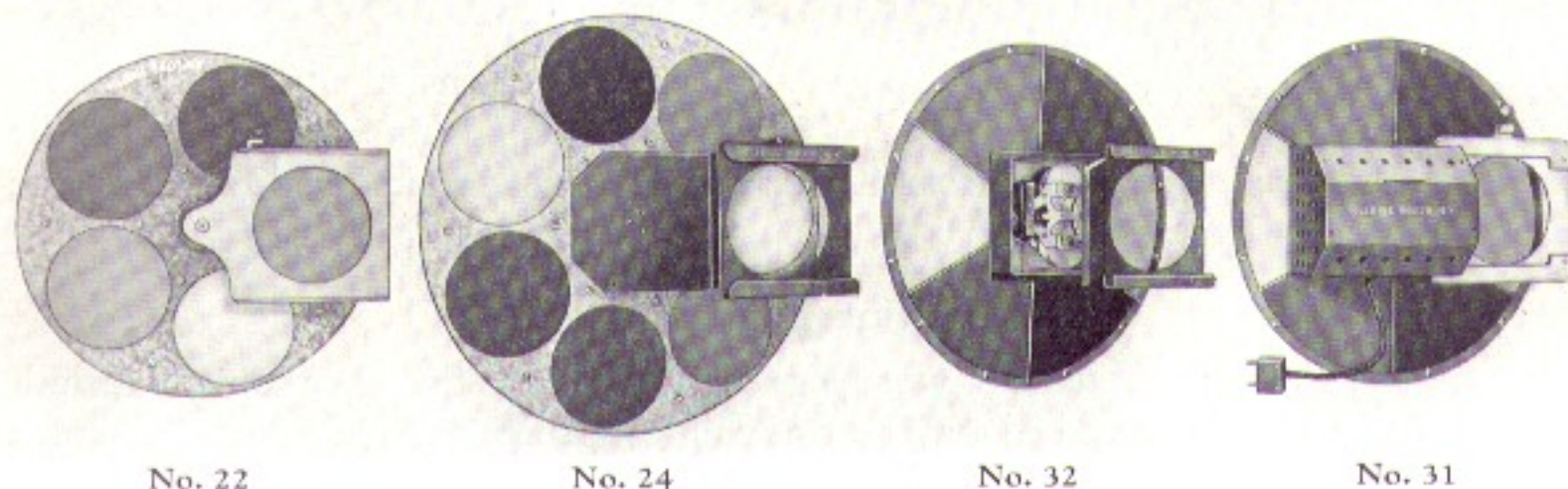
For spotlights, footlights, border lights, and similar lighting equipment, metal color-frames with gelatine color mediums are generally used. They are made of sheet metal, for one or more colors, and can be fitted with any color of gelatine desired.

KLIEGL COLOR FRAMES

No.	DESCRIPTION	No. OF COLORS	SIZE OF FRAME	USED WITH KLIEGL APARATUS—CATALOGUE NO.	PRICE	CODE WORD
566	Color-Frame of Metal for Gelatine	2	8" x 9"	5, 6, 9, 10, 11, 15, 16, 60, 61, 69, 70	3.35	Ondular
567	Color-Frame of Metal for Gelatine	2	8" x 15"	5, 6, 9, 10, 11, 15, 16, 60, 61, 69, 70	.85	Oncatis
568	Color-Frame of Metal for Gelatine	2	8" x 21"	5, 6, 9, 10, 11, 15, 16, 60, 61, 69, 70	1.50	Oncete
569	Color-Frame of Metal for Gelatine	4	8" x 27"	5, 6, 9, 10, 11, 15, 16, 60, 61, 69, 70	2.00	Oncredo
570	Color-Frame of Metal for Gelatine	1	10" x 11"	19	.75	Ongelat
571	Color-Frame of Metal for Gelatine	1	11" x 11"	21	.90	Ongelat
573	Color-Frame of Metal for Gelatine	1	4" x 4"	66, 67	.20	Oncora
574	Color-Frame of Metal for Gelatine	1	5 1/4" x 6"	55, 54, 55, 56	.20	Oncora
575	Color-Frame of Metal for Gelatine	1	7" x 8 1/4"	62, 63, 64	.35	Oncall
577	Color-Frame of Metal for Gelatine	1	12" x 12 1/2"	540	1.25	Oncatu
578	Color-Frame of Metal for Gelatine	1	12 1/4" x 14"	541	1.25	Oncetft
580	Color-Frame of Metal for Gelatine	1	12" x 12"	533, 534, 535, 536	1.00	Oncelad
581	Color-Frame of Metal for Gelatine	1	16" x 16"	537, 538	1.50	Oncaspt
582	Color-Frame of Metal for Gelatine	1	14 1/2" x 14 1/2"	550, 552, 553, 554, 555	1.50	Oncose
583	Color-Frame of Metal for Gelatine	1	11 1/4" x 12 3/8"	617, 544	1.00	Onculst
584	Color-Frame of Metal for Gelatine	1	9 1/4" x 12 1/4"	618	1.00	Onczag
585	Color-Frame of Metal for Gelatine	1	18" x 20"	1, 1-N, 3, 544, 545, 660	2.00	Oncato
588	Color-Frame of Wood for Gelatine	1	18" x 20"	1, 1-N, 3, 544, 545, 660	.55	Oncgat
589	Color-Frame of Wood for Gelatine	1	16" x 16"	537, 538	.55	Oncall
1045	Color-Frame of Metal for Glass	1	25" x 15 1/2"	1011, 1013, 1031, 1015, 1017, 1018	2.50	Apaorus
1056	Color-Frame of Metal for Glass	1	15 1/2" x 14 1/2"	1050, 1052, 1055	2.50	Apaenty

Metal Color-Frames, all sizes, for glass, furnished with or without color-glass. Prices on request.

ACCESSORIES SPECIALTIES and APPLIANCES



COLOR - WHEELS

KLIEGL COLOR-WHEELS are used on spotlights for changing color of the light projected. They are made for hand movement, and for automatic control—with clockwork or motor driven mechanism; supporting frame fits into slide grooves provided on all spotlights; rotary frames are designed to hold several gelatine color mediums; any combination of colors can be furnished.

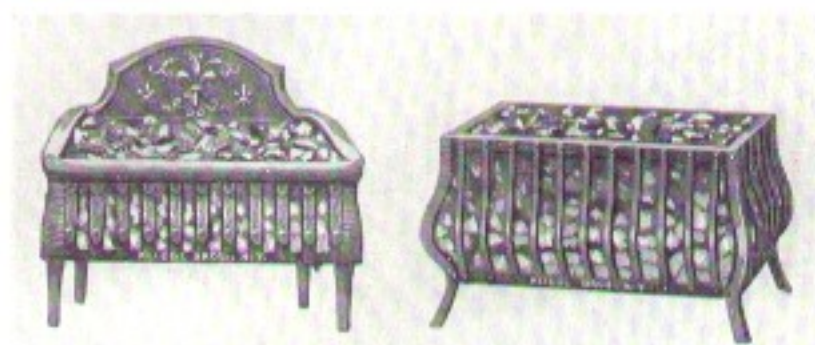
Automatic Color-Wheels may be operated from a distant point; spotlight with color-wheel located in gallery can be controlled from the stage; pressing and releasing a button turns the wheel from one color to the next; clock-driven automatic color-wheel, No. 32, is equipped with electro-mechanical control device; motor-driven color-wheel, No. 31, is controlled by closing and opening the motor circuit—motor is a universal type and operates on either alternating or direct current.

A color-wheel, operated by a string passing over a pulley, No. 27, is made especially for use with spotlight No. 66A; spotlight can be located high above the floor, as in a ball room, and color-wheel operated from the floor by pulling the string.

A Rotary color illusion is procured by color-wheel No. 28; color-wheel is 8 inches in diameter (larger in diameter than lens of the spotlight), and is pivoted at a point corresponding to the center of the lens or light beam; when turned it gives a rotary color illusion.

KLIEGL COLOR-WHEELS

No.	DESCRIPTION	DIAMETER OF WHEEL	WEIGHT	PRICE	CODE WORD
22	Color-Wheel furnished with 5 colors; for 5" or 6" spotlights	18"	2 1/2 lbs.	\$5.50	Blush
24	Color-Wheel furnished with 7 colors; for 5" or 6" spotlights	20"	2 3/4 lbs.	7.50	Bluster
23	Color-Wheel; furnished with 5 colors; for 8" spotlight	24"	3 1/4 lbs.	11.00	Blushful
31	Automatic Color-Wheel, with motor-driven mechanism; furnished with 6 colors; for 5" or 6" spotlights	19"	9 1/2 lbs.	60.00	Bolema
32	Automatic Color-Wheel with clockwork mechanism, and electro-magnetic control; furnished with 6 colors; for 5" or 6" spotlights	19"	6 1/4 lbs.	34.00	Bolgeta
27	String-Operated Color-Wheel, for spotlight No. 66A; furnished with 4 colors	10"	1 1/2 lbs.	4.00	Bogies
28	Rotary Illusion Color-Wheel, showing all colors at one time; furnished with 6 colors; for 5" or 6" spotlights	9"	1 lb.	9.00	Bogoris



No. 2025—Type K

No. 2022—Type H

A flickering flame like that of a real bed of burning coals is obtained by causing shadows to pass between the lamps and crystal; two Rotors, which fit over the two lamps hidden under the coals, turn slowly and provide the flickering flames.

Smoke rising from illuminated coal grates add a still more realistic touch, giving the appearance of actual smoke coming from the burning coal bed (chemical or electrical smoke; No. 204, No. 209; Page 70).

Heating Elements

HEATING ELEMENTS can be fitted into wood logs or coal grates so that they actually furnish heat. Wood logs can be furnished with heating coils concealed in the logs, and coal grates can be furnished with heating coils or radiator lamps concealed in the coal bed; thus equipped, fire logs or coal grates give warmth equal to any electric heater—at the same time provide all the natural atmosphere of the real open fire.

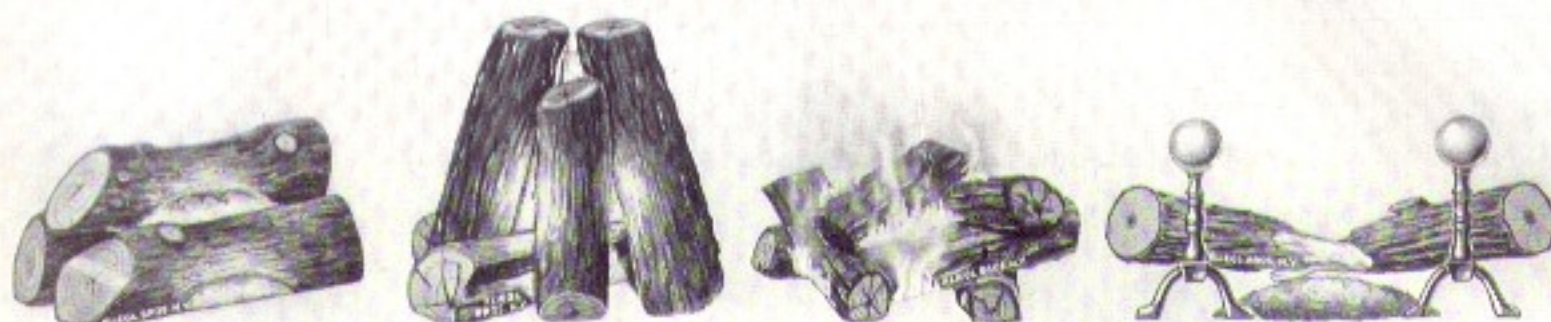
KLIEGL FIRE LOGS AND COAL GRATES

No.	DESCRIPTION	SIZE	PRICE	WEIGHT	CODE WORD
FIRE LOGS					
2000	Type A, 3 logs, for fireplace	18" x 9"	\$45.00	10 lbs.	<i>Svariata</i>
2001	Type A, 3 logs, for fireplace	22" x 12"	52.00	15 lbs.	<i>Svebilus</i>
2002	Type A, 3 logs, for fireplace	26" x 15"	60.00	19 lbs.	<i>Svelte</i>
2005	Type C, 5 logs, for fireplace or camp-fire	18" x 9"	42.00	10 lbs.	<i>Svetta</i>
2006	Type C, 5 logs, for fireplace or camp-fire	22" x 12"	50.00	15 lbs.	<i>Sviando</i>
2010	Type C, 5 logs, for fireplace or camp-fire, with flame and chemical smoke	22" x 12"	125.00		<i>Svicolata</i>
2012	Type B, 6 logs, for camp-fires	36" high	75.00	30 lbs.	<i>Sviluppo</i>
2016	Type D, 2 logs, with one ash heap, for large open fireplaces	5' x 3'	110.00		<i>Sviziero</i>
2017	Type D, 3 logs, with one ash heap, for large open fireplaces	5' x 3'	150.00		<i>Stolazza</i>
2019	Type A, with gas burners, made entirely of metal	18" x 12"	65.00		<i>Stoltero</i>
COAL GRATES					
2020	Type G, plain wrought-iron basket	18" x 9"	25.00	45 lbs.	<i>Swabbed</i>
2022	Type H, fancy wrought-iron basket	18" x 9"	36.00	50 lbs.	<i>Swarms</i>
2025	Type K, fancy cast-iron basket	18" x 9"	36.00	60 lbs.	<i>Sweeps</i>
2026	Type K, fancy cast-iron basket	20" x 12"	40.00	66 lbs.	<i>Swertia</i>
2027	Type K, fancy cast-iron basket	22" x 12"	42.00	69 lbs.	<i>Suerved</i>
2028	Coal Grate, Type K, fancy cast-iron basket	30" x 12"	50.00	80 lbs.	<i>Swillings</i>
2031	Heating Element (electric), with Reflector, for Coal Grates, each		6.00		<i>Switzer</i>

Andirons are not included in Fire Log list prices.

GAUZE for SCENIC EFFECTS

KLIEGL GAUZE FOR SCENIC EFFECTS is carefully selected for its strength, lightness, and flawless weave. It can be furnished from stock without seams in sizes 28'x150' and 30'x150'. Drops in any other size can be furnished on request. Prices on application.



No. 2000—Type A

No. 2010—Type B

No. 2012—Type C

No. 2016—Type D

FIRE LOGS and COAL GRATES

ILLUMINATED

KLIEGL BURNING FIRE LOGS AND GLOWING COAL GRATES are realistic imitations of burning wood logs and glowing coals. For years they have been used on the stage for camp fire and open fireplace scenic effects, and now are also used extensively in show windows, display rooms, clubs, hotels, and homes. They provide the final touch of art and realism to an open fireplace.

Fire Logs

KLIEGL FIRE LOGS are made with three or more logs naturally grouped, in several designs and sizes, for open fireplaces and outdoor campfires; logs are hollow, made of wire gauze on a light iron frame, covered with asbestos and translucent materials, modeled and artistically hand painted to represent bark-covered burning logs; means are provided for inserting incandescent lamps in the hollow logs; by proper shading of translucent and opaque parts, and by reflection from below, when illuminated, logs glow with all the natural colors of burning wood logs; ash heap, when provided, is also made to glow by illumination.

A flaming effect with fire logs is procured by flame-colored silk streamers, illuminated, and fluctuating in the breeze of one or more electric fans concealed in the logs; streamers leap and quiver like actual flames.

A still more realistic stage effect is obtained when smoke effect is used with flaming, glowing logs, giving the appearance of actual flames and smoke rising from the burning logs (chemical or electrical smoke; No. 204, No. 209; Page 70).

Actual cooking operations (for stage purposes—boiling of water, frying, et cetera) with burning wood logs, are obtained by an electrically heated plate which can be furnished to fit into the logs—concealed from view of the audience.

Coal Grates

KLIEGL COAL GRATES are to all appearances actual grates of glowing coals; iron baskets are identically the same as those used with genuine coal fires; coal bed is made of lumps of colored crystal glass; incandescent lamps are concealed under the coal bed; when illuminated, light shining through the crystals gives "life" to the coals—a true reproduction of a glowing coal fire.

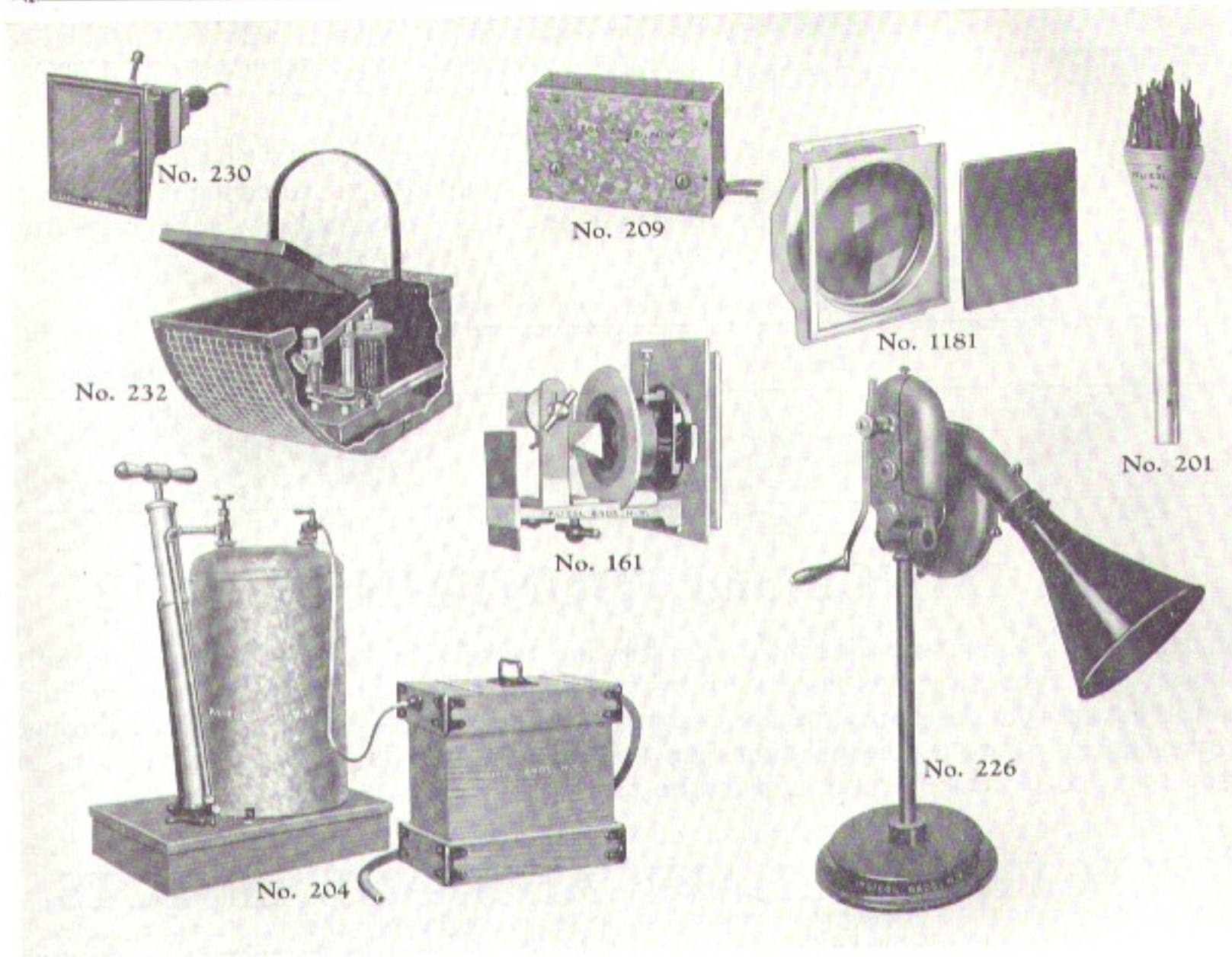
KLIEGL ELECTRO-MECHANICAL STAGE EFFECTS (continued)	PRICE	No.	CODE WORD
DESCRIPTION			
Electric Musical Bells, set of 18, with Resonator and Keyboard	\$220.00	207†	Emenso
Single Bell with Resonator	10.00	207D	Emery
Keyboard Piano, 18-note	25.00	207E	Emetina
Electric Skipping Rope (with 8 lights and batteries complete, all on one rope)	12.00	208	Emeto
Electric Smoke Boxes (single unit)	7.50	209	Emetology
Electric Smoke Powder for same, 1 lb.	1.25	209A	Emetpate
Fencing Act (with flashes)	*	212	Emettre
Fireflies (made in sets of 12, with battery and keyboard)	21.00	213	Emicas
Fireflies (made in sets of 24)	42.00	214	Emilio
Fireplaces, coal, gas, wood (see page 72)			
Flash or Explosion Box, with fuse, all inclosed, asbestos leads	7.00	215	Emigrais
Flash or Explosion Powder for same, 2 oz.	1.70	215A	Emigrero
Flower, Illuminated	3.50	219	Emitias
Flower Basket, Illuminated	"	220	Emtida
Flower Bouquet (6 flowers illuminated, with battery)	10.00	221	Emttir
Hand Lightning (enclosed)	9.00	230	Emptos
Hand Lightning (enclosed) with rheostat, switch, and 25 feet of stage cable, complete	28.00	231	Empuse
Illuminated Ball (8" in diameter, highly colored, complete with battery and light)	5.00	223	Emolo
Lightning Bolt (enclosed)	12.00	235	Emulsif
Lightning Bolt (with rheostat, switch and 40 feet cable, complete, all enclosed)	35.00	236	Emungi
Lightning Bolt (complete with battery and wires)	9.50	236A	Emutas
Lightning Flashes (with battery)	8.00	234	Emulng
Lightning Shutter for Spotlights	12.00	237	Enalcide
Lightning Shutter for Sciopticons, with Zigzag Lightning Effect	3.50	238	Enamono
Lightning Shutter for Sciopticons, with Cloud Effect	3.50	239	Enaser
Mephisto Hand Sparks Effect (the effect of sparks is produced between 2 metals, without using current)	3.50	224	Emotion
Mephisto Hand Sparks Effect Attached to Gloves	6.00	224A	Empale
Moon Box (13" diameter, cable extra)	10.00	225	Emparer
Moon, transparent rising, complete with stepladder	50.00	225A	Emparin
Noise of Wind Effect	45.00	226	Emparks
Other howling and whistling noises can be furnished			
Parsifal Grail Cup (with lights)	55.00	227	Empenoir
Radium Dance Effect produced with No. 1180 and No. 1181.			
Radium Liquid, visible only in Ultra-violet light	15.00	1180	Atiplo
Radium Luminous Fluorescent Powder (glows in the dark) one ounce of powder with 2 ounces of liquid will cover 35 sq. in.)	6.50	1178	Aticiata
Stars (12 twinkling and falling, complete with battery)	100.00	228	Emphase
Sun Box (24", cable extra)	15.00	228A	Empight
Telephone, with light in Mouthpiece	7.50	228F	Empirk
Torch, Lycopodium	5.50	229	Empilons
Torch, Flaming (with lamp and dry battery)	9.50	201	Emenda
Ultra-Violet Carbons (see page 104)			
Ultra-Violet Filter Glass only, 6" square	5.00	1183	Atomico
Ultra-Violet Lens only, made of Heat Resisting glass; 6" diameter, 10" focus	6.00	1182	Atobes
Ultra-Violet Lens with Ultra-Violet Filter glass, Aluminum Frame and Holder for Spotlight	18.50	1181	Atizara
Water Shield for Ultra-Violet Filter	15.00	1185	Atonica
Wireless (automatic lightning, with rheostat and cable)	40.00	229A	Empimento

†207—Electric Musical Bells are for musical production for hotels, restaurants, and theatres. The bells can be placed in any part of the theatre, separately or collectively, and are played by means of an electric piano keyboard. Eighteen bells are usually furnished as a complete set and are perfectly tuned to pitch desired.

*Price on application.

EFFECTS for DEGREE WORK

KLIEGL ILLUSIONARY EFFECTS and special illuminated designs for degree work for all Fraternal Orders, can be furnished, and are made to order. Theatrical experience enables Kliegl Brothers to devise ingenious Effects which operate smoothly—and combine beauty, novelty, and impressionable qualities.



tective screen encloses the arc. It is noiseless, much handier, and more effective than the old carbon and file method.

No. 232

Kliegl Automatic Lightning No. 232 produces lightning flashes by magnetic make-and-break control of the arc, giving a rapid succession of flashes when switch is thrown. It is usually suspended between the wings on the stage, and connected to a switch and rheostat on the stage floor. Where several of

these automatic lightning strikers are located on different parts of the stage, a special panel is furnished by which all strikers are operated from the same control, and made to operate one after another if desired, by simply turning a handle.

No. 1181

Kliegl Radium Effect No. 1181 is an Ultra Violet Lens with filter and aluminum frame which fits slide grooves on spotlights; is used for Radium Dance Effects.

KLIEGL ELECTRO-MECHANICAL STAGE EFFECTS

DESCRIPTION	PRICE	No.	CODE WORD
Anvil Sparks Effect (sparks produced between two special metals without using current)	*	200	Embusy
Automatic Lightning Striker	\$18.00	232	Emsiger
Automatic Lightning Striker (with rheostat, switch, and 25 feet of stage cable)	38.00	233	Emuled
Candle Stick (with lamp and battery)	4.50	202	Emendabas
Cannon, 3 shots, with Electric Connections, 8½ lbs.	7.50	203	Emendatif
Cannon, 6 shots, with Electric Connections, 15 lbs.	12.00	203A	Emendator
Cannon, 12 shots, with Electric Connections, 30 lbs. (feed cable extra)	20.00	203B	Emendavel
Chemical Smoke (a combination of acid and air, producing smoke, complete with air tank)	45.00	204	Emender
One new charge for Chemical Smoke	2.75	204A	Emendico
Electric Fountain, Portable (see Page 63)	*		
Electric Garlands	*	206	Ementem

EFFECTS *produced with* OPEN-BOX LIGHTS

TWILIGHT AND SIMILAR COLOR LIGHTING EFFECTS are usually produced with Kliegl open-box lights. Twilight Effects show a gradual transition from sunlight to twilight and moonlight, or vice versa from moonlight to dawn and day—obtained by silk or gelatine color mediums, as indicated in the listing.

KLIEGL EFFECTS PRODUCED WITH OPEN BOX LIGHTS

No.	DESCRIPTION	PRICE	CODE WORD
588	Color Frame (page 74)	\$.35	Orgia
45	Twilight Effect with 3 gelatine mediums (page 76)	6.50	Baffle
50	Twilight Effect, silk rolls of 7 colors (page 76)	40.00	Cento
51	Twilight Effect, silk rolls of 7 colors (page 76)	35.00	Certas

FIRE DANCE and FOUNTAIN EFFECTS

KLIEGL FIRE DANCE AND FOUNTAIN EFFECTS are usually built to order and generally consist of a cylindrical box lined with mirrored-glass reflectors, fitted with arc or high candle power Mazda lamps, and are designed to throw light vertically upward through a glass floor. Various color mediums are used to produce the desired colored rays. A reflector used for this purpose is listed on page 45.

ELECTRO-MECHANICAL STAGE EFFECTS

KLIEGL ELECTRO-MECHANICAL STAGE EFFECTS include all electrically operated properties for illusionary effects, either lighted or moving, and various sound-making apparatus. Effects listed are those most often used, but designs are unlimited, and any effect desired can be made to order.

No. 161

Kliegl Rainbow Effect No. 161 is a device equipped with glass prisms; its slide grooves of effect holder on scripticons; prisms break up the light and produce the colors of the rainbow in semi-circular form (listed on page 66).

No. 201

Kliegl Flaming Torch No. 201 is hollow, made of metal with illuminated colored-metal flames on top to give appearance of brightly burning torch; furnished with lamp and battery; special designs made to order.

No. 204

Kliegl Chemical Smoke Apparatus No. 204, used for producing smoke effects; consists of a hand pump and pressure tank with valve, and a tube system which passes through glass jars containing chemicals for producing an odorless smoke when air from the pressure tank is permitted to flow; can be used anywhere with absolute safety and smoke can be directed through tube outlets to any place desired;

pump and pressure tank are mounted on a heavy wooden base; chemical jars are mounted in a convenient wooden traveling case.

No. 209

Kliegl Electric Smoke Box No. 209 is a galvanized iron box containing heating coils, and provided with a tray on top to receive smoke powder. Electric current in the coils produces heat which causes the powder to give off a smoke cloud. By controlling the current the volume of smoke produced can also be controlled.

No. 226

Kliegl Noise of Wind Machine No. 226 is fitted with a hand driven blower which when turned gives off howling sounds characteristic of the winds.

No. 230

Kliegl Hand Lightning No. 230 is used to produce lightning flashes any place on the stage. It is held in the hand and operated by a push button. A pro-

exactly in the same place on every slide. Special list of Pose Plastic slides furnished on request. Entire pose acts assembled, and furnished with special small movable effects, operated by small clockworks, specially designed for stereopticons.

KLIEGL EFFECTS PRODUCED WITH STEREOPTICONS

DESCRIPTION	PRICE	No.	CODE WORD
Falling Flowers (small disc with clockwork)	\$45.00	1187	Kaashut
Flying Angels (small disc with clockwork)	45.00	1188	Kaasnop
Flying Birds (small disc with clockwork)	45.00	1189	Kabaci
Flying Butterflies (small disc with clockwork)	45.00	1190	Kabin
Fountain (small disc with clockwork)	45.00	1186	Kaarta
Lightning Slide, Zigzag (cut in brass)	3.50	1191	Kadsura
Lightning Slide, Zigzag, mica with clouds	7.50	1192	Kaftan
Moving Clouds (small disc with clockwork)	45.00	1193	Kahawy
Ocean Waves (small disc with clockwork)	45.00	1194	Kalauer
Opening of a Rose (small disc, hand feed)	45.00	1198	Kamwool
Rising Fire Effects (small disc with clockwork)	45.00	1195	Kalfden
Sand Storm (small disc with clockwork)	45.00	1196	Kallatis
Snow (small disc with clockwork)	45.00	1197	Kamhout
Slides—Pose Plastic—Dressing Act Slides of artistic design per slide	9.00	178	Diaboli

EFFECTS produced with SPOTLIGHTS

Aside from the moonlight beams, sunlight rays, and similar applications to enliven a stage setting, Kliegl Spotlights are also used with the following listed appliances for producing various effects.

Effect No. 240, the Optiscope (Lobsterscope) is a metal disc having four various shaped openings, provided with gears, and handle for rotating the disc and an attachment which fits slide grooves on spotlights. When handle is turned quickly a rapid succession of light rays is thrown upon the performers, producing a weird illusion, and has the effect of apparently multiplying the number of performers as a result of the rapid succession of impressions made upon the eye. The effect is very startling.

Effect No. 242 produces all the colors of a sunset, on a drop, in a semi-circular form—disappearing below the horizon or mountain line without showing the sun, and for sunrise effect the operation is reversed.

Other effects listed for spotlights are described elsewhere in this publication as indicated in the table.

KLIEGL EFFECTS PRODUCED WITH SPOTLIGHTS

No.	DESCRIPTION	PRICE	CODE WORD
240	Optiscope (Lobsterscope)	\$12.00	Empitura
241	Curtain Shutter (page 80)	55.00	Empofia
242	Color-changing Effect for Rising or Setting Sun	25.00	Empopar
243	Silk Roller, 7 colors, (page 76)	25.00	Empopen
257	Iris Shutter (page 81)	15.00	Finerra
566	Color Frame (page 75)	.35	Ondular
22	Color Wheel (page 74)	5.50	Blush
25	Color Boomerang (page 77)	18.00	Bogey
20	Color Boomerang for 4-section Lens Box (page 77)	48.00	Biceps
1180	Radium Dance Effect produced with (No. 1180, page 71)	15.00	Atiplo
	(No. 1181, page 71)	18.50	Atizara
237	Lightning Shutter (page 81)	12.00	Enalcide

EFFECTS produced with SCENE PROJECTOR

KLIEGL SCENE PROJECTOR OR LINNEBACH LAMP, described on page 46, projects an entire scene on a prepared drop, and can be arranged to produce a gradual change from a winter scene to a summer scene in full view of the audience—or similar startling applications.

KIEGL SCENIC EFFECTS—PRODUCED WITH SCIOPTICONS (continued)

DESCRIPTION	PRICE	No.	CODE WORD
FANTASTIC AND SPECIAL SCENIC EFFECTS			
Aeroplanes, Flying, with Moving Clouds (18" Double Disc with clockwork)	\$150.00	131A	Demarcus
American Flag (slide, hand painted)	5.50	77A	Deapusan
American Flag, Waving (slide, with waving disc and clockwork)	40.00	77	Deapod
Ascension of Christ between Clouds (slides with clockwork)	110.00	76C	Deares
Bird's Eye View, Panorama, Motion Picture (21" slide)	120.00	82	Deatato
Chinese Snow (18" single disc with clockwork)	85.00	87	Deaum
Chromatrops—Rotary designs of Colors (hand movement)	15.00	92	Deautomun
Chinling Monkeys (single disc and slide)	110.00	88	Deaum
Crawling Spider Weaving Web (for 2 machines; web, hand movement; spider, clockwork)	60.00	89	Deauco
Dissolving Colors (3 glass design-slides with color slide)	12.00	93	Deaum
Dissolving Colors (with Cat. No. 839 attachment and slide carrier, 3 design-slides and color wheel with clockwork for objective)	35.00	94	Deatum
Electric Fountain (18" single disc with fountain slide)	65.00	95	Deaum
Falling American Flags (18" single disc with clockwork)	120.00	97	Deaum
Falling Flowers (18" single disc with clockwork)	120.00	98	Deaum
Falling Leaves (18" single disc with clockwork)	95.00	99	Deaum
Falling Pumpkins with Heads Painted in Pumpkins (18" single disc with clockwork)	120.00	99A	Deaum
Falling Roses (18" single disc with clockwork)	120.00	100	Deaum
Fire Rockets (18" single disc with clockwork)	70.00	103A	Deaum
Fireworks, Bursting Explosions, Falling, colored (18" single disc with clockwork)	70.00	103	Deaum
Flying Angels (18" single disc with clockwork)	120.00	106	Deaum
Flying Birds (18" single disc with clockwork)	120.00	107	Deaum
Flying Bluebirds (18" single disc with clockwork)	120.00	107A	Deaum
Flying Butterflies (18" glass disc with clockwork)	120.00	108	Deaum
Flying Butterflies (18" mica disc with clockwork)	180.00	108A	Deaum
Flying Cupids and Fairies (18" single disc with clockwork)	150.00	111	Deaum
Flying Ghosts and Skeletons (18" single disc with clockwork)	150.00	112	Deaum
Frogs (18" single disc with clockwork)	90.00	110	Deaum
Inferno, Spectacular (18" double disc with clockwork)	120.00	117	Deaum
Jumping Insects (18" disc with shutter for objective)	90.00	119	Deaum
Pyrotechnic Effect (for 3 separate machines), 2 fireworks ascending, 1 Rocket Effect	240.00	156	Deaum
River of Souls (18" single disc with clockwork)	120.00	168	Deaum
Rowing Scene (for 2 machines, 2 discs, 1 wave and 1 panorama)	165.00	169	Deaum
Slides—"Die Walfahrt" (4 slides)	48.00	177	Deaum
Swimming Fish (18" single disc with clockwork)	85.00	186	Deaum
Twinkling Moon, comical (hand movement)	20.00	188	Deaum
Uncle Tom's Vision (for 2 machines; 1 Cloud effect, 1 Vision with Angels)	185.00	190	Deaum

Note—When so desired, standard effects can be modified, colored, or elaborated, or special effects designed and built, to meet individual requirements—prices on application. *Price on application.

Motor Driven Mechanism for Sciopticon Effects

KIEGL EFFECT CASING can be furnished fitted with a slow speed, air cooled, 110-volt motor instead of clockwork, operating on either direct or alternating current, and provided with regulator for speed control.

No.	DESCRIPTION	PRICE	WEIGHT	CODE WORD
198	Kiegl Effect Casing with motor and regulator, for single 18" disc	\$72.00	16 lbs.	Diadema
199	Kiegl Effect Casing with motor and regulator, for double 18" disc	77.00	17 lbs.	Diadelle

EFFECTS produced with STEREOPTICONS

KIEGL STEREOPTICONS, particularly the double and triple dissolving stereopticons, described on page 48, may be used for producing various natural and fantastic effects as shown in listing, principally for Pose Plastic acts.

In Pose Plastic acts a performer, dressed in white tights, takes a position in front of a screen while scenes and effects are projected. Pose slides are hand painted in rich and effective colors with appropriate background; are 4 inches long by 3¼ inches high, and blank space for face or figure, as the case may be, is

KIEGL SCENIC EFFECTS—PRODUCED WITH SCIOPTICONS (continued)		PRICE	No.	CODE WORD
DESCRIPTION				
NATURAL SCENIC EFFECTS (continued)				
Lava Effect (18" disc with Mountain slide)		\$80.00	121	Deturns
Lightning, Zigzag (3 brass cut-slides with lightning shutter)		30.00	122	Deturpo
Lightning, Zigzag, between the Clouds (3 mica slides with lightning shutter)		40.00	123	Detuve
Midnight Sun (two 5" discs with clockwork)		120.00	128	Deusi
Midnight Sun (two 5" discs with hand movement)		60.00	128A	Deusos
Moonlight Water Ripple (mica travelling slides, and framing shutter Cat. No. 33A)		60.00	129	Deuten
Moon Picture Slides with Appearing and Disappearing Clouds (11 slides)		115.00	130	Devale
Moving Clouds with Disappearing Moon (for 2 machines; one 18" disc moving cloud, with clockwork; and one moon with cloud, hand feed)		115.00	131	Devance
Moving Clouds with Flying Aeroplanes (18" double disc)		150.00	131A	Devancons
Moving Clouds with Rising or Setting Moon, Appearing and Disappearing between Clouds (18" single disc and slide)		100.00	132	Devasso
Moving Clouds with Rising or Setting Sun (18" disc and slide)		100.00	133	Devast
Moving Clouds with Stationary Moon (18" single disc and slide with clockwork)		85.00	134	Deveho
Moving Fleecy Clouds (18" single disc with clockwork)		95.00	135	Develin
Moving Fire Clouds (18" single disc with clockwork)		95.00	136	Devenir
Moving Heavenly Clouds (18" double disc with clockwork)		120.00	137	Devergo
Moving Storm Clouds (18" single disc with clockwork)		85.00	138	Devesci
Moving Sunset Clouds (18" single disc with clockwork)		95.00	139	Devexos
Moving Clouds with Flowing Water and Appearing Islands (two clockworks)		130.00	140	Devezal
Niagara Falls Effect (18" single disc with clockwork and slide)		95.00	148	Devious
Northern Light Effect (12" single disc and clockwork)		65.00	149	Devirage
Ocean Ripple (3 mica painted slides)		65.00	150	Devisor
Ocean Waves (18" single disc with clockwork)		85.00	151	Devium
Ocean Waves with Panorama (18" double disc with clockwork)		130.00	152	Devocao
Panorama, Moving, Country Scene (18" single disc with clockwork)		90.00	154	Devor
Panorama, Moving, Country Scene (18" double disc with clockwork)		120.00	155	Devomis
Panorama, Moving, Desert, Sand Storm Scene (18" double disc with clockwork)		120.00	155A	Devorabas
Panorama, Moving, North Pole, Icicle Scene (18" double disc with clockwork)		120.00	155B	Devorgilla
Panorama, Moving, Race Track Scene (18" double disc with clockwork)		120.00	155C	Devorsus
Panorama, Moving, Railroad Scene (18" double disc with clockwork)		120.00	155D	Devotary
Panorama, Moving, Winter Scene (18" double disc with clockwork)		120.00	155E	Devouais
Panorama, Moving, Scene Effects with 24" double mica disc		*		
Planets, Moving (18" single disc with clockwork)		95.00	157	Devrais
Prairie Fire (18" single disc with clockwork)		95.00	157A	Devriez
Rain Effect (18" single disc and slide)		85.00	158	Devanny
Rain Effect with Driving Clouds (for two machines)		170.00	159	Devedrop
Rain of Ashes (18" single disc with clockwork)		85.00	160	Develke
Rain of Fire (18" single disc with clockwork)		80.00	160A	Devoil
Rainbow Effect (glass prisms)		130.00	161	Devolap
Rainbow Slide (glass)		7.50	162	Dexius
Rainbow Slide (mica)		9.00	162A	Dextans
Rising Fire (18" single disc with clockwork)		85.00	163	Dexter
Rising Fire and Smoke (18" double disc with clockwork)		120.00	164	Dextim
Rising Mist (3 mica travelling slides with clockwork)		65.00	165	Dextral
Rising or Setting Moon (hand feed)		25.00	166	Dextros
Rising or Setting Moon with stationary clouds (hand feed)		35.00	166A	Dezena
Rising or Setting Moon with clouds (travelling slide with clockwork)		95.00	166B	Dezmeria
Rising or Setting Sun (hand feed)		25.00	167	Dezoito
Rising or Setting Sun with Stationary Clouds (hand feed)		35.00	167A	Dholes
Rising or Setting Sun with clouds (travelling slide with clockwork)		100.00	167B	Dehorta
Running Water (18" single disc with clockwork)		85.00	170	Diabao
Sand Storm Effect (18" single disc with clockwork)		85.00	175	Diabase
Sand Storm Effect (18" double disc with clockwork)		115.00	176	Diablos
Slides—Moon Picture Slides (11 to a set)		80.00	179	Diachee
Slides—Scenes, highly colored	per slide	10.00	179A	Diacira
Smoke Effect (18" single disc with clockwork)		85.00	180	Diacono
Smoke Effect (18" double disc with clockwork)		110.00	180A	Diaconk
Snow Effect (18" single disc with clockwork)		75.00	181	Diacope
Snow Storm (for two machines)		150.00	182	Diacrea
Star, Shooting (Handfeed)		15.00	183	Diacrise
Stars (slide, foil in brass frame)		7.50	183A	Diacrisis
Stars, Twinkling (hand movement)		9.00	183B	Diacritico
Stars, Twinkling (with clockwork)		55.00	183C	Diactoros
Surf Effect, gentle waves (prisms and travelling slides with clockwork)		75.00	185	Diadeem
Surf Effect, rough waves (prisms and travelling slides with clockwork)		75.00	185A	Diadeglo
Volcano Effect (for three machines; 1 Eruption, 1 Lava, 1 Rain of Ashes Effect)		245.00	191	Diaire
Volcano Eruption (18" single disc and slide with clockwork)		85.00	192	Diakon
Waterfall (18" single disc with clockwork)		85.00	195	Diakria
Water Ripple (mica slides, and framing shutter, Cat. No. 33A)		60.00	196	Dialima



Phantom illusions are produced with combination effects, and "Mazda" type Scioptricons with dimmers, as in the prologue to the motion picture "Down to the Sea in Ships," a phantom ship appeared and disappeared on the rolling sea—the ship being faded in and out by dimmers.

All Kliegl Scioptricon Effects are furnished with clockwork control unless motor control is specified. Clockworks are of the best quality, have a double spring movement, provided with a governor for regulating speed of disc, and are carefully regulated before shipping. They will run from 30 to 50 minutes without winding, and can be wound while in operation without stopping or jarring the effect. For remote control, effects can be equipped with a magnetic release.

Motor, furnished with Kliegl Effects when specified, is an air cooled, slow speed, 110-volt motor, which operates on either direct or alternating current. It is geared to provide the proper speed for effects, and a variation in speed is obtained by means of a regulator, which may be adjusted while effect is in operation. It is noiseless and will run indefinitely, obviates the responsibility of winding, and can be controlled from a remote point.

KLIEGL SCENIC EFFECTS—PRODUCED WITH SCIOPTICONS

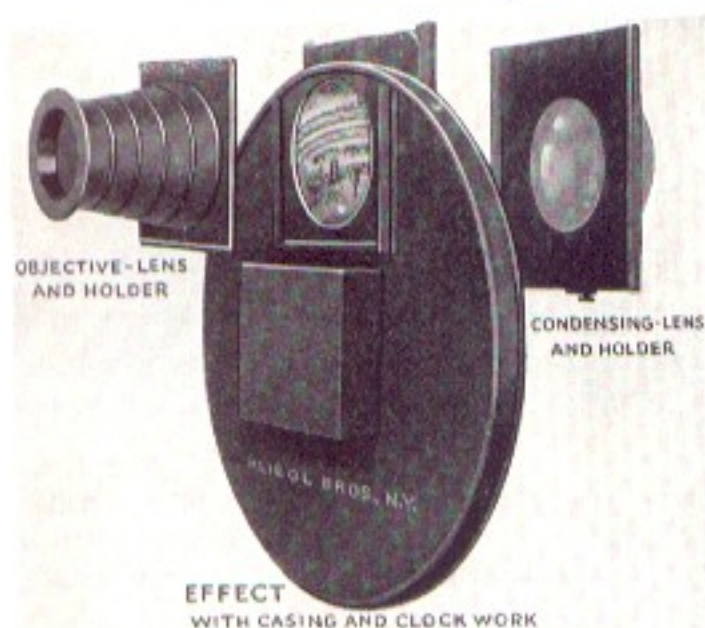
DESCRIPTION	PRICE	NO.	CASE WORK
NATURAL SCENIC EFFECTS			
Aurora Borealis (4 slides and color wheel with clockwork)	85.00	78	Deapno
Extra Color Wheel for Aurora Borealis with clockwork	25.00	78A	Deapno
Aurora Borealis Rays (8" double disc with clockwork)	75.00	79	Deapno
Avalanche Effect (18" single disc)	85.00	80	Deapno
Blizzard Effect (18" single disc and slide)	85.00	83	Deapno
Burning Forest, Panorama View (18" single disc)	95.00	84	Deapno
Cyclone Effect (18" single disc)	80.00	90	Deapno
Cyclone with Flying Object (18" double disc)	120.00	91	Deapno
Cyclone with Flying Object (two separate effects, single discs, for two machines)	165.00	91A	Deapno
Fata Morgana (slide, hand movement)	30.00	102	Deapno
Flame Effect (18" single disc)	80.00	104	Deapno
Flowing Water (18" single disc)	80.00	105	Deapno
Flowing and Rippling Water (18" disc and slides, 2 clockworks)	150.00	105A	Deapno
Fog Effect (18" single disc)	80.00	109	Deapno
Fog Effect (18" disc and slides, 2 clockworks)	120.00	109A	Deapno
Great Tidal Wave (18" single disc)	80.00	115	Deapno

SCENIC and STAGE EFFECTS

KLIEGL SCENIC AND STAGE EFFECTS are reproductions of natural phenomena and countless other forms of stage illusions. They embody mechanical, electrical, and optical contrivances, and are produced with sciopticons, stereopticons, open-box lights, spotlights, and other types of stage apparatus. Kliegl Brothers, pioneer designers and manufacturers of electrical effects for the American Stage, have a reputation for producing truly realistic effects with perfectly working mechanisms. Many Kliegl effects have been in continuous use for more than a decade and are still giving satisfactory service—which speaks well for their workmanship, quality, and durability.

A number of Kliegl effects have become standard, and are carried in stock, as listed on the following pages. New effects are constantly being designed. Special effects and illusionary devices, and effects for degree work are made to order.

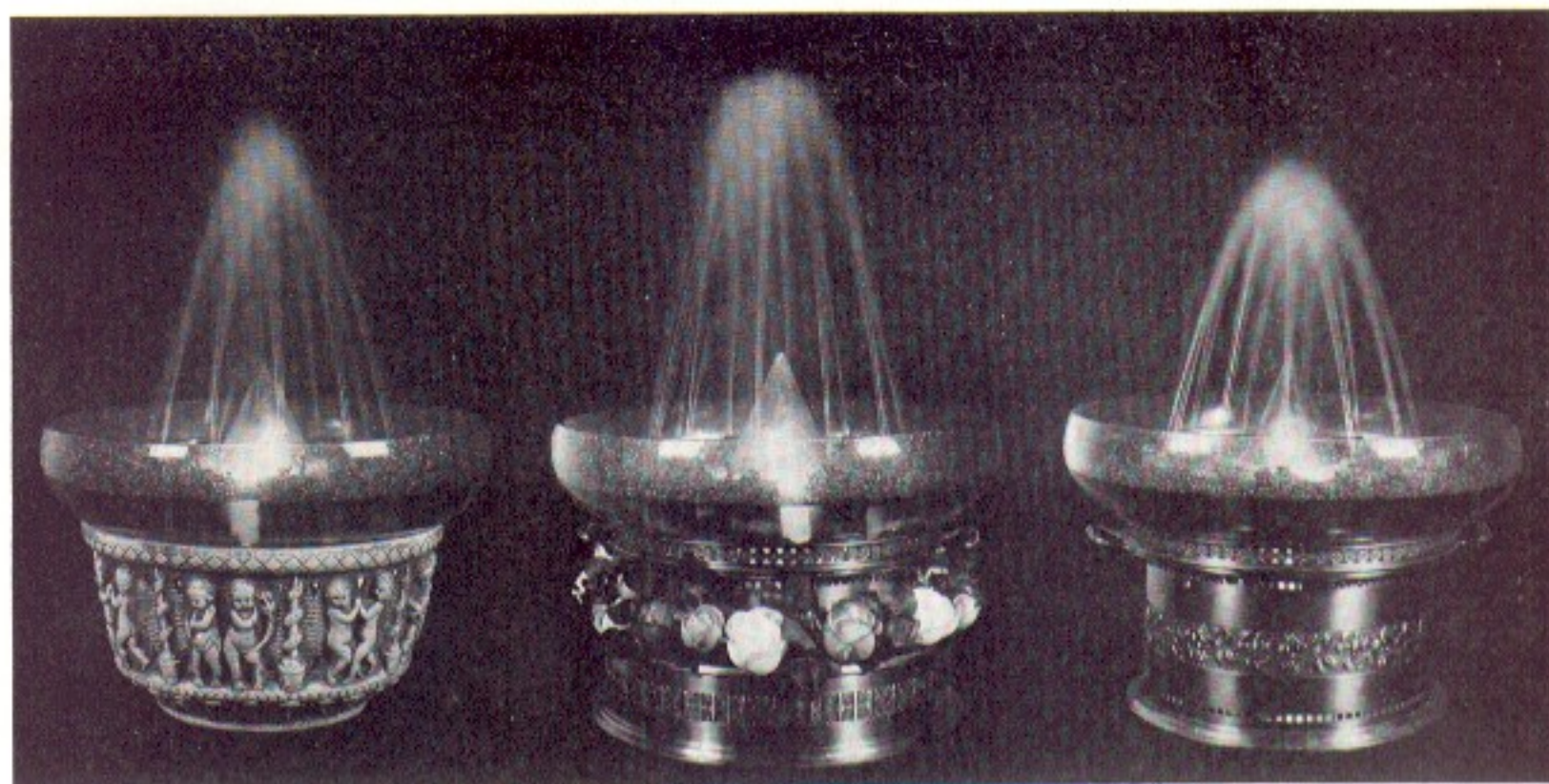
EFFECTS *produced with* SCIOPTICONS



MOVING SCENIC EFFECTS such as panoramas, flowing water, floating clouds, falling rain, rising flames; and fantastic effects such as climbing monkeys, swimming fish, falling flowers, et cetera; are produced with Kliegl Sciopticons (described on page 47). Effect is hand painted on a mica disc or on vertical slides enclosed in a metal case, with clockwork or motor drive for rotating the disc or moving the slides through the light beam. Effects that can be produced are unlimited. They are made with single and double discs, and in other forms, and two or more different effects can be combined. Effect casing has attachment which fits slide grooves on Effect Holder of the sciopticon, and is provided with grooves for holding the objective lens in place. Casing can be turned on a swivel joint so that, for example, a flowing water effect will move across the scene, and rain effect will move downward.

Double Disc Effects have two discs operated by a single clockwork, at different speeds; used especially for scenic and panoramic illusions, such as in "The Vanderbilt Cup," where the clouds and distant hills in the background moved slowly while the foreground moved rapidly, giving a realistic effect of actually traveling through the country at an appreciable speed. Boat racing and horse racing effects can be secured in the same way.

Combination Effects of two or more sciopticons can be used to produce unusual illusions, such as moving clouds and running water with islands appearing and disappearing (double disc effect) and with men swimming in the flowing water (moving film effect).



No. 2040

No. 2042

No. 2041

ELECTRIC FOUNTAINS

KLIEGL ELECTRIC FOUNTAINS are small self-contained, beautifully illuminated, artistically designed fountains, with actual water sprays spurting, splashing, and sparkling in a most attractive manner; can be set on a table or pedestal, and used in theatre lobbies, ball rooms, club rooms, dining rooms, fashionable stores, window displays, home libraries, and elsewhere.

They consist of a clear-glass bowl containing water which is circulated and forced through jets by an electrically driven pump concealed in the base (require no pipe connections). Each jet is provided with an adjustment to control both the force and direction of the stream. An electric lamp, mounted under a glass cone in the center of the bowl, lends brilliancy and sparkle to the water. Colored celluloid cones are placed over the center cone to provide various color effects—red, blue, green and amber. Fountains are made in various designs, as illustrated; furnished complete, with the motor that operates on 110 or 220 volts, direct or alternating current, and with an attachment cord and plug for connecting to any standard outlet.

No. 2040

Kliegl Electric Fountain No. 2040 is assembled in

a pottery base, attractively designed, in two tones, with figures in bas-relief, and furnished with all the previously described electrical and mechanical equipment.

No. 2041

Kliegl Electric Fountain No. 2041 is assembled in a brass base with neatly embossed flower designs and is furnished with all the previously described electrical and mechanical equipment.

No. 2042

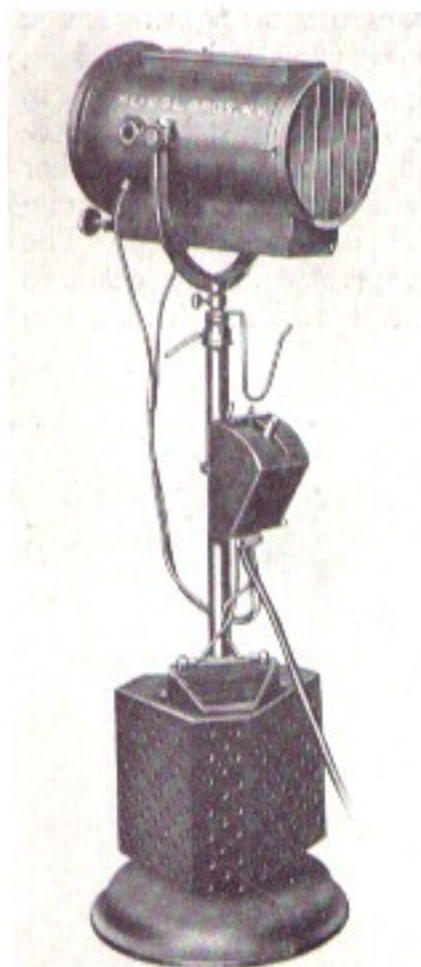
Kliegl Electric Fountain No. 2042 is assembled in a brass base with embossed designs and circled with a ring of artificial roses naturally colored and illuminated, providing an entrancing design of exceptional beauty; furnished complete with all the previously described electrical and mechanical equipment.

KLIEGL ELECTRIC FOUNTAINS

No.	DESCRIPTION	PRICE	WEIGHT	CODE WORD
2040	Electric Fountain, pottery base with figures in bas-relief	\$155.00	33 lbs.	Sydroc
2041	Electric Fountain, brass base with embossed flower design	125.00	38 lbs.	Syelus
2042	Electric Fountain, brass base, with illuminated flowers	155.00	50 lbs.	Sylectre

SEARCHLIGHT PROJECTOR

KLIEGL SEARCHLIGHT PROJECTOR is a long-distance unit for lighting outdoor theatrical productions—particularly where the light rays must be pronounced in an already well illuminated area; consists of a hand-feed arc lamp with specially designed carbon holders that cast no shadow; housed in a Russian-iron hood; highly polished parabolic ground glass mirrored reflector mounted back of the arc; front provided with hinged frame door fitted with strips of plate glass; hood is accurately balanced in trunnion bearings on a telescopic iron stand, permits lamp to be raised or lowered and beam of light thrown horizontally or vertically in any direction; furnished complete with rheostat, enclosed switch, asbestos lead wires, and 25 feet of stage cable; can also be furnished with automatic feed arc lamps, if desired; operate on 110-volt circuit, made in three sizes.



No. 295

KLIEGL SEARCHLIGHT PROJECTORS

No.	DESCRIPTION	CARBONS		PRICE	CODE WORD
		POSITIVE CORED	NEGATIVE SOLID		
295	Searchlight Projector, 9", 25 amp.	$\frac{3}{16}$ "	$\frac{5}{16}$ "	\$180.00	Golter
296	Searchlight Projector, 13", 35 amp.	$\frac{5}{8}$ "	$\frac{5}{16}$ "	240.00	Gomati
297	Searchlight Projector, 18", 50 amp.	$\frac{3}{4}$ "	$\frac{3}{8}$ "	350.00	Gonad

REVOLVING CRYSTAL REFLECTORS

REVOLVING CRYSTAL REFLECTORS are rotating mirrored devices, suspended from the ceiling of ballrooms, banquet halls and other places of public entertainment, which reflect sparkling and moving spots of light, like countless fireflies or floating lighted balloons, to all parts of the room, producing a delightful and entrancing effect. They consist essentially of a hollow steel frame, encased with sheet copper, external surface completely covered with small silvered-glass mirrors. A motor, which slowly revolves the reflector, is concealed within the framework, and operates on 120 volts, either direct or alternating current. Spotlights from several parts of the room are directed upon the reflector to produce the lighting effect. When motor-driven color-wheels are used with spotlights the effect is made still more attractive. Crystal Reflectors are furnished complete with motor. Special designs are made to order.



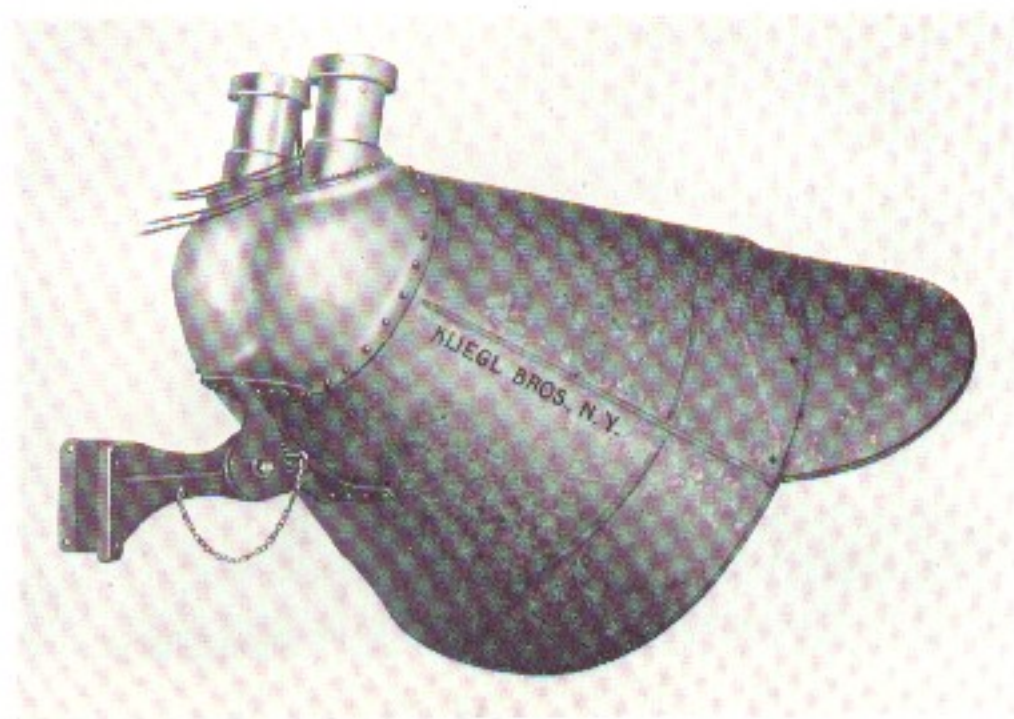
No. 245

No.	DESCRIPTION	PRICE	WEIGHT	CODE WORD
244	Revolving Crystal Shower, 26" wide x 18" high	\$230.00	45 lbs.	Emporetic
245	Revolving Crystal Shower, 40" wide x 24" high	300.00	67 lbs.	Emporos

Crating or Travelling Cases furnished extra at cost.

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vanized sheet iron—spreads out to a large 30½" x 28" opening; though substantially constructed throughout, it is comparatively light in weight and can be easily handled. No. 563 is the same design but made to accommodate one 1000-watt lamp.



No. 562

No. 660

Kliegl Outdoor Floodlight No. 660, for long distance floodlight projection, used for outdoor theatricals, pageants, and the like; projects the light a distance of approximately 300 feet, can be focused for a narrow or a wide light beam; illuminates the chosen area with clear definition, leaving surroundings in desired darkness; 1000-watt P. S.-52 Mazda lamp is housed in a long cylindrical hood fitted with a mogul-screw-base receptacle; 13-inch all-metal silvered reflector back of the lamp is mounted on an adjustable arm with handle extending outside of the hood for focusing; interior of hood is painted a dull black including light shields in the center of the housing, thus eliminating undesired reflections and making the light source practically invisible from any place other than the illuminated area; hood is provided with slide grooves for color frames, and is mounted with an adjustable support on a telescopic pedestal stand permitting any desired setting; it is furnished with or without a heat-resisting glass front, and with a mirrored-glass reflector in place of a silvered-metal reflector; also in a larger size for a 2000-watt Mazda lamp.



No. 660

KLIEGL OUTDOOR FLOODLIGHTS

No.	DESCRIPTION	PRICE	WEIGHT	CODE WORD
560	Outdoor Floodlight, glass-lined reflector, curved-glass front	\$41.00	24 lbs.	Onager
561	Outdoor Floodlight, all-metal silvered-reflector, inclined front	35.00	23 lbs.	Onbezet
	Outdoor Floodlight, giant reflector			
562	With horizontal mounting for two 1000-watt lamps	80.00	49 lbs.	Oncavit
563	With horizontal mounting for one 1000-watt lamp	50.00	44 lbs.	Ondatra
564	With suspension mounting for one 1000-watt lamp	45.00	44 lbs.	Onderin
565	With suspension mounting for one 500-watt lamp	25.00	44 lbs.	Ondifero
	Outdoor Floodlight, long distance projector			
660	With 13" all-metal silvered reflector, for 1000-watt lamp, without glass front	40.00	35½ lbs.	Ramogno
661	With 13" all-metal silvered reflector, for 1000-watt lamp, with glass front	45.00	40 lbs.	Ramoitir
662	With 13" mirrored-glass reflector, for 1000-watt lamp, without glass front	55.00	40 lbs.	Ramosos
663	With 13" mirrored-glass reflector, for 1000-watt lamp, with glass front	60.00	44½ lbs.	Rampaute
664	With 16½" mirrored-glass reflector, for 2000-watt lamp, without glass front	95.00	60 lbs.	Rampojo

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