

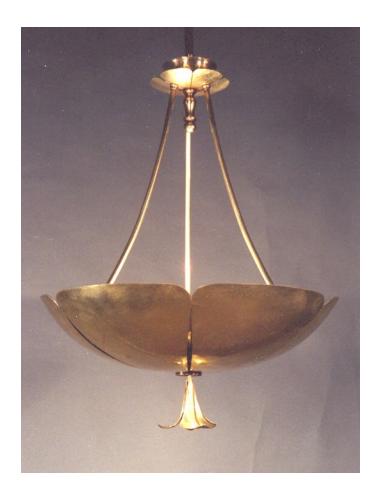


hand repoussé metal art

specifications

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Third generation craftsmen specializing in custom design and hand crafting of fine metal work.



HAND CRAFTED REPOUSSE'
LIGHTING

Repousse' is a general term used to describe ornamental work produced by modeling sheet metal with hammers and punches. This technique along with the other traditional art metal work applications such as chasing, raising, and planishing are utilized in all work done by Grag Studios.





HANS GRAG NORMAN GRAG JON GRAG







THE FAMILY BUSINESS, LOCATED ON A RANCH IN THE FOOTHILLS OF NORTHERN CALIFORNIA AND NOW IN ITS THIRD GENERATION, HAS SPECIALIZED IN CUSTOM DESIGN AND HAND CRAFTING OF FINE METAL WORK SINCE 1927. THIS IS THE YEAR THAT HANS GRAG FIRST ARRIVED IN CHICAGO FROM HIS NATIVE GERMANY.

WHILE IN CHICAGO HE CO-FOUNDED CELLINI CRAFT. AFTER RELOCATING TO CALIFORNIA IN 1952 HE AND HIS WIFE ELIZABETH FORMED GRAG STUDIOS AND STARTED DESIGNING AND FABRICATING LIGHTING FIXTURES FOR GUMP'S. IN 1959 THEY WERE JOINED BY NORMAN AND HIS WIFE, PATRICIA. THE BUSINESS AT THIS TIME DIVERSIFIED INTO PRODUCING SCULPTURE AND ECCLESIASTICAL COMMISSIONS AS WELL AS LIGHTING. BOTH HANS AND ELIZABETH REMAINED ACTIVE IN THEIR CRAFT UNTIL THEIR DEATHS IN 1965 AND 1991 RESPECTIVELY.

SCULPTURE, LIGHTING AND DECORATIVE FURNISHINGS HAVE BEEN COMMISSIONED BY DEVELOPERS, ARCHITECTURAL FIRMS AND PRIVATE FIRMS, GOVERNMENT AGENCIES, MUSEUMS AND PRIVATE COLLECTORS, CHURCHES AND SYNAGOGUES.

IN 1982 JON JOINED HIS PARENTS IN THE BUSINESS, WHICH BY THEN WAS PRIMARILY PRODUCING LIGHTING FIXTURES FOR GUMP'S. BEGINNING IN 1987 THE STUDIO WAS REPRESENTED BY CASELLA LIGHTING. SUBSEQUENTLY THE FIXTURE LINE HAS BECOME AVAILABLE EXCLUSIVELY TO A NUMBER OF SHOWROOMS THROUGHOUT THE COUNTRY.

ORDERING INFORMATION

FIXTURES ARE INDIVIDUALLY PRODUCED FOR EACH ORDER. THEREFORE IT IS IMPORTANT THAT THE ORDER CONTAINS THE FOLLOWING INFORMATION:

1) ON CHANDELIERS, — **THE OVERALL HEIGHT.** THERE IS NO ADDITIONAL CHARGE FOR CUS TOM HEIGHT UP TO 42". ON CHANDELIERS WITH BODY HEIGHTS EXCEEDING 30" THE LIMIT IS 60"

THE CEILING PITCH, IF IT IS TO GO ON A SLANTED CEILING. (IF NOT INDICATED, IT IS ASSUMED TO BE A FLAT CEILING). THERE IS NO ADDITIONAL CHARGE ON ORIGINAL ORDER, BUT THERE IS AN ADDITIONAL CHARGE FOR RETRO-FIT.

- 2) ON ALL FIXTURES, **FINISH.** THERE IS AN ADDITIONAL CHARGE FOR SATIN & SOME WAX FINISHES.
- 3) METAL/GLASS SHADES, MULTIPLY SHADE COST BY OF NUMBER OF ARMS, AND ADD TO COST OF FIXTURE.

ALL FIXTURES ARE HAND HAMMERED, HAND FINISHED, STAMPED, DATED AND NUMBERED.

RESTOCKING CHARGE

10% of order if cancelled within 1 week of receipt of order. 25% of order if cancelled within 3 weeks of receipt of order. 50% of order if cancelled after 3 weeks of receipt of order.

YOU MAY CONTACT US ABOUT THE FEASIBILITY OF CUSTOM MODIFICATION AND FOR A COST QUOTE.

Custom quotes are in effect for 120 days only.

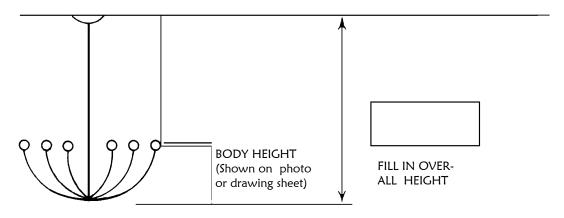
WE CURRENTLY PRODUCE OVER ONE HUNDRED ITEMS FROM OUR ACTIVE FILES, NOT INCLUDING INACTIVE DRAWINGS AND PATTERNS THAT DATE BACK NEARLY TWO GENERATIONS.



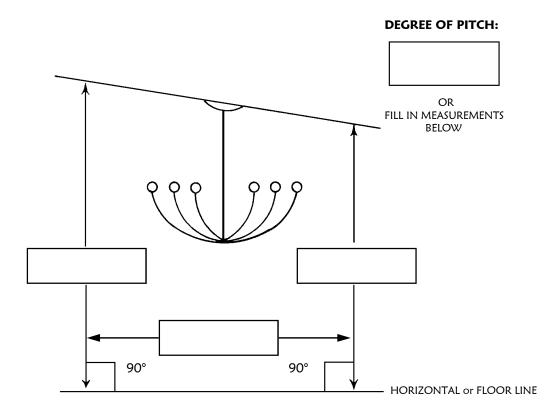


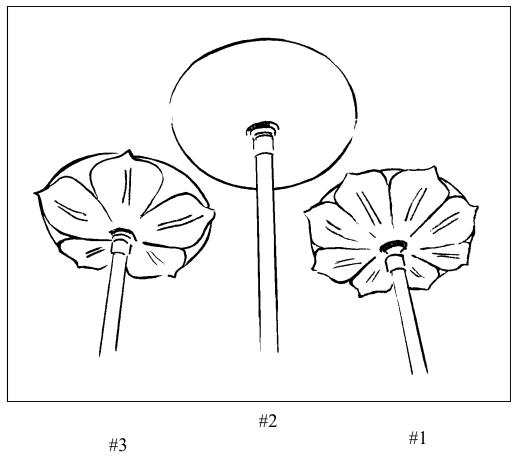
OVERALL HEIGHT & CEILING PITCH INFORMATION

FIXTURES MAY BE ORDERED WITH AN OVERALL FIXTURE HEIGHT **UP TO 42" AT NO EXTRA CHARGE. (ON CHANDELIERS WITH BODY HEIGHTS EXCEEDING 30" THE LIMIT IS 60")** PLEASE CALL FOR A QUOTE ON ALL HEIGHTS OVER 42" OR ON AN O.A.H. THAT IS CHANGED AFTER THE ORDER HAS BEEN ENTERED.



FOR CHANDELIERS TO BE INSTALLED ON SLANTED CEILINGS, THE FOLLOWING ADDITIONAL INFORMATION MUST ACCOMPANY ALL ORDERS:

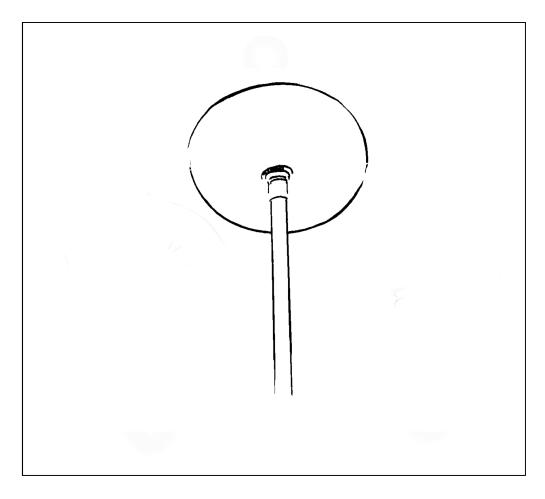




Standard 5" diameter

THE CHANDELIER STEM, SWIVEL, AND REPOUSSE' CANOPY ARE SPECIALLY MADE FOR EACH FIXTURE; THEREFORE OVERALL HEIGHT AND CEILING PITCH INFORMATION MUST ACCOMPANY THE ORDER.





#2

Standard 5" diameter

THE CHANDELIER STEM, SWIVEL, AND REPOUSSE' CANOPY ARE SPECIALLY MADE FOR EACH FIXTURE; THEREFORE OVERALL HEIGHT AND CEILING PITCH INFORMATION MUST ACCOMPANY THE ORDER.



FINISHES

ANTIQUE BRASS (AB)	Satin antique hand rubbed overall without highlights. Lacquered, wax optional.
BRASS PATINA ** (BP)	Antique brass with hand rubbed and brushed highlights. (As shown in most photographs). Lacquered, wax optional.
BUTLER FINISH ** (BF)	Similar to BRASS PATINA but with minimum oxidation. Overall hand rubbed and brushed finish. (Like highlights on BP). Lacquered, wax optional.
COPPER BRASS ** (CB)	Fixtures are Brass Patina with Copper Patina leaves, bobeches, candle cups ornaments and canopy. Lacquered, wax optional.
COPPER PATINA ** (CP)	Antique copper with hand rubbed and brushed highlights. Lacquered, wax optional.
GOLD GILT (GG)	A finish resembling aged and mellowed gilding with patina undertones.
GUNMETAL NICKEL** (GN)	Fixtures are metallic black with nickel silver leaves, bobeches, candle cups, ornaments and canopy. Lacquered, nickel parts waxed.
NICKEL BRONZE ** (NB)	Fixtures are dark bronze with nickel silver leaves, bobeches, candle cups, ornaments and canopy. Lacquer on bronze, nickel silver parts are waxed. (This finish was formerly known as NICKEL SILVER.)
NICKEL PATINA ** (NP)	Fixtures are all antique nickel silver/nickel plate, with hand rubbed and brushed highlights. Available only on a limited number of models; please en quire. Waxed only.



FINISHES (continued)

OVERALL BRONZE ** (OB)	Fixtures are dark bronze. (Areas can be highlighted BRASS PATINA on request) Lacquered, wax optional.
OVERALL GUNMETAL ** (OG)	Fixtures are metallic black with a lacquered finish. Wax optional.
OVERALL NICKEL ** (ON)	Fixtures are all bright nickel silver / nickel plate. Limited availability, please en quire. Wax only.
SILVER GILT (SG)	A somewhat matte finish resembling aged and mellowed silvering with patina undertones.
UMBER ANTIQUE (UA)	Fixtures are hand finished with a russeted antique brown and reddish earth tone finish.
VERDE ANTIQUE (VA)	Fixtures are hand finished with a blue-green Verde antique finish.

NOTES:

These finishes are available in a satin finish for an additional charge of ten percent. Add "\$**" to finish letters. Example: BPS, CPS, OBS, etc. (Exception: AB. This finish is normally satin therefore no extra charge).

An additional charge of ten percent for waxed finishes. (Exceptions: NP, NPS, ON, ONS. These are normally waxed and therefore there is no extra charge).

Nickel plating service is no longer available to us so Overall Nickel finishes can now be done only on units that can be built entirely from nickel-silver sheet. Please contact factory for details.





OXIDIZED FINISHING A THREE STAGE PROCESS

OXIDIZING

The general term of "oxidizing" is applied to the chemical coloring of metals. The oldest method, and the one that will produce the largest number of shades ranging from black to light brown, is the use of an alkaline sulfide. These sulfide salts were once known as "liver of sulfur" but now are divided into sodium, potassium, barium, ammonium or polysulfides, (polysulfides in the liquid state being used most generally today).

The color obtained is dependant upon the composition of the base metal. The colors produced on cast items seldom match those produced on wrought metals.

The polysulfide is applied by dipping or hand application to specified areas. The color is then "set" with a weak acid solution. This process is generally repeated several times until the desired shade is obtained.

RELIEVING (RUBBING)

Relieving, to obtain a contrast of color, is done with either wet or dry pumice depending on how aggressive the removal of the oxidize has to be. Most of the relief is done by tampico or wire wheel on a scratch brush machine or by hand with a tampico brush or scrub pad. This is then followed by hand rubbing with pumice and finished with a dry brass wheel on the scratch brush. In some cases, the oxidize is relieved by use of a suitable buffing compound and loose muslin buff.

LACQUERING or WAXING

All sulfide colors are susceptible to the action of the atmosphere, especially if warm and moist. Lacquering or waxing of the work helps maintain the finish for an extended period.

THE BRASS AND NICKEL FINISHES ARE NATURAL FINISHES THAT ARE EITHER LACQUERED OR WAXED AND MAY MELLOW OR CHANGE OVER TIME. LACQUERS WILL DULL SOMEWHAT AND THE WAXED NICKEL CAN TAKE ON A PEWTER APPEARANCE. THE PERIOD OF TIME DEPENDS ON LOCATION AND CLIMATE.

CARE OF FINISHES

ANTIQUE BRASS, BRASS PATINA, BUTLER FINISH, COPPER BRASS, COPPER PATINA, GOLD & SILVER GILT, UMBER/VERDE ANTIQUE, OVERALL BRONZE AND OVERALL GUNMETAL.

THESE FINISHES HAVE BEEN LACQUER COATED (OR WAXED AT COSTUMER REQUEST). DO NOT USE ANY POLISHES OR HARSH CLEANING AGENTS. DUST WITH SOFT CLOTH OR FEATHER DUSTER.

NICKEL BRONZE AND GUNMETAL NICKEL.

THE BRONZE OR GUNMETAL PARTS HAVE BEEN LACQUERED (OR WAXED AT CUSTOMER REQUEST). DO NOT USE ANY POLISHES OR HARSH CLEANING AGENTS. DUST WITH SOFT CLOTH OR FEATHER DUSTER.

THE NICKEL SILVER COMPONENTS ARE WAXED AND MAY EVENTUALLY DULL TO A PEWTER-LIKE FINISH. IF DESIRED, THESE PARTS CAN BE POLISHED WITH A SOFT CLOTH AND A LITTLE NON-ABRASIVE SILVER POLISH TO BRING BACK ITS ORIGINAL LUSTER.

NICKEL PATINA AND OVERALL NICKEL

THIS FINISH HAS BEEN GIVEN A HARD WAX COATING. DO NOT USE ANY POLISHES OR HARSH CLEAN-ING AGENTS. DUST WITH SOFT CLOTH OR FEATHER DUSTER. THE FINISH CAN BE MAINTAINED WITH A PASTE WAX AND BUFFING WITH A SOFT CLOTH. IF POLISHED AREAS EVENTUALLY DULL TO A PEWTER-LIKE FINSH, THEY MAY BE RESTORED WITH SILVER POLISH AND THEN REWAXED.

NICKEL PATINA SATIN AND OVERALL NICKEL SATIN

THIS FINISH HAS BEEN GIVEN A HARD WAX COATING. DO NOT USE ANY POLISHES OR HARSH CLEAN-ING AGENTS. DUST WITH SOFT CLOTH OR FEATHER DUSTER. THE FINISH CAN BE MAINTAINED WITH A PASTE WAX AND BUFFING WITH A SOFT CLOTH.



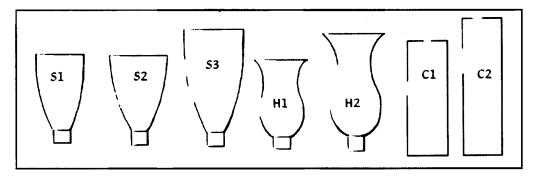


SHADES

SAVANNAH SHADES

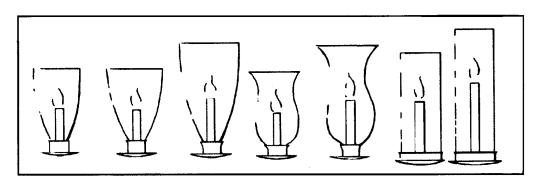
HURRICANE SHADES

CYLINDER



3.75" Dia. 6.50" Hgt. 4.50" Dia. 6.50" Hgt. 4.75" Dia. 8.25" Hgt. 3.75" Dia. 6.50" Hgt. 4.75" Dia. 8.50" Hgt. 3.00" Dia. 3.00" Dia. 8.00" Hgt. 10.00" Hgt.

CANDLE HEIGHTS FOR GLASS SHADES



3.50" Hgt.

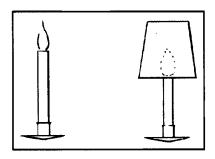
4.50" Hgt.

3.50" Hgt.

4.50" Hgt.

3.50" Hgt. 6.00" Hgt.

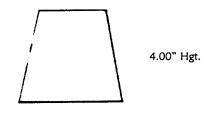
CANDLE HEIGHTS



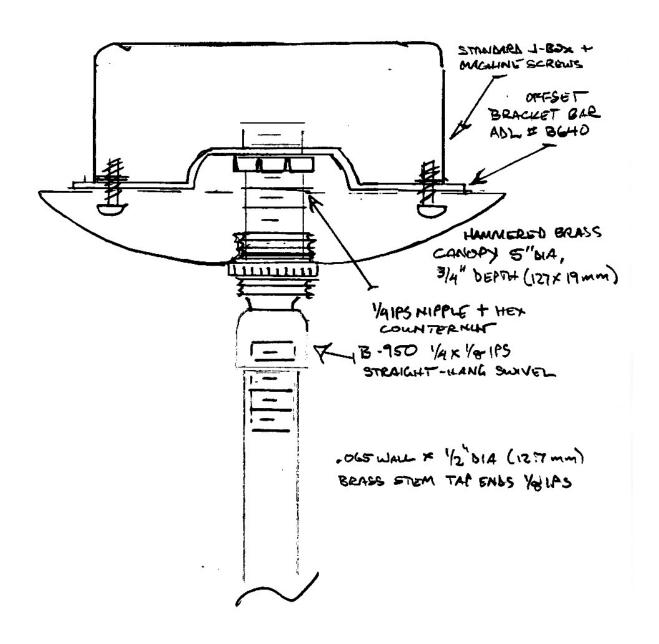
6.00" Hgt.

4.50" Hgt. Also used on Wall Sconces w/out shades.

MS1 METAL SHADE

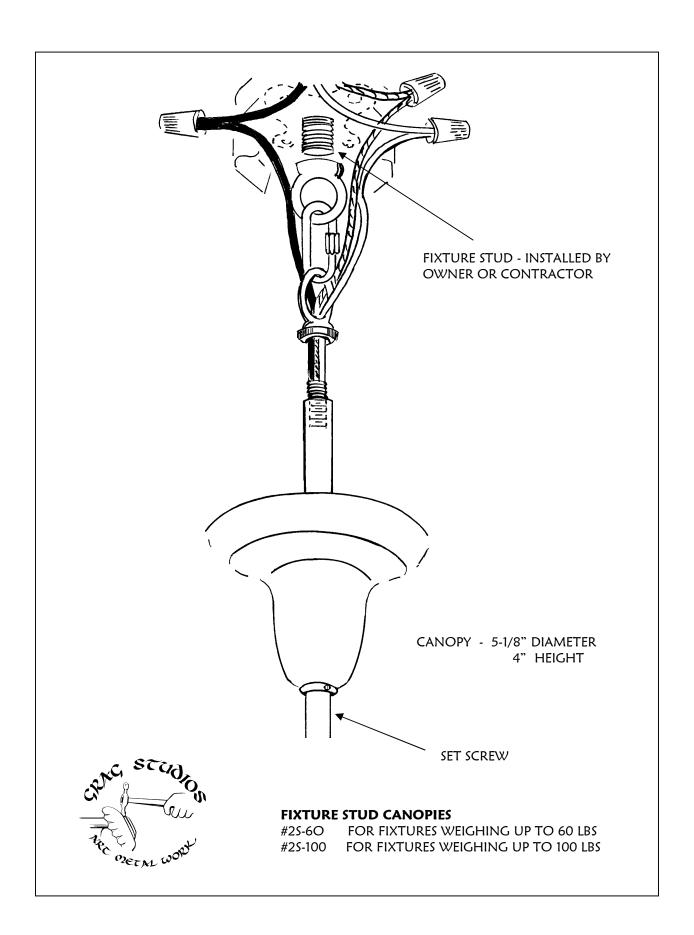


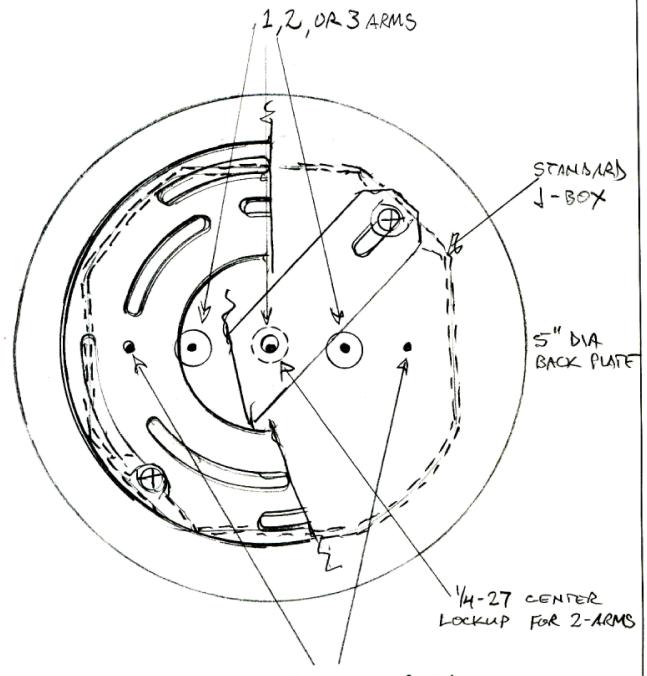
4.00" Dia.





item 5/	INGRED C	HAIDA-A		Scale Furi	
Width Body H		lgt	Extension	Canopy	
::	Socket(s)	Watts ea.	Finishe		
	Date	Revise	ed St	neet No.	

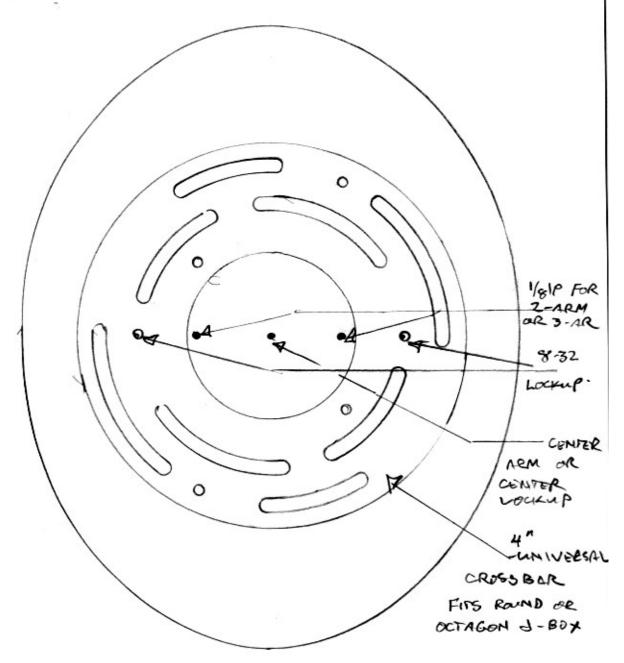




8-32 LOCKUP ON RING BRACKET FOR 1 OR 3 ARMS



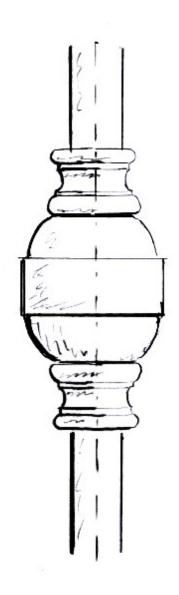
Item II ROUND BACK PLATE Scale FULL						
Width	Body H	łgt	Extension		Canopy	
::	Socket(s)	Socket(s) Watts ea.		Finishes N/A		
	Date 6-3-	-14 Revis	ed	Sheet	No.	



5 Inc+ W. 61/2 INC+ H.

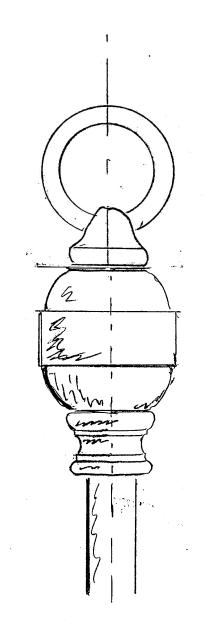


TYPE NOTO	V4L BACK	PLATE
FOR:		SCALE FULL
Date &-9-11	Revised	Sheet No.





Item 972	M	SPLIC	E BODY	/		Scale Full
Width 11/2	u L	Body H	lgt 2 3/4 "	Extensio	n	Canopy
::	So	cket(s)	Watts ea.		Fini	ishes
Date		Revis	'. NAL be	13	Sheet No.	

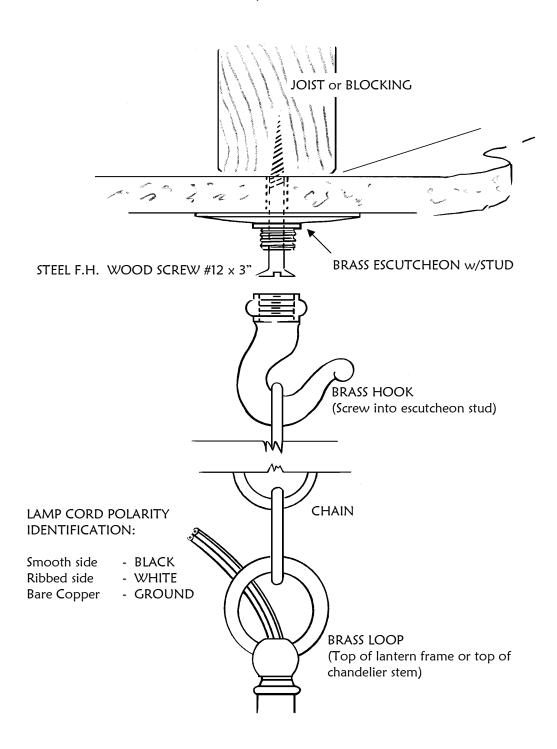




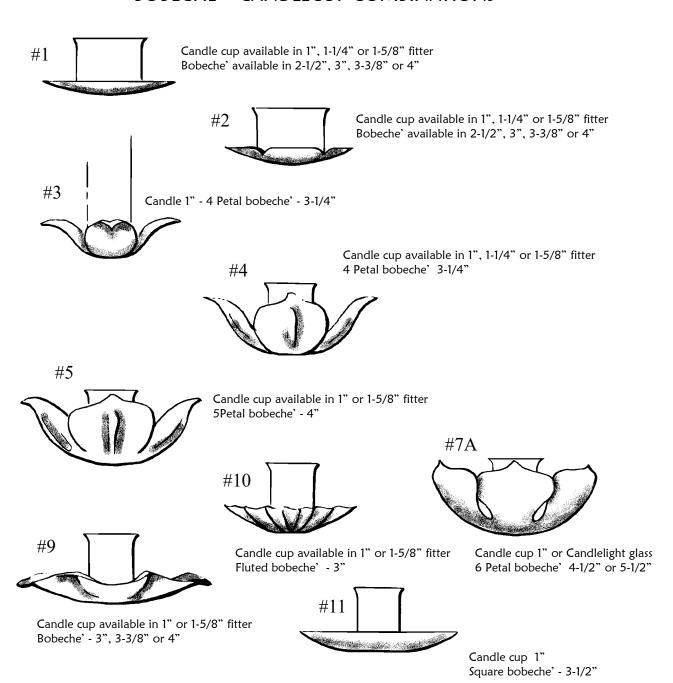
TYPE: Stem-to-Chain Splice Body				
FOR:	SCALE: Full			
Date: Mar 2020	Sheet No.			



SWAG / CHAIN FIXTURES



BOBECHE' - CANDLECUP COMBINATIONS

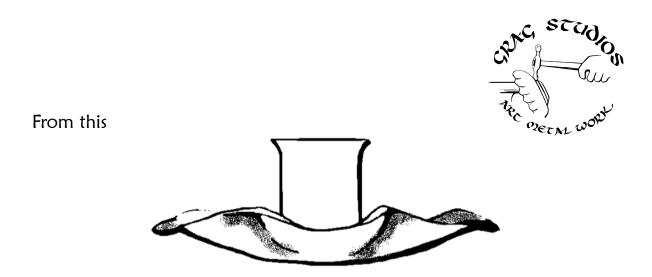




Candle cup available in 1" or 1-5/8" fitter Bobeche' - 3", 3-3/8" or 4"

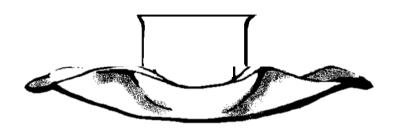


Custom modifications available - call factory for prices



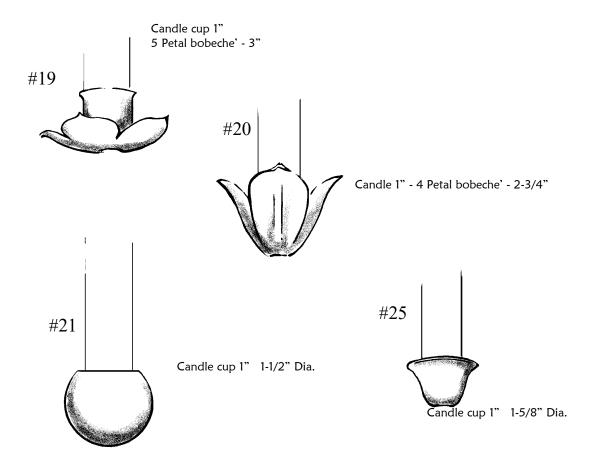
#9 Bobeche/candlecup... 4" dia. With 1" std. candle cup or 13/4" c.c. for glass shade

To this



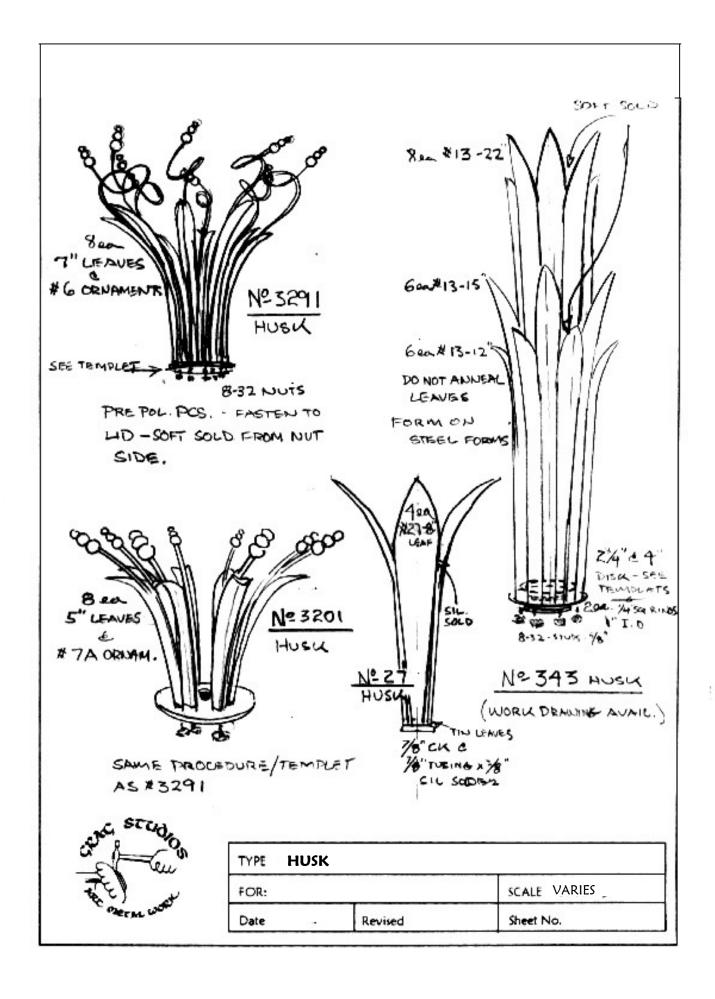
BOBECHE' - CANDLECUP COMBINATIONS

(Continued)

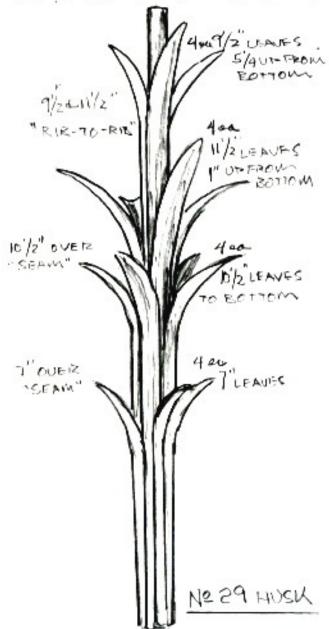




Custom modifications available - call factory for prices

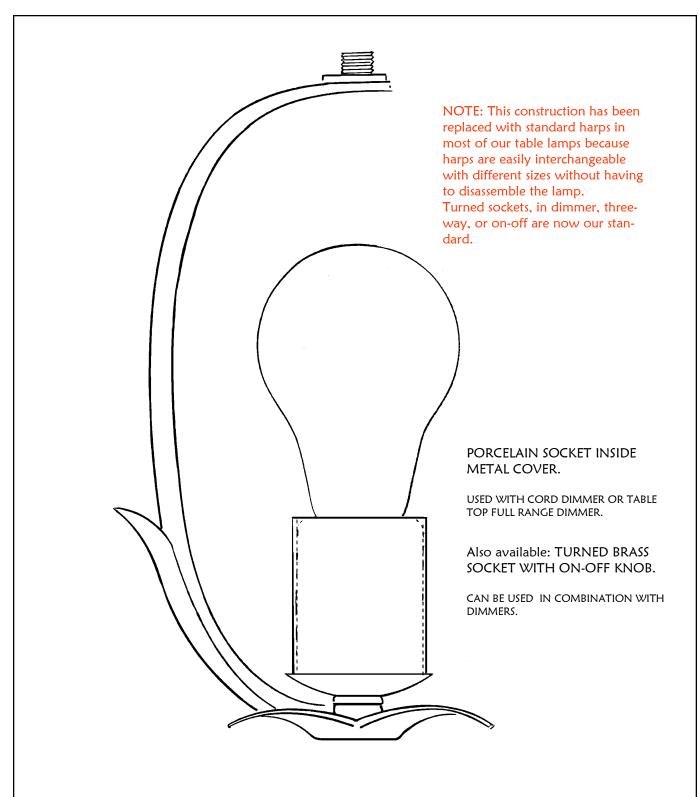


STEM - 063 × 98 OD × 16"
Y'OD X I" INSERT, BOTHENDS, DRILLGTAP



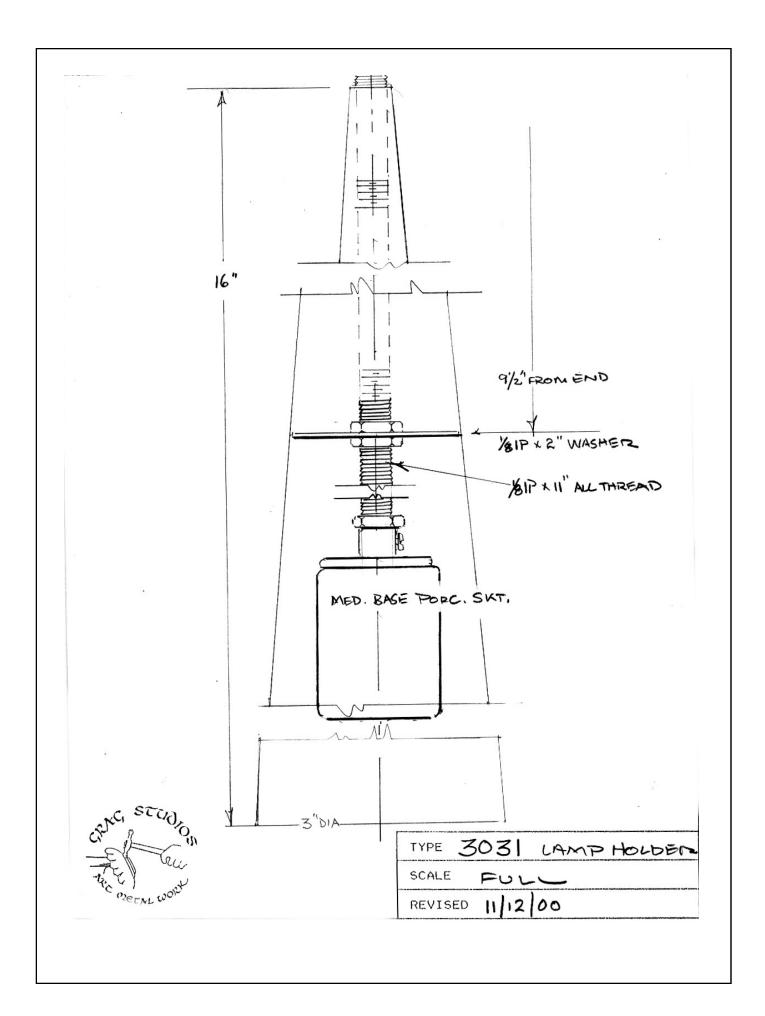
THE STUDIOS

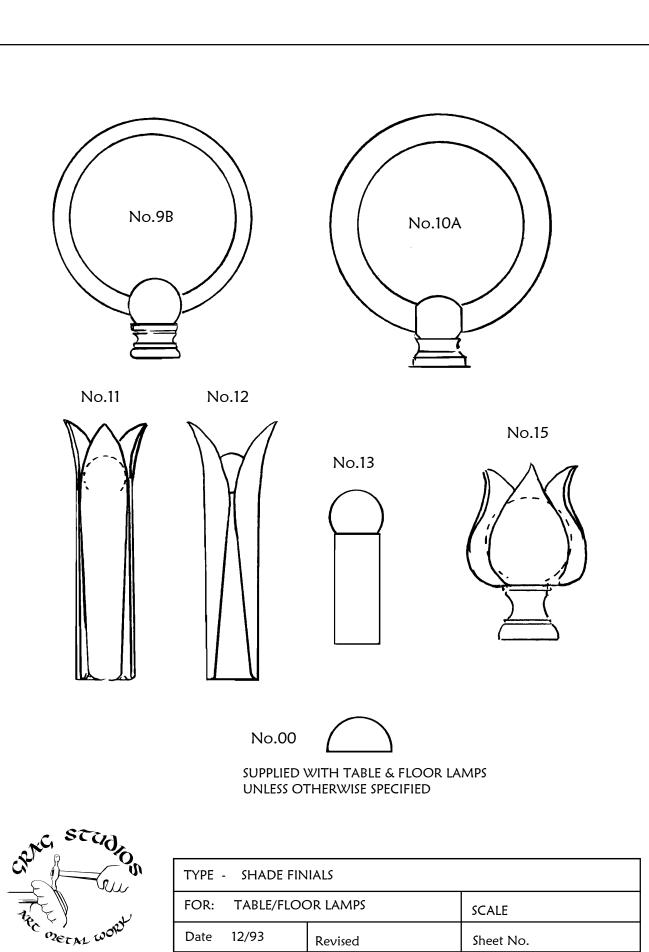
TYPE HUSIA			
FOR: STEWS	SCALE		
Date 3 4 03 Revised	Sheet No.		

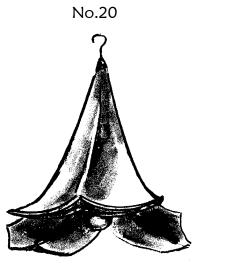




Item SH8 SHADE HOLDER					Scal	e	
Width		Body Hgt 8" Ext			on		Canopy
1 :: MB Socket(s) 150 Watts ea.			•	Finish	nes - N	NOST	
	Date 2/94 Revis		ed		Sheet	No.	







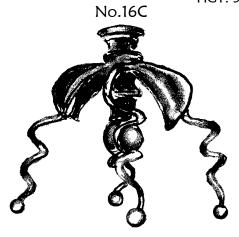
No.22

HGT. 4.5" if used with 25" dia. or 5.5" if used with 31" dia.

HGT. 3.5"

No.21

HGT. 3.75" for 14" dia. Up-lights





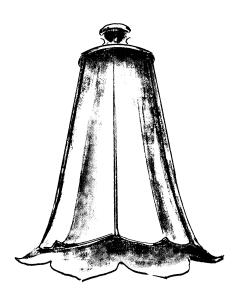


HGT. 3.5"

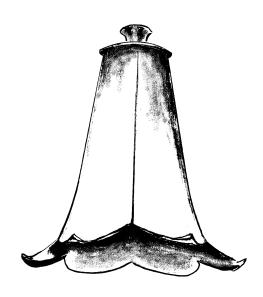


TYPE: FINIALS		
FOR: UP LIGHTS		SCALE
Date 1991	Revised 4/2/03	Sheet No. 12

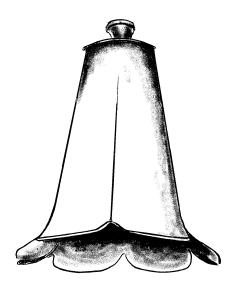
DOWN LIGHT REFLECTOR SHADES 75 WATT R20 or 50 WATT PAR20



No. 1 Used with 3716/17 up light



No. 2 Used with 3712/13 up light



No. 3 Used with 3714/15 up light

SHADE OVERALL HEIGHT - 6.75" (Add to body height of individual up lights)

SHADE AVERAGE WIDTH 5.75"

Note:

When ordered with a FIXTURE, unit will be wired into a separate circuit so that both up & down lights can be operated independent of each other if desired.



TYPE	TYPE REFLECTOR DOWN LIGHT SHADES					
FOR:	3712 etc UF	LIGHT SER	RIES	SCALE N/A		
Date		Revised	11/1/2004	Sheet No. 13		