

Johnson 75 Alphabets

HIS BOOK

Sign Painting

A Complete Manual
Self-Educational

many
Minor Composites and
96 Lay Outs 96 ^{and} Text

ATKINSON'S SIGNS



ATKINSON'S
SIGN PAINTING
UP TO NOW

A complete manual of the Art of Sign Painting—Contains Ninety Six Designs or Layouts and accompanying color notes—Seventy five Alphabets embracing all standard styles, their modifications and alternates—Comprehensive text covering all practical phases of the art— for every day reference in the shop—

By FRANK H. ATKINSON



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PREFACE

Atkinson presents his book without apology and wishes to state that the "work" was not inspired by any latent egotism nor a desire on his part to pose as an author. The intent has been to present his experience of twenty years in as short and concise a manner as possible, omitting nothing that will aid the energetic and determined student to acquire greater knowledge and ability.

There are no "experiments" in the book, the practical and technical matter reflects the methods in vogue with the foremost "talent" of the present day. Nor does he wish to supplant other previous and meritorious works upon the same subject. His advice is, "*Get them all.*"

The book as you find it is an every day record of experience and association with foremost contemporary talent. Aside from the de-

signs and alphabets in the book there is no credit due him.

With these few remarks he respectfully dedicates the book to the Craft in general.

He has purposely compiled the text in a rather disconnected way—making it necessary to consult the index at all times. He also repeats some phases under different headings, which he thinks an advantage.

The Reviews and Test Questions in back of the book are for the beginner's guidance and help, if he desires to study closely and systematically. Atkinson feels that the book will be gladly welcomed by the Craft in general. No book extant contains as much text or as many Alphabets.

"HIMSELF."

CHAPTER ON GILDING.

Gold leaf is 22 carat fine, twenty books to the pack, twenty-four leaves to the book; leaves are $3\frac{1}{4}$ inches square. On flat, smooth surface one book will cover and gild solidly $1\frac{1}{2}$ square feet.

To gild lettering or grounds solidly all leaves and parts of leaves should lap on the joints in much the same manner as the carpenter laps shingles. This applies to both glass and surface gilding. *Surface gilding* embraces all classes of board signs (either varnish or smalted grounds), marble japanned tin, pressed brick, zinc, silk and

employed when using less than full leaf. The *break* is produced by pressing a trifle with the thumbs of each hand on edges of the book at stopping point, in the manner and position as shown. When full leaf is to be used proceed as in Nos. 1, 2 and 3, exposing the full leaf, then as in No. 4, omitting No. 5.

Surface gilding admits of rubbing and removal of scewings immediately after completing the laying of the leaf. Clean cotton bat should be used, free from seed or foreign substances. Use a wad as large as can be carried in one hand, slightly compressed. First remove the loose gold or scewings by a light circular motion in an



Fig. 1.
OPENING BOOK.

Fig. 2.
DELIVERY TO "SIZED"
PORTION.

Fig. 3.
THUMB PRESSURE AT
EDGES OF BOOK TO
BREAK LEAF AT DE-
SIRE POINT.

Fig. 4.
TURNING BACK TO DE-
LIVER FULL SIZE
LEAF.

Fig. 5.
LAYING FULL LEAF.

satin, galvanized iron, etc. All surface gilding is executed *direct from the book*, as per the illustrations.

No. 1 is first motion of turning leaf of book with index finger of the right hand, exposing the gold.

No. 2 is the thumb movement of rolling back the paper leaf, exposing one-eighth, one-quarter, one-half or the full leaf, as the "sized" portions of the work direct.

No. 3 carrying book to the work, placing edge of the book against the surface.

No. 4 is rolling forward, using very light pressure, which delivers and places the gold in contact with the size.

No. 5 is the *stop or break* at the desired point, and is always em-

upward stroke. The cotton will collect the scewings, and when loaded rub across the screen in the scewing box, which will deposit the gold in the box in fine particles.

SCEWING BOX.

A small box used for the sole purpose of collecting "scewings" from gilding, is made as follows: Take ordinary cigar box and fit light, loose frame on inside at the top. Cover this frame with screen wire. When scewing box is full, empty and sell to the buyer of gold waste. We urge the savings of all *cotton wads* which have been used in burnishing and cleaning gold, either on glass or surface gilding;

also save all old letters which bear gilding and which are beyond repair, or future use. Burn these and save the ash.

ON REPAINTS.

In cleaning up surface gold smalt ground signs, *burn* out the lettering first and save separately; then proceed with burning off the rest of the ground; save the old smalt and scale in a barrel. The extra effort required in saving all gold waste means from \$100 to \$500 annually in the average shops employing from three to seven men.

After scewings are removed from the work rub or burnish the gilding, using moderate pressure.

(*A word about burnishing surface gold.* It means that the size is hard and just right. Consequently it will stand the rub or vigorous burnish which is so essential to good, bright gild.)

If size is not hard enough to stand a vigorous rub with pressure, it is not worth its use.

Sizing is divided in two classes: Quick size, which is Japan Gold size, tempered to dry with proper gilding *tack* in from three-quarters of an hour to eight hours. Slow size, which dries with proper gilding *tack* over night and up to forty-eight hours and beyond.

There are but two reliable Gold Size Japans most popular with the sign trade, *i. e.*, Nonpareil Japan, manufactured by the Chicago Varnish Co., and Harland's English Japan Gold Size. "Nonpareil" is the gold size universally popular with the trade, and the Harland size is used exclusively by first class wagon letterers.

Nonpareil used clear will gild in three-quarters of an hour if the weather is dry and of an even temperature. The proper tack is reached when size is apparently dry and hard, and a *whistling tack* is felt when lightly touching *the back* of a finger to it; *the tack* is unmistakable when one becomes accustomed to it. The same is true of *slow size*, with the exception of *the tack* being more pronounced than in the quick or semi-quick adhesives.

THINGS TO AVOID.

Avoid gilding either quick or slow size too soon, the result will be far from satisfactory, as well as causing many "*size deviltries*," principal among them being the *lack of lustre* and the inability to properly *rub* or burnish the gilding. When this occurs it is called "*drowning*," and in every sense entitles itself to the name.

Gilding carved or raised letters, gild as on surface work and use two-inch dry camel's hair brush to "stomp" or force loose leaf into crevices and carvings. For good gild, all carved letters should be sized in *over night size*.

Slow size is not practical during the winter months in northern latitudes. Better results are obtained with the quick size, "slowed" or tempered to dry with a *tack* in from three to five hours. This gives equally as fine a gild as a slower or *over night size*.

Gilding small raised letters or thin script, raised or carved, many prefer using the "Tip" (see glass gilding), claiming more speed can be made and a slight saving of gold.

If an over-night size is used and it chills over night it will have no apparent *tack* in the morning. Do not place near the fire or stove, but allow the room to reach a comfortable temperature. In most cases the *tack* will appear about noon. Avoid this bother as suggested by confining the use of over-night size to the favorable or warmer months.

In the summer months trouble will be experienced with quick size when the atmosphere is humid or sultry. The size will not dry evenly; as a remedy add a small quantity of good quick rubbing varnish, which will have a tendency to harden the size uniformly.

In quick size practice start with clear Nonpareil Japan upon properly coated surface. If light colored ground (for either varnish or smalt finish) add small pinch of Prussian blue in oil to the size. This will give the size "color" so that all strokes can be noted. If dark varnish grounds (which should be flat or semi-flat) leave out "color," use "size" clear, as every stroke can be readily seen without the aid of coloring matter.

All varnish grounds should be dry corn starch or rotten stone part of ground not sized. If b touch up with same ground c eraser.

Wagon lettering is usually should be lettered on the rubbin fully pounced before "sizing in time necessary to letter a wagon nish. High grade finish varnish that defies the ordinary pounce r room for months. In this case th powdered pumice and water, to and "chamois" dry. Follow wi whole surface where lettering o

Fill teacup two-thirds full white of one egg, stir and app and "size" lettering in Harland proper tack is reached. The lea alike, but will clean up nicely all, removing all waste gold, lea

TEMPERIN

Harland's Gold Size can be drops of boiled oil or finishing v est to use. Boiled oil has a tender and must be used discriminately.

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All varnish grounds should be pounced with either dry whiting, dry corn starch or rotten stone to prevent gold from adhering to any part of ground not sized. If by chance a trifle does adhere in spots, touch up with same ground color or erase, using ordinary pencil eraser.

Wagon lettering is usually in gold, aside from canvas tops, and should be lettered on the rubbing varnish coat, which should be carefully pounced before "sizing in" the lettering. However, it is sometimes necessary to letter a wagon in gold upon the finishing coat of varnish. High grade finish varnish is very elastic, hence it retains a tack that defies the ordinary pounce method even after standing in a ware-room for months. In this case the panel should receive a light rub of powdered pumice and water, to "knock off" the gloss. Wash clean and "chamois" dry. Follow with light rub of dry curled hair. Size whole surface where lettering occurs with the following solution:

Fill teacup two-thirds full of cider vinegar, to which add the white of one egg, stir and apply. When dry, proceed with layout and "size" lettering in Harland's Gold Size, used clear. Gild when proper tack is reached. The leaf will adhere to lettering and ground alike, but will clean up nicely by passing dampened chamois over all, removing all waste gold, leaving lettering clean and sharp.

TEMPERING QUICK SIZE.

Harland's Gold Size can be slowed as desired by adding a few drops of boiled oil or finishing varnish. Finishing varnish is the safest to use. Boiled oil has a tendency to sweat when added to gold size and must be used discriminately.

Nonpareil Japan can be tempered by adding small quantity of fat oil. The latitude is wide and we advise the student to start with a few drops of fat oil added to small cup of Nonpareil Japan, say about four tablespoonsful. Note the time it takes to reach gilding tack and make a record of it. The more fat oil the slower the size. Experiment and records will enable the student to temper from one hour to eight hours at his pleasure.

FAT OIL FOR SLOW SIZE.

Suitable for all kinds of exterior gilding. Fascia surface gold signs, raised letters, etc. Should never be varnished. Fat oil is old or aged boiled linseed oil and enough cannot be said of its importance in sign painting. If used as here directed will never fail of fine result.

Wherever "size" of any kind is used the surface should be free from suction. Work should be primed in thin lead coating, mixed half oil and half turpentine. Shellac all knots and pitchy places before priming. Also use small quantity of Japan in your priming. When priming is dry, sandpaper with coarse sandpaper and second coat with heavier coat of lead, mixed three-fourths turpentine and one-fourth oil Japan enough to harden properly. All coating should be applied quickly, cross-stroked and feather stroked from end to end quickly. This is necessary to get a uniform distribution.

If desired the work can be laid out upon second coat, if indelible pencil is used, per the following: Lay out roughly in chalk, follow with charcoal, making corrections, and then trace with indelible pencil. Proceed to third coat, which must be flat coat, viz: White lead thinned with turps only; lay quickly and smooth. The indelible pencil will show through faintly, but distinct.

(Note—This same layout method is employed by progressive Bulletin Artists and can also be used advantageously on commercial signs that are executed in full color, whether light or dark grounds.)

Third coat should dry flat, with no perceptible gloss. Sandpaper second and third coats lightly with 00 sandpaper. Work is now ready for "sizing in."

If you desire to "layout" work on last or third coat, tint same a lead color, which enables chalk to show plainly—"layout" in chalk, correct in charcoal, dust off and "size in." If you wish to be doubly sure that no suction exists, trace your layout with lead pencil, and give space occupied by lettering a thin wash coat of shellac. If you do not trace with lead pencil, the shellac will wash away charcoal; proceed with the sizing.

Fat oil for fine results *should be thinned with gasoline*. Thin fat oil eliminates the possibility of "gummy edges" and does away with the "Rubbing Out Method," as in the case of heavy or "thick size." In the thin state it can be flowed carelessly and will always give a uniform result, that of an exceedingly thin film of size, with gloss unimpaired owing to the fact that the gasoline evaporates almost immediately after application, leaving the size in its original state. Permits of a vigorous, hard rub with the cotton, producing the high burnish so essential to fine gilding.

Another size deviltry, which is avoided by using thin fat oil, is the following: During the cold months if an over-night size is used and applied "heavy," it is bound to chill over night and if gilded next day when tack is reached it will gather more warmth when gilded and "crinkle" the gold, making a very unsatisfactory gild to say the least.

OVER-NIGHT SLOW SIZE.

To clear fat oil add one-tenth of its bulk of turpentine dryers.

FORTY-EIGHT HOUR SLOW SIZE.

Clear fat oil with one-twentieth of its bulk of turpentine dryers. *Thin with gasoline to a very thin flowing consistency.*

GOLD BLOOM.

A job of gilding sometimes remains in shop for several days or a week and if the weather is sultry and damp the gilding will take on a dull appearance and will have a bluish tinge. This is called "*gold bloom*," and should cause no worry, as it is quickly removed by rubbing lightly with damp chamois, restoring it to its original brightness and lustre.

CLEANING GLASS.

To clean *old signs* off of windows, *mix and boil* thin flour paste, to which add concentrated lye (sufficient to make it good and strong). This will immediately convert the solution into paste consistency.

Apply several coatings, allowing ten or fifteen minutes between applications. Lift or scrape with ordinary wall scraper or putty knife, rub with diluted ammonia with powdered pumice stone in the rag; sponge off and rub with whiting and water; sponge this off, chamois and polish with clean piece of cheese cloth, or tissue paper. Now ready for gilding.

CLEANING LOOSE GLASS SIGNS.

Provide a *lye bath tub* about 70x40x10 inches, made of galvanized iron. Fill with water and add seven pounds of concentrated lye. Stand glass to be cleaned in the bath on edge, allow to remain until paint is destroyed, remove from bath, rinse in clear water and lay on flat table, wipe dry with sawdust, rub with dilute ammonia and whiting, dry with *clean* sawdust, and polish with clean cheese cloth. Now ready to gild.

GILDING GLASS.

Glass must be absolutely clean on both sides. Clean as per previous instructions and no trouble will be had. Sign must be laid out accurately, either in chalk on face of glass or by pounce pattern on face of glass. If pattern is used, use whiting in pounce bag.

Four No. 0. or 4 grain quinine capsules (empty) dissolved in a pint of boiling water makes a sure size for gilding on glass in gold. For silver leaf add two more capsules.

Fish glue (genuine) is best for size in severe climates. Use piece the size of a quarter-dollar to one pint of water. Must be boiled about ten minutes.

Use *camel's hair tip* for laying leaf and brush same over hair of the head or face before attempting to *pick up* loose leaf from book. The heat thus created will hold leaf firmly to "tip" until it comes in contact with the fresh size.

Use a two-inch camel's hair brush for flowing on water size. Flow size on freely and while wet, lay leaf. Keep glass constantly wet ahead of the gilding. This is important. Avoid wrinkling or splitting leaf as much as possible and do not be too saving with your gold. See that your layout is well covered.



FIG. 6. OPENING BOOK

"When laying leaf hold "tip" the glass as possible and avoid into wet size. If a leaf insists push back with point of tip and glass underneath the true leaf. This will effectually stop it with from the fingers upon the glass will cause size to "crawl" or dry ing it almost impossible to get le which is the essential feature. When gilding is dry burnish with cotton (catching scavings first a ing). Now add one-half pint your size to weaken it some. S gilding and patch *all holes*, etc., and squares of gold. Cut the le size with the finger nail while le book on small piece of cardboard

When sizing for patching br strokes as possible to prevent was careful also not to allow size to streams—it is sure to leave streak

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GLASS SIGNS.

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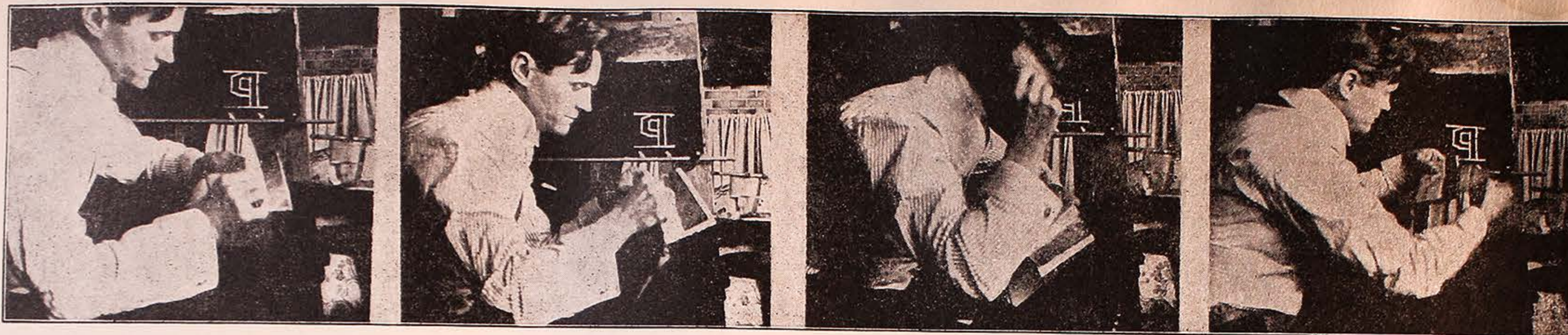


FIG. 6. OPENING BOOK

FIG. 7. CUTTING LEAF DESIRED SIZE WITH FINGER NAIL

FIG. 8. STROKING GILDING TIP ON HAIR OF HEAD BEFORE PICKING UP LEAF

FIG. 9. PICKING UP

"When laying leaf hold "tip" as nearly flat with the glass as possible and avoid getting your tip into wet size. If a leaf insists on sliding down, push back with point of tip and lightly touch the glass underneath the truant leaf with point of tip. This will effectually stop it without getting grease from the fingers upon the glass (Grease on glass will cause size to "crawl" or dry up in spots, making it almost impossible to get leaf in *close contact*, which is the essential feature in glass gilding). When gilding is dry burnish with clean absorbent cotton (catching scewings first as in ordinary gilding). Now add one-half pint of clear water to your size to weaken it some. Size over the first gilding and patch *all holes*, etc., with small strips and squares of gold. Cut the leaf in any desired size with the finger nail while leaf is still lying on the book (keep book on small piece of cardboard, trifle larger than book).

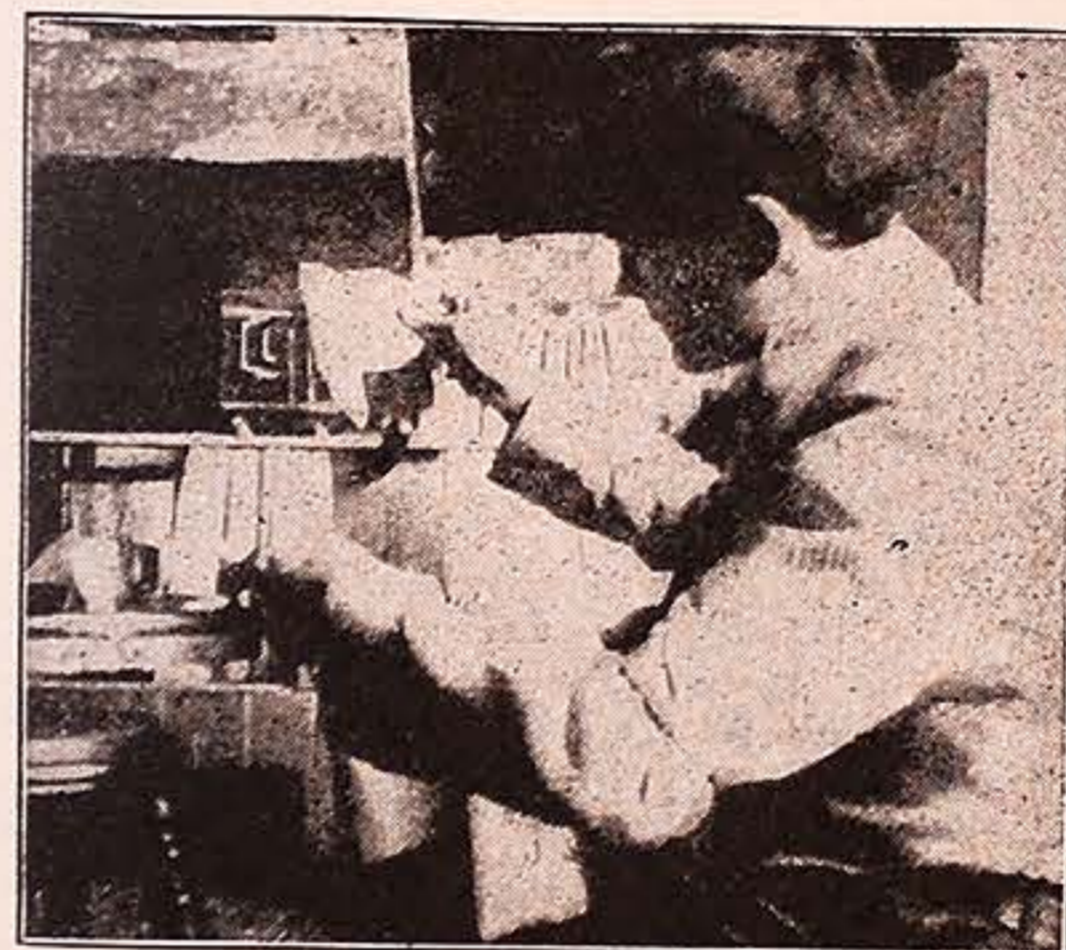


FIG. 10. DELIVERY

When sizing for patching brush your first gilding with as few strokes as possible to prevent washing up the gold of first gild. Be careful also not to allow size to run down over dry gold in little streams—it is sure to leave streaks. To avoid this if more than one

line of work occurs in the layout, flood vertically, taking section of each line, from top to bottom, instead of flooding horizontally.

Do not size more than you can patch before sizing dries. Keep glass *flooded* ahead of the patching as in the first gild. When patching is dry burnish gold with cotton and give entire gilding a quick flowing bath of clear boiling hot water, to which add a few drops of chloroform, with as few strokes as possible, flooding vertically. When *hot bath* is dry give final burnish with the cotton and proceed to form the lettering according to the layout. This is called "backing up."

Best "backing up" color is made by adding quick rubbing varnish to lamp black ground in Japan; thin with few drops of turpentine. Use a *camel's hair pencil* for all lettering on glass. This backing up color will dry to clean in one hour. As an extra precaution if in a hurry rub the backing with dry aluminum bronze or dry litharge. When set with sufficient tack (which will be about twenty-five minutes) clean off surplus gold with *damp* (not too wet) *cotton*, dipped in whiting or rotten stone. Rub by keeping the cotton in flat wad under the hand, instead of holding in the fingers. Damp chamois

the work, which will clean it, and be sure to remove every vestige of surplus gold outside of lettering. Make sure of this before proceeding with colored backgrounds, shading or other embellishment if first class job is desired. *Back up* the entire work (when dry) with white lead mixed with one-half *fat boiled oil* and one-half fresh boiled oil. In one week go back and varnish the whole work with high grade floor varnish or spar varnish, to which add one-tenth of its bulk of fat oil. Varnish should extend beyond edges of panels and lettering from one-eighth to one-half inch.

Windows *should not* be washed in less than two weeks after varnish is applied.

SILVER LEAF ON GLASS.

Proceed in the gilding same as for gold, using *Badger Hair Tip* instead of Camel's Hair Tip. Silver leaf is dense or semi-opaque, making use of pounce pattern necessary on general glass work, such as show window, etc. Pounce layout in whiting on face of glass to guide in the gilding and when ready to "back up" place pattern on gilding and *dark pounce* it before "backing up." Finish as in gold work.

(Note.—Always be provided with three pounce bags, one containing dry whiting, another containing powdered charcoal, and still another filled with equal quantities of dry vermilion and dry burnt umber. Use double thickness of cheese cloth or better use empty *Bull Durham tobacco bags*.)

A chalk layout can be employed on silver gilding on second floor and above. To see layout through silver leaf on glass, comb silver when dry with an ordinary fine tooth comb, in uniform diagonal strokes.

SEVERAL WAYS OF PRODUCING "MATT CENTERS" IN GOLD AND SILVER ON GLASS—QUICK AND GOOD.

"Back up" all the bright or burnish gold on your job, such as outlines of lettering, ornamenting, etc. When dry clean out surplus gold and size "centers" in clear Harland's Japan Gold Size, and

when tack is reached gild from book same as on board gilding. May be gilded with "tip" if preferred. Another fine matt or dead gold effect is produced by gilding in the "centers" with lager beer, using the beer same as the water size. Back it up when dry with usual backing color.

PRODUCING MATT AND BRIGHT GOLD IN ONE GILD.

Lay out carefully and faintly rub back of glass with whiting and water. When dry put in dead centers and desired matt effect, using clear Damar Varnish, to which add a little quick rubbing varnish, also a pinch of powdered pumice stone. The whiting on the glass enables one to render strokes easily and distinctly, whereas it would be next to impossible to see the stroke on clear glass, as it is colorless. When dry, rub off whiting with clean rag and gild and back in the usual manner.

STIPPLE GOLD MATT ON GLASS.

Back up the burnish work on the job, clean out and fill centers with Damar Varnish, to which add one-tenth its bulk of balsam of fir, and one-fifth its bulk of Quick Rubbing Varnish, also good pinch of powdered pumice stone. "Lay in" the varnish and stipple with a short-haired bristle fitch brush (which one can make by cutting with a sharp knife and grinding on fine sandpaper laid flat). Stippling must be done while wet and care must be taken not to "lay in" more than can be stippled easily. To be safe, lay in and stipple one letter at a time. When dry gild in *water size* and "back up" (when dry) with regular backing color. Quick rubbing varnish is added to insure perfect hardening of the Damar—*never omit it*, or it will cause trouble.

ADDITIONAL POINTS ON GLASS GILDING.

Much time may be saved in "backing up" burnished leaf by trimming top and bottom edges of lettering and border lines by means of a *straight edge* and a small stick or pencil handle cut to a chiseled edge and moistened with the lips. Hold "edge" firm and

"run" the stick along with firm
This is done before backing up.

If single color outline on pla
If double outline, do first one in J
rubbing. Second outline can be
Same with split shades.

On blend shade job after "b
transparent color, using gold siz
added. Next do the black "stop
up color," then follow with out
When hard, proceed with the "b
using light, medium and deep to
and blend with one-half inch flat
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Outlining colors for gold on gla
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bind if in Japan, and the same if

For opaque black shade on gl
drop in Japan, thinned with turp
bind.

Liberal gilding may waste gol
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(NOTE.—It is sometimes imposs
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"run" the stick along with firm pressure, cutting the gold as it goes.
This is done before backing up.

If single color outline on plain gold letter it can be an oil color.
If double outline, do first one in Japan color, binding same with quick
rubbing. Second outline can be oil and varnish color.

Same with split shades.

On blend shade job after "back up" is cleaned, do "split" in
transparent color, using gold size to which desired Japan color is
added. Next do the black "stop" shade, using quick drying "back
up color," then follow with outside stop shade, also quick drying.
When hard, proceed with the "blending," which must be *oil color*,
using light, medium and deep tones of the chosen color. "Layin"
and blend with one-half inch flat Russia sable brushes. To insure
drying of blending colors add small quantity of Japan dryers.

Outlining colors for gold on glass should be semi-transparent, such
as drop black, Prussian blue, road cart red, etc. Mix in gold size to
bind if in Japan, and the same if in oil.

For opaque black shade on glass use half lamp black and half
drop in Japan, thinned with turpentine, with gold size added to
bind.

Liberal gilding may waste gold, but it will save time, which is
comparatively more valuable.

To "fill in" backgrounds or fields on glass, in blacks, greens, etc.,
give first coat of color in Japan (with gold size or rubbing varnish
added to bind). Second coat with white lead mixed with equal parts
fat oil and fresh boiled oil. (Final coat can be tinted or toned neu-
tral.)

(NOTE.—It is sometimes impossible to get outside of windows on
second floors and above and if a pounce pattern is not used (owing to
lack of time or price paid), proceed as follows: Lay out roughly
on inside of glass, using soft white crayon, and outline the lettering
in opaque quick drying black (this before gilding). When dry, gild
as usual, "back up," let dry, clean off surplus gold and varnish or
lead coat, or both.)

CONVEX GOLD LETTERING ON GLASS.

If without background, outline lettering in opaque quick black
and put in the convex effect in Damar Varnish, with little pinch of
pumice stone (powdered) in it, let dry, gild, back up and varnish.

If with background, "cut in" and fill in background as above, or
outline in black. When dry, gild in burnish gold and "back up"
the "convex effect," let dry, clean up, and "stipple" the openings in
Damar Varnish, and gild in water size, using either XX deep gold
or lemon gold (see previous text upon "Stipple Centers").

ON CHEAP WINDOW WORK IN OFFICE BUILDINGS IN GOLD OR SILVER ABOVE SECOND FLOOR.

"Layout" on inside of the glass, using white or yellow *China
Marking Pencil*. In gilding, the water size will not affect or dis-
turb it. When gilding is dry the *marks* show through exceedingly
distinct. "Back up," etc.

QUICK JOB OF GILDING.

If you have a small job of gilding to do on glass, don't make two
or three trips from the shop to the job—do it this way:

Lay out and gild in usual manner, then assist drying of gold by
pressing carefully with blotting paper. When dry "back up". When
dry to a tack rub over with aluminum lining bronze and clean off
gold with a slightly damped cotton, or better use the breath, by hold-
ing mouth close to gilding, breathe hard against the gold and rub
out with dry cotton. Repeat often as necessary until clean. Shade
with quick black and varnish soon as dry enough, or dispense with
the varnishing and outline and shade in *fat oil black*, or plain outline
of transparent color in oil and varnish.

CHEAP WINDOW LETTERING ON FACE OR FRONT OF GLASS.

For aluminum leaf or bronze use Nonpareil Japan, clear if a
small job, for big job slow down same with a few drops of fat oil or
finishing varnish. (Add flake white enough to color the stroke.)

When proper tack is reached apply the leaf same as directed in previous text, with no regard for the saving of the waste leaf.

NOTE.—Aluminum leaf requires a much *stronger tack* than gold, hence apply the leaf before a *gold tack* is reached. For bronze, apply same by a rubbing application, using a "bluff" made from a piece of soft velvet with wad of cotton tied to it, forming sort of a ball. Dip into bronze and apply to sizing with a circular motion, using but a slight pressure. Pass a damp chamois over the work and outline shade, etc., in quick drying oil colors.

NOTE.—If you have silver lettering to do on varnish ground, aluminum leaf is preferable. However, bronze can be used successfully per the following: Size in quick size, same as for gold, and instead of using the velvet buff, use a dry camel's hair duster. Dip the bronze and carry to the size and use very little pressure in distributing. When "size" is uniformly covered sponge down with soaking wet sponge of clear water and dry with moist chamois. Stripe and shade in Japan colors.

NOTE.—If the "buff" is used in applying bronze to the "size," the rubbing will produce a faint "halo" around the lettering that cannot be removed.

Best bronze method is the use of best quality aluminum bronze, using it in the pencil as though paint. Proper way to mix is to break the bronze stiff in rubbing varnish and thin to *penciling consistency* with turps. In lettering keep pencil well charged and apply in a flowing manner. Practice will enable the student to flow with a full charged pencil and keep from the verge of "running" or sagging. By reason of the varnish it will have an immediate tendency to level, and when dry will reflect a uniform, even distribution, which cannot be discerned from a "rub in" job.

Use gold lining bronze in the same manner.

DUPLICATE GLASS SIGNS IN GOLD OR COLOR.

Design and cut a background stencil (see Stencil Cutting), fasten to face of glass for gilding guide and gild entire layout solidly. When patched and dry, fasten pattern to light frame, which hinges

to flat bench. (Frame must fit the glass loosely.) Provide an inch block the size of the glass and fasten in position to the bench so that the pattern frame will fall directly over it. Lay glass, gilded side up, on the block, let pattern fall into position over it and breathe upon the gilding which shows through the cutting in the pattern, and rub out the gold with an ordinary oval horse brush. Gilding must be kept moist with hard breathing or the gilding *will not* rub out. Pass the first or male pattern through entire lot before proceeding with second or female pattern. Operate as previously and observe care in forcing the second pattern to "register," and if a third pattern is necessary observe the same care. Patterns should clean away all surplus gold, leaving lettering and ornament clear. Put in backgrounds in strong, medium drying oil color, and apply evenly. Sift any color of "flock" on the color before drying, which will give the back of the sign a neat appearance, if for inside display upon show cases or in windows.

If color is specified, coat entire glass in *distemper color*, using barely enough *mucilage* or gum arabic to bind lightly. Rub out in same manner as for gold. Apply a background of oil color.

DRILLING HOLES IN GLASS FOR HANGERS.

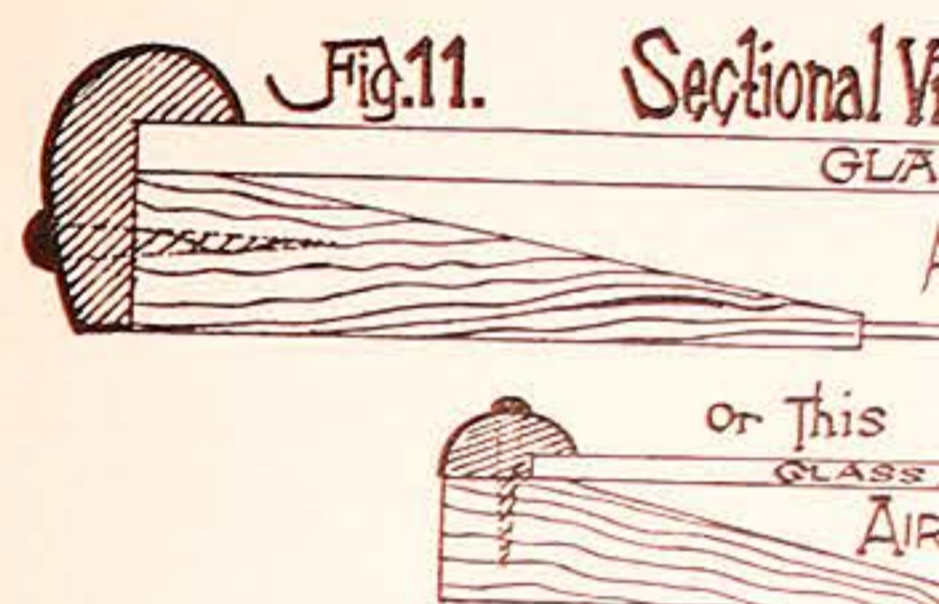
Grind short piece of three-cornered file to a blunt point on a grindstone, fasten in ordinary carpenter's brace and start boring with a very slight pressure, barely the weight of the tool. Lubricate with equal parts of ether, ammonia, turpentine and camphor. Drill half way through and meet the hole from opposite side of the glass.

BEDS OR FRAMES FOR EXTERIOR GLASS PANELS.

Fig. 11—Sectional View of Glass Bed.

Beds for plate glass panels should be light and strong, and if fascia style, *i. e.*, flat against building, can be built from one-inch lumber about five or six inches wide, allow for bottom, or contact edge of moulding (which should fasten to face of bed frame and flush with outer edge). Add the width of the "moulding lip" and

bevel the rest of the piece. strengthen the corners with small bed frame is made it should have moulding, and a resting face for the moulding. This will leave around the edges, which is all be fastened by screwing through



Frames for lamps or transparent lumber, either four, five or six cover with one-half inch square ornament the face of frame with round each corner block. Carved scroll nate effect. Put one-inch batten edge to hold glass. Set glass from round moulding.

ANATOMICAL

The ideal man's figure (front) to breast bone, 1 head; breast bone head; center to just above knee cap, to beginning of calf, 1 head; from base of calf to sole of foot, 1 head. sixth the length of the figure, the the head, the ankle is one-fourth of

it the glass loosely.) Provide an inch fasten in position to the bench so that exactly over it. Lay glass, gilded side up, into position over it and breathe upon through the cutting in the pattern, and rub by oval horse brush. Gilding must be or the gilding will not rub out. Pass through entire lot before proceeding with operate as previously and observe care to "register," and if a third pattern is are. Patterns should clean away all g and ornament clear. Put in back-rying oil color, and apply evenly. Sift color before drying, which will give the rance, if for inside display upon show

entire glass in distemper color, using um arabic to bind lightly. Rub out in ply a background of oil color.

IN GLASS FOR HANGERS.
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FOR EXTERIOR GLASS PANELS.
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bevel the rest of the piece. Mitre the corners. If large glass, strengthen the corners with small angle irons screwed to edges. When bed frame is made it should have only flat face sufficient to take the moulding, and a resting face for the glass, the width of the "lip" of the moulding. This will leave the glass free from contact, except around the edges, which is all that is required. Moulding should be fastened by screwing through the face.



Frames for lamps or transparencies can be made from one-inch lumber, either four, five or six inches wide. Lap the corners and cover with one-half inch square blocks, to hide the lapping, and ornament the face of frame with rosettes, including a larger rosette on each corner block. Carved scrolls and a "pole" will produce an ornate effect. Put one-inch battens on back projecting beyond inner edge to hold glass. Set glass from the face and fasten with quarter-round moulding.

ANATOMICAL POINTS.

The ideal man's figure (front) : Top of head to chin, 1 head; chin to breast bone, 1 head; breast bone to navel, 1 head; navel to center, 1 head; center to just above knee cap, 1 head; just above top of knee cap to beginning of calf, 1 head; from thence to base of calf, 1 head; from base of calf to sole of foot, 1 head. Total, 8 heads. The foot is one-sixth the length of the figure, the hand is three-fourths the length of the head, the ankle is one-fourth of a head across, the calf is a little

more than half a head across, the knee at both top and bottom is half a head wide, the thigh at the widest point is three-fourths of a head in width, the waist is one and one-fourth heads wide, the shoulders are two heads wide, the neck is half a head high.

The comparative divisions in the height of the ideal woman's figure are substantially the same as those of an ideal man, but the widths are considerably different. The foot is one-sixth the length of the figure, the ankle is one-fourth of a head across, the calf is a little over half a head across, the base of the knee is half a head wide, the top of the knee is a little wider than the base, the thighs are each three-fourths of a head wide, the hip is two heads across, the waist is one and one-eighth heads wide, the shoulders are one and a half heads across, the neck is half a head wide, the front head is egg-shaped, the smaller end being at the base. A band one-fourth the length of this oval and placed directly across it (one-third down) gives the position at either edge, of the top and bottom of the nose, and the top and bottom of the ears. The front eye is divided into three equal parts, of which the pupil is the central one. The eyes are the width of one eye apart, the ear is as long as the nose, the mouth is a little wider than the eye.

The center of a baby's figure is at the navel. A child of about three years is usually five heads high, the upper part of its figure being three heads, the lower part two. A child of six years is six heads high.

AUTOMATIC BRUSH.

FOR LINING, RUNNING BEVELS, ETC.

Take any size flat bristle brush, unchiseled, and bind with piece of thin tin or brass, leaving the bristles exposed three-eighths of an inch, charge, by stomping in color laid on a palette, use same as a carpenter uses his pencil against his rule. In this manner a stripe can be run fully twenty feet, uniform and clean and as quickly as the operator can walk backward.

AD. SIGNS

BULLETIN AND WALL SIGNS.

For bulletins use oil colors in one-pound and five-pound cans, and white lead in oil.

All pale colors or tints should be "flat," *i. e.*, "break" the lead in clear turpentine or benzine, adding pale Japan dryers to aid the drying. All dark background colors and dark lettering colors should be *oil color* with dryers to aid in drying.

A bulletin can be worked up on a dry white-coated surface, or, all white and pale colors can be "broken on," as in wall sign work, and "cut in" with the background color.

Layouts for bulletins or walls should first be sketched on paper to a scale of one-fourth, one half or one and one-half inches to the foot. Accurate spacing and good execution of layout is thus assured on large lettering and pictorial work.

WALL SIGNS.

Wall signs are treated as per following: If new or raw wall, break lead for lettering in one-half oil and one-half benzine. This will "set" quick enough to permit "cutting in" with "ground" color. On "repaint" walls "break lead in benzine only."

All white on walls should be "double coated." Benzine permits this, as it "sets" the lead sufficiently to repeat coating at once. Apply second coat with as little stroking as possible to avoid "rubbing up" the "break on."

All "cutting in" on walls should be done in black, regardless of the background color. It is essential that a colored background should bear either white or pale tints for lettering, and all lettering should have a black outline. By "cutting in" with black it obviates the necessity of "recutting" to add the black outline as suggested, it being merely necessary to "recut" the outer edge of said outline when "filling in" is done.

Backgrounds for walls are customarily in the dark greens, blues, olives, reds, browns, etc., with black having strongest preference,

and should be procured in the dry state and broken or mixed in oil with dryers added to hasten the drying, thinning or "cutting" with benzine.

On cheap fence advertising *gloss oil* may be employed in the mixing of dry colors for background instead of linseed oil—it dries *very fast*; thin with *benzine*.

Lamp black broken in gloss oil and thinned with benzine makes a cheap and quick drying color for "trimming" and cleaning the edges of sign boards.

SCALING PICTORIAL WORK ON WALLS AND BULLETINS.

Divide *copy pictorial* into one-inch squares, drawing the lines with lead pencil, or, drive tacks and stretch black thread from tack to tack until picture is cut up into one-inch squares. Number each line from left to right on the vertical lines, and from top to bottom on the horizontal lines, on the left hand side.

Duplicate the lines on work to be executed, bearing in mind the proportionate increase in the size of the "squares," "draw in" by referring to copy, and note position of all detail occurring in the squares, "drawing in" a square at a time. Reference can be had to numbered lines to keep track of each square. Use charcoal in drawing and when completed "redraw" with a brush, using thin Burnt Sienna. This is called "fixing the drawing."

Use one-half turps and one-half japan in the Sienna *for fixing*.

ART MATERIALS.

Practically all sign painting equipment may be considered Art Material, aside from common paint stock and the larger classes of bristle brushes. Easels, straight edges, T squares, drawing instruments, tube colors, crayons, charcoal, lettering and striping pencils, distemper colors, artists' moist tube colors in water, pan colors in water, artists' chiseled bristle brushes, pattern and drawing papers, etc.

Lettering Brushes.—In Camel's Hair Letterers in quills, the *French liners* and *shaders*, assorted sizes, are preferred.

Flat Camel's Hair Lacquer for large lettering upon oilcloth,

Flat Bear's Hair or Fitch for smooth surfaces, such as pressed canvas and large bulletin surface sizes.

Flat Bristle Varnish Brushes, inch (commonly called "Cutters" on small boards, and general board "cutting in" on wall work and large sizes.

Artist Flat Bristle Brushes, in" and *lettering on*, pictorial work called *Bristle Fitches*.

Flat Red Sable Lettering Brushes for cloth and semi-smooth surfaces, for "lettering and "single stroke" work.

Red Sable Letterers, in quills, being the speediest of all letterers, adept. Carry heavy colors and letter or "spring" of the pencil.

Black Sable Letterers, in quills, ular. No. 12 is a "special," and used on general fascia board.

Red Sable Riggers for water colors.

CARE OF BRUSHES.

All brushes used in water or distemper should be cleaned above exclusively. (Do not change water) through using, rinse in clear water. Use *Red Sable "Riggers"* and "Flats" for water colors.

All lettering brushes used in oil should be cleaned by using rinse in turpentine or benzine *oil*. Lay away in tray in *flat position* smoothed evenly, in the natural shape.

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ON WALLS AND BULLETINS.

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MATERIALS.

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brushes, pattern and drawing papers,

amel's Hair Letterers in quills, the
orted sizes, are preferred.

Flat Camel's Hair Lacquering Brushes, assorted sizes, suitable
for large lettering upon oilcloth, muslin and smooth board surfaces.

Flat Bear's Hair or Fitch Hair for large lettering on rough or
smooth surfaces, such as pressed brick (coated), large muslin, coated
canvas and large bulletin *surface lettering*. Have them in assorted
sizes.

Flat Bristle Varnish Brushes, chiseled, one and one-half and two-
inch (commonly called "Cutters" in the trade), are used in coating
small boards, and general board color work, large pictorial work and
"cutting in" on wall work and large bulletin work.

Artist Flat Bristle Brushes, chiseled, are for general "cutting
in" and *lettering on*, pictorial work, etc., on bulletin and wall work,
called *Bristle Fitches*.

Flat Red Sable Lettering Brushes, assorted sizes for muslin, oil-
cloth and semi-smooth surfaces, exceedingly fine for free hand let-
tering and "single stroke" work. Also work well in water color.

Red Sable Letterers, in quills, assorted sizes for general letter-
ing, being the speediest of all lettering pencils in the hands of the
adept. Carry heavy colors and lead colors without affecting the life
or "spring" of the pencil.

Black Sable Letterers, in quills. Nos. 6, 8, 10 and 12 most pop-
ular. No. 12 is a "special," and used mostly for "cutting in" on gen-
eral fascia board.

Red Sable Riggers for water color, suitable for show cards.

CARE OF BRUSHES.

All brushes used in water or distemper color should be used in
above exclusively. (Do not change to oil or japan color.) When
through using, rinse in clear water and do not fail to keep a set of
Red Sable "Riggers" and "Flats" for water color work exclusively.

All lettering brushes used in oil or japan colors when through
using rinse in turpentine or benzine and grease thoroughly in *lard*
oil. Lay away in tray in *flat position*, taking care *that hair* is
smoothed evenly, in the natural shape of the brush.

All Bristle Fitches and Bristle Flat Brushes should be carefully
wrapped separately in paper, rolling the paper tightly around the
hair, conforming it to shape of the brush, bending end of paper sharp-
ly, taking care that the "fold" occurs one-eighth inch beyond the
point of the hair; stand in pot of turpentine. The paper wrappers
keep weight of handles off of hair and keep the brush in the pink of
condition, points always sharp and elastic.

Coating Brushes should be wrapped in the same manner, and
keep in *turpentine-tray* or trough—*never in water*.

By reason of the quick drying nature of much of the stock used
in sign painting it is almost impossible to keep pencils from getting
"lousy" and dirty in the *heel* or *butt* of the pencil. When this occurs,
rinse in chloroform and clean thoroughly, then rinse in turpentine,
grease, and lay in tray.

Bristle tools, when by accident they become "lousy," should be
cleaned in *fusil oil*, then rinsed in turps and wrapped.

If by accident a lettering pencil becomes warped or crooked,
keep it saturated with turpentine and draw between the forefinger
and a moderately hot stove pipe or steam pipe. If the hair in a
pencil is a trifle longer or shorter (*liners* or *shaders*) plug up end of
quill with pine plug, shellaced. Take wide mouthed bottle, fill with
hot water and insert pencil, quill end down, into bottle, allowing
the water to extend just beyond the indentation (which holds the
hair to place), and taking extreme care not to allow any water to
touch the hair (if it does it will reduce the spring and spoil an other-
wise good pencil), the indentation will immediately come out, per-
mitting pulling the hair out or pushing it in the desired length;
bind the indentation back in the quill by means of a fine-copper wire,
leaving it in place for all time or removing when quill becomes dry.
The indentation remains if wire is removed.

DRAWING WHITE LEAD.

Break keg lead in turps, mixing thoroughly. Let stand over
night. In the morning pour off the liquid on top. Repeat the op-
eration until liquid on top (after standing) is absolutely clear.

For use add Rubbing Varnish sufficient to give good spreading quality. Should dry almost flat.

Drawn lead is suitable for coating small and large boards when work is to be varnished and answers for second coat over priming.

A WORD ABOUT PRIMING FOR BOARDS.

Priming (when properly done) should show no "paint film" upon the surface. The wood should have the appearance of being saturated with the *prime*, and by reason of this saturation the surface should possess "a tooth" caused by the raising of the wood fibre. The use of turps or benzine is imperative, as it neutralizes the oil and aids in the absorption. The dryers are added to harden, making it possible to sandpaper the board, bringing the surface back to its original smoothness before second coating.

Knots and pitchy places should be "thin shellaced" before priming, and care must be taken to "rub" priming out well upon the *shellaced spots*, owing to the suction being partially or entirely stopped.

Priming should bear but enough white lead to produce a stain upon all board surfaces intended for good grade of commercial work, whether for color treatment or gold.

Bulletin boards, however, can be primed in a *heavy lead prime*, as it is not practical to give more than two coats of white with but one object in view, that of producing a solid and uniform white surface with two coats of lead.

PAINTING GALVANIZED IRON AND ZINC.

Practically all bulletins now erected are "faced" with galvanized iron and should be treated as follows to insure durability:

Take a five-gallon carboy nearly full of water, in which dissolve three-quarters of a pound each of chloride of copper, sal ammoniac, and nitrate of copper; when these ingredients are thoroughly dissolved, add three-quarters of a pound of crude hydrochloric acid.

Use big kalsomine brush in applying this mixture, and the next day use same brush in rubbing off the grey "bloom."

Have priming coat very thin and rub out well, using raw linseed oil and turps, half and half, with red lead, Venetian red or white lead. Subsequent coats as in general board work. Treat zinc in the same manner before coating.

FLAT COATING.

It is essential and important that all coated surfaces should be absolutely flat or semi-flat—if semi-flat the perceptible gloss should be that of varnish (added to coating to facilitate the spread and stop suction). An "oily" gloss is not reliable in daily coatings as it is always tacky or "green," "digging up" easily under lead pencil or crayons when laying out the design or lettering.

No. 2. Simple Preparation for Zinc, Add tablespoonful of nitric acid to one gallon of water. Wash zinc with this solution before coating. Use red lead, Venetian red or metallic brown mixed with equal parts raw linseed oil, japan and turpentine. Rub this out well. Second coat with ordinary flat lead coating.

PUTTY.

Hard Putty is the only practical putty to use in sign painting, made as follows: Equal parts of keg lead and dry white lead, mix to stiff or pliable putty consistency by addition of equal parts of quick varnish and gold size japan.

SHELLAC PUTTY FOR CHEAP WORK.

Use bolted Whiting mixed "putty stiff" with Grain Alcohol Shellac. Dries immediately.

GLUE STUFFING—SWEDISH PUTTY.

(For cheap advertising boards.)

Soak ordinary Cabinet Glue over night. Place in double boiler and heat, adding whiting and a little boiled oil. Mix to a paste consistency and *knife in* with broad knife. When dry will sandpaper smooth.

Shellac if used as here directed between coats of paint or upon gilding chapter, is to stop suction. Never apply a heavy coat.

Keep Shellac exceedingly thin. Flood it on and leave unapplied, allowing fifteen minutes usually necessary, as is a primer only.

Caution.—Use Grain Alcohol with Grain Alcohol. Avoid Water, also Paint Removers containing Grain Alcohol is dangerous to health and the optic nerve, causing blindness. Shellac is confined to work that is especially applicable to "repairing" with necessary coating.

CARVED RAISED LETTERS.

Take piece of pattern paper with charcoal and letter in japan black. When letters are received, priming color. When dry, rub down with good flat lead color, with pliers with same color and give thin shellac. When gilded, tack in position coated in flat color. "Cut in" with mixed in oil with japan dryers to dry.

SMALT.

Spread smalt cloth on floor beneath and sift smalt onto board through o

Applying this mixture, and the next
the grey "bloom."

and rub out well, using raw lin-
seed, with red lead, Venetian red or
white in general board work. Treat
as in coating.

COATING.

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PUTTY FOR CHEAP WORK.

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PUTTY—SWEDISH PUTTY.

(advertising boards.)

ue over night. Place in double boiler
a little boiled oil. Mix to a paste con-
oad knife. When dry will sandpaper

SHELLAC.

Shellac if used as here directed will never cause any trouble either
between coats of paint or upon final coatings. Its use, as stated in
gilding chapter, is to stop suction on surfaces to be "sized in" for
gilding. *Never apply a heavy coat of Shellac upon any painted sur-
face.*

Keep Shellac exceedingly thin. Flow quickly without extra
stroking. Flood it on and leave it. Two or three coats can be ap-
plied, allowing fifteen minutes between coats. One is all that is
usually necessary, as is a precaution against size "soaking in"
only.

Caution.—Use Grain Alcohol Shellac (orange or white) and thin
with Grain Alcohol. Avoid Wood Alcohol Shellac and Wood Al-
cohol, also Paint Removers containing Wood Alcohol. Wood Al-
cohol is dangerous to health and the fumes will eventually paralyze
the optic nerve, causing blindness. Also bear in mind that the use
of Shellac is confined to work that is to be "cut in" and smalted, and
is especially applicable to "repaints" when it is desired to dispense
with necessary coating.

CARVED RAISED LETTER BOARD SIGN.

Take piece of pattern paper size of board, lay out lettering in
charcoal and letter in japan black. Send to carpenter or signboard
maker. When letters are received, prime by *dipping* in very thin
priming color. When dry, rub down with *fine steel wool*, and coat
with good flat lead color, with plenty of good varnish in it. Repeat
with same color and give thin shellac coat before sizing in *Slow
Size*. When gilded, tack in position on board, board being fully
coated in flat color. "Cut in" with good smalt color (lamp black
mixed in oil with japan dryers to dry).

SMALTING.

Spread smalt cloth on floor beneath trestles bearing the board,
and sift smalt onto board through *ordinary flour sieve*, or sieve pan.

Cover board with smalt to depth of $\frac{1}{4}$ -inch uniformly, and avoid
thin places or "holidays" which will show the "paint gloss" through.
Dump surplus smalt immediately onto the smalt cloth and set board
(after trimming the edges, in quick drying black) on easel or high
stilts to dry.

Note.—*Smalt* is stained or colored Sea Sand and is manufactured
expressly for sign painters use, in producing the dull velvety back-
grounds so popular in Raised Letter and Surface Black and Gold
Fascia Sign. Also made in various colors, viz.: Red, blue, royal
green, purple, etc.

Fascia, Black and Gold, Surface Letter on Flat Coated Board.
Lay out roughly in chalk, correct in charcoal, and trace with lead
pencil, thin shellac the lay-out, "size in" either quick or slow size,
gild, and burnish. Pass moist chamois over gilding before "cut-
ting in" in oil black. Smalt as per the above.

Note.—Sizing in for gold to be "cut in." Crowd size beyond the
letter outlines a trifle, to give freedom and latitude in "cutting in."

"CUTTING IN."

"Cutting in" is the term applied to the formation of a letter by
forming it with the background color, as in the case of a sign bearing
white lettering with black background.

It is more practical to coat sign white and cut it in, leaving white
in letter, than to coat sign black and surface the white letter on, which
would require two coats of white to cover, or two executions.

The exception to the rule is the dark varnish ground sign bearing
white or pale tinted lettering, which must be coated in "background
color" in Japan, and lettering must be double coated to cover well and
solid.

Note.—It is impractical to "cut in" a background in japan color
on all board work for the reason that "laps" cannot be avoided.

All signs bearing white or tinted lettering with dark backgrounds
are "cut in" and all signs bearing dark colored lettering on light
grounds are "surfaced on" except as above stated.

The customary method in dark ground varnished sign, bearing tinted lettering is per following:

Last flat coat before final ground color is applied should be neutral in tone, bluish in tone for blue finish, orange in tone for red finish, and greenish for green finish, etc.

When "color" coat is dry, lay out in faint chalk and letter in white or pale tints. When dry, varnish, and when varnish is dry, re-letter in same color to *dry flat*, making a very attractive sign.

For gold lettering, varnish ground, use quick japan gold size tempered with finishing varnish to gild anywhere from one to six hours.

Never use fat oil size under varnish. It will crack and check badly owing to elasticity of the oil, and the less elastic nature and hardening property of the varnish.

PAINT WILL PEEL AND BLISTER.

If a board is not perfectly dry when primed, paint will peel if priming does not contain sufficient oil.

Paint will peel if sufficient time is not allowed between coatings.

Each coat *must be* thoroughly dry before subsequent coat is applied.

Paint will blister if shellac between or upon coatings has been applied too heavy.

Do not *apply a quick drying color over an oily or slow drying color.*

SPONTANEOUS COMBUSTION.

Soiled paint rags, cottons, overalls, etc., should be hung on nails or pegs to give free circulation of air. If compressed, will heat and ignite, causing in most instances a disastrous *Paint Shop Fire*.

Keep Gasoline and Benzine on outside of shop premises.

Fill paint burner away from flame or artificial light.

USE ELECTRIC LIGHT FOR HYGIENIC REASONS.

Gas light consumes oxygen in large quantities and the air in a sign shop becomes very unpleasant on account of the evaporation

from freshly coated surfaces, hence we advise electric light for night work and cloudy weather.

PAINT BURNER.

Use Gasoline Torch for removing old paint and smalts from signs.

Use burner as directed, following rules of use which accompany each burner. Place board on easel in upright position and start burning from, and along the bottom edge, holding flame close enough to scorch and blister. Follow with broad scraper behind the flame, or in other words start to scrape, using steady forward pressure, keeping flame of torch just ahead of the scraper. Care must be taken not to scorch the bare wood, as it becomes exposed. When through burning and scraping, sandpaper with coarse sandpaper bent around sandpaper block, and rub crosswise of the board. Dust off loose dirt and *flat coat* for the repainting, using oil enough to bind well. Second coat in pure flat lead coating.

PAINT STRAINER.

Use ordinary milk strainer for straining purposes, keep clean by washing immediately after use with benzine.

IMPROVED STRAINER.

Fold small piece of pattern paper into funnel-shaped cone, leaving small hole at pointed end. Drop small piece of fine steel-wool or curled hair into funnel, crowding it down into the point. Pour color to be strained into funnel and hold over clean cup.

FRESH COLOR.

Always use fresh colors in sign painting. By reason of the combination of oil varnish, japan and turps, "color" gets fat and "gummy," unsuitable for use in lettering pencils. Discard all *fat color* and deposit in pot kept for the purpose. Use this old paint on *backs* of signs and general *slush* work.

A one-quart paint mill is ha
grinding accumulated "fat" or

HAND PAI

Build two frames large eno
and make them 30 feet long. J
1 foot. Join at top separating f
screen wire stretched tight To
screen, half on one side and hal
inside the screen, which will lig
execute all subsequent posters o
them out) by simply covering th
Use wooden paper clips having
tion.

Letter in printers' ink thinne
in varnish japan colors.

THE P

It is not essential to use a pal
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FIG. 12. PALETTE AND MA

we advise electric light for night

BURNER.

moving old paint and smalts from

following rules of use which accom-
modate on easel in upright position and
the bottom edge, holding flame close
to the bottom edge. Follow with broad scraper behind
the scraper, using steady forward
movement just ahead of the scraper. Care
must be taken to scrape bare wood, as it becomes exposed.
After scraping, sandpaper with coarse sand-
paper, and rub crosswise of the board.
After the repainting, using oil enough
to give a flat lead coating.

STRAINER.

for straining purposes, keep clean
and use with benzine.

WEDGED STRAINER.

paper into funnel-shaped cone, leav-
ing a drop of fine steel-wool
padding it down into the point. Pour
the liquid and hold over clean cup.

WASH COLOR.

sign painting. By reason of the com-
mon use of turps, "color" gets fat and "gum-
ming" pencils. Discard all fat color
for this purpose. Use this old paint on backs
of work.

A one-quart paint mill is handy for grinding dry colors, and for
grinding accumulated "fat" or old paint.

HAND PAINTED POSTERS.

Build two frames large enough to carry paper 4 feet in width,
and make them 30 feet long. Join at bottom, separating the frames
1 foot. Join at top separating frame 18 inches. Cover with common
screen wire stretched tight. To use, hang "sample poster" upon the
screen, half on one side and half on the other. Place electric lamps
inside the screen, which will light up the paper (making it easy to
execute all subsequent posters of same design without having to lay
them out) by simply covering the "pattern" poster with blank paper.
Use wooden paper clips having tension spring to hold paper in posi-
tion.

Letter in printers' ink thinned with benzine or gasoline, or letter
in varnish japan colors.

THE PALETTE.

It is not essential to use a palette when working in shop on easel
work, in sitting or standing position, although we recommend it, how-



FIG. 12. PALETTE AND MAHL STICK IN POSITION.

ever, on window lettering, door lettering and wagon lettering where
position of the letterer is changeable, the use of a palette is imperative.
Palette is carried on the left hand with thumb through the thumb
hole, enabling the letterer to grip it firmly and keep in a general
flat position, at the same time holding and carrying the Mahl Stick
in the same hand.

THE MAHL OR REST STICK.

Showing Use of Mahl Stick—All Strokes.



FIG. 13. USE OF MAHL STICK.

On all lettering executed with a lettering pencil large and small,
the rest stick is a great aid.

On large lettering it performs double duty—first as a rest and control
for the pencil hand, and as a straight-edge. For general exe-

cution hold stick in left hand, rest the cushion point against surface being lettered, keeping cushion point in "dry" spots.

Rest the Pencil Hand on the stick. For vertical strokes set Rest Stick point to right of your body and in the vicinity of the *base line* of the lettering which will place it almost horizontally. Rest pencil hand (with pencil charged with color) on stick, in position,



FIG. 14. USE OF MAHL STICK.

lift the pencil hand to starting point of the stroke, by raising the *left hand*. Touch pencil point at start of stroke with but slight, even pressure, and bring the left hand downward simultaneously in unison with the direction taken by the pencil.

Horizontal strokes and all curves are executed in the same manner.

On a horizontal stroke the point of the stick is placed above the head, or line of lettering, in an oblique position.

Free-hand lettering is executed by resting the pencil hand over the left hand (when soft pencils are used) the left hand acts as a "rest" and assists the steadiness and sureness of the stroke. With practice one can "letter" free-hand without resting over left hand.

Large lettering in which the flat brushes are used can be executed free-handed without the steadying assistance of the left hand.

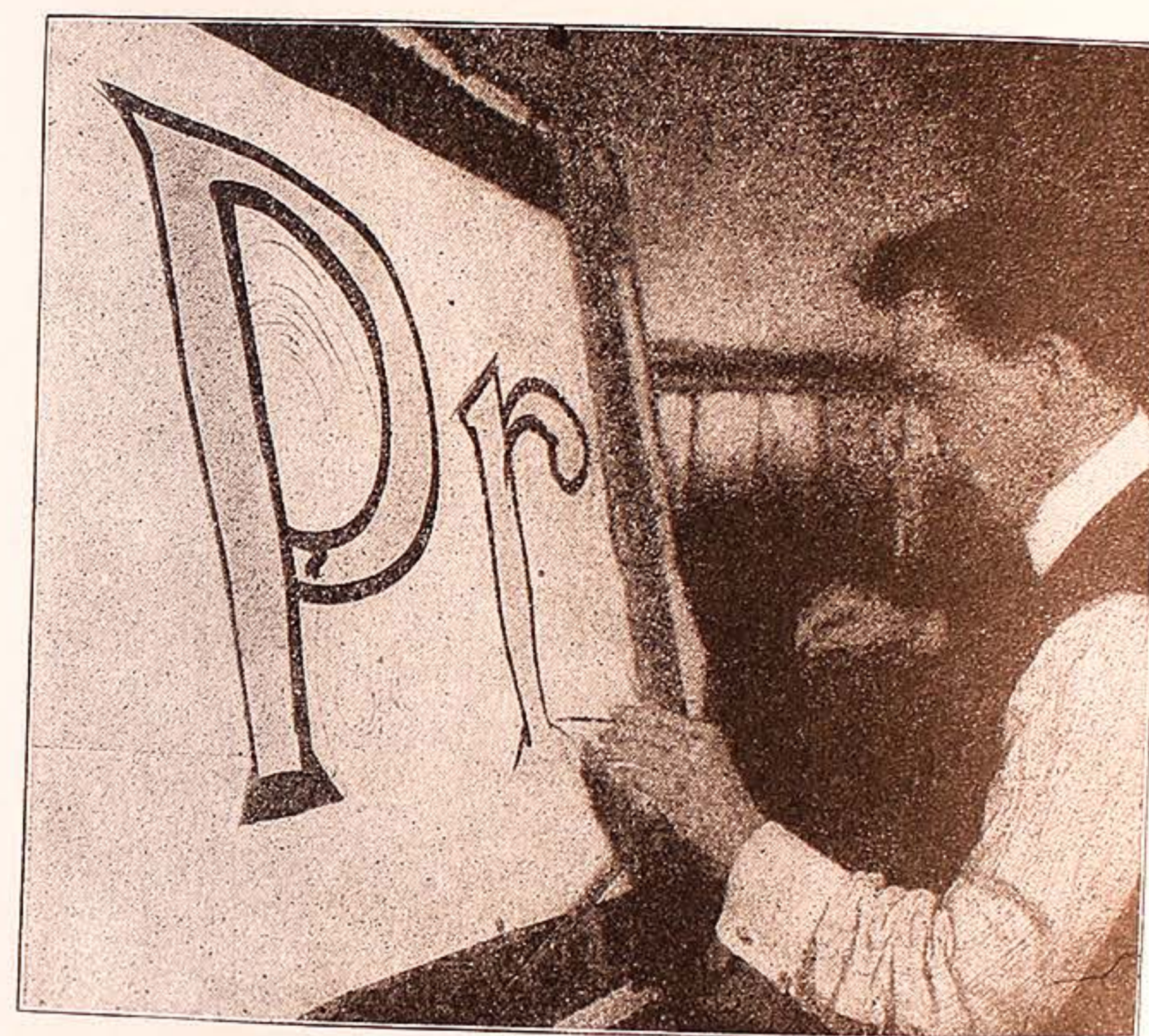


FIG. 15. USE OF MAHL STICK.

Fitch and bristle work is also "lone-handed" free execution.

USING THE MAHL STICK AS A STRAIGHT-EDGE ON LONG STRAIGHT LINES AND STROKES.

Rest point of stick and drop the left hand against surface being lettered, letting backs of fingers rest, enabling you to hold stick firmly in position. Change lettering pencil by dropping into palm of

the hand, grip with thumb and fingers. Hold pencil rigid, place color and hold pencil rigid, place the Rest Stick (to guide the hand) the pencil hand along the stick.



FIG. 16. SHOWING USE OF MAHL STICK.

REPAIRING BROKEN

Use Lepage's Glue and tack w firmly. "Set" brads beneath surface before coating.

RAISED WOOD LET

Fasten from back, using small s sections, or use small staples.

Fasten one inch stripes on base rarely, on which to rest letters wh standing the sign in an oblique posi

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 and sureness of the stroke. With
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USE OF MAHL STICK.

also "lone-handed" free execution.

STRAIGHT-EDGE ON LONG STRAIGHT LINES
 AND STROKES.

op the left hand against surface being
 gers rest, enabling you to hold stick
 ttering pencil by dropping into palm of

the hand, grip with thumb and first joint of index finger, charge with
 color and hold pencil rigid, place tips of two middle fingers against
 the Rest Stick (to guide the hand) and execute the stroke by sliding
 the pencil hand along the stick.

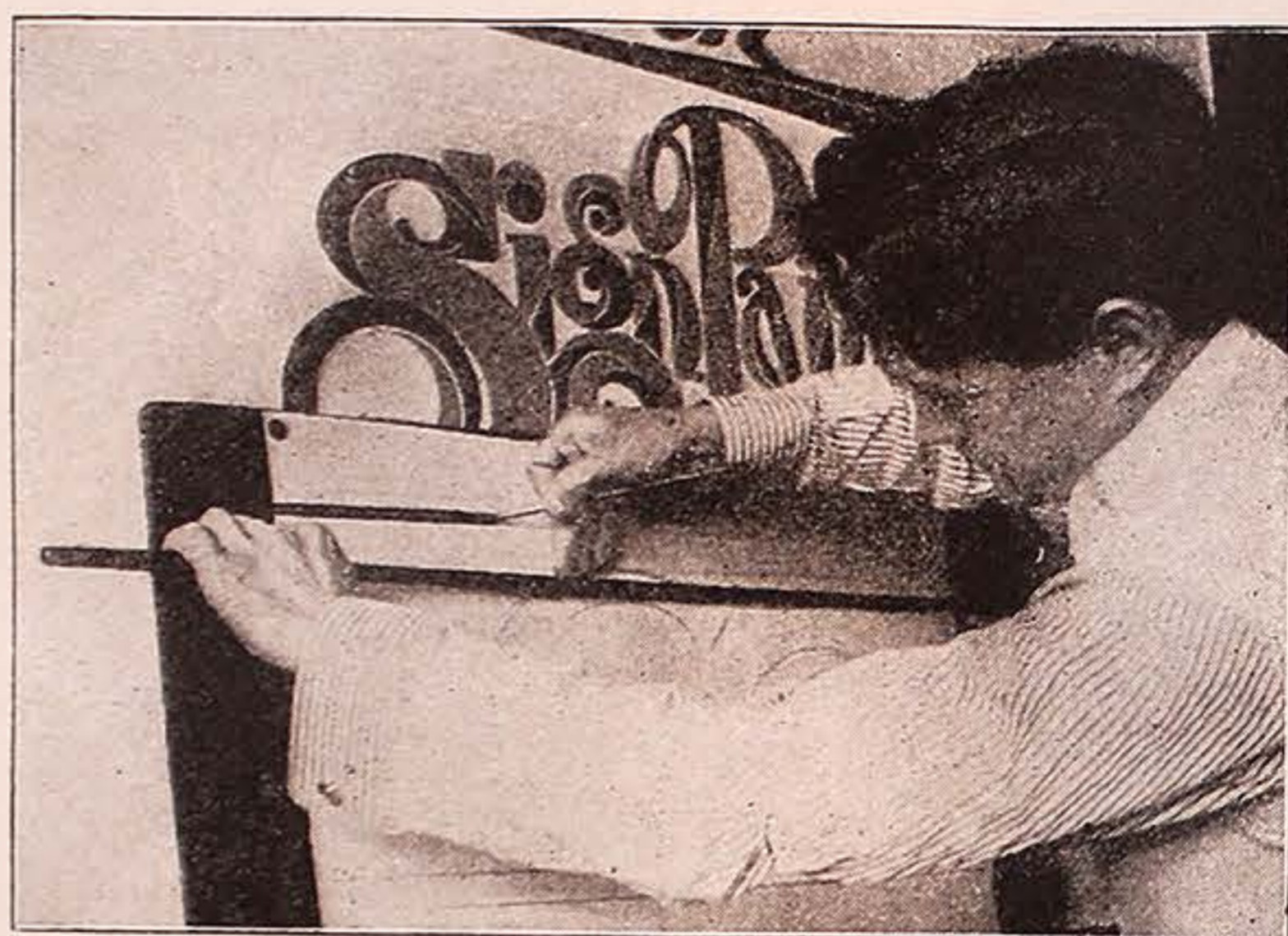


FIG. 16. SHOWING USE OF MAHL STICK AS STRAIGHT EDGE.

REPAIRING BROKEN WOOD LETTERS.

Use Lepage's Glue and tack with brads, holding parts together
 firmly. "Set" brads beneath surface so that the holes can be puttied
 before coating.

RAISED WOOD LETTER ON WIRE.

Fasten from back, using small screws and washers at wire inter-
 sections, or use small staples.

Fasten one inch stripes on base line of letter positions tempo-
 rarily, on which to rest letters while fastening letters from back,
 standing the sign in an oblique position.

GALVANIZED IRON LETTERS ON WIRE.

Solder with small galvanized iron straps on back of letters, each
 strap to cross a wire, or use small metal strips and short stove bolts.

CARVED WOOD LETTERS ON IRON OR STONE LINTELS.

Drill small holes and plug with wood. Use thin brass plates
 on back of letters, projecting beyond edges of letter, with holes in the
 projection, screw to *plugs* with small *brass* screws.

All lettering color upon solid exterior surfaces should be oil var-
 nish color, such as marble, iron lintels, stone and brick.

GOLD LETTERING ON SILK AND SATIN FOR LODGE BANNERS, ETC.

Make layout upon thin pattern paper, perforate, making it a
 pounce pattern. Stretch silk upon easel board and pounce pattern
 in whiting or charcoal, whichever the color of the silk dictates.

Letter the layout in japan black with Rubbing Varnish and turps
 as thinners. When dry size in two-hour Quick Japan gold size stain-
 ed with flake white to show on the black. Gild and burnish. Out-
 line and shade in varnish oil color.

If any emblematic or art subject in color, use ordinary tube col-
 ors in oil with gasoline and varnish as thinners.

LEMON GOLD LEAF.

Lemon Gold is pale gold and is used extensively for "centers"
 of lettering on glass. When deep gold is used for the outline, use
 in same manner as deep or usual gold.

"LAYOUT."

The proper way to get long lines in laying out work is the use
 of the *Chalk or Snap Line*. On wood bulletins and fences fasten one
 end of line to small brad awl and lines can be "snapped" without
 assistance.

On iron bulletins assistant must hold one end.

For muslin chalk line use linen thread or small fish line with hook in end to hook in muslin. For this hook use bent safety pin or small fish-hook with the "barb" filed away.

To "snap" a line, chalk it with either chalk or charcoal, and draw taut. "Snap" by lifting line between thumb and forefinger, four or five inches from surface, and letting go of it. Repeat for all lines wanted.

Mark *position of lines* at one end of the space and duplicate same marks on the other end by dotting long stick with the crayon.

Using chalk for "layout" be careful to dust off all surplus chalk before proceeding to letter as it will "draw" the color.



FIG. 17. SHOWING LINES DRAWN WITH TAUT STRING.



FIG. 18. SNAPPING SHORT THREAD LINES.

The progressive plan is the use of the indelible pencil. On bulletin work and general *color board work* in shop, layout is made on prime or second undercoat, using chalk and retracing with indelible pencil. The work is then entirely second or third coated as

the case may be and the pencil mark will show through the coat faintly, but clear enough to guide in the execution.

Charcoal is fine for laying out upon muslin, light grounds, etc. It dusts off easily and leaves but a faint mark, and does not "draw" color.

DRAWING LINES WITHOUT CHALK-LINE, STRAIGHT-EDGE OR MEASUREMENTS, A GREAT TIME SAVER.

Use a short string with *bowline* tied in one end.

If top or bottom of sign is straight it is the only requirement.

All lines drawn by the string method will parallel the guide line.

Pass piece of crayon or pencil into loop of string, hold the pencil between thumb and forefinger, the other end of the string should be held between the thumb and forefinger of the left hand. The thumb and forefinger of the left hand should be placed beneath the edge of the sign and kept in a rigid position. If the under edge of the sign is inaccessible, place the sign on a ledge so as to form a right angle with the sign, the fingers holding the lower end of the string should now be run along, or in the groove thus formed. Mark with dots the points where you desire to draw the lines, and then begin at the left of the sign, keeping the string taut, and moving both hands simultaneously to the right.

The string must be kept perfectly perpendicular, otherwise the line will sag to the right.

SNAPPING SHORT THREAD LINES.

Wind linen thread around little finger of left hand, passing the thread over the point of the little finger. With the right hand chalk the line and carry to points where line is wanted, set left hand little finger on point, pinch the line in thumb and forefinger of same hand before setting right hand down on *its* point. Now draw taut with right hand. "Let go" with thumb and forefinger of left hand. Repeat operation for all subsequent lines.

Modeling a scroll in colors
ing it to appear in relief against
The styles most in vogue are
esque, and Rococo. For partial
style is easily the favorite, as it c
spaces and no matter what form o
retains the character of its style.

FLAT ORN

For end formations in ornate
is used to fine advantage. Flat orn
styles and confined to simple grace
To render a serious Relief Sc
it in. All light and shade values
position and in charcoal or soft lea
literation stain or "fix" in thin Sie
spray with an atomizer and shellac

Note.—Mixing a Fixatif for
pint, to which add two liquid ounce

Note.—Treat *small* drawing of
same manner. Draw fully in char
method, providing drawing is mad
small art subject, draw in lead pen

MODELING RELIEF SC

Gild entire scroll in solid gold, g
allow to dry over night. "Model in
"set" before proceeding with the n
modeling is completed from the hig
Use transparent tube color. Those n
Burnt Sienna, Asphaltum, Gambog
Verdigris, Carmine, Vandkye Brown

mark will show through the coat faint-
the execution.

ut upon muslin, light grounds, etc.
a faint mark, and does not "draw"

X-LINE, STRAIGHT-EDGE OR MEASURE-
EAT TIME SAVER.

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the string taut, and moving both hands

perfectly perpendicular, otherwise the

SHORT THREAD LINES.

d little finger of left hand, passing the
ittle finger. With the right hand chalk
where line is wanted, set left hand little
e in thumb and forefinger of same hand
wn on *its* point. Now draw taut with
thumb and forefinger of left hand. Re-
quent lines.

SCROLLS.

Modeling a scroll in colors or color-glazing is the art of caus-
ing it to appear in relief against the background.

The styles most in vogue are modifications of Louis XV, Roman-
esque, and Rococo. For partial relief and flat rendering the Rococo
style is easily the favorite, as it can be adapted to the filling of odd
spaces and no matter what form or shape a Rococo panel is given, it
retains the character of its style.

FLAT ORNAMENT.

For end formations in ornate panels, flat or modeled scrolling
is used to fine advantage. Flat ornament is derived from the several
styles and confined to simple graceful rendering.

To render a serious Relief Scroll care must be taken in drawing
it in. All light and shade values must be faithfully drawn in true
position and in charcoal or soft lead pencil, and if in danger of ob-
literation stain or "fix" in thin Sienna, or if drawn in pure charcoal
spray with an atomizer and shellac fixatif.

Note.—Mixing a Fixatif for atomizer, use Grain Alcohol 1
pint, to which add two liquid ounces of White Alcohol Shellac.

Note.—Treat *small* drawing of trade marks and art subjects in
same manner. Draw fully in charcoal and "fix" by the atomizer
method, providing drawing is made directly upon surface. If real
small art subject, draw in lead pencil.

MODELING RELIEF SCROLL IN GOLD.

Gild entire scroll in solid gold, give coat of rubbing varnish and
allow to dry over night. "Model in" faintest color value and let it
"set" before proceeding with the next value and repeat until all
modeling is completed from the highest to the lowest tonal value.
Use transparent tube color. Those most popular for gold relief are
Burnt Sienna, Asphaltum, Gamboge, Yellow Lake, Dutch Pink,
Verdigris, Carmine, Vandkye Brown, Orpiment.

As a medium for thinning to desired values use Finishing Var-
nish.

The customary high light for above is Lemon Yellow, Medium
Chrome Yellow or Naples Yellow.

Allow the scrolling to stand twelve hours before giving finish-
ing coat of varnish.

MODELING RELIEF SCROLL IN FULL COLOR.

Use artist's tube color and render opaque or solid tone values
(instead of transparent) as in gold.

Work from palette, fully "set" with all colors to be used, and
the palette cup containing mixing medium.

SCROLL SAW.

A small foot-power scroll saw is essential in shop. With it one
can produce many special ornaments as well as produce the flat face
raised lettering which is so popular at the present time. For small
letters and ornaments use thin basswood or white holly.

LYE TUB FOR CLEAN CUPS.

Fill tub or keg with strong lye water. Dump dirty cups into
same. Allow to soak two days or more, take them out and rinse in
clean water. Dry in clean sawdust.

FINISHING VARNISH FOR EXTERIOR VARNISH GROUND SIGNS.

Finishing Varnish for exterior varnish ground signs, should be
good grade of Spar Varnish, light in color and good body. In finish-
ing, varnish should be freely "flowed," "cross-stroked" and layed
lengthways of the work.

Cause of sags and runs (if sign is in upright position) is not so
much in the heaviness of the coat, but in the irregular distribution of
same (heavy in one place and lighter in another) law of gravitation
makes the run or sag. If possible lay work flat when finishing and
keep so over night.

Absolute cleanliness is the secret of successful varnishing. Sponge and chamois a piece of work before beginning the finishing. Keep floor evenly sprinkled with water to keep down the floor dust much as possible, and lastly do all finishing the last thing before closing time.

Keep varnish brush in old or drain varnish when not in use, tightly covered.

EQUIPMENT FOR SHOP.

Shop should be provided with the following: Six pairs of horses or trestles 28 or 30 inches high, one small easel for small work, one double easel 7 feet long by 5 feet high, built from 2x4 scantling, peg holes 5 inches apart in the uprights; six or eight pairs of stilts 3 inches longer than shop ceiling is high.

Note.—A stilt is a 2x4 with peg holes 4 or 5 inches apart. Pins or pegs for easels and stilts should be turned in lathe from hardwood, should be in pairs in long and short lengths. A 2x4 scantling should run on ceiling of shop, full length, with 4-inch notches at intervals of 6 or 8 feet, to engage top ends of stilts, enabling one to suit stilt positions for various lengths of signs.

Also have one pair of stilts 12 feet long, one pair 10 feet, one pair 8 feet, one pair 6 feet, very handy in "stilting" finished work against the wall, starting with the 6-foot stilts against wall, filled with two or more boards. Follow with the 8-footers placed in front. Fill with boards and so on to the 12-foot stilts.

Have three or four drawing boards 3 feet by 4 feet. Can be used on easels and as temporary benches (when placed flat on horses) anywhere in the shop.

Paint bench should be circular in form, with post in middle supporting shelves above and below the bench level, shelves below bench level same diameter as the bench, shelves above bench level narrower in diameter. Fasten four paint presses to each face of post just above the bench level and have first shelf just above the presses with holes in the shelf to allow plungers of presses to pass through.

Cover the entire surface of the bench level with zinc, so that color can be ground under palette knife anywhere on it. Have turps bottle with quill in the cork and rags to keep zinc clean. Clean zinc each time color is ground or every night at closing time.

Bench level should be 40 inches from the floor, diameter of bench 40 inches, diameter of shelves under bench 40 inches. Put the bench structure upon heavy piano ball-bearing casters, so it can be moved about the floor at will.

Several small paint stands made per following: Make three circular shelves 8, 10, and 12 inches in diameter, separate 6 or 7 inches and use four 1-inch strips 30 inches long to fasten together, strips also to answer for "legs."

Showcard Bench, 3 feet by 5 feet, on hinges against the wall, or on sill of a window. Put front support on hinges and nail strip of 1-inch lumber on the floor with notches in it to engage bench support. This makes it easy to adjust the bench at different pitches or planes.

Muslin Board should be 6½ feet by 25 feet, and should slide up and down on upright "ways." Ways should slant outward at top to prevent occasional *drip* from brush striking the muslin. Fasten ordinary spring filing clips to face of board to hold muslin in place.

Have upright reel at left of muslin board to hold full roll of muslin.

RACK FOR RAISED LETTERS.

Build upright frame 6 feet by 10 feet from 2x6 inch planks with cross pieces on bottom for feet. For "shelves" stretch copper wires (using two wires to each shelf) 5 inches apart, with 4-inch spaces between shelves. Wire are given preference for the reason that they reduce the "dust" problem to a minimum.

SMALT CLOTH.

A smalt cloth should be made from 4-oz. duck at least 42 inches wide by 60 feet long. Fasten roller to one end so that cloth can be rolled and unrolled quickly.

PAINTING CANVAS which is handling, such as street and kite

Dissolve finely sliced beeswax in turps and soap suds. Require about three days. The material should be washed with soft soap.

Next mix one pound of this ground in oil, and three tablespoonsful of turps.

A few tablespoonsful of japan is then applied to both sides of the canvas. The japan is then "worked in" so that all the material scraped off with the spatula is removed.

When this priming mixture is applied to both sides of canvas with following: Turps, zinc white alone, with equal parts of turps and zinc white, and pentine to a stout brushing consistency. Letter in medium drying oil.

GLUE

Use Lepage's Glue for general purposes. Use for binding dry color in small quantities.

LETTERING WINDOW

Lay out in white crayon (dust size), gild in Dutch Metal or Florine. Size, gild in Dutch Metal or Florine. Gilded give thin wash of White Shellac. Flat colors, a split shade and high light.

MARBLE BUILDING DIRECTORIES

Letter in water color and instructive cleaner when marble becomes soiled.

Note.—Oil color, when removed, which is objected to, hence the use of

bench level with zinc, so that color
anywhere on it. Have turps bottle
keep zinc clean. Clean zinc each
at closing time.

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For "shelves" stretch copper wires
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nimum.

WAX CLOTH.

made from 4-oz. duck at least 42 inches
roller to one end so that cloth can be

PAINTING CANVAS which is subjected to rolling up and much
handling, such as street and kite banners.

Dissolve finely sliced beeswax in cold turpentine. This will re-
quire about three days. The mass will then have same consistency as
soft soap.

Next mix one pound of this with three pounds of zinc white
ground in oil, and three tablespoonsful of soft soap.

A few tablespoonsful of japan are then added to the mixture, which
is then applied to both sides of the canvas with a large spatula. It
is then "worked in" so that all the fibre is filled and the superfluous
material scraped off with the spatula.

When this priming mixture is thoroughly dry, second coat both
sides of canvas with following: Thin a mixture of wax, turpentine
and zinc white alone, with equal parts of boiled linseed oil and tur-
pentine to a stout brushing consistency. Third coat with same ma-
terial, letter in medium drying oil colors.

GLUE.

Use Lepage's Glue for general gluing around the shop and for
binding dry color in small quantities, in distemper.

LETTERING WINDOW SHADES.

Lay out in white crayon (dust off), and size in one hour Quick
Size, gild in Dutch Metal or Florence Leaf (for gold) and when
gilded give thin wash of White Shellac over all lettering. Shade in
flat colors, a split shade and high light being the custom.

MARBLE BUILDING DIRECTORIES IN LOBBY OF BUILDING.

Letter in water color and instruct the janitor to use *wall paper
cleaner* when marble becomes soiled, instead of water.

Note.—Oil color, when removed from marble, leaves a faint stain
which is objected to, hence the use of water color is preferable.

MUSLIN SIGNS.

For all muslin signs, use Prepared Sign Painter's Muslin, being
careful not to letter the "back" or wrong side.

For general announcements letter in "fast" color, viz.:

Japan color mixed in cheap Furniture Varnish and thinned in
turpentine or *Gasoline*; or

Dry color broken in Furniture or Damar Varnish and thinned
with Turps or Benzine or Gasoline; or

Dry color broken in gloss oil and thinned with Benzine, adding
few drops of boiled oil; or

Letter in Hot Distemper Color which is recommended for all
large or mammoth size muslin signs.

Prepare per following: Use two pounds of powdered Kalso-
miner's Glue to ordinary water pail full of boiling water or soak same
over night in cold water bringing to boil next morning. Add few
drops of Carbolic Acid and a handful of powdered alum.

When mixed well, stir in dry color adding it to the liquid grad-
ually, keep on low fire when using, and use fresco bristle fitches for
"cutting in" and flat 3-inch brushes for "filling in."

For brushes on muslin use Flat Camel's Hair, Flat Red Sable,
Flat Ox Hair, or Bear's Hair Fitches.

Note.—Owing to many degrees of surface in sign cloth, it is ad-
visable to use japan color clear and thin to very thin consistency with
gasoline.

Note.—It is the custom to do all large muslin in white letter
and dark grounds, such as black, ultra marine blue, green, dark
brown, dark red, etc.

MOUNTING MUSLIN OR OIL CLOTH.

To avoid wrinkles in muslin or oil cloth and to insure tight, even
stretch, first tack one end in the middle with three or four tacks, leav-
ing corners free, then stretch the cloth full length of frame and put
in few tacks at end same as at the beginning, leaving corners as before.

Next tack along one edge of board, keeping edge of cloth in line

with edge of frame, leave corners free. Now stretch cloth on opposite side of frame thoroughly, beginning in the middle and working both ways. Last, stretch and tack all four corners.

LARGE MAMMOTH MUSLINS.

Large Mammoth Muslins should be built in 6 by 16 foot sections, to execute with ease. A scale drawing must be made 1 inch to the foot. When sketch is completed divide in 6x16 foot sections and show divisions by drawing same upon the sketch, making it readily apparent the portion of the inscription each stretcher will bear.

To insure "registration" set up several sections at once.

Number of stretchers in sign must correspond to number in the sketch.

Lay out all muslin sign in charcoal and "dust" vigorously with clean feather duster or "flog" with clean "Cat o' Nine" Tails made from strips of rags.

To make a muslin stretcher quick, use 1x2 inch strips. Tack side strip upon end piece on top. Fill in end with extra strip to make face of frame flush. Square up and tack brace or two on back of frame.

RAW CANVAS SIGNS SUCH AS AWNINGS, ETC.

For black, use cheap Turpentine Asphaltum to which add dry lamp sufficient to render same opaque. Thin with benzine and use a well chiseled bristle fitch. For other than black, use dry or oil colors, mixed with Furniture Varnish and benzine.

FOR CANVAS ON STRETCHER.

Mount on the stretcher and give coat of "Glue Size," one pound glue to pail of boiling water. Apply and when dry, coat two coats of lead mixed with half and half oil and turps.

OIL CLOTH.

Before lettering direct on oil cloth rub well with benzine and whiting, in a cotton bat. Prevents color from "creeping" and aids in "laying out." Good color for oil cloth is oil color mixed with Finishing Varnish and turps. Japan enough to dry it.

OIL CLOTH BOARD SIGNS.

Oil Cloth makes a fine surface for large board signs when stretched tightly over ordinary board, say 6-inch flooring, cleated on back. Surround board with 1/2-inch or 1-inch band after oil cloth is tacked on.

OIL COLORS.

The term Colors in oil is applied to paste colors ground in oil. Japan or Coach Colors are paste colors ground in japan. They are quick drying and dry absolutely "flat."

Distemper Colors are paste colors ground in clear water. Binder in form of Glue or Gun Arabic, must be added to prevent rubbing up.

LIQUIDS USED IN SIGN PAINTING.

Boiled Linseed Oil.

Fat Linseed Oil.

Harland's English Japan Gold Size.

Chicago Varnish Co.'s Nonpareil Japan Gold Size.

Turpentine Japan for Color Drying.

Turpentine.

Damar Varnish.

Quick Rubbing Varnish.

Spar Varnish for Finishing.

Asphaltum.

White and Orange Shellac.

Grain Alcohol.

Water.

COLOR COMBINATIONS.

Where color is used for letters, ornaments, lines, etc., black or dark colors should be used on white or light tinted grounds, and vice versa.

In using colors care should be taken to have tones harmonize, as for example, on dark green ground use white or lemon, or on pinkish ground use black or deep red, on deep blue use white or delicate blue or pale pink. When more than one color is used the following combinations will be found valuable:

TRI-COLOR NEUTRAL.

| GROUND | LETTER | SHADE | SCROLL | BORDER |
|------------|------------|------------|---------------|----------|
| Black | White | Dark Gray | Same as Shade | White |
| Black | Light Gray | White | Dark Gray | White |
| White | Black | Light Gray | Gray | Gray |
| White | Gray | Black | Gray | Black |
| Light Gray | Black | White | Black | Black |
| Dark Gray | White | Black | Black | White |
| Glass | Aluminum | Black | Black | Aluminum |

To soften contrasts on gray grounds use very light or very dark grays instead of black and white.

BOARD SIGNS.

Place for large board signs when board, say 6-inch flooring, cleated on 1-inch or 1 1/2-inch band after oil cloth is

COLORS.

Applied to paste colors ground in oil. Paste colors ground in japan. They are very "flat."

Colors ground in clear water. Binder must be added to prevent rubbing up.

ON SIGN PAINTING.

Old Size.
pareil Japan Gold Size.
Drying.

COMBINATIONS.

For letters, ornaments, lines, etc., black or dark or light tinted grounds, and vice versa. It should be taken to have tones harmonize, as on deep blue use white or delicate blue than one color is used the following combinations are available:

TRI-COLOR NEUTRAL.

| GROUND | LETTER | SHADE | SCROLL | BORDER |
|------------|------------|------------|---------------|----------|
| Black | White | Dark Gray | Same as Shade | White |
| Black | Light Gray | White | Dark Gray | White |
| White | Black | Light Gray | Gray | Gray |
| White | Gray | Black | Gray | Black |
| Light Gray | Black | White | Black | Black |
| Dark Gray | White | Black | Black | White |
| Glass | Aluminum | Black | Black | Aluminum |

To soften contrasts on gray grounds use very light or very dark grays instead of black and white.

WARM COLORS.

| GROUND | LETTER | SHADE | SCROLL | BORDER |
|----------|------------|---------|---------------|------------|
| Red | Pink | Carmine | Carmine | Pink |
| Deep Red | Pink | Red | Red | Pink |
| Yellow | Dark Olive | Orange | Same as Shade | Dark Olive |
| Orange | Dark Red | Yellow | Same as Shade | Red |

COLD COLORS.

| GROUND | LETTER | SHADE | SCROLL | BORDER |
|------------|-----------------|------------|-----------|------------|
| Blue | Dark Blue | Light Blue | Dark Blue | Light Blue |
| Dark Blue | Very Light Blue | Blue | Blue | Light Blue |
| Light Blue | Very Dark Blue | Blue | Blue | Dark Blue |

Greens are treated same as blues. To strengthen contrasts in cold blues or greens, use black and white for lettering instead of very light or very dark color.

STRONG CONTRASTS.

| GROUND | LETTER | SHADE | SCROLL | BORDER |
|-------------|-----------------|-----------------|---------------|----------------|
| Light green | Black | Red | Red or Black | Black |
| Yellow | Blue or Black | White or Orange | Same as Shade | Black |
| Pink | Very Dark Green | White or Red | Same as Shade | Dark Green |
| Black | White | Orange or Red | Green | White |
| Red | White | Black | Black | Black or White |

Complex combinations may be worked out according to the artist's taste.

MIXING COLORS.

In this table the first color named in each item is the base, and should be used in the greatest quantity. The other colors should be added until desired shade or tone is reached.

Yellow and Blue produce Green.
Yellow and Red produce Orange.
Red and Blue produce Purple.
Red, Yellow and Blue produce Citron.
Yellow and Black produce Olive.
Red, Yellow and Black produce Russet.
Yellow, Black and Red produce Brown.
Red and Black produce Maroon.
White and Black produce Gray.
White and Blue produce Light Blue.
White and Red produce Pink.
White, Yellow and Red produce Flesh.
White and Yellow produce Cream.
Yellow, Blue and Red produce Bronze Green.
Blue and Red produce Violet.
White, Black and Red produce Lavender.

Rich tones and shades may be compounded by adding to the foregoing opaque colors, such transparent colors as Sienna, Umber, Carmine, Olive Lake, Verdigris, Ultramarine Blue, Turkey Red Lake, etc.

COLOR MIXING.

For experimental color mixing the student will require a "slab" to grind on (use piece of flat marble, or piece of plate glass or zinc covered board), quantity of white lead in oil, turpentine, a palette knife, small pair of beam scales, and a fitch brush.

First series of experiments is to obtain tints of the various colors by reducing with white.

Take in turn each of the ordinary colors, such as Prussian Blue, Chrome Yellow, Ivory Black, Ochre, Umber, Indian Red, Venetian Red, Chrome Green, and Vermilion.

Weigh out of each a very small portion, place them in separate piles on the slab, then weigh out ten parts of white and add it to each. Note the effect of adding the white, how in some cases the color is very materially changed while in others it is not altered to so great an extent.

Having done this a small portion of each color may be painted on a board, the pure color and the tint side by side, and a note made of the number of parts of white used in the reduced color. Vary by taking equal parts of white and color, when it will be found that there is comparatively little difference, and then 10, 20, 30 and 50 parts of white, respectively.

This will form a permanent record of the effect of white when added to the different colors, and we advise the student to tint and record every color he can get hold of.

All records should be memorized.

After completing the tints, take up shades in exactly the same way. A shade is produced by adding black to a color, using a much smaller proportion of black than was used in the white. From equal portions of black to one-tenth part would be about right.

Lamp or drop black may be used. The student now arrives at the admixture of the colors and following the same plan as before, we take one color and add to it another color or colors.

It is well to classify colors under the different heads such as reds, blues, yellows, greens, browns, etc. Yet the student must consider that one series of colors merges into another. For example, we have a pure blue in the shape of Prussian Blue, and to this may be added more or less red until it becomes a purple, or more or less yellow until it becomes a green. Thus we have bluish green or greenish blue, according to the color which predominates.

Starting with the reds, taking a normal red such as bright geranium scarlet, take the normal red and experiment with it by adding small portions of different yellows, then different small portions of

various blues. Then by adding to the red and notice how the color changes, avoiding anything of a muddy appearance. Add a little black and note the difference.

Next experiment with the maroon and Venetian Red as standards and add various colors to them to get different shades.

The study of reds should occur at the end of that time the student will have a collection which will be of life-long service.

Greens are as interesting as a study of the great variety of hues obtainable.

Starting with Prussian Blue and adding parts, note the brilliancy of the green. Various yellows complexed with reds. A long list of pleasing greens is obtainable.

Make a note under each sample of the admixture. Hang the color chart.

The fact of having actually made the colors impress some of the effects upon the student.

If referred to frequently the student's entire system of producing "Color."

STIPPLE IN COLOR.

Imitation ground glass—Take a quantity of whiting and oil putty and add a consistency with equal parts of oil. Use a brush and stipple with cotton bat. A roller covered with plush. Fine stippling.

WHITE FROST.

Use white lead thinned with equal parts of turpentine. Proceed as in the first named. Use color to stipple all pale or tinted backgrounds.

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Thus we have bluish green or greenish which predominates.

aking a normal red such as bright geran- red and experiment with it by adding yellows, then different small portions of

various blues. Then by adding a very little blue and yellow to the red and notice how the tone is lowered without producing anything of a muddy appearance. Try also the effect of adding a little black and note the difference.

Next experiment with the more sombre reds, taking Indian Red and Venetian Red as standards and adding reds, yellows and blues and various colors to them to get different effects.

The study of reds should occupy several weeks at least, and at the end of that time the student will have gained very valuable information which will be of life-long service if carefully memorized.

Greens are as interesting as any portion of color study because of the great variety of hues obtainable.

Starting with Prussian Blue and medium Chrome Yellow, equal parts, note the brilliancy of the green thus produced. Using the various yellows complexed with reds, umbers and the siennas, a never ending list of pleasing greens is obtained.

Make a note under each sample stating the relative parts of the admixture. Hang the color chart in shop for reference at all times.

The fact of having actually made the admixtures will in itself impress some of the effects upon the student's memory.

If referred to frequently the student will eventually absorb the entire system of producing "Color."

STIPPLE IN COLOR ON GLASS.

Imitation ground glass—Take 4 parts house painters' putty (whiting and oil putty) and add 1 part white lead, thin to brushing consistency with equal parts of oil and turps. Apply with a bristle brush and stipple with *cotton bat in cheese cloth*, or use a stencil roller covered with plush. Fine stipple for grounds of ornate panels.

WHITE FROST ON GLASS.

Use white lead thinned with equal parts oil and turpentine. Proceed as in the first named. Use colors same as white. It is advisable to stipple all pale or tinted backgrounds of panels on window work,

also in the case of white or tinted centers of lettering bearing gold or silver outline, with or without background.

ETCHING GOLD ON GLASS.

Emblems, trade marks, corner scrolls, etc., are customarily etched in black and gold, on high grade glass work, proceed per the following:

Make correct drawing upon thin tracing paper, fasten in position to face of glass (as gilding guide), with gummed stickers. Gild entire space occupied by the drawing and gild it solidly and make a supreme effort to gild it thus in *one* gild (as patching is a serious drawback to successful etching).

Give two or three *hot water baths* and when dry, carry drawing from face to back or gilded side, fasten with stickers in same position, with back of drawing toward you as originally. Place good grade of carbon paper under drawing (carbon side toward gilding). The thinness of the paper will show the drawing through the paper, permitting you to draw or retrace and when fully traced will leave an impression upon the gilding. Next go on outside of glass and "coat in" solidly the entire space occupied by the gilding to be etched, using lampblack in distemper. This black will enable the student to note every mark made upon the gold.

For etching use stick of jeweler's *peg wood* sharpened to dull or sharp point and a No. 2 glass brush ("bristles" in this brush are glass), also a short bristle "tapestry" brush.

Proceed to draw in all detail and produce the different tone values with the glass brush and the short bristle. When etching is complete the high light should appear in gold and the shadow values in black. When etching is completed "back up" in regular "backing up" black, solid to the outline. When dry clean or erase surplus gold around the outer edge of etching.

CIRCLES ON GLASS IN GOLD.

Gild space for circles, getting on plenty of gold. When dry instead of attempting to back up with a lettering pencil, scratch them

in per following: Take piece of cardboard 1 inch or so square with "hole" in center for compass point. Fasten this to "center" of circle with "stickers." Next tie to compass leg a piece of hardwood chiseled bluntly (or use same in lead pencil holder). Set compass and scratch

ELONGATING AND CONDENSING.

The normal form of the Full Block letter is square, and permits of condensing or elongating when space or taste dictates.

Condense—To reduce the width of the letter body.
out the gold at desired positions. Back temporarily with clear rub-

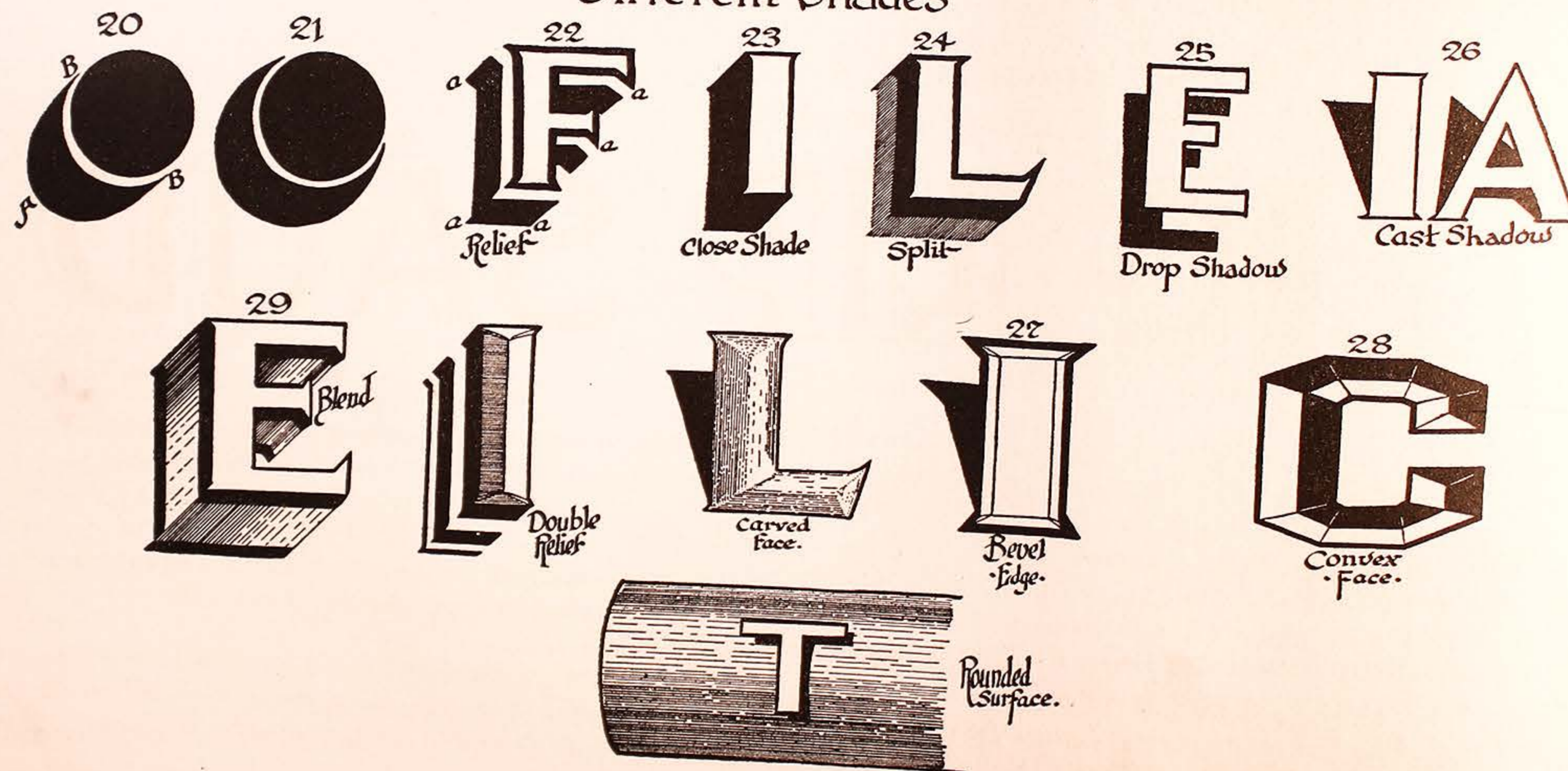
bing varnish to protect the bare gold from injury while proceeding with the rest of the work.

Elongate—To lengthen or extend the letter body. Either can be done without changing the character of the letter.

The styles most susceptible to condensing are: Egyptian, Classic, French Roman and Half Block.

Styles most susceptible to elongating are: Standard Roman, Antique Roman, Tuscan Roman, Tuscan Block, Plain Full Block, French Roman, Egyptian, Antique Round Block, Plain Antique Block.

Different Shades



Shading is used to cause letter relief, or to appear projected or the most important auxiliary of l

The subjects of shades and sha the examples shown can be used at

Shading to the left and on the Painting, is usually executed at ab- sumed that light falls on a letter a C, D, B, G, J, O, P, Q, S, U, &, 3 Fig. 20, widest portion of shade o the lines b, b, and gradually dimini



ishing points b, b, where it is comp error with many is to crowd shade b appear clumsy and distorted and fail 21 shows the incorrect method to wh letters must be shaded on the same angl be indicated as at "a," Fig. 22, and e equal width on all letters except the reaches the extreme width only at the

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longating are: Standard Roman,
, Tuscan Block, Plain Full Block,
ique Round Block, Plain Antique



SHADING.

Shading is used to cause letters, panels, scrolls, etc., to appear in relief, or to appear projected or raised from the background, and is the most important auxiliary of lettering.

The subjects of shades and shadows are diversified and either of the examples shown can be used at the will of the student.

Shading to the left and on the bottom is unwritten law in Sign Painting, is usually executed at about a 45 degree angle, it being assumed that light falls on a letter *at this angle*. On the round letters C, D, B, G, J, O, P, Q, S, U, &, 3, 5, 6, 8, 9, observe the illustration, Fig. 20, widest portion of shade occurring at "a" midway between the lines b, b, and gradually diminishing in width until it reaches van-

extremities of letters are close together the stroke can be left disconnected, which liberty is legitimate and permissible. On the relief shade leave the *relief line* wide, as in Fig. 23 or Fig. 29. It gives the letter better emphasis and looks professional.

HIGH LIGHT.

The high lights on a letter are the upper edges of a letter which are not effected by the shade, and suggested by an accent of light or deep color in either broad line or fine line.

Fine line on gold and broad line on color. Fig. 30 shows letter shaded and high lighted. Fig. 31 shows letter whose face has the

HIGH LIGHTS 4 Different Examples.



ishing points b, b, where it is completed. A common unjustifiable error with many is to crowd shade beyond the points b, b, making it appear clumsy and distorted and failing in the primary object. Fig. 21 shows the incorrect method to which reference is made. All letters must be shaded on the same angle, and every characteristic must be indicated as at "a," Fig. 22, and every part of shade should be of equal width on all letters except the round letters whereon the shade reaches the extreme width only at the point shown at "a," Fig. 20.

On ordinary work the relief shade is most commonly used, as it permits of quick execution and with the one stroke method. Where

appearance of being countersunk, same rule being applied. Fig. 32, blended shade. Fig. 33, heavy face high light.

BRUSH PRACTICE.

The student will not attempt any lettering with the brush until the 14 strokes necessary in the formation of any letter or scroll are mastered.

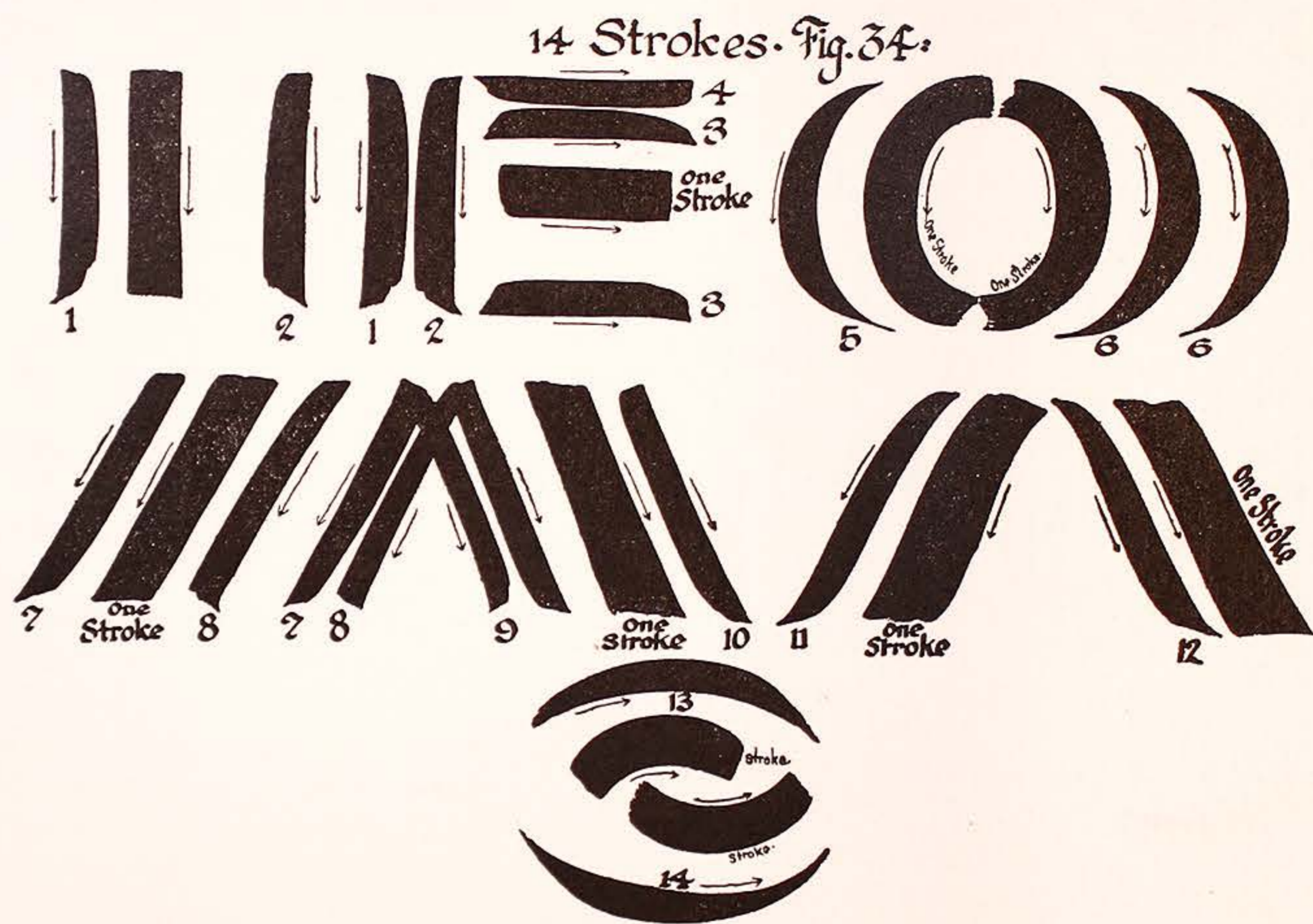
These strokes are illustrated in Fig. 34B, where they are combined in the formation I, S and O, and again in their individual form in Fig. 34. Bear in mind that constant practice is necessary to master

these strokes and the control and use of the lettering pencil. Always make a brush stroke continuous. Avoid short, "choppy" strokes. Practice will demonstrate that a line, either curved or straight, can be drawn much more exact and pleasing, with a moderately rapid, steady stroke, than when the movement is slow and hesitating.

Always begin a letter by executing the vertical strokes, the left vertical stroke first (finished letters), and the right vertical stroke next.

Brush should have a "flat" point like a chisel and kept so by keeping the hair spread by stroking on palette at each recharging of the pencil. (For fine line short stripe, the brush can be turned edgewise of the flat point and the line drawn with the bare tip or extreme point.)

When joining two brush strokes do not resume at the stopping point of preceding stroke. Begin a short distance back or inside the



Execute the correct formation and proportion of the letter first, after which add the spurs or other peculiarities, which as a rule do not affect the proportion.

In brush practice note the following: Do not work with a sharply pointed brush.

preceding stroke and gradually work the pencil to point of continuing. No matter how long a stroke is it should appear as though drawn in one operation.

The brush should be held between the thumb and first finger firmly, but lightly, in much the same position as a pen or pencil, not

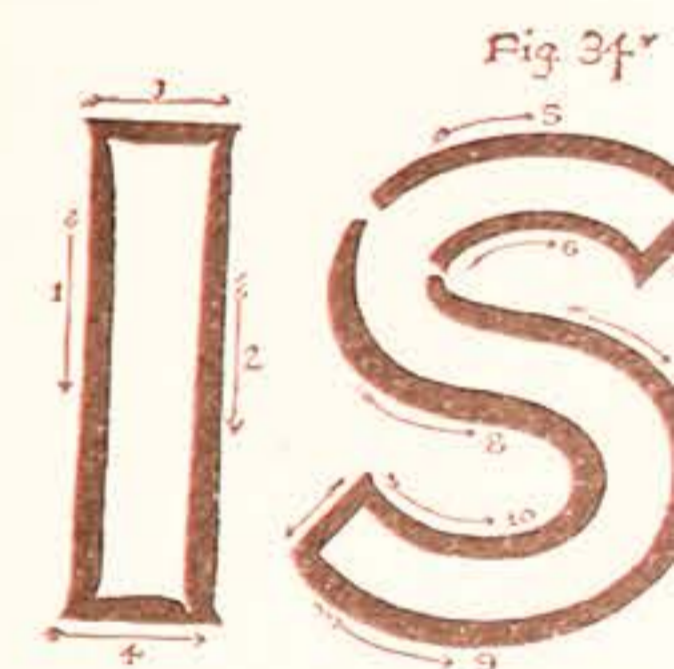
stiff or rigid, but so as to allow between the fingers when necessary,

Try to maintain a uniform lig sired.

In this case, first place the " pressure gradually until the requi and then decrease the pressure term

Draw lines slowly and contin Execute a straight unwavering line represents the finished part of the letter the stroke.

Note.—This rule cannot be fol both sides of the stroke must be st



work requires an even pressure on th stroke script where the "swell" occu

Keep brush well charged with co

If brush is too full or color too thi

Color must be the proper consist

If too thin it will be beyond con

and refuse to flow freely, resulting in

Dipping the brush in the color is

applying it to the surface.

To thoroughly "charge" a brush

after dipping, work same back and fo

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on palette at each recharging of the
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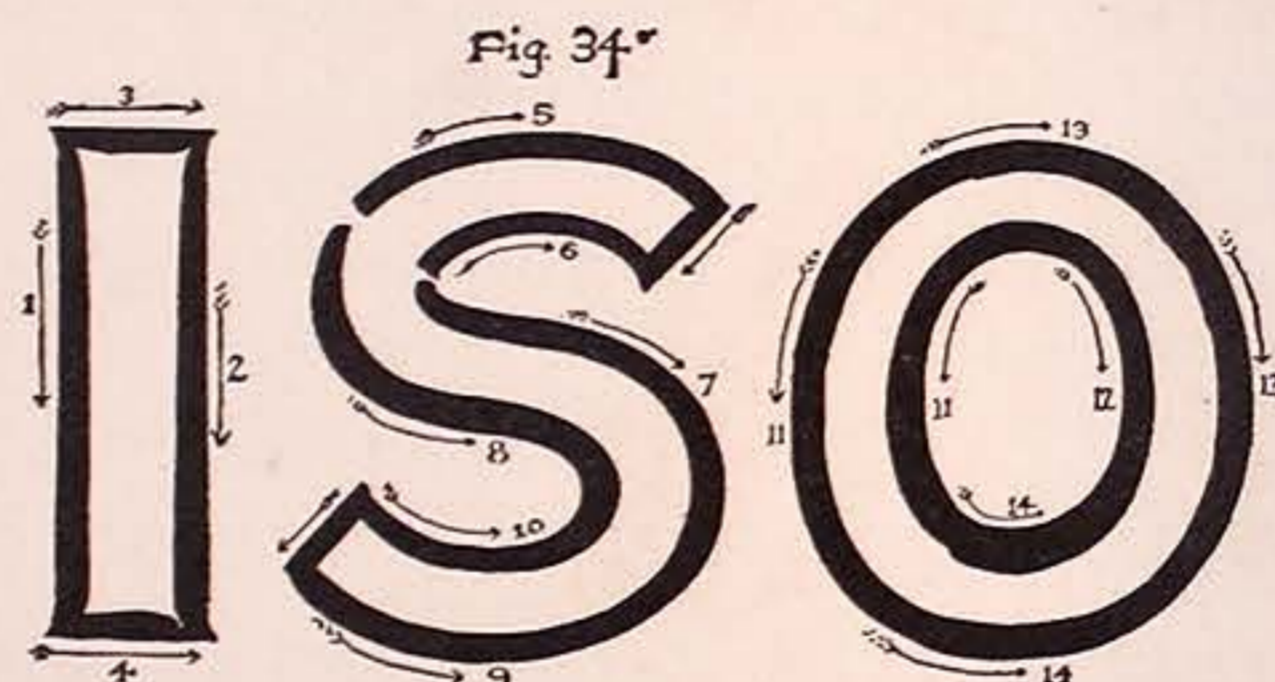
stiff or rigid, but so as to allow the handle of the brush to roll be-
tween the fingers when necessary, as in the execution of a curve.

Try to maintain a uniform light pressure unless a "swell" is de-
sired.

In this case, first place the "point" to the surface, increase the
pressure gradually until the required width of the stroke is reached,
and then decrease the pressure terminating the stroke at point of brush.

Draw lines slowly and continuously at beginning of practice.
Execute a straight unwavering line on the side of the stroke that rep-
resents the finished part of the letter, pay no heed to the inner edge of
the stroke.

Note.—This rule cannot be followed in "one stroke lettering" as
both sides of the stroke must be straight and uniform. One stroke



work requires an even pressure on the brush constantly except in one
stroke script where the "swell" occurs.

Keep brush well charged with color to avoid ragged edges.

If brush is too full or color too thin, it will get beyond control.

Color must be the proper consistency, not thick nor too thin.

If too thin it will be beyond control. If too thick it will "pull"
and refuse to flow freely, resulting in an imperfect line.

Dipping the brush in the color is not all that is required before
applying it to the surface.

To thoroughly "charge" a brush and get "shape" to the pencil,
after dipping, work same back and forth on a palette turning to right

and left several times, after which draw it gently toward you on one
side, the side resting on palette should now be applied to the surface.
Charge frequently. Never work with a "semi-dry" lettering pencil.
The secret of good execution is a fully charged pencil, and eventually
acquire the ability to execute with light touch, enabling you to exe-
cute with point of brush and the brush fully charged. Do not form
the habit of *hard pressure* on a lettering brush, there is nothing in the
heel, it's all in the point.

THE SINGLE STROKE METHOD.

The term "one stroke" is applied to a letter whose individual
parts are executed with one stroke of the brush, thus the Egyptian let-
ter "K" one stroke, is executed with but three strokes of suitable brush.
(Brushes having fine square points and those of the "flat" variety, are
most suitable for *one stroke* work, properly "loaded" and with the
proper "touch" a "square start" and a square "stop" with uniformity
of stroke is the result.)

The "start" and "stop" of the stroke determines its claim to char-
acter.

To execute the Egyptian "K" in the finished method requires 10
strokes. On show cards, oil cloth, and muslin signs, it is highly com-
mendable to use "single stroke" lettering, or upon any sign work of
a temporary nature, owing to the rapidity with which they can be
executed.

Do not confuse the "single stroke" method with carelessly exe-
cuted work. It requires more ability and good touch to execute a
"single stroke" letter than it does to execute a "finished" letter for the
reason that the number of strokes are reduced to a minimum, where-
as a "finished" letter is a letter correctly executed in every detail with
equivalent strokes necessary to bring this result.

Letters carrying thick and thin strokes are not adaptable to the
single stroke method, excepting heavy script, which readily adapts it-
self to one stroke by using the "swell."

Those best adapted are the Egyptian, Round Full Block, Modern
Full Block, Eccentric Block, and Tuscan Block, Modern Italic.

These can all be rapidly formed in "single stroke" minus the accurate finish of spurs and minor detail which would class them in the "finished" order. In addition to the above the "Pen Alphabets," such as "Bradley Text," and Modified Old English," are readily adapted to brush execution by the "one stroke" method.

Never do an inscription entirely "one stroke." Do display lines in "finished styles," reserving the "single strokes" for the less important text of the inscription. Following this suggestion your work will always have the character and "nifty" appearance.

On rush work incident to special events, such as fairs, carnivals, sales, etc., the opportunity is great for the development of designing and letter composition that will come under the "one stroke" head and have the appearance of serious high grade work. As much art can be introduced into temporary sign display via the rapid stroke route as in the serious conservative field of permanent sign painting.

Cultivate a knowledge of abbreviated ornament, principally Rococo, which can be executed very quickly. Odd shaped panels, and, in fact, anything in the way of embellishment which is unconventional. This suggestion alone gives one unlimited latitude in developing individuality.

MAKING SMALT.

Use clear white beach sand and have perfectly dry. For black smalt use Lamp Black in Japan, toned deep with Prussian Blue. Add a little Quick Rubbing Varnish and break and thin with gasoline. Start coloring the sand in five pound lots, and start by keeping sand in motion, adding the color the while, when sand is stained the desired shade dry by "tossing" it against an inclined screen (common wire screen). Keep it in motion until it no longer adheres together, then sift it three or four times and it will then be ready for use.

For light colored smalts, such as vermilion, pale green, tan, yellow, old gold, etc., make the "cutting in" color about the same color as the smalts used, *i. e.*, neutral in tone. While neutrality is not imperative it is more workmanlike and gives the smalted ground a more solid look.

EMBOSSSED GOLD GROUND BOARD.

BLACK LETTERING.

Make a pounce pattern of the layout and pounce dark on properly flat coated board. "Cut in," leaving margin or outline on all the lettering and smalt with ordinary white beach sand, well sifted. (Use little white lead in "cutting in" color.) Let dry for forty-eight hours and dust out all loose smalt, coat in solid in good "flat" lead, with little varnish in it. When dry give another coat of same material. When dry give two thin wash coats of shellac and size in slow forty-eight-hour fat oil. Gild solidly and before rubbing and burnishing pass over the gilding with a stencil roller, covered with dry plush having a deep nap. This will "press" gold into the rough surface of the ground and reduce the patching necessary to render the gilding solid. Rub and burnish with a "used" wad of gold cotton. Now letter in glossy black (oil black with varnish added), leaving the smooth or burnish outline around each letter. When finished the work shows a black letter with burnish gold outlines and rough embossed or chased surface.

BURNISH GOLD BOARD—BLACK LETTER.

Use pounce pattern, or "layout" sign in lead pencil before "sizing in." Size in solid (regardless of layout), using *over-night size*. In the morning before gilding trace the layout with hard lead pencil, each pencil mark to be a faint indentation showing in the hardened size. Proceed to gild softly, rub and burnish highly. The layout can readily be seen in reflected light. Tie a clean cotton wad on end of mahl stick to prevent marring the gilding when resting the stick and letter in glossy oil color (oil color and varnish). Makes a very handsome sign.

Another method on gold ground board with black letter, instead of tracing, layout on the hardened size, execute lettering (before gilding) in clear Japan black (with little finishing varnish in it). Will dry in few hours. When lettering is dry, gild as in the first method,

and when burnished *give lettering* care not to overcrowd onto the g

STENCIL

A stencil pattern for surface layout upon thin tracing paper (which has been previously "back" of "tracing" with dry Eng blue. Trace with hard pencil and "cutting" cut only one-half of each "register" the tracing and trace the "Cut" and when completed the t without any touching up or "tying" give coat of shellac before beginning

ADDITIONAL POINTS

When "cutting" a stencil pattern held slanting at a slight angle. The on the edge of the cut and a feather if one is to do clean work. Hence the If one cuts on glass or zinc as man cut" cannot be produced. A "bevel will do cleaner work.

If Stencil Brush is used *do not sto* the brush from palette place firmly o brush in a circular motion, producing the wrist. Forge ahead as openings when necessary to recharge. Keep fir The more pressure the cleaner the v unsteady and jerky.

STENCILING I

Stencil color should be "stiff" lam fat oil added.

OLD GROUND BOARD.

LETTERING.

the layout and pounce dark on properly leaving margin or outline on all the lettering. Use white beach sand, well sifted. (Use color.) Let dry for forty-eight hours in solid in good "flat" lead, with little another coat of same material. When dry of shellac and size in slow forty-eight-hour before rubbing and burnishing pass roller, covered with dry plush having a gold into the rough surface of the thing necessary to render the gilding a "used" wad of gold cotton. Now let with varnish added), leaving the smooth letter. When finished the work shows gold outlines and rough embossed or

BOARD—BLACK LETTER.

layout" sign in lead pencil before "sizing (size of layout), using *over-night size*. In tracing the layout with hard lead pencil, slight indentation showing in the hardened surface, rub and burnish highly. The layout should be light. Tie a clean cotton wad on end carrying the gilding when resting the stick (oil color and varnish). Makes a very

old ground board with black letter, instead of hardened size, execute lettering (before gilding with little finishing varnish in it). Will lettering is dry, gild as in the first method,

and when burnished *give lettering* a coat of finishing varnish, taking care not to overcrowd onto the gilding.

STENCIL PATTERNS.

A stencil pattern for surface lettering is made as follows: Make "layout" upon thin tracing paper and transfer to thin, tough manila paper (which has been previously "oiled"). Use carbon paper or rub "back" of "tracing" with dry English vermilion or dry ultramarine blue. Trace with hard pencil and "cut" on soft pine board. When "cutting" cut only one-half of each letter in first or male pattern. Take an impression of the male pattern on second piece of manila, "register" the tracing and trace the uncut portions of each letter. "Cut" and when completed the two stencil patterns will execute without any touching up or "tying" by hand. When through cutting give coat of shellac before beginning stencil work.

ADDITIONAL POINTS ON STENCILING.

When "cutting" a stencil pattern it is essential that the knife be held slanting at a slight angle. This will produce the desired bevel on the edge of the cut and a feather edge is the edge to be desired if one is to do clean work. Hence the use of soft pine board to cut on. If one cuts on glass or zinc as many authorities suggest, the "bevel cut" cannot be produced. A "bevel cut" pattern lies closer and hence will do cleaner work.

If Stencil Brush is used *do not stomp* the pattern. After charging the brush from palette place firmly on pattern openings and start the brush in a circular motion, producing it by letting the hand turn on the wrist. Forge ahead as openings are covered and lift brush only when necessary to recharge. Keep firm pressure on brush all the time. The more pressure the cleaner the work, if the wrist motion is not unsteady and jerky.

STENCILING IN OIL.

Stencil color should be "stiff" lamp black in boiled oil with little fat oil added.

STENCILING IN JAPAN COLOR.

Use Japan Color—"broken" in turpentine and have it ordinary penciling consistency. To "charge" drop a few drops at a time upon shallow tin tray or pie tin, taking it up with the stencil brush. (If stencil roller is used drop color upon a glass palette. Take up color by rolling back and forth on palette.)

Note.—For smalted backgrounds and real estate boards stencil in oil color. All other work stencil in Japan color and give one coat of varnish to finish, such as duplicate advertising signs, etc., small and medium size.

BACKGROUND STENCIL.

Proceed as for surface letter stencil and in the cutting, cut out spaces between letters and cut just a little above and below the top and base line of each line of lettering. Take an impression and in the second pattern "cut" out the spaces between the lines of lettering. (See page 309 for example.)

STENCIL BRUSHES.

For all ordinary board stenciling use a No. "300" Stencil Brush. To keep in condition, when not in use wrap as stated in "Care of Brushes," and submerge in turpentine. To put in use vigorously "bat" back and forth against edge of a stick held firmly against the wall or floor.

Stencil roller is covered with "plush." To clean, "unclamp" the roller and rinse the plush in gasoline and lay in shallow tray of turpentine.

TRACING A SAMPLE SIGN OR LETTERING ON WINDOWS, TO BE DUPLICATED.

Use thin tracing paper and trace with lead pencil; or, use ordinary thin drawing paper which is opaque. To render transparent keep it saturated ahead of the lead pencil with gasoline, benzine or turpentine, using clean cotton to apply it.

MAKING A POUNCE PATTERN FOR WINDOWS OR BOARD DUPLICATE.

Use medium weight manila pattern paper. Make drawing and perforate the lines with perforating wheel. After perforating, fine sandpaper the "back" of the pattern lightly to remove paper fibre from the perforation.

PATTERN FOR SMALL OR MEDIUM SIZED GLASS SIGNS.

Use thin manila paper, fasten to face of glass as *gilding guide*, and when gilding is ready, rub "face" of pattern with dry pale English vermilion (using dry cotton). Fasten face down to back of glass with clips on gummed stickers. Trace with hard pencil. When removed will show a fine red tracing that shows fine in reflected light.

PATTERN FOR JAPANED TIN.

Proceed same as for glass pattern, except in the *vermilion rub*, which must be on back of drawing. Trace with hard pencil. Japaned tin should be sponged and chamoised and polished with clean cotton before "tracing." "Size" in Japan gold size, stained with chrome yellow in oil. Gild when ready and chamois after rubbing is done. The chamois should remove all gold that adheres to the background. If a few spots fail to come by this method, erase with ordinary pencil eraser sharpened to a wedge point.

LAYING OUT WAGON LETTERING.

Lay out all solid panels on one side—in white crayon—to transfer or "carry" to other side, use common newspaper per following: Start at left of a panel and lay on one thickness of paper; hold firmly (do not allow it to shift), and rub hard with a clean, dry cloth. Make a chalk mark at edge of first paper to determine the placing of second paper and so on. Lift and "carry" to other side and place against lifted will show a faint but true duplicate of layout. Do not omit the *chalk dots* at edge of paper or the position of second "rubbing" will be lost. Proceed thus until right hand side of panel is reached.

To take an impression of a wagon layout (when duplicates are to

be lettered in future) coat manila in flat Japan black on one side. When dry place paper against the chalk layout and "rub" hard as in the foregoing. When lifted the paper will bear faint duplicate with the lettering reversed on the black side of paper. Perforate with a wheel and lay away for future work.

Note.—Paper for stencil cutting should be oiled with linseed oil, to which add a little kerosene. Before cutting give one coat of shellac. After cutting is done give another coat of shellac.

On large stencil patterns for cars, agency signs, etc., heavy shellac coat the back of oiled paper (before cutting) and cover back with finely woven muslin (containing *no* starch) and press in close contact with a *cold flat iron*.

Note. Shellac is a fine paper adhesive and if used same as glue will give good results.

Cloth will give the pattern all the strength needed and with proper care will last for years. Stencil patterns should be cleaned carefully and frequently, using rags and benzine. If through lack of time or carelessness a pattern is left uncleaned, take into open air on a flat surface and clean up with fusel oil.

Note.—All large or small stencil patterns should be mounted upon light frames and should fit the board or work being stenciled rather loosely.

TIPS AND TRICKS.

Blending color smooth. "Lay in" colors side by side, leaving even joints. Blend together with dry blending brush until desired effect is obtained.

Blending color mottled. "Lay in" colors and produce the mottled blended effect by "stomping" with dry sponge (having a flat cut face).

Painting art subjects upon glass in full color. Make full detailed drawing and perforate for pounce.

Pounce on face of glass and fine line in Quick Drying Burnt Sienna (on inside of glass). Hang a *large mirror* on a step ladder, in front of window—the mirror to face the glass. All progress can be noted from the inside by glancing into mirror.

If pictorial is surrounded by cloth. When dry can be transferred in manner. Coat glass and the picture. Place in position quickly and with contact. As the surplus varnish "works" off with a knife. If any air bubbles, locate them with a needle. Continue the rolling until the glass is covered. Allow to dry a few days. Give a strong lead coat.

Mother of Pearl for centers of glass. Fasten pieces of irregular picture to glass with bright tin foil in the hand and backs of letters with Damar Varnish. Gives a bright, pleasing background for heavy coat of fat lead color.

MOST POPULAR GLAZING COLORS FOR WAGON LETTERING.

Asphaltum is first; must be used first or it will "pull" up when finished. Splitting shades, on greens, white, cream.

Carmine in Japan—fine for glazing. Lates, old gold, pinks and purples.

Ultramarine in Japan—fine for glazing. Olives, blues and purples.

Yellow Lake in Japan for splitting shades. Gamboge in Japan for glazing. Gold.

Burnt Sienna on old gold and terra cotta buff.

Emerald Green on greenish yellow. Greens, greenish browns.

Mix all glazing colors in Japan glaze. Depth of tone desired in the glaze. The deeper for stronger tone.

...hila in flat Japan black on one side. ...he chalk layout and "rub" hard as in ...paper will bear faint duplicate with ...ack side of paper. Perforate with a ...work.

...ting should be oiled with linseed oil, ...Before cutting give one coat of shellac. ...ther coat of shellac.

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AND TRICKS.

"Lay in" colors side by side, leaving ...with dry blending brush until desired ef-

"Lay in" colors and produce the mottled ...with dry sponge (having a flat cut face). ...n glass in full color. Make full detailed ...ounce.

and fine line in Quick Drying Burnt ...Hang a large mirror on a step ladder, in ...or to face the glass. All progress can ...glancing into mirror.

If pictorial is surrounded by border it can be painted upon oil-cloth. When dry can be transferred or fastened to glass in following manner. Coat glass and the pictorial with clear Damar Varnish. Place in position quickly and with a rubber roller rub in close contact. As the surplus varnish "works" out at edges pick up with putty knife. If any air bubbles, locate them from the back and prick with a needle. Continue the rolling until it appears in perfect contact with the glass. Allow to dry a few days and putty the edges and give strong lead coat.

Mother of Pearl for centers of high grade ornamental lettering on glass. Fasten pieces of irregular pearl with Damar Varnish. Crinkle bright tin foil in the hand and partly smooth out and fasten to backs of letters with Damar Varnish to protect the pearl and furnish a bright, pleasing background for the pearl. Back up the foil with heavy coat of fat lead color.

MOST POPULAR GLAZING COLORS FOR SHADES AND SCROLLS ON WAGON WORK.

Asphaltum is first; must be used with a little quick rubbing varnish or it will "pull" up when finishing varnish is applied. Fine for splitting shades, on greens, white, cream and yellows.

Carmine in Japan—fine for glazing "splits" on reds, tans, chocolates, old gold, pinks and purples.

Ultramarine in Japan—fine for splits and glazing on greens, olives, blues and purples.

Yellow Lake in Japan for splits on pale tans, pale greens, pale yellows and creams. Gamboge in Japan on yellows, tans and pale old gold.

Burnt Sienna on old gold and terra cottas, chocolates, cream and buff.

Emerald Green on greenish yellows, pale greens, pale olive greens, greenish browns.

Mix all glazing colors in Japan gold size and in proportion to the depth of tone desired in the glaze. Very faint for delicate tone and deeper for stronger tone.

MOST POPULAR COLORS FOR GLAZING ON GOLD SCROLLS AND ORNAMENTS.

Burnt and Raw Sienna, Burnt and Raw Umber, Carmine, Yellow Lake, Gamboge, Emerald Green, Orpiment, in oil, thin to glazing consistency with finishing varnish and few drops of oil—do not try "modeling up" all of the values at one sitting, "lay in" the broad ones and let stand for a few hours, proceeding then with the deeper tone values and shadows. "High lighting" color should be warm and crisp and full of nice, "snappy" feeling; should be warm, rather light yellow or orange buff.

TRICKS AND TIPS.

Before laying out a window or large glass in chalk give glass a rub with Stale Beer, let it dry, and the crayon will mark exceedingly well.

Do not attempt to do Sign Painting without the aid of that most valuable article, the Chamois Skin, for wiping and drying surfaces.

Small Alcohol Lamp is a most essential thing to carry in the "kit" for boiling water and water size.

The Sponge is companion to the Chamois Skin with the same degree of importance.

Very swell colored transparent background on glass can be produced by sizing in over-night size and rubbing desired dry color on the "tack" in the morning, using regular velvet buff.

For lining gold or silver on card signs, grind either gold lining bronze or aluminum lining bronze stiff in LePage's glue, thin with water; also add coarse bronze to give brilliancy.

Dry colors for Distemper Show Card Lettering, grind in LePage's glue with a few drops of grain alcohol added; thin with water.

Flat large cork in a saucer makes a good grinding utensil for distemper color to be used on cards.

If a large quantity of Orange Mineral, Red Lead or English Vermilion is being mixed, drop a few handfuls of bolted whiting in the

pot and stir it up. It will assist greatly in keeping the heavy pigments in suspension. Treat all dry colors the same.

Working on a window in cool, changeable weather keep glass dry with aid of an electric fan.

Rods for large projecting swings should be large gas pipe, with screw base, base having screw holes to fasten rod to building. Brace each way and from top with chains having small *turn buckles* to draw chains taut.

Sign rods and hooks can be ornamental, but must fill their primary object, that of supporting the sign.

Use a small block with small staple in end for keeping signs of a kind separated. Free staple point sticks in edge of sign and keeps block in place.

Fasten upright stakes (with brad in top end) to pair of horses, one pair to each horse. When stenciling double face signs the brads prevent sign from shifting during the stencil operation.

To ship varnish ground signs successfully, cover face with heavy felt paper, and tack it securely on back, or place two signs together face to face, separating the faces with ordinary felt *gun wads*.

Smalted sign to ship should be in sections face to face, separated and held firmly by tacking blocks along edges.

Durable Red Ground Varnish, second coat with half oil and turps thinned red lead; third coat, flat red lead, fourth coat, American or Chinese vermilion, last coat and final color coat, in Harrison's "1793" Vermilion in Japan, with little rubbing varnish in it; also advisable to *prime* in red lead.

For cheap red varnish grounds, neutral coat with any deep buff, ochre, or orange yellow; color coat with Harrison's "1793" Vermilion. Comes in light, medium and deep shades.

For imitation chipped glass use plain D. S. A. sheet glass on which do black lettering, and *burnish silver leaf* shade. Use chipped glass same size, and *size in* the chipped side in *fat oil*. Gild in *aluminum leaf*. Fasten the two *glasses* together with *gummed bicycle tape* around edges before setting in frame.

After a large panel is covered with smalt, *in dumping loose smalt*

off do not raise to an incline and let smalt slide off. The weight of the smalt will "cut" smalt away from the edges of the lettering, leaving them devoid of smalt. The panel should be raised to a vertical position quickly, *which will throw the smalt off* instead of sliding off. Use a large drop cloth to catch loose smalt.

When a pencil becomes damp rinse in chloroform, then in gasoline, lay in sun or moderate heat to dry; leave several hours.

Don't forget to wash lettering pencils after using. If used in water, wash in water; if in oil or Japan wash in benzine or turps. Grease with *lard oil*; wash again in benzine before using.

Don't use skinny or dirty color; strain it before use.

Don't keep brushes of any kind in water.

Have a set of sable brushes for water color exclusively and never allow them to come in contact with oil of any kind.

Don't forget to pounce all surfaces, except glass, where leaf or rubbing bronzes are used before "sizing in" letters. Rotten stone, corn starch or whiting will do. If very sticky, rub with raw potato or white of an egg added to teacup of vinegar. Be sure these are dry before proceeding.

Don't work on dirty glass or any dirty surface. Time is saved in cleaning it.

Don't dig holes in can colors. Keep top leveled and cover with turpentine. *Never* under any condition keep water on colors or even on the white lead. Keep lead surface level and covered with turps.

Don't depend on eye too much after position of lines or curves are determined—use rule, snap line and compasses.

Flock produces a fine, velvety ground for signs; used instead of and in the same manner as smalt.

For fine work always grind colors under palette knife on zinc bench, marble slab or plate glass slab.

Do Show Cards free hand, same as ordinary writing, laying card on sloping bench.

Closing Out and Special Sales may be effectively announced by kalsomining all windows on face and lettering in well "sized" distemper color.

Another Red Varnish Suggest after prime. Second coat English son's 1793" Vermilion.

Imitation Oxidized Copper Final coat frame in deep greenish insect powder gun with copper br "pattern" taken by oxidization.

Fine Flat Coating.—Good even grounds. Draw lead thoroughly (lead its bulk of Quick Rubbing Varnish a "lead with a spread.")

Lacquers.—On glass use different "skeleton" or outlined letters, on d crinkled tin foil.

Glass Backing (good).—Use equal parts, mixed with lead or color glass work.

Imitation Gold Leaf on Chipped aluminum leaf and glaze with yellow varnish and a few drops of turps. In nivals.

Effective Interior Sign.—"Cut in" trifle sift on dry ultramarine blue as

Use a large scewing box, two feet screen, on which to gild carved letter screen.

Building Boards.—Always use color for the face.

Fancy Glass Sign.—In centers of small ladies' watch crystals before gild an adhesive for them.

Black Board Slating.—Add one part lon grain alcohol shellac, two ounces black sufficient to make it an opaque color powdered emery to give it "tooth." T

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Another Red Varnish Suggestion.—Orange mineral first coat
after prime. Second coat English vermilion, final color coat "Harris-
son's 1793" Vermilion.

Imitation Oxidized Copper on Fancy Glass Sign Frames.—
Final coat frame in deep greenish umber in oil. When "set" fill an
insect powder gun with *copper bronze*. "Blow" bronze on frame in
"pattern" taken by oxidization. Varnish with fat oil.

Fine Flat Coating.—Good even spread of white and pale tints for
grounds. Draw lead thoroughly (extracting all oil). Mix with the
lead its bulk of Quick Rubbing Varnish and thin with turps. This is
a "lead with a spread."

Lacquers.—On glass use different color *lacquers* for glazes on
"skeleton" or outlined letters, on dark or black ground. Back with
crinkled *tin foil*.

Glass Backing (good).—Use Baking Varnish and Boiled Oil
equal parts, mixed with lead or colors for durable final coating on fine
glass work.

Imitation Gold Leaf on Cheap or Temporary Work.—Use
aluminum leaf and glaze with yellow lake mixed with coach finishing
varnish and a few drops of turps. Fine for exposition work and car-
nivals.

Effective Interior Sign.—"Cut in" job in blue and when "set" a
trifle sift on dry ultramarine blue as in smalting. Very fine.

Use a large scewing box, two feet by six feet, covered with wire
screen, on which to gild carved letters. Rub all scewings through
screen.

Building Boards.—Always use concave or curve side of a board
for the face.

Fancy Glass Sign.—In centers of vertical stroke of lettering fasten
small ladies' watch crystals before gilding. Use Damar Varnish as
an adhesive for them.

Black Board Slating.—Add one pint of LePage's glue to one gal-
lon grain alcohol shellac, two ounces powdered borax; stir in lamp
black sufficient to make it an opaque coating, and add eight ounces of
powdered emery to give it "tooth." Thin with grain alcohol.

Lamp Black is gray and will look so if used as a ground on glass.
Enrich and tone to deep black with Prussian Blue.

Small Imitation Brass Signs.—Lacquer clean, bright tin in gold
lacquer (yellow lake in baking varnish). When dry rub faintly with
whiting and water, leaving it on to dry. Make thin paper drawing
of the layout and rub on back with dry ultramarine blue. Trace on
the tin and letter in quick drying oil black. When black is dry clean
off the whiting with moist chamois.

Blending Gold on Glass.—Gild one-third of the letter height in
deep gold. When dry scratch or etch blend with the *glass brush*.
Gild next section in lemon gold, etch in the blend and finish in silver
leaf in top section. Back up in the usual manner.

Use a *stylographic pen* instead of chalk on office doors, for laying
out. Glass must be clean or it will not take the *ink*.

In the winter Plate Glass windows are liable to breakage if they
bear large painted panels and the temperature of the room is not uni-
form. For instance, if a window has black or colored panel entirely
across the glass the Plate Glass Insurance Co. will not insure the
window, and *will insure* if clear glass surrounds a painted panel.
However, we have noted plenty of breakages in either case. In severe
freezing weather, if windows are covered with frost the sunshine will
usually aid in the breakage; part of the glass having paint on back
will warm faster than the bare glass, which causes a difference in the
expansion and contraction of the glass.

On Wagon Lettering.—It is often imperative to execute a white or
light colored letter upon a black or dark colored panel or side curtain.
If aluminum lining bronze is added to the color it will force it to
cover in one coat—saving much time—as without it the lettering
would have to be double coated to look clean and opaque.

Never do "inside gold" lettering on windows of meat markets,
restaurants, grocery or saloons serving lunch in severe climates.
Moisture is always prevalent and keeps the windows wet with
"sweat," which freezes when the temperature drops.

BRASS SIGNS.

Select a plate exact size desired and "buff" to high polish. Use a pounce pattern for layout and "cut in" lettering and lines and "fill in" background carefully with composition of *best grade* asphaltum, beeswax and resin, heated on slow fire to insure coalition. Should be as "stiff" as can be readily worked with a camel's hair pencil.

Carry on the brass sign operation upon the roof of shop or out of doors in back yard to avoid *fumes* given off by the acid and brass.

Care must be taken to cover background thoroughly. Do not touch any part of the polished brass with the fingers, it will cause trouble.

When "cutting in" color is thoroughly dry, lay the plate on perfectly level surface and bank the edges with stiff putty, made of beeswax and asphaltum. Now pour on the plate, to the depth of one-fourth inch, a solution of one part *nitric acid* and three parts of water, and allow it to stand from twelve to twenty hours. This solution should be frequently agitated and watched carefully to prevent cutting too rapidly in spots or *lifting* edges of "cutting in" composition. The acid may be diluted if cutting too fast, but do not pour in clear acid if cutting too slow—dilute first.

When letters and lines are *cut* to about one-half the thickness of the brass, pour off the acid and rinse in clear water. Then remove the "cutting in compo" with coal oil and benzine.

Now "fill in" letters and line with stiff paste, composed of dry ivory black, boiled oil and sugar of lead; knife it in and level off nicely with a stiff celluloid paper knife. When dry clean off whole surface well with oxalic acid dissolved in clear water, and polish with cotton and dry ivory black.

APPROXIMATE PRICE LIST.

The prices charged for sign painting will ever be a source of contention among the craft, yet it is unnecessary to add that the price for a given piece of work should at all times be consistent.

The lowest minimum of *profit* for a day's work in sign painting

(when in business for oneself) *must be* \$10.00 after cost of materials and incidentals are deducted.

The student cannot adhere to this principle until fully qualified, with average *speed* ability fully considered. The above and the following are for the student's guidance when fully qualified to take rank with contemporaneous talent engaged in the business of sign manufacture and painting.

Never develop into a *cheap man*. If the student will work and work hard throughout this course of instruction and after completing it, work all the harder, it will spell success. Do not allow the mastery of one phase or detail of the art to develop any latent egotism in your personality. Rather take it as encouragement for further and more energetic effort and always bear in mind that fully 60 per cent of the talent engaged in sign painting is *mediocre*.

Men who can "letter" passably, but who cannot do anything more than the most ordinary work, showing lack of character and technical knowledge in every detail—these are the people the students can forge ahead of with aid of this course and what it stands for.

DRUM SIGNS.

| | Gold | | Paint | |
|---------------|---------|---------|---------|---------|
| | Single | Pairs | Single | Pairs |
| 8 inch | \$ 2.25 | \$ 4.00 | \$ 1.05 | \$ 2.50 |
| 12 inch | 3.00 | 5.00 | 2.25 | 3.75 |
| 18 inch | 3.75 | 7.00 | 2.75 | 5.00 |
| 24 inch | 4.00 | 7.50 | 3.00 | 5.75 |
| 30 inch | 4.75 | 9.00 | 3.75 | 6.50 |
| 36 inch | 5.50 | 10.00 | 4.25 | 8.00 |
| 42 inch | 6.50 | 11.75 | 5.50 | 10.00 |
| 48 inch | 7.50 | 14.00 | 6.50 | 11.75 |
| 5 feet | 8.50 | 16.00 | 7.00 | 13.50 |
| 6 feet | 10.00 | .... | 8.50 | .... |
| 7 feet | 13.00 | .... | 9.50 | .... |
| 8 feet | 15.00 | .... | 10.75 | .... |
| 9 feet | 18.00 | .... | 13.00 | .... |
| 10 feet | 24.00 | .... | 16.00 | .... |

In lots of 6 or more deduct 30 per cent.
 In flat zinc, deduct 10 per cent.
 If lettered entirely in silver, deduct 10 per cent.
 For every 6 in. over 3 ft. in width, deduct 10 per cent.
 On *repaint* deduct 15 per cent.
 For gold ground, add 75 per cent.
 For silver ground, add 30 per cent.
 Varnished ground, add 15 per cent.
Bracket Signs, double face, estimate 20 per cent.

BOARD AND GALVANIZED

Up to 6 inches wide
 Up to 12 inches wide
 Up to 18 inches wide
 Up to 24 inches wide
 Up to 30 inches wide
 Up to 36 inches wide

Above prices call for smalted ground.
 After first full line add 30c per foot.
 gold; if silver, 25c per foot; if paint, 20c per foot.
 Repaints—deduct 20 per cent.
 If customer furnishes board, deduct 10 per cent.
 If finished in varnish add 30 per cent.
 If gold ground, add 75 per cent.
 If both sides, add 75 per cent.

CARVED RAISED LETTERS ON FASCIA BOARD

3 in. letter, up to 14 in. wide, per foot
 4 in. letter, 14 to 18 in. wide, per foot
 5 in. letter, 18 to 24 in. wide, per foot
 6 in. letter, 24 to 30 in. wide, per foot
 9 in. letter, 30 to 36 in. wide, per foot

must be \$10.00 after cost of materials

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man. If the student will work and course of instruction and after completion will spell success. Do not allow the of the art to develop any latent ego-her take it as encouragement for further and always bear in mind that fully 60 in sign painting is *mediocre*.

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NUM SIGNS.

| Gold | | Paint | |
|---------|---------|---------|---------|
| Single | Pairs | Single | Pairs |
| \$ 2.25 | \$ 4.00 | \$ 1.05 | \$ 2.50 |
| 3.00 | 5.00 | 2.25 | 3.75 |
| 3.75 | 7.00 | 2.75 | 5.00 |
| 4.00 | 7.50 | 3.00 | 5.75 |
| 4.75 | 9.00 | 3.75 | 6.50 |
| 5.50 | 10.00 | 4.25 | 8.00 |
| 6.50 | 11.75 | 5.50 | 10.00 |
| 7.50 | 14.00 | 6.50 | 11.75 |
| 8.50 | 16.00 | 7.00 | 13.50 |
| 10.00 | .... | 8.50 | .... |
| 13.00 | .... | 9.50 | .... |
| 15.00 | .... | 10.75 | .... |
| 18.00 | .... | 13.00 | .... |
| 24.00 | .... | 16.00 | .... |

In lots of 6 or more deduct 30 per cent.
 In flat zinc, deduct 10 per cent.
 If lettered entirely in silver, deduct 15 per cent.
 For every 6 in. over 3 ft. in width, add 30 per cent.
 On *repaint* deduct 15 per cent.
 For gold ground, add 75 per cent.
 For silver ground, add 30 per cent.
 Varnished ground, add 15 per cent.
Bracket Signs, double face, estimate same as 1 pair drums, less 15 per cent.

BOARD AND GALVANIZED IRON FASCIA SIGNS.

| | Per lineal Foot | | |
|----------------------------|-----------------|--------|--------|
| | Gold | Silver | Paint |
| Up to 6 inches wide | \$0.50 | \$0.40 | \$0.30 |
| Up to 12 inches wide | .65 | .50 | .40 |
| Up to 18 inches wide | .85 | .75 | .60 |
| Up to 24 inches wide | 1.00 | .85 | .70 |
| Up to 30 inches wide | 1.25 | 1.00 | .80 |
| Up to 36 inches wide | 1.50 | 1.25 | .90 |

Above prices call for smalted grounds and one line of lettering.
 After first full line add 30c per foot for all additional work in gold; if silver, 25c per foot; if paint, 20c per foot.
 Repaints—deduct 20 per cent.
 If customer furnishes board, deduct 20 per cent.
 If finished in varnish add 30 per cent.
 If gold ground, add 75 per cent.
 If both sides, add 75 per cent.

CARVED RAISED LETTERS ON FASCIA BOARD, BLACK SMALT GROUND.

| | |
|---|--------|
| 3 in. letter, up to 14 in. wide, per ft. lineal | \$1.25 |
| 4 in. letter, 14 to 18 in. wide, per ft. lineal | 1.50 |
| 5 in. letter, 18 to 24 in. wide, per ft. lineal | 1.75 |
| 6 in. letter, 24 to 30 in. wide, per ft. lineal | 2.00 |
| 9 in. letter, 30 to 36 in. wide, per ft. lineal | 2.50 |

Letters gilded in XX Deep gold leaf.
 If finished in silver deduct 20 per cent.
 If two lines of letters, add 75 per cent.

GILDING ON GLASS.

5 in. high, one shade or lined, 75c per lineal ft. On ground floor increase 20 per cent.
 4 in. or less outline or with ground, \$1.00 per lineal ft.
 6 in. high, shade or line, 80c per lineal ft.
 From 6 to 8 in. high, one shade or lined, \$1.00 per lineal ft.
 From 8 to 10 in. high, one shade or lined, \$1.90 per lineal ft.
 Over 10 in. high, one shade or lined, \$2.00 and up per lineal ft.
 Gold or silver lines around panels, 3/8 in. or more wide, 10c per ft.
 For each additional shade add 20 per cent.
 For blended shade add 40 per cent.
 For ornamental face add 30 per cent.

A sketch should be made for each order to assist in accurate estimates on scale of one-fourth inch to the foot.

OFFICE DOORS.

Black. Colors or Aluminum, per lineal ft.....\$0.25
 Single line75
 Gold numbers on transoms in office buildings, up to 5 in. high, 25c for each numeral up to 99. After 99, 20c for each numeral.
 Colors half the above price.

HOUSE NUMBERS ON TRANSOM.

| | Residence or Store. | |
|----------------------------------|---------------------|--------|
| | Gold or Silver. | Paint. |
| Up to 8 in. high..... | \$2.50 | \$1.50 |
| If done in shop | 2.00 | 1.00 |
| 3 to 5 numbers, one trip..... | 1.80 | .80 |
| 5 or more numbers, one trip..... | 1.70 | .60 |

PAINTED CANVAS SIGNS ON FRAMES.

Smalted or Unsmalted.

Three ft. wide or less, 60c per lineal ft., up to 25 lineal ft., after first 25 ft., then 18c per lineal ft.

If wider than 3 ft. estimate at 20c per sq. ft., up to 75 sq. ft.; after first 75 sq. ft., 15c per sq. ft.

If gold lettering, 10 per cent less than board or metal signs.

OILCLOTH SIGNS (UNMOUNTED).

| | |
|-----------------------|--------|
| Ordinary, per sq. ft. | \$0.15 |
| 40 or more sq. ft. | .12 |
| 75 or more sq. ft. | .11 |

UNMOUNTED MUSLIN SIGNS.

| | |
|--------------------------------|--------|
| Ordinary, per sq. yd. | \$0.45 |
| 50 or more yards, per sq. yd. | .40 |
| 100 or more yards, per sq. yd. | 37½ |

Mounted muslin or oilcloth add 10 cents per lineal foot to above prices.

Muslin Banners for railway coaches, per square yard, 45c, \$1.50 per banner extra for sewing and rope.

PLAIN SWING SIGNS.

Tin or Zinc.

| | Gold. | Paint. |
|--------------|--------|--------|
| 6x12 inches | \$2.00 | \$1.50 |
| 10x14 inches | 3.00 | 2.00 |
| 12x18 inches | 3.25 | 2.25 |
| 14x20 inches | 3.50 | 2.75 |
| 18x24 inches | 4.50 | 3.00 |
| 24x30 inches | 7.00 | 5.00 |
| 24x36 inches | 8.50 | 5.75 |

For japanned tin, add 20 per cent; if on board, add 15 per cent; if fancy shape, add 40 per cent; if only one side, deduct one-third.

GLASS SWING SIGNS.

In Fancy Frames.

\$3.00 per sq. ft. glass measure, up to \$5.00 sq. ft.

EXTERIOR GLASS PANELS—FASCIA.

\$3.00 per sq. ft.

GLASS SWING HALL SIGNS—ONE SIDE.

On frosted glass, lettered in black or colors, same as swing signs in color letter.

STAIR STRIPS—"TIN."

In gold or silver, 50c lineal ft.

In two colors, 30c lineal ft.

SHOW CARDS.

| | |
|-----------------------|--------|
| Full sheet | \$0.75 |
| 5 or more, one order | .60 |
| Half sheet | .40 |
| 10 or more, one order | .35 |
| Quarter sheets | .25 |
| 10 or more, one order | .20 |
| Price tickets, plain | .03 |
| Price tickets, fancy | .07 |

WALL WORK.

| | |
|--|--------|
| "Broke on" and "cut in," white letter, black ground. | |
| Up to 100 sq. ft., per sq. ft. | \$0.05 |
| Up to 500 sq. ft., per sq. ft. | .04½ |
| Up to 1,000 sq. ft., per sq. ft. | .04 |
| Above 1,000 sq. ft. per sq. ft. | .03½ |
| Contract 10,000 sq. ft. or more, per sq. ft. | .03 |
| If colored ground, 5c sq. ft under 1,000 sq. ft. | |

Above 1,000 sq. ft., 4c sq. ft.
 Lettered on light colored ground
 Pictorial work on walls, bulletins and
 Decorative panels on walls, bulletins

REAL ESTATE

2 ft. by 3 ft., lots of 25 or less
 2 ft. by 3 ft., lots of 100 or more
 All sizes larger, per sq. ft.
 In lots of 25, per sq. ft.

WINDOW SIGN

Gold, per lineal ft.
 Silver, per lineal ft.
 Paint, per lineal ft.
 Add 10c per ft. for shade.

WAGON LETTERING

Gold, with shade, per lineal ft.
 Silver, with shade, per lineal ft.
 Color, with shade, per lineal ft.

LETTERING SILK

Gold, per lineal ft.
 Silver, per lineal ft.
 Color or bronze, per lineal ft.

CAMPAIGN BANNERS

For street display. Style, ribbons and
 sewed on net 14x30 ft., \$150. each, or ch

SWING SIGNS.
 Fancy Frames.
 Price, up to \$5.00 sq. ft.

SS PANELS—FASCIA.

WALL SIGNS—ONE SIDE.
 In black or colors, same as swing signs

STRIPS—"TIN."
 1 ft.
 2 ft.

SHOW CARDS.
 \$0.75
60
40
35
25
20
03
07

WALL WORK.
 " white letter, black ground.
 1 ft. \$0.05
 1 ft.04½
 1 ft.04
 1 ft.03½
 more, per sq. ft.03
 sq. ft under 1,000 sq. ft.

Above 1,000 sq. ft., 4c sq. ft.
 Lettered on light colored ground, under 1,000 sq. ft., 7½c sq. ft.
 Pictorial work on walls, bulletins and fences, per sq. ft. \$0.25
 Decorative panels on walls, bulletins and fences, per sq. ft.12

REAL ESTATE BOARDS.

2 ft. by 3 ft., lots of 25 or less \$1.00
 2 ft. by 3 ft., lots of 100 or more95
 All sizes larger, per sq. ft.16
 In lots of 25, per sq. ft.09

WINDOW SHADES.

Gold, per lineal ft. \$0.50
 Silver, per lineal ft.40
 Paint, per lineal ft.35
 Add 10c per ft. for shade.

WAGON LETTERING.

Gold, with shade, per lineal ft. \$0.50
 Silver, with shade, per lineal ft.40
 Color, with shade, per lineal ft.25

LETTERING SILK OR SATIN.

Gold, per lineal ft. \$1.00
 Silver, per lineal ft.75
 Color or bronze, per lineal ft.50

CAMPAIGN BANNERS.

For street display. Style, ribbons and portrait panels of canvas
 sewed on net 14x30 ft., \$150. each, or charge about 30c per sq. ft.

BEST BRUSH PALETTE FOR COLOR STAND IN SHOP.

Take empty *gold book*, turn first leaf and fasten to top of stand
 (with few drops of color), allowing remainder of book to hang over
 the edge of the stand, as fast as one leaf is filled or gummed with
 color turn the next leaf and let it fasten to preceding leaf, and so on
 to end of book.

PAPER COLOR CUPS.

In use by all who lay any claim to being progressive in the busi-
 ness. Shellac pattern paper, one on side (two coats), cut into pieces
 3½x5½ inches. Keep them on hand in shop and "kit."
 A box can be folded in a few seconds per following: Fold both
 sides of paper three-quarters inch, fold ends one and one-quarter
 inches, bend side and end of corner upward from bottom until the
 creases meet in forming the corner and fold the surplus around the
 end. Repeat with other corner on same end and fold all projecting
 paper of the end (which is above the three-quarter inch mark) out-
 ward and over the end, which effectually "locks" the folding of the
 corners and makes it a color tight box or cup.

SPACING.

In the art of lettering we have no fixed mathematical rules. The
 law is based entirely upon approximates, with the laity or people out-
 side of the profession the supposition is that all letters are the same
 size, formed on mathematical lines. Nothing is further from the
 truth. All letters *are the same size in appearance*. Technical knowl-
 edge and professional skill are necessary to render this result.
*Some letters must occupy more space, others less to produce the
 appearance of uniformity.*
 Composition in lettering is almost too intangible to define by any
 rule. All the mathematical formulæ ever given on the subject are
 incapable of equaling the result that may be obtained *by spacing and
 producing* the effect solely from artistic experience and intuition.
 The final result should always be judged by its effect upon the

eye, which must be trained until it is susceptible to the slightest deviation from the perfect whole.

A line of lettering on any surface, no matter what style, must have a starting point and a stopping point. These two points are a matter of taste with the workman, and governed entirely by the fact that a letter cannot be condensed or elongated to the point of distortion. However, the latitude is very wide in both cases before reaching the point of distortion, owing to the many and varied modifications of the standard fixed styles normal in proportions. Hence the taste of the workmen can be exercised to almost an unlimited degree, in condensing and elongating.

Never condense a letter more than 3-5, and never extend or elongate more than 5-5.

No matter how long a space is, when it is to bear a short word, never extend lettering more than 5-5—that would make the letter 5-5 high by 10-5 wide. Take away sufficient space from each end of space so that lettering will approximate itself into 10-5 spaces, with good proportionate space between letters.

Fig. 36. Incorrect:
LAWYER

Fig. 35 Correct:
LAWYER

Proportionate space between letters must be proportionate and not dictated by any mathematical rule of spacing, as for instance, the novice would in ninety-nine cases out of one hundred proceed in this wise in spacing the word "LAWYER." The result is far from right or pleasing, because the letters do not space proportionately.

The sole intent is to equalize the open or blank space between letters producing a pleasing effect of approximate space.

This proportionate space must be an approximate only and is all that is required to get a pleasing effect in spacing.

All round letters should be spaced a trifle more closely to each other (such as C, G, O and Q), and the full space letters such as B, D, E, H, K, M, N, R, U, S, X, Z must be allowed more space between them. All open letters, A, F, J, L, P, T, V, W, Y, must be spaced very close, owing to their open shapes.

In order to get the appearance of uniformity throughout a line of lettering or alphabet it is necessary to observe the following: In normal or square space letter divide letter space into fifths, five squares high and five squares wide. For A add 1-5 to width, for B normal, for C normal, for D normal, for E 1-2 of 1-5 less in width, for F 1-2 of 1-5 less in width, for G normal, for H 1-4 of 1-5 less in width, I 1-5, J 1-5 less in width, K normal, L 1-5 less in width, M add 1-5 to width, N 1-2 of 1-5 less in width, O add 1-2 of 1-5 to width, P normal, Q add 1-2 of 1-5 to width, R normal, S normal, T normal in full blocks and Romans, 1-2 of 1-5 less in width in Egyptians, U 1-4 of 1-5 less in width, V add 1-2 of 1-5 to width, W add 2-5 to width, X normal, Y add 1-2 of 1-5 to width, Z normal, & normal.

Same increase and reduction must be observed in elongating and condensing and in condensed letter the reduction of L, E, F, H, J, N and T may be highly exaggerated without detrimental effect. Quite the contrary, the effect is pleasing and highly proper.

On "full face" lettering, viz: Full Block, Half Block, Round Block and Tuscan Block, where vertical stroke is one major fifth, draw all horizontal strokes one minor fifth less in width than vertical strokes. If this suggestion is not observed the horizontal strokes will appear clumsy or larger than the vertical strokes, although in reality they are the same size. The above suggestion will overcome the delusion and will give the letter an interesting and pleasing contour.

The legitimate styles must be modified styles having "bold faces" heavy letters, in which vertical strokes major fifths in thickness, increase in proportion.

All round letters in every style (Egyptian) should extend a mere trifle above base line. If this rule is not observed, the letters will be taller in height in a line of lettering than the other letters in the line.

A normal letter space is square or smaller or *unit* squares, making the letter one major fifth and five major fifths wide. Now, if the unit square into fifths, we have minor

are used in an elementary way to assist in determining proportions in letter form, and must be used only when the student is qualified to draw and form letters.

Use Porte Crayon at end of light pencil line long for sketching and "blocking in" letters. It is only used out on large work such as panels, and is not used seriously "drawing in" same. Use charcoal for

ize the open or blank space between let-
t of approximate space.

must be an approximate only and is all
ng effect in spacing.

be spaced a trifle more closely to each
Q), and the full space letters such as
S, X, Z must be allowed more space be-
s, A, F, J, L, P, T, V, W, Y, must be
eir open shapes.

arance of uniformity throughout a line
necessary to observe the following: In
ter divide letter space into fifths, five
s wide. For A add 1-5 to width, for B
O normal, for E 1-2 of 1-5 less in width,
a, for G normal, for H 1-4 of 1-5 less in
th, K normal, L 1-5 less in width, M add
ss in width, O add 1-2 of 1-5 to width, P
width, R normal, S normal, T normal in
of 1-5 less in width in Egyptians, U 1-4
1-2 of 1-5 to width, W add 2-5 to width,
to width, Z normal, & normal.

ction must be observed in elongating and
ed letter the reduction of L, E, F, H, J,
exaggerated without detrimental effect.
ect is pleasing and highly proper.

g, viz: Full Block, Half Block, Round
where vertical stroke is one major fifth,
one minor fifth less in width than vertical
is not observed the horizontal strokes will
han the vertical strokes, although in reality
The above suggestion will overcome the
e letter an interesting and pleasing contour.

ON WORK PLACED AT HIGH ELEVATIONS.

The legitimate styles must be abandoned and recourse had to modified styles having "bold faces," or in shop vernacular "fat" or heavy letters, in which vertical strokes are one major fifth to two major fifths in thickness, increase horizontal strokes in same proportion.

WARNING.

All round letters in every style (except top and bottom spurred Egyptian) should extend a mere trifle above the top line and below base line. If this rule is not observed the *round letters will look less* in height in a line of lettering than the rest of the letters in the same line.

MAJOR FIFTH AND MINOR FIFTH.

A normal letter space is square, subdivided into twenty-five smaller or *unit* squares, making the letter space five major fifths high, and five major fifths wide. Now, if we subdivide one major fifth or unit square into fifths, we have minor fifths.

MAJOR AND MINOR FIFTHS

are used in an elementary way to assist in fixing good approximate proportions in letter form, and must be abandoned as soon as the student is qualified to draw and form lettering without their assistance.

LONG PORTE CRAYON.

Use Porte Crayon at end of light bamboo pole six or eight feet long for sketching and "blocking in" large pictorial subjects and layouts on large work such as panels, large muslin, etc., previous to seriously "drawing in" same. Use charcoal in drawing.

MISTAKE IN SPELLING.

On surface gold, smalt ground, lay "T" square at point desired and *scrape out* necessary section of smalt, leaving straight edge of smalt for the re-smalting to join against. Wipe cleaned "spot" with rag and benzine, "shellac coat" and correct the error.

On muslin, "paint out" error with flake white in Japan, giving coats enough to cover, or use flake white in distemper, or cover with little muslin patch.

On white show cards paint out error by covering up with dark colored panel, letter in flake white in distemper, or erase with steel ink eraser and fine sandpaper edges of the scraped patch, rub down smooth with thumb nail. If card is greasy wash greasy places with saturate solution of baking soda. Remove pencil marks and dirty spots with sponge rubber dipped in powdered pumice stone.

On oilcloth erase lettering with rag and linseed oil and wash clean with strong *soap suds*. Rinse off and chamois dry.

Do same on boards, using oil and benzine in the rag.

False stroke on surface gold, *rub out* with one sure stroke, using a clean wad of cotton moistened with clean saliva from the mouth.

STENCIL CUTTING.

Cut paper stencils on zinc or smooth pine board. Pine board preferred.

ZINC STENCILS.

"Cut in" design upon sheet zinc, using asphaltum and beeswax. Coat back of plate with melted beeswax and pour dilute nitric acid on plate. Confine acid with wall of beeswax around plate. Let acid eat its way through the plate and when this is accomplished rinse in clear water and remove asphaltum with turpentine. Use *thinnest* sheet zinc obtainable for zinc stencils.

PEBBLE CLOTH.

Pebble cloth is an oilcloth having a pebbled surface. (Used principally by carriage trimmers.) Makes an attractive sign and is excellent for exposition and carnival work. Mount on stretcher same as ordinary oilcloth. It does not need a *rub* of whiting and benzine before lettering to prevent color from crawling. Comes in several shades of color, also black. For rich effect on pebble cloth coat in flat Japan black. Letter in gold or silver bronze, and do shades and scrolls in clear varnish on the *flat* surface.

JUTE CLOTH.

Jute cloth is semi-flat or dull finished oilcloth; is made especially for sign painters. Does not need a benzine rub before lettering. Is excellent for all kinds of oilcloth signs. In New York City it is used exclusively for all signs of a temporary nature, instead of *Sign Painters' Muslin*.

IMITATION MARBLE.

Excellent for pleasing backgrounds on any sign surface. Prepare a water tank larger than the sign to be marbled. Fill with water, add two ounces of gum tragacanth for every gallon of water, and cover surface of the water with colors mixed with equal parts of oil, Copal varnish and turpentine. Colors should be of a thin brushing consistency to enable one to readily pour them upon the water from bottles. When surface of water is *covered*, form the color film into pleasing design in imitation of marble, using a stick for this purpose. When ready carefully lay face of sign upon the water surface and lift it immediately. *Lay sign flat* on trestles to dry. Should dry in thirty hours.

BRASS SIGNS NO. 2.

Use highly polished brass plate and coat entire "face" with asphaltum per following formula:

One pint best asphaltum, two ounces of beeswax melted in *Venice turpentine*, one-half ounce resin. Heat together over slow fire to insure coalition. Let coated plate stand few minutes until "tacky," and cover with thin lead foil, rub in close contact, trace layout from pattern or give foil a sponge rub of whiting, to which is added a small quantity of mucilage to bind. Will dry in a few minutes; then proceed to "layout" with lead pencil, and with ordinary sewing needle fastened in a holder proceed to "cut out" the lettering, lift out waste foil and wash away the exposed asphaltum with coal oil or turpentine; polish and etch with acid as in the instructions on page 121. When etching is completed tear away all of the foil, clean as on page 121.

Never stir oil and japan colors together. *They will curdle*. If you must use them in this wise grind them together under the palette knife and no trouble will be experienced.

If oil is added to japan color, the color will curdle. Grind under knife and add oil a few drops at a time and the curdling will be avoided.

LETTERING SILK AND SATIN.

IN GOLD AND SILVER.

Make a careful pounce pattern of the layout and pounce upon the satin. (Satin must be *thumb tacked* to drawing board. Letter the layout carefully in "backing up" color, lampblack in japan broken in quick rubbing varnish and thinned with turps.) When dry "size in" two-hour quick size, gild at right tack, for shades, etc., use varnish colors. If any pictorials or emblems, execute in artists' tube colors, using gasoline for a thinning medium. The gasoline overcomes the oil spreading into the cloth. Also use a little varnish in the tube colors.

FROSTED GLASS.

To stale beer add as much epsom salts as the beer will dissolve. Apply to glass with flat camel's hair brush and fan with palm leaf fan until dry.

WATERPROOFING.

If your show card is exposed to weather, lettering on inclined plane, surface, should be toward the higher point. (See page 121.) The most popular alphabets are Block, Egyptian and French Roman. The latter is the easy favorite for general work.

FLITTERS OR FLITTERS.

are small flakes of brilliant metal. They are used in various poses. Can be had in pale and dark blue, green, copper and purple. For cards with lettering use of Lepage's Glue or Mucilage to let them stick at one time as it will strike in.) Sprinkle the surplus. Continue until all lettering is decorated.

FLITTER BACKGROUND.

Cheap glass signs bearing black lettering are handsome. Letter glass in black with Nonpareil Japan and sprinkle on with a brush. Roughly, let stand few minutes and s...

Diamond Dust for cards is applicable for holiday cards. It imitates...

Carved Gold Letters get very dull. To "repaint" job of this kind and the gilt letters, a regild by washing the letters with water, powdered borax, or pure cider vinegar. After application, sponge in clear water, dry on board and it will have every appearance of...

ASPHALTUM.

Never add oil to Asphaltum, it will make it soft. Never use it without the addition of a hardening varnish to insure hardness.

ounces of beeswax melted in *Venice*

Heat together over slow fire to in-
te stand few minutes until "tacky,"
b in close contact, trace layout from
ub of whiting, to which is added a
nd. Will dry in a few minutes; then
pencil, and with ordinary sewing
eed to "cut out" the lettering, lift out
posed asphaltum with coal oil or tur-
cid as in the instructions on page 121.
away all of the foil, clean as on page

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grind them together under the palette
perienced.
color, the color will curdle. Grind
drops at a time and the curdling will

G SILK AND SATIN.

LD AND SILVER.

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rnish and thinned with turps.) When
size, gild at right tack, for shades, etc.,
pictorials or emblems, execute in artists'
for a thinning medium. The gasoline
into the cloth. Also use a little varnish

ROSTED GLASS.

uch epsom salts as the beer will dissolve.
mel's hair brush and fan with palm leaf

WATERPROOF CARD SIGNS.

If your show card is exposed to the weather letter in japan color.
Lettering on inclined plane, such as diagonal panels, should slant
toward the higher point. (See page of ribbons.)

The most popular alphabets are the Roman, Round and Full
Block, Egyptian and French Roman, with the French Roman an
easy favorite for general work.

FLITTERS OR METALLICS

are small flakes of brilliant metal and are used for decorative pur-
poses. Can be had in pale and deep gold, silver, blue green, fire,
copper and purple. For cards when lettering is dry apply touches
of Lepage's Glue or Mucilage to letter faces. (Do only a few letters
at one time as it will strike in.) Sprinkle on the Flitter and shake off
the surplus. Continue until all lettering desired bears the Flitter
decoration.

FLITTER BACKGROUNDS FOR GLASS SIGN.

Cheap glass signs bearing black lettering with Flitter ground
are handsome. Letter glass in black. When dry apply sizing of
Nonpareil Japan and sprinkle on Flitter immediately, cover thor-
oughly, let stand few minutes and shake off the surplus.

Diamond Dust for cards is applied in same manner as Flitters.
Fine for holiday cards. It imitates frost and snow closely.

Carved Gold Letters get very dirty in time. When you have a
"repaint" job of this kind and the gilding is not scarred, you can save
a regild by washing the letters with stale beer, weak soap suds, and
powdered borax, or pure cider vinegar. Use a bat of cotton in the
application, sponge in clear water, and chamois dry. Resmalt the
board and it will have every appearance of a regild.

ASPHALTUM.

Never add oil to Asphaltum, it will retard the drying indefinitely.
Never use it without the addition of a few drops of quick rubbing
varnish to insure hardness.

Asphaltum is used for glazing on colors and gold and has a wide
latitude in producing many degrees of tone value by applying it thin.
Depth of tone is produced by repeated glazings, one over the other.
Thin with Turpentine. Also used to "gloss face" lettering on show
cards.

CHEAP ECONOMY.

It is cheap economy to buy your staple colors (oil and japan) in
one pound cans.

Buy them in 5-pound press cans and avoid the waste incident to
the small can policy.

All progressive paint grinders now put up both oil and japan
colors in press cans, where formerly the press can was used ex-
clusively for japan colors.

BLOCK SHADE.

Block Shade is used to give a letter the appearance of having
thickness as though sawed or cut out of wood, and must conform to
the rules of perspective.

RED "STRIKE THROUGH."

In *repaints* where "reds" have been used in lettering, do not fail
to *thin shellac* the red where they occur. If they are *not* "shellaced"
the color will "burn" through the coating no matter how many are
applied.

"PALETTE" FOR PICTORIAL WORK.

| | |
|--------------------|--------------------|
| Burnt Umber | Prussian Blue |
| Burnt Sienna | Black |
| Yellow Ochre | Med. Chrome Yellow |
| Indian Red | Orange Chr. Yellow |
| Venetian Red | Lemon |
| Red Lake (Devoe's) | Vermilion |
| Cobalt | Med. Chr. Green |
| Ultramarine Blue | Raw Umber |
| Raw Sienna | Zinc White |

"CUTTING IN" COLOR FOR SMALT.

"Cutting in" color for Smalt should be Lampblack ground in oil thinned to penciling consistency with oil, with small quantity of Turpentine Japan added and few drops of Turpentine. A small quantity of Finishing Varnish aids materially in giving "color" a good "touch" as well as overcoming the tendency of the oil to "sweat" at edges, which will give said edges a "ragged" appearance when "smalted."

On small signs such as church tablets carrying large amount of lettering, it is advisable to use raw linseed oil in place of boiled oil. Also add a little keg lead to the mixture to cause smalt to adhere more permanently.

The raw oil prevents color from "setting" during process of "cutting in" a long inscription, which is essential if uniform background is desired and a perfect adherence of smalt.

Never use "cutting in" color that has stood for several days. To be safe, mix fresh every day, and it will save trouble and annoyance, overcoming the "fat edge" tendency.

CHEAP RAISED LETTER FACIA BOARD.

Cheap raised letter facia board, as produced in Chicago *Brewery Sign Shops*. Board is smalted solid, stands over night and letters tacked on next morning when smalt is dry.

Taut chalk-line is stretched length of board on *base line* position, and removed when lettering is tacked in position, properly spaced, etc.

It is unnecessary to add that the letters are primed, coated, sized and gilded loose. They should be thoroughly burnished and the "backs" well dusted (removing all scewings) before laying in position on board, otherwise the workman will have "scewings" adhering to smalt, giving the work an untidy appearance. Use thin brass brads to fasten letters to board. If wire brads are used they will corrode and stain faces of letters.

COLOR FORMULAS.

Light Amber—Burnt Sienna, Orange Chrome, equal parts; dash of Burnt Umber and Lampblack. Grade to light or high tint with White Lead.

Amber, Dark—Equal parts Burnt Sienna, Orange Chrome, Burnt Umber; dash of Lampblack and White Lead, keeping the color low in tone.

Antique Bronze—Burnt Umber, Burnt Sienna, equal parts; dash of Lampblack and Light Chrome Green.

Apple Green—White Lead, tinted with Medium Chrome Green; dash of Orange Chrome.

Ashes of Roses—Tuscan Red; dash of Red Lake and Lampblack. Tone high or low with Lead.

Buff, Light—White Lead tinted with Golden Ochre.

Brown, Stone—White Lead tinted with Golden Ochre, Burnt Sienna, and Black.

Bismark Brown—Burnt Sienna, Burnt Umber; dash of Orange Chrome, and Lead.

2—Carmine, Crimson Lake and Gold Bronze, glazed over Dark Amber.

3—If light tone is desired use Vermilion instead of Carmine.

Bottle Green—Dutch Pink and Prussian Blue for ground; glazed with Yellow Lake.

Brown—3 parts Red, 2 of Black, 1 of Yellow.

Bronze Green—5 parts Medium Chrome Green, 1 of Black, 1 of Burnt Umber.

Brick Color—2 parts Yellow Ochre, 1 of Venetian Red, 1 of White Lead.

Buttercup—White Lead tinted with Lemon Yellow.

Cream—5 parts Lead, 2 Yellow, 1 Red.

Citron—3 parts Red, 2 Yellow, 1 of Blue.

Citrine—3 parts Lead, 2 Orange Chrome, 1 Green.

Coral Pink—Lead, Vermilion, Orange Chrome.

Crimson—Vermilion, Carmine.

Chocolate—Burnt Umber, Venetian Red, White or Yellow; or take Indian Red, or Red Lake or Carmine, Burnt Umber.

Clay Drab—Raw Sienna, Raw Umber, with Chrome Green.

Canary—White 5 parts, Lemon Yellow 1 part.

Copper—2 parts Yellow, 1 Black, 1 Blue.

Chestnut—2 parts Red, 2 Chrome Green, 1 Black.

Claret—Red and Black; dash of Orange Chrome.

Carnation—3 parts Red Lake, 1 part White Lead.

Dove—Lead, Blue, Red and White.

Burnt Umber—

Dull Green—Lead, Chrome Green, and White.

Dove Drab—Lead, Ochre and White.

Wine—Tuscan Red, Lampblack, and White.

Warm Drab—9 parts White Lead, 1 part Black.

Ecru—White, Ochre, Burnt Sienna, and White.

Ultramarine, and Orange Chrome.

Emerald Green—Paris Green and White.

Electric Blue—Ultramarine, White, and Black.

French Gray—White, Vermilion, and Black.

Fawn—White, Ochre, Burnt Sienna, and White.

Forest Green—White, Chrome Green, and Black.

Flax Color—White, Ochre and Black.

French Red—Indian Red, English Red, and White.

Flesh—8 parts White, 3 of Venetian Red, 1 of Black.

Green—4 parts Yellow, 4 parts Prussian Blue, 1 of Black.

Grass Green—3 parts Chrome Green, 1 of Black, 1 of White.

Gold Color—White, tinted with Orange Chrome.

Burnt Sienna, Red and Prussian Blue.

Gazello—Tuscan Red, Venetian Red, and White.

Green Rice—White, Lemon Yellow, and Black.

Greenish Grey—White, Chrome Green, and Black.

FORMULAS.

a, Orange Chrome, equal parts; dash
 k. Grade to light or high tint with
 Burnt Sienna, Orange Chrome, Burnt
 White Lead, keeping the color low in
 umber, Burnt Sienna, equal parts; dash
 ne Green.
 , tinted with Medium Chrome Green;
 Red; dash of Red Lake and Lamp-
 n Lead.
 tinted with Golden Ochre.
 ad tinted with Golden Ochre, Burnt
 ienna, Burnt Umber; dash of Orange
 ke and Gold Bronze, glazed over Dark
 d use Vermilion instead of Carmine.
 k and Prussian Blue for ground; glaze
 f Black, 1 of Yellow.
 Medium Chrome Green, 1 of Black, 1
 ellow Ochre, 1 of Venetian Red, 1 of
 l tinted with Lemon Yellow.
 2 Yellow, 1 Red.
 Yellow, 1 of Blue.
 2 Orange Chrome, 1 Green.
 rmilion, Orange Chrome.
 Carmine.

Chocolate—Burnt Umber, Venetian Red, Tuscan Red; dash of
 White or Yellow; or take Indian Red and Black, tone with Yellow
 or Red Lake or Carmine, Burnt Umber tone with Yellow.
Clay Drab—Raw Sienna, Raw Umber, Lead, equal parts, tinted
 with Chrome Green.
Canary—White 5 parts, Lemon Yellow 2 parts.
Copper—2 parts Yellow, 1 Black, 1 Red.
Chestnut—2 parts Red, 2 Chrome Yellow, 1 Black.
Claret—Red and Black; dash of Carmine, and Ultramarine Blue.
Carnation—3 parts Red Lake, 1 of White.
Dove—Lead, Blue, Red and Yellow; or Lead, Venetian and
 Burnt Umber.
Dull Green—Lead, Chrome Green, Ultramarine; dash of Black.
Dove Drab—Lead, Ochre and Burnt Umber.
Wine—Tuscan Red, Lampblack and White.
Warm Drab—9 parts White Lead, 1 of Burnt Umber.
Ecrú—White, Ochre, Burnt Sienna, and Black; also White, Red,
 Ultramarine, and Orange Chrome.
Emerald Green—Paris Green and White.
Electric Blue—Ultramarine, White and Raw Sienna.
French Gray—White, Vermilion, Ultramarine and Black.
Fawn—White, Ochre, Burnt Sienna and Black.
Forest Green—White, Chrome Green, Black.
Flax Color—White, Ochre and Chrome Green.
French Red—Indian Red, English Vermilion, glazed with Car-
 mine.
Flesh—8 parts White, 3 of Venetian, 3 of Golden Ochre.
Green—4 parts Yellow, 4 parts Prussian Blue.
Grass Green—3 parts Chrome Yellow, 1 part Prussian Blue.
Gold Color—White, tinted with Ochre; dash of Chrome Yellow,
 Burnt Sienna, Red and Prussian Blue.
Gazello—Tuscan Red, Venetian Red, White and Black.
Green Rice—White, Lemon Yellow and Chrome Green.
Greenish Grey—White, Chrome Green and Black.

Hay Color—White, Orange Chrome, Chrome Green; dash of
 Tuscan.
Jonquil Yellow—Flake White, Chrome Yellow; dash of Ver-
 milion and Carmine.
Lemon—5 parts Lemon Chrome, 2 of White.
Lilac—4 parts Red Lake, 3 White, 1 Ultramarine Blue.
Lavender—White, Ultramarine, and Red Lake.
Lavender, Dull—White, Ultramarine, Vermilion and Black.
London Smoke—Golden Ochre, Black, Ultramarine Blue, White.
Leaf Bud—White, Orange Chrome and Chrome Green.
Leather Brown—Venetian, Red, Black, Ochre and dash of White.
Light Grey—9 parts White, 1 Prussian Blue, 1 of Black.
Pale Old Gold—Golden Ochre, White, Umber, and little Green.
Warm Old Gold—Chrome Yellow, Umber, Burnt Sienna.
Light Citron—White, Orange Chrome, Chrome Green.
Light Russet—White, Orange Chrome, Venetian Red; dash of
 Black.
Light Slate—White, Venetian, Ultramarine Blue, Green.
Light Tan—White, Ochre, Burnt Sienna, Burnt Umber.
Light Brown Stone—White, Venetian, Ochre, Tuscan, Black.
Light Myrtle Green—White, Chrome Green, Ultramarine Blue
 and Black.
Mastic—White, Ochre, Venetian, Black.
Mauve—Venetian, Ochre, White, Black.
Mauve, Bright—Red Lake, Ultramarine Blue, White.
Maroon—Tuscan, Ultramarine Blue.
Maroon—3 parts Carmine, 1 of Yellow.
Maroon Brown—Tuscan and Black.
Magenta—Carmine, Cobalt Blue, White.
Grey—White and Black.
Myrtle Green—Chrome Green, Ultramarine Blue, Black and
 White.
Old Gold—Ochre, White, Burnt Sienna and little Green.
Olive—Chrome Yellow, Black, dash of White.
Olive, Light—White, Orange Chrome, Black and Green.

Olive, Dark—Ochre and Prussian Blue.
Olive Drab—Raw Umber, Raw Sienna, Orange Chrome, Ultramarine Blue and White.
Olive Brown—3 parts Burnt Umber, 1 part Lemon Yellow, 1 part Chrome Green.
Oak Color—5 parts White, 2 Yellow, 1 Red.
Orange—3 Yellow, 1 Red (Vermilion).
Opera Pink—White, Vermilion, Ultramarine Blue.
Pearl—White, Black and Red.
Pea Green—5 parts White, 1 part Chrome Green.
Purple—3 parts Red Lake, 3 Ultramarine Blue, 2 White.
Peacock Blue—Cobalt, Paris Green, White.
Pure Grey—White, Ultramarine Blue, Chrome Yellow, Black.
Primrose—White and Lemon Yellow.
Pink—White and English Vermilion.
Pompeian Red—Venetian, Burnt Sienna and Carmine.
Pompeian Red, Light—Venetian, Tuscan, Yellow and White.
Pearl Gray—White, Vermilion, Ultramarine and Black.
Purple Brown—Tusca, Ochre, Black, Burnt Sienna, Ultramarine Blue and White.
Peach Blossom—10 parts White, 2 Vermilion, 1 Blue, 1 Yellow.
Portland Stone—3 parts Raw Umber, 3 Ochre, 2 White.
Plum—2 parts White, 1 Blue, 1 Red Lake.
Quaker Drab—White, Ochre, Green, Black, Burnt Sienna.
Quaker Green—2 parts Chrome Green, 1 Drop Black.
Russet—White, Vermilion, Chrome Yellow, Ultramarine Blue.
Russian Gray—White, Vermilion, Yellow, Blue, Black.
Red Slate—Venetian, White and Burnt Sienna.
Russet Green—White, Green and Orange Chrome.
Shrimp Pink—White, Vermilion and Burnt Sienna.
Spruce—Ochre, White and Venetian.
Salmon—White, Venetian and Burnt Sienna.
Slate—White, Venetian, Ultramarine Blue and Green.
Straw—White and Ochre.
Sky Blue—White and Cobalt.

Shell Pink—White, Vermilion and Burnt Sienna.
Scarlet—Vermilion and Carmine.
Smoke Drab—Ochre, Black, Ultramarine Blue and Burnt Umber.
Sage Green—12 parts White, 2 Chrome Green, ½ each of Chrome Yellow and Burnt Umber.
Sand Stone—Tuscan, White, Venetian, Black.
Snuff—4 parts Yellow, 2 Vandyke Brown.
Stone—10 parts White, 1 Yellow, ½ Black.
Tally Ho—White, Ochre, Venetian, Black, Green.
Tan—5 parts Burnt Sienna, 2 Chrome Yellow, 1 Raw Umber, 1 White.
Terra Cotta—White, Burnt Sienna, Black.
Turquoise Blue—White, Cobalt, Paris Green.
Violet—5 parts Red Lake, 4 Ultramarine Blue, 1 White.
Willow—5 parts White, 2 Verdigris.
Wine Color—3 parts Carmine, 2 Ultramarine Blue.
Yellow Bronze—White, Chrome Yellow and Green.

TO HARDEN GLASS DRILL POINT.

After forming point on grindstone, drive it into block of lead deep enough to cover point. Remove from lead, heat until it is a dark red, plunge into mercury, which will harden it. To toughen it insert point into lead and draw the temper of the shank by holding over gas flame, heat to a blue color to within a short distance of the lead, then plunge drill and the lead into cool water.

The lead prevents point from becoming heated sufficient to draw temper.

SILVERING GLASS.

No. 1 Solution—Dissolve 12 grains of Rochelle Salts in boiling distilled water; add while boiling, 16 grains Nitrate of Silver having been previously dissolved in 1 oz. of distilled water. Continue to boil for 10 minutes, then add enough distilled water to make in all 12 ozs.

No. 2 Solution—Dissolve 1 oz. Nitrate of Silver in 10 ozs. dis-

tilled water, then add liquid ammonia nearly, but not quite dissolved. To sufficient distilled water to make before using.

To silver take equal parts of mercury upon the glass in same manner than previous. Glass should be wet and polished with strong varnish color after precipitating.

SILVER 1

Dissolve 1 oz. silver in aqua fortis salt to which add ½ lb. sal ammoniac corrosive sublimate.

Lay cleaned glass on blanket of solution on slowly and let run to edge off. Add as much solution to glass. When precipitated, drain and let dry.

ROUGH STIPPLE FOR RELIEF

Mix equal parts of dry White Zinc Oxide. Mix stiff in ½ and Japan to bind. Apply to surface as thick as desired, apply with a brush.

PLASTICO FOR R

Dissolve 1 lb. Glue in gallon of Plaster Paris and 1 lb. Keg Lead. with water to desired consistency. For relief ornament and scrolling on signs.

Plastico No. 2.—1 lb. Plaster Paris, 2 tablespoonfuls of Bi-Carbonate of Soda paste. Fill bulb and proceed. Tint with FUMED TIN SIGNS IN CRYSTAL FO

TIONS AND B

2 oz. Sulphuric Acid, 1 oz. soft

ion and Burnt Sienna.
 rmine.
 k, Ultramarine Blue and Burnt Um-
 e, 2 Chrome Green, 1/2 each of Chrome
 e, Venetian, Black.
 Vandyke Brown.
 Yellow, 1/2 Black.
 Venetian, Black, Green.
 a, 2 Chrome Yellow, 1 Raw Umber,
 at Sienna, Black.
 Cobalt, Paris Green.
 4 Ultramarine Blue, 1 White.
 Verdigris.
 nine, 2 Ultramarine Blue.
 Chrome Yellow and Green.
 GLASS DRILL POINT.
 grindstone, drive it into block of lead
 Remove from lead, heat until it is a
 dry, which will harden it. To toughen
 draw the temper of the shank by hold-
 blue color to within a short distance of
 and the lead into cool water.
 from becoming heated sufficient to draw
 SLIVERING GLASS.
 ve 12 grains of Rochelle Salts in boiling
 boiling, 16 grains Nitrate of Silver having
 in 1 oz. of distilled water. Continue to
 add enough distilled water to make in all
 olve 1 oz. Nitrate of Silver in 10 ozs. dis-

tilled water, then add liquid ammonia until the Nitrate of Silver is nearly, but not quite dissolved. Then add 1 oz. of Grain Alcohol and sufficient distilled water to make 12 ozs. Should stand few days before using.

To silver take equal parts of 1 and 2, mix thoroughly, then pour upon the glass in same manner that a photographer applies his solutions. Glass should be wet and previously well cleaned. Back with strong varnish color after precipitation is dry.

SILVER BY HEAT.

Dissolve 1 oz. silver in *aqua fortis* and precipitate it with common salt to which add 1/2 lb. sal ammoniac and white vitriol and 1/4 oz. corrosive sublimate.

Lay cleaned glass on blanketed hot table perfectly level, drop solution on slowly and let run to edges, being careful not to let it run off. Add as much solution to glass surface as the edges will hold. When precipitated, drain and let dry. Back in varnish color.

ROUGH STIPPLE FOR RELIEF WORK ON FLAT SURFACE.

Mix equal parts of dry White Lead, best Plaster of Paris and Zinc White. Mix stiff in 1/2 and 1/2 oil and turps. Add Gold Size Japan to bind. Apply to surface as heavy as it can be applied. If thicker is desired, apply with a trowel. Works in relief bulb also.

PLASTICO FOR RELIEF BULB.

Dissolve 1 lb. Glue in gallon of water, add 2 lbs. Whiting, 2 lbs. Plaster Paris and 1 lb. Keg Lead. Thicken with Whiting or thin with water to desired consistency. Fine for executing relief lettering, relief ornament and scrolling on sign work.

Plastico No. 2.—1 lb. Plaster Paris, 1/4 lb. dry White Lead, 2 tablespoonfuls of Bi-Carbonate of Soda. Mix with water to thick paste. Fill bulb and proceed. Tint with dry color if desired.

FUMED TIN SIGNS IN CRYSTAL FOR NOVELTY WORK ON EXPO-

TIONS AND BAZAARS.

2 oz. Sulphuric Acid, 1 oz. soft water, 1 tablespoonful of com-

mon salt. Warm tin over heat, pour acid in glass, add the water and when ready to fume add the salt.

While tin is warm apply the solution with sponge tied on stick. Apply quickly. When covered rinse in clear water. Dry over heat and varnish in color varnish, using Red Lake or Carmine for Red, Verdigris for Green, Gamboge or Yellow Lake for Yellow or Gold, Ultramine for Blue, etc.

CEMENT FOR WHITE ENAMELED LETTERS.

Grind dry sifted White Lead stiff with good Finishing or Spar Varnish.

LACQUER FOR TIN.

Fine for small signs in exposition work. Gum Shellac 3/4 lb., Gum Sandarac 3/4 ozs., Alcohol 2 gallons. Color to suit either with Aniline colors or Prussian Blue, Carmine, Gamboge, or any of the transparent colors.

GOLD LACQUER.

Thin Copal Varnish, slightly colored with Tumeric. Bake in moderate oven.

ETCHING ON GLASS WITH ACID.

To etch stained glass it must be fluxed on one side only. Foil the glass on stained side as in *brass sign etching*. Lay flat and bank the edges with a Beeswax wall 1 inch high. Pour on Hydrofluoric Acid (diluted) until exposed glass is equally covered.

Let acid remain until stained portion of glass is etched through, then pour off the acid and rinse well in clear water. Remove foil and clean in benzine or coal oil.

Similar etching can be executed upon ground or plain glass. On ground glass the acid will etch away the ground surface, leaving it clear where desired in lettering and ornament.

On plain glass, lettering and ornament is etched quite deep. Grind

ground with flat brass and wet powdered emery. Can be left this way or it can be chipped.

If ground is desired chipped, coat entire glass with hot strong Cabinet Glue. Let it "air dry." As it dries the glue will chip away the rough or ground portions, leaving the smooth or etched portions undisturbed.

Keep acid in wax, lead or gutta percha bottle.

SHOW CARD INK.

Bleached Gum Shellac 2 oz., Borax Crystals 1 oz., Water 16 ozs. Powder the Shellac and Borax in a mortar and place over heat in an enameled iron pot. Boil, and when it begins to foam remove from fire and allow to cool. Repeat the boiling until Shellac is thoroughly dissolved. When again cool, strain through fine cheesecloth. Add any desired pigment and mix thoroughly and strain again.

If a glossy ink is desired, add Yellow Dextrin, 1 to 4 ozs. Dextrin to pint of ink.

PASTE FOR HANGING MURAL PAINTINGS.

Dissolve 1 lb. Sheet Glue in 2 gallons water. Add to it while boiling enough of the following to make thick paste: $5\frac{1}{2}$ lbs. Wheat Flour, $\frac{1}{2}$ lb. Caustic Soda, $\frac{1}{2}$ lb. Sulphate of Ammonia.

Strain and add while warm $\frac{1}{8}$ pint of Venice Turpentine.

Apply to painting luke warm. Place in position quickly and rub down with paperhanger's roller until perfect adhesion is noted. Wall must be free from suction. Either paint them or size in wall varnish.

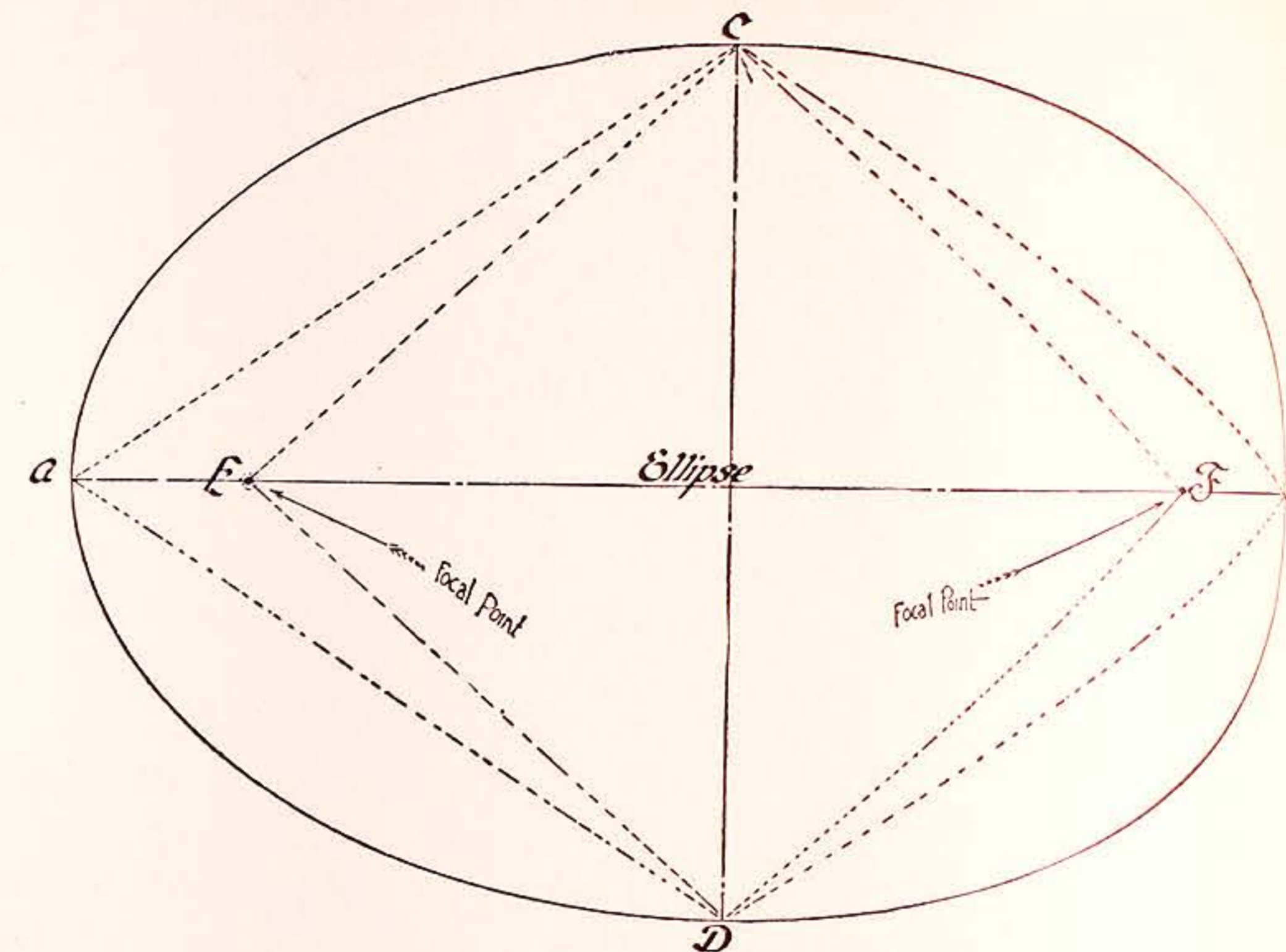
SIZE FOR CANVAS WAGON TOPS.

Thicken strong Glue Size with *Rye Flour*.

RULE FOR DETERMINING FOCAL POINTS OF AN ELLIPSE AT ONCE.

The major diameter is the dimension A B. The minor diameter is the dimension C D. To get focal point take $\frac{1}{2}$ of major diameter A to F and set end at C or D. Swing a circle and where the circle

bisects major diameter the focal points occur. Drive nails or thumb tacks at focal points. Fasten flexible cord to the posts and adjust cord to meet points A or B. Place pencil inside loop thus formed, draw taut, describe the ellipse by forcing pencil ahead.



DEXTRIN MUCILAGE FOR BINDING WATER COLORS.

Dissolve Dextrin in boiling water, much as it will dissolve, stirring constantly. Strain through cheesecloth. When cool add Oil of Cloves in proportion of 20 drops to the quart to prevent mold and souring.

USE GUMMED STICKERS.

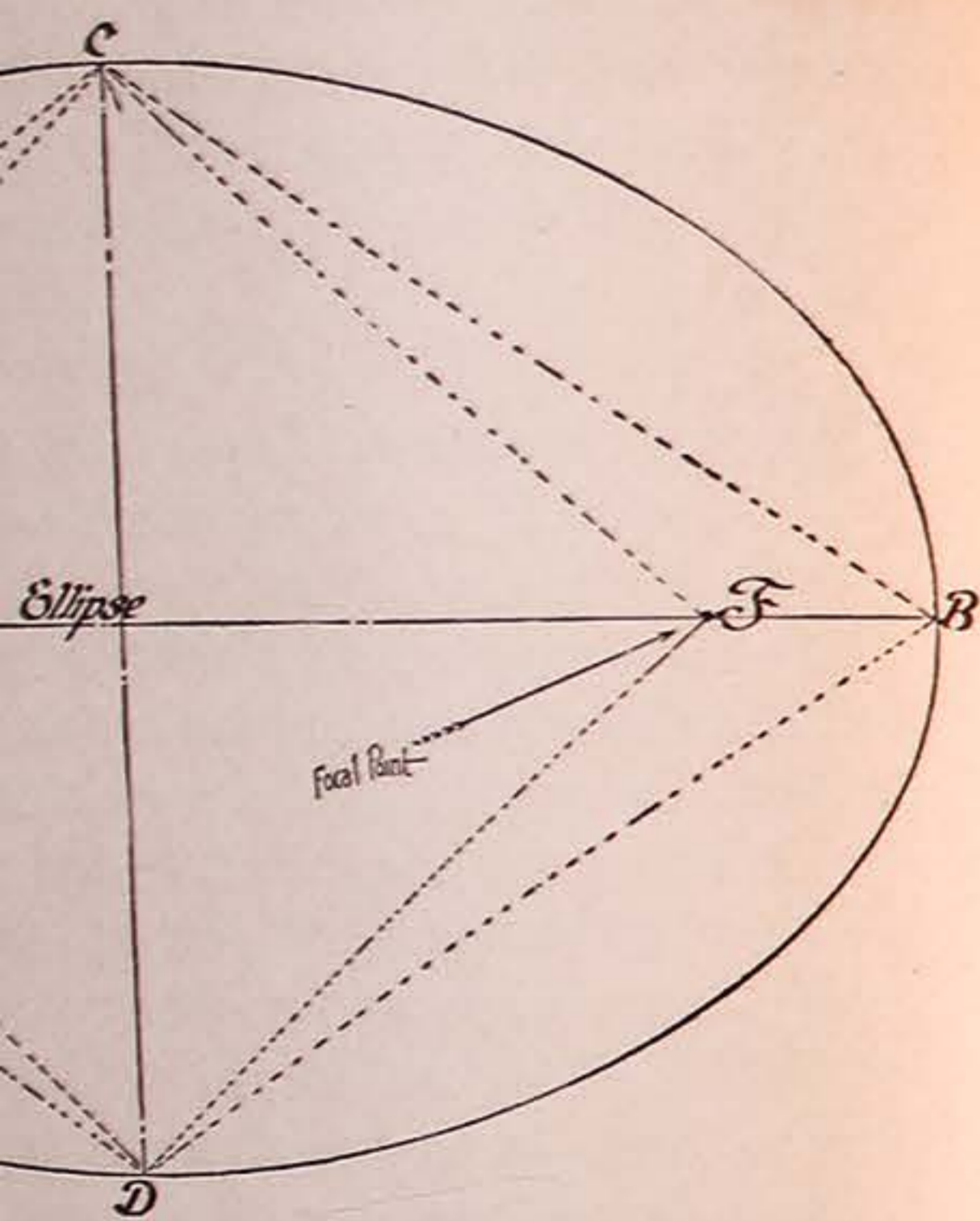
To temporarily fasten patterns in position on window work, or glass work in shop, on loose glass plates, use stickers, or flat spring clamps, to hold patterns in position.

Flat Spring Clamps are intended for general office use and can be had in various sizes at the stationery store.

WATER COLORS FOR

Use Fresco Color ground in water. Colors can be used if ground in a saturated solution of drops of Alcohol to moisten the dry ground. Grind under wide flat cork; thin with water.

al points occur. Drive nails or thumb
flexible cord to the posts and adjust cord
pencil inside loop thus formed, draw
forcing pencil ahead.



E FOR BINDING WATER COLORS.

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GUMMED STICKERS.

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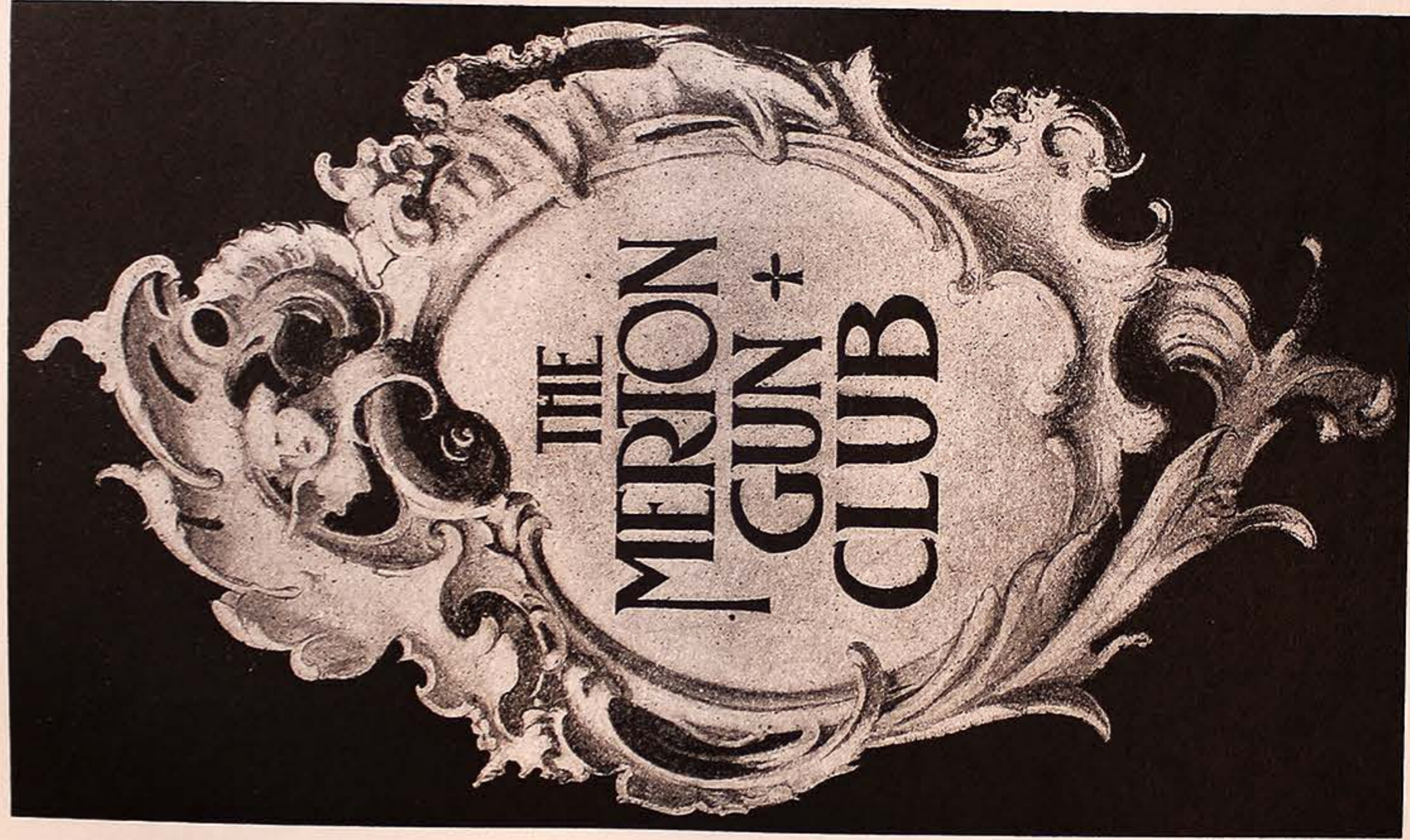
WATER COLORS FOR SHOW CARDS.

Use Fresco Color ground in water, bind with Dextrin. Dry Col-
ors can be used if ground in a saucer. Grind in Dextrin, use few
drops of Alcohol to moisten the dry pigment before adding Dextrin.
Grind under wide *flat cork*; *thin with water* to working consistency.

ON GLASS, GOLD OUTLINE, TRANSPARENT LETTER AND BACKGROUND.

Gild and back up outline, clean off surplus gold. Coat entire
space with background color and "roll stipple" with plush covered
Stencil Roller, then "wipe" out "centers" of lettering with *canton*
flannel, water moistened, then "lay in" centers with desired color and
stipple with small pounce, size of finger tip.

SIGN DIVISION



NO. 1. LOUIS XV SCROLL DESIGN.

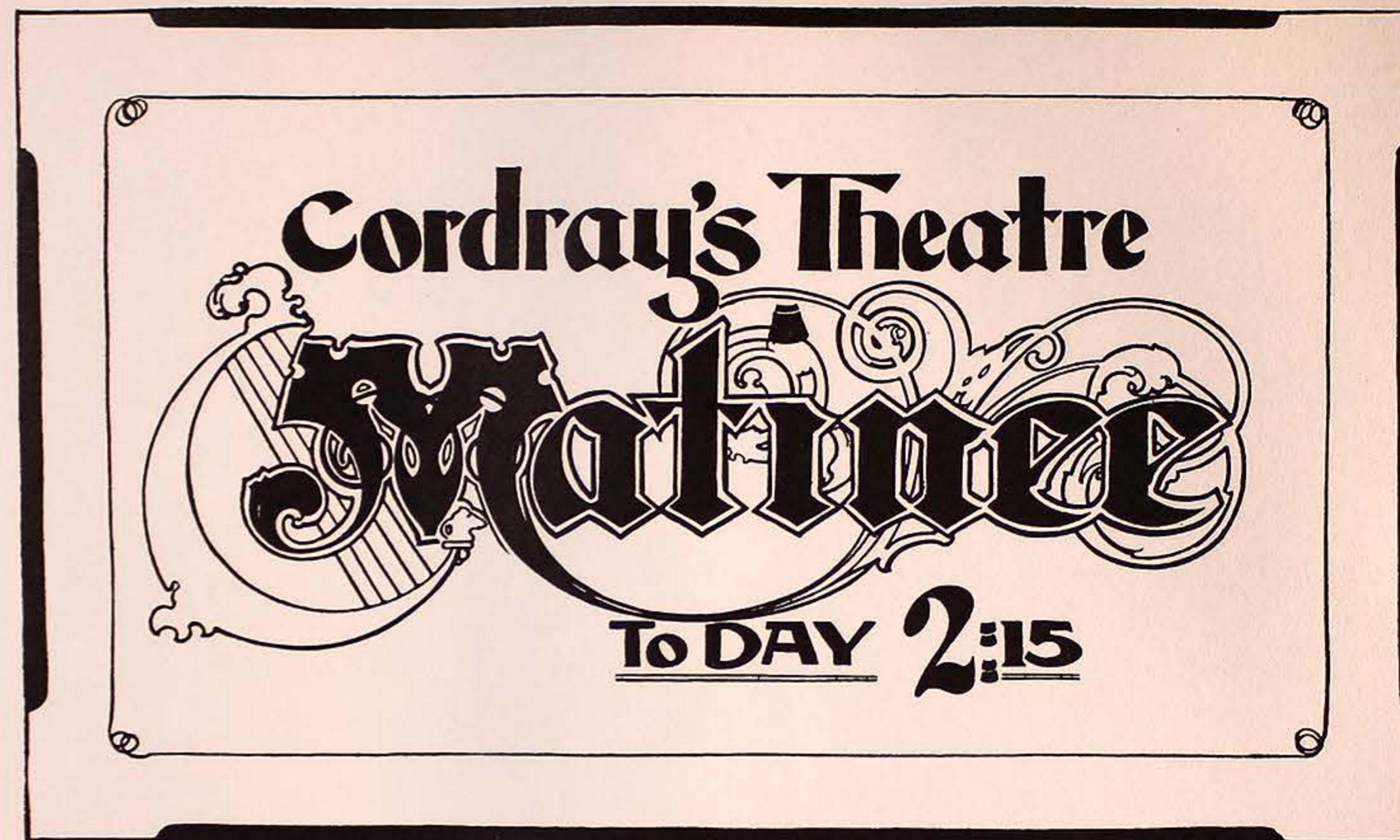
for small panel sign suitable for Country Clubs where high grade is demanded and paid for. Board should be "tablet" form with deep bevel. Paint ground in deep umber, gild the scroll solid gold and depend on your "glazing" to bring up the "modeling" and detail. Glaze with Vandyke Brown, Burnt Sienna, Yellow Lake and Orpiment. High light in pale orange yellow, do the lettering in black. As a medium for working glazing free, use coach finishing varnish with a drop of boiled oil.



No. 2. SWELL DESIGN FOR YOUR CARD.

BY FRED WATRIN, NOTED SIGN PAINTER, OF PORTLAND, ORE.

Copy on 22x28 Bristol Board, using Waterproof India Ink. With a blue pencil, mark size you wish drawing reduced.



No. 3. MATINEE DESIGN

can be used large or small on Oil Cloth, Muslin or Board. For board use a background of pale lemon yellow—for the harp and scroll use rich old gold color—not too strong, just enough to show distinctly. "Cordray's Theatre" gets gold with a black outline. "Matinee" do in gold with double outline of black and vermillion (black next to letter) for "today 2:15" use gold with tuscan red outline, for matt line and bevel use gold.

**CHAS. ARNOLD,
Sign Painter**

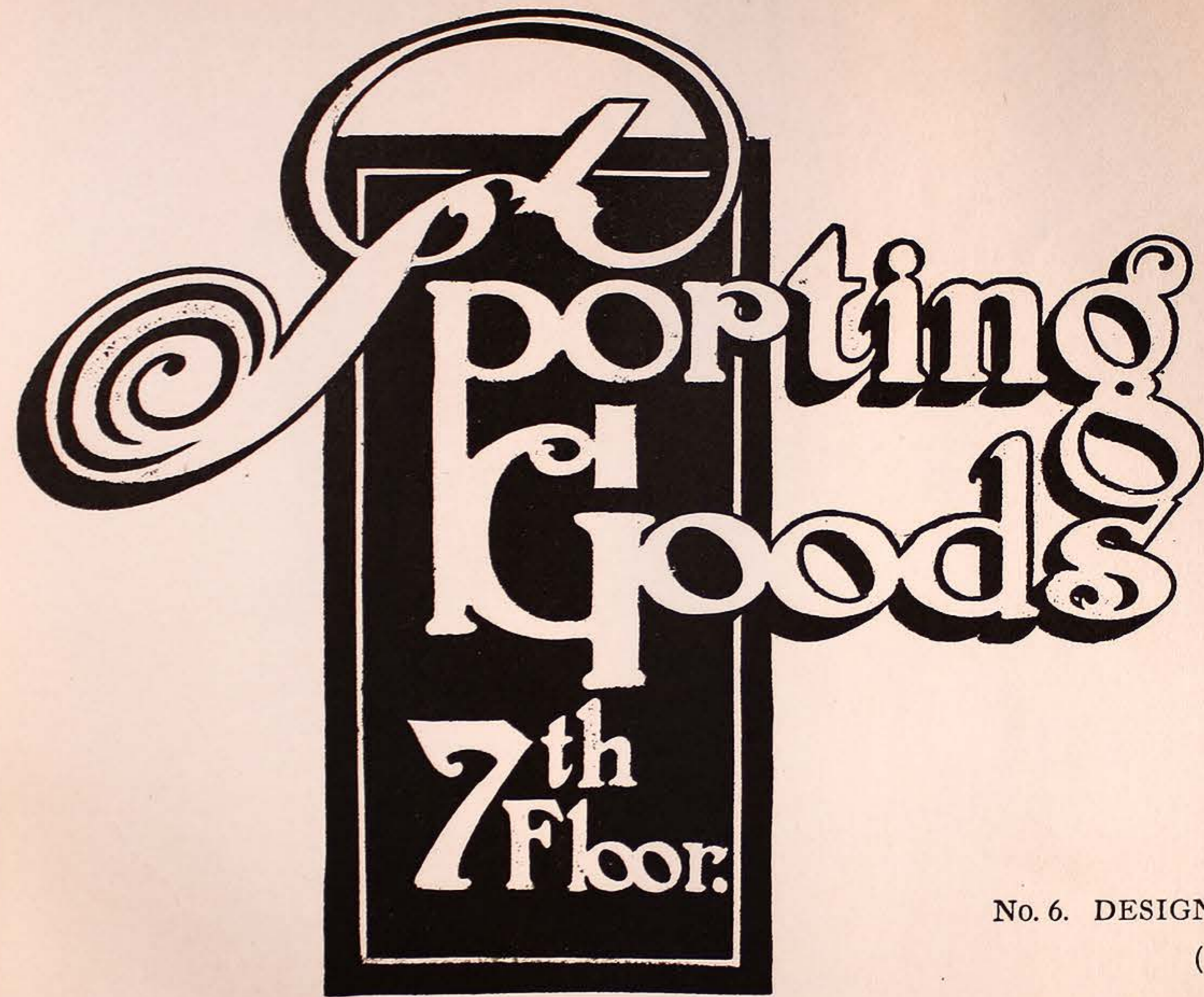
No. 4. SUGGESTION FOR BUSINESS CARD.

Copy on 22x28 Bristol and have Zinc Etching made the size you desire.



No. 5. STATIONERY IN ART NOUVEAU STYLE.

Original by Chas. J. Strong, head of Detroit School of Lettering and a recognized leader in the art of lettering and design. Slightly varied in minor detail to suit general use. Copy 22x28 Bristol Board.



No. 6. DESIGN FOR DEPARTMENT STORE.

(INTERIOR DISPLAY.)

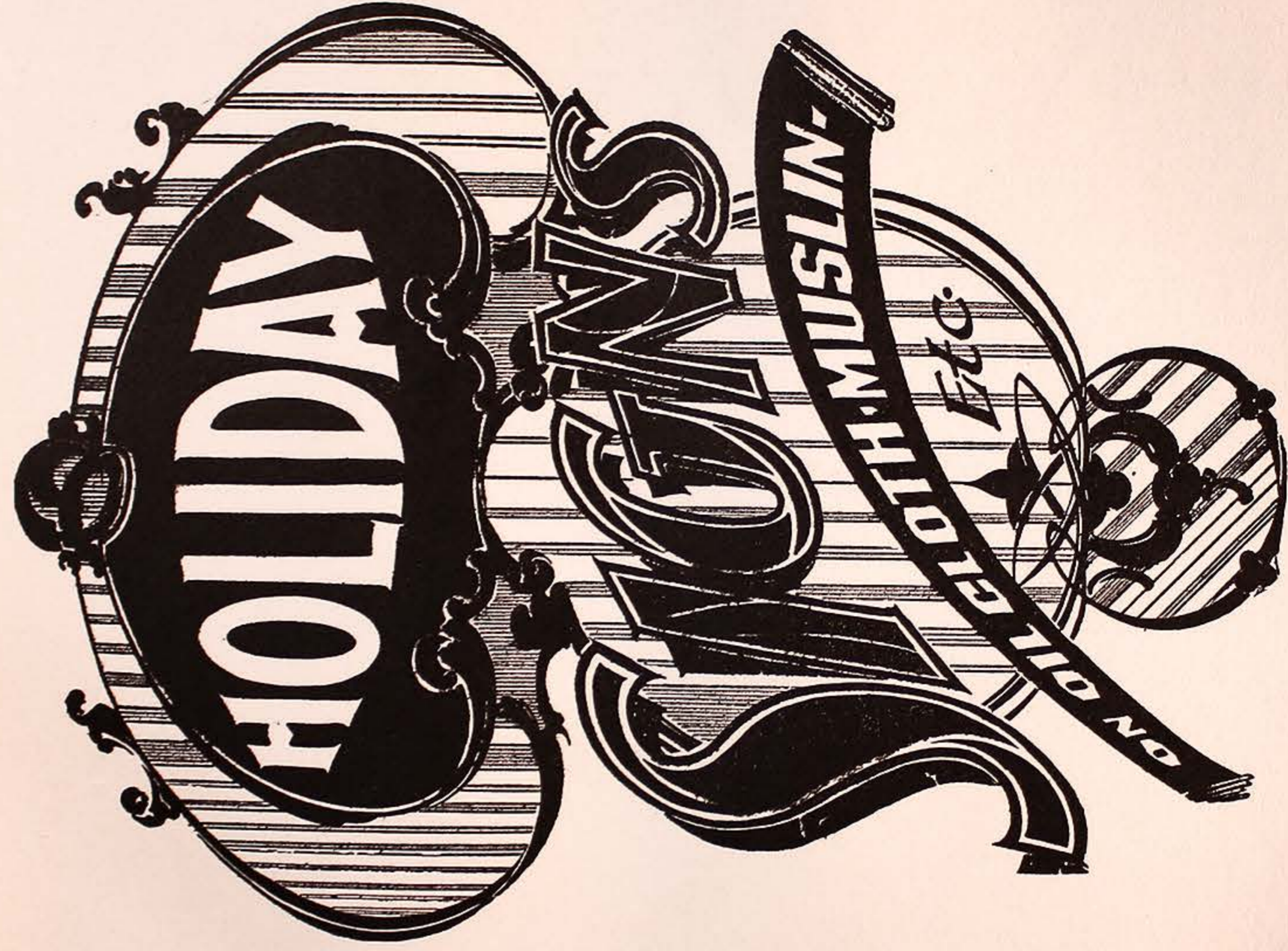
Make Board in "tablet" style with an extremely wide bevel, at least 6 inches—with rounded corners, prepare in the usual manner and gild entire surface solid gold or bronze, including the bevel—produce design in one color of dark purple flock.

O·W·HYTE & Co.



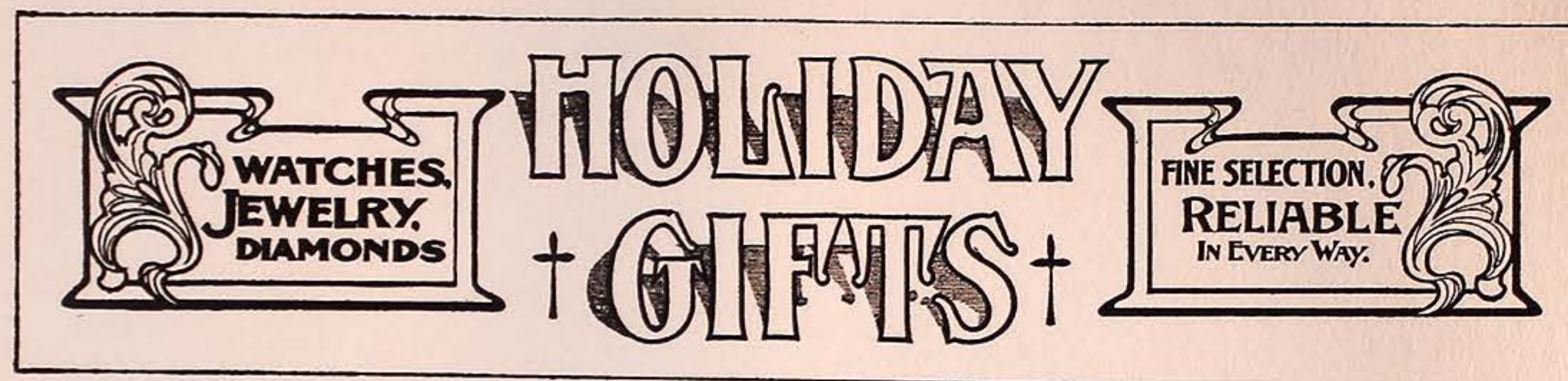
No. 7. "NIFTY STUNT" FOR STATIONERY AND CARD.
BY ATKINSON.

Lettering appears in the very latest modification of the antique block. Note how they touch each other and connect wherever the stroke permits. To get all the beauty in this style of handling get "O" and other letters your fancy will dictate extremely large. This style loses its attractiveness if this liberty is not taken; also bear in mind that it is an extreme modification and cannot be appreciated unless interpreted from this standpoint. Copy on 22x28 Bristol Board and have half-tone cut made the size desired.



No. 8. A TEMPORARY DISPLAY IN BOARD, MUSLIN,
OR OIL CLOTH PANEL.

For entire scroll use Gold Bronze, "break on" the word "Holiday" in very pale bluish green and "cut in" with dark bottle green. On the word "Sign" do the outline and broken shade in black, fill center of letters with Lt. Eng. Vermilion, leaving white show as it appears in the design. Fill balance of design in pale greenish yellow—use same color deepened a little with Chr. green and umber (enough to render it distinct on the yellow), for the irregular Vertical Bars. Get these Bars all parallel with irregular distances between, also make Bars in different widths, to give design a "snappy" look.



No. 9. MUSLIN OR OIL CLOTH.

ATKINSON.

Holiday Gifts—Vermilion, with black outline. Cast shade, pale purple.

Panels—Ground and matt in two tones of pale purple. Scroll in pale grey; deepen same for detail and outline on scroll and border of panel. Letter panels in black.



No. 10. "CUT OUT" FOR WINDOW DISPLAY.

ORIGINAL IDEA BY W. D. TATE.

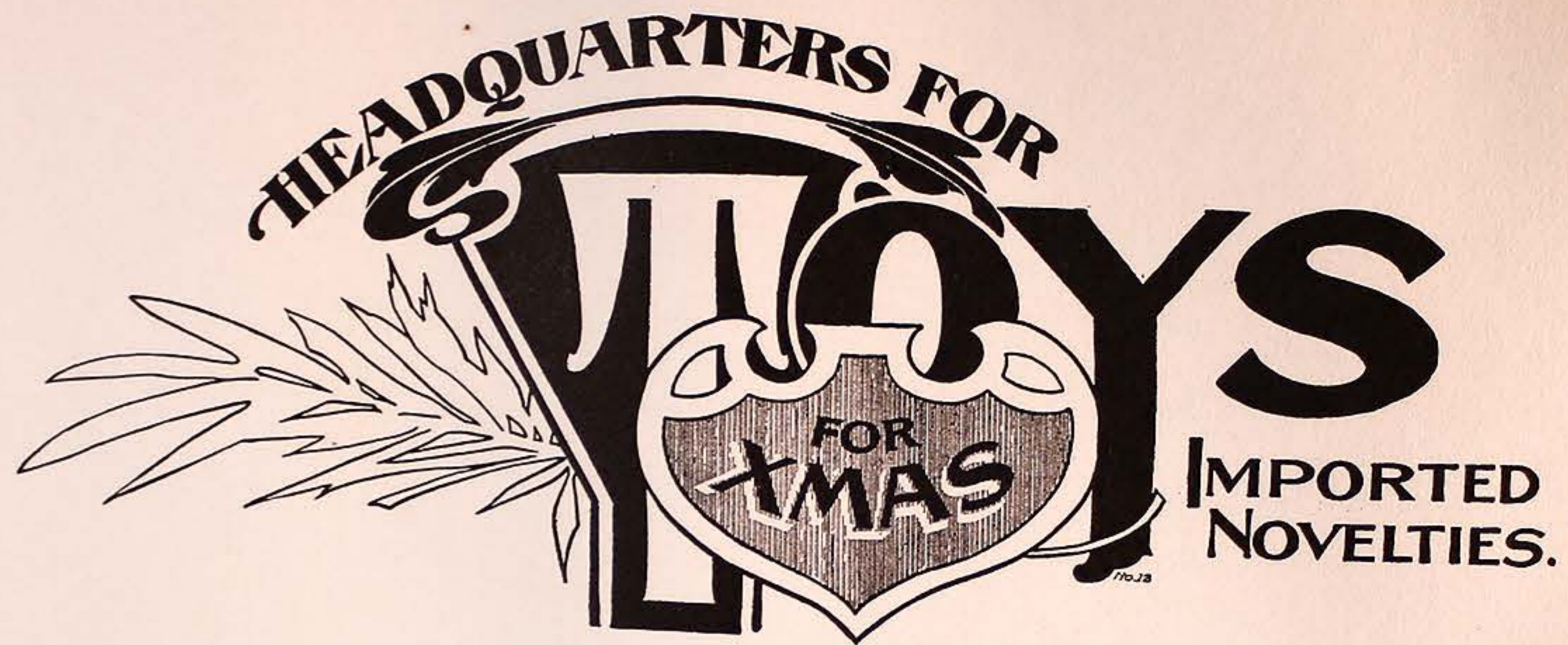
Make from heavy poster board and mount face with muslin or blank white paper. Ovals and Scrolls do as shown in gold bronze; outline them in pale buff; letter in dark bottle green. Panel in center, deep vermilion ground, white letter; pale vermilion outline. "Quills" in gold bronze. White letter, black outline. Very pale greenish grey background, leaving rough white outline around ovals, scrolls, quills and center panel.



No. 11. MUSLIN OR OIL CLOTH.

ATKINSON.

Do "Cigars" in rather deep old gold with wide outline of Tuscan. On circle use pale, rich blue strong enough to show well, leaving white show as in design, giving poster effect. Center of Circle *very* pale grey. Little panel at top in pale sienna, deepen a trifle for outline and matt on same; letter it straight burnt sienna; streamer at bottom, same. Balance of lettering, deep purple.



No. 12. HOLIDAY MUSLIN OR OIL CLOTH.

ATKINSON.

"Headquarters for"—dark olive. Shield Panel very pale olive green with dark olive outline and matt line. Letter "for Xmas" dark blue. Initial Panel in medium pink, leaving "T" white with vermilion outline. Nouveau Scroll at top, deeper pink. For matt inside of scroll and panel use pale emerald green; same on Laurel Sprig; deepen for outline on Sprig. Balance of "Toys" light vermilion. Imported Novelties in dark olive.



WHOLESALE & RETAIL
CANDIES
HOLLY WREATHES AND MISTLETOE.

No. 13. MUSLIN OR OIL CLOTH.

ATKINSON.

Sprig—Pale Emerald green, deepen same color a trifle and detail it.

Back Scroll in dark purple, leaving white show as in design.
“C” in deep orange, with wide outline of black. Balance of word, candies—dark purple. Small lettering—deep vermilion.



No. 14. MUSLIN OR OIL CLOTH.
ATKINSON.

"Break on" The Curio Shop, in pale chr. green, extra light in tone. "Cut in" rather dark warm olive green. "Returns" on panel in pale lemon. "Poster Floral" in vermilion; detailed in light pink. On small lettering do all caps in vermilion; rest of lettering dark bottle green.



No. 15. OIL CLOTH OR MUSLIN.

ATKINSON.

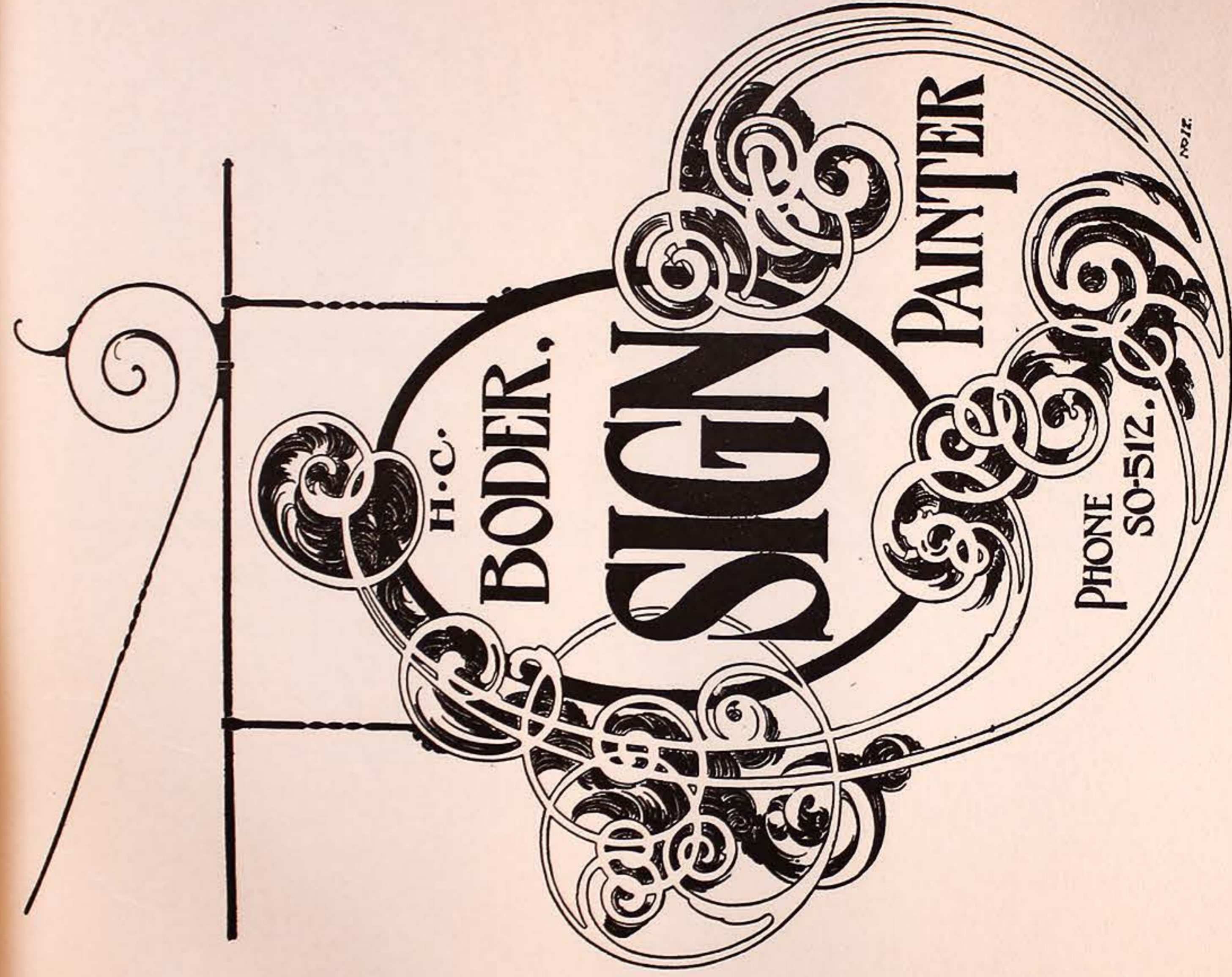
Little Panel at top in pale and deep Brewster green. The Sprig in bright emerald green, rather pale; detail same in darker tone of same color. "Teco" use medium dull purple (tuscan red and ultramarine), and for outline, deepen same color; outside outline in pale greenish yellow. Wreath Panel pale greenish yellow with dark olive ground. Streamer two shades of pink. Art Pottery light and deep vermilion, using the deep for high light.



No. 16. MUSLIN OR OIL CLOTH.

ATKINSON.

Do "B" and scroll surrounding in extremely pale old gold. A broken shade of tuscan on "B." Balance of "Books" in deep vermilion with black high light. Ribbon panel, pale warm grey. Detail in medium purple grey; letter, deep olive green. Long panel at top gets pale bluish green border and scroll. White letter "cut in" deep bluish green.



No. 17. DESIGN FOR "CUT OUT" SWING, LARGE
OR SMALL.

ORIGINAL BY FRED WATRIN, NOTED SIGN PAINTER, PORTLAND, ORE.

Make pattern and "black in" layout (will save bother in execution). Perforate for pounce—will also answer for the carpenter. In cutting, follow extreme outside outline for shape of swing; leave the rest solid and work up design per following.

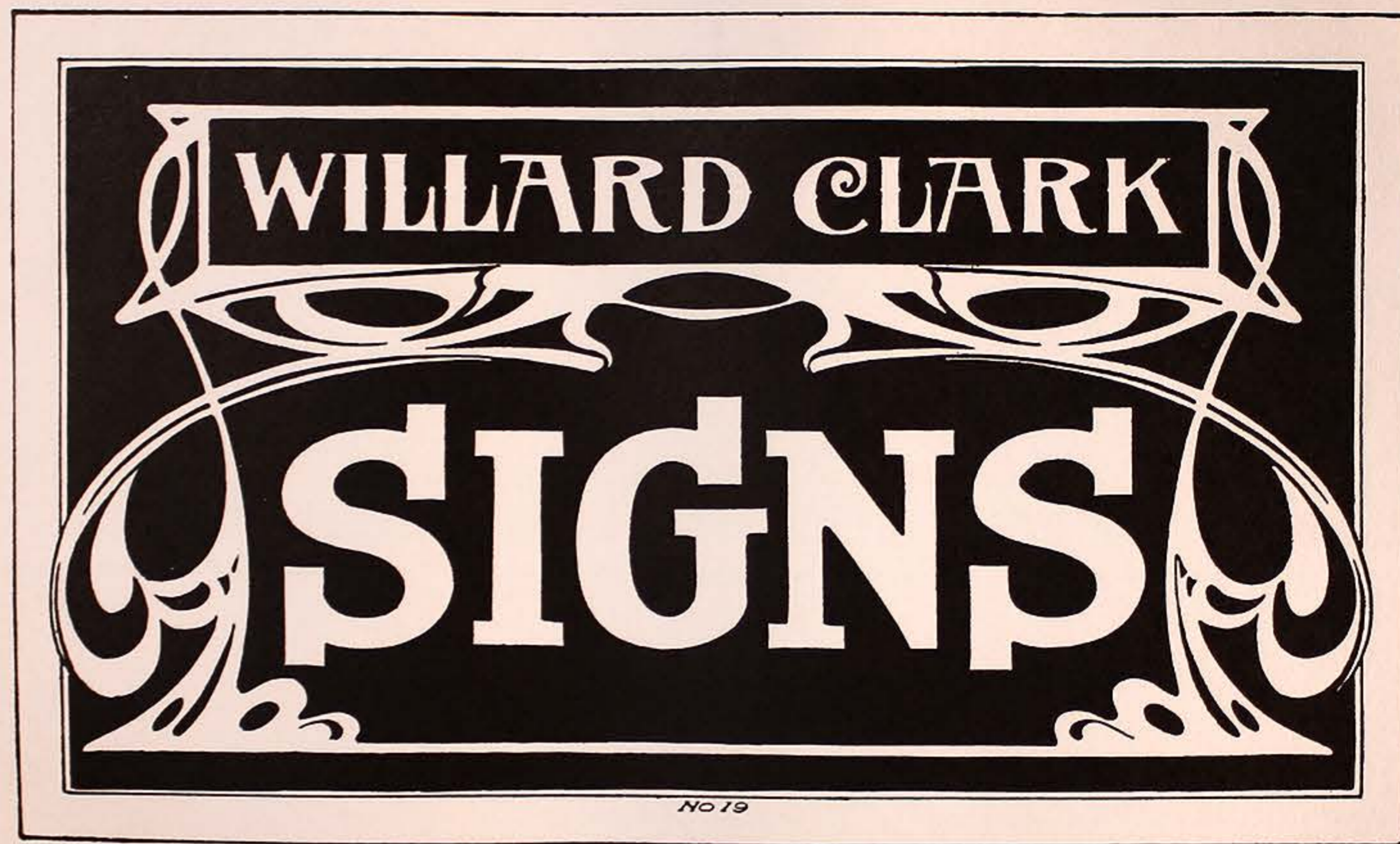
Do all lettering white with gold outline. Ground of sign, dark old gold. Scrolls pale old gold, outlined in pale med. chr. yellow. Black "wave" scroll do in tuscan red. Border on oval in gold "white inset."



No. 18. DESIGN FOR BOARD ARM SIGN—SCROLL
SAWED.

ORIGINAL BY J. P. ZIRNGIEBEL OF PORTLAND.

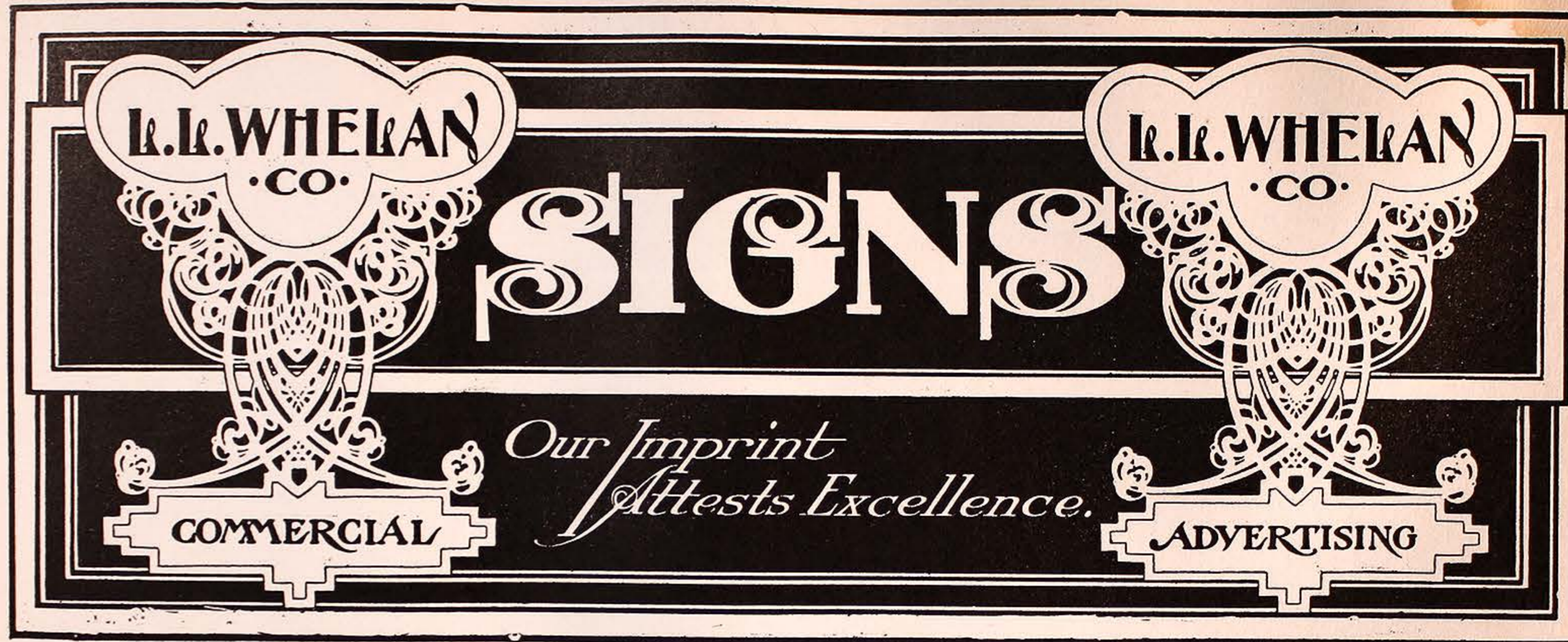
Do scrolls and "circle" panel at top in solid silver. Background rich deep chocolate; border pale chocolate; lettering silver; pale sienna high light; tuscan red slant shade. Firm name letter in reds.



No. 19. COLOR BULLETIN.

AFTER ORIGINAL IDEA BY JESSE WADDEL, PORTLAND, ORE.

Do the "nouveau" design in medium old gold, with a heavy "poster" outline of darker old gold. Ground outside of design in deep chocolate. Ground of name panel medium bluish green, white letter. Ground signs panel deep orange, toned strong with burnt sienna; white letter wide poster outline, of tuscan. Red border, white inset.



No. 20. DESIGN FOR LARGE OR SMALL PANEL.

ATKINSON.

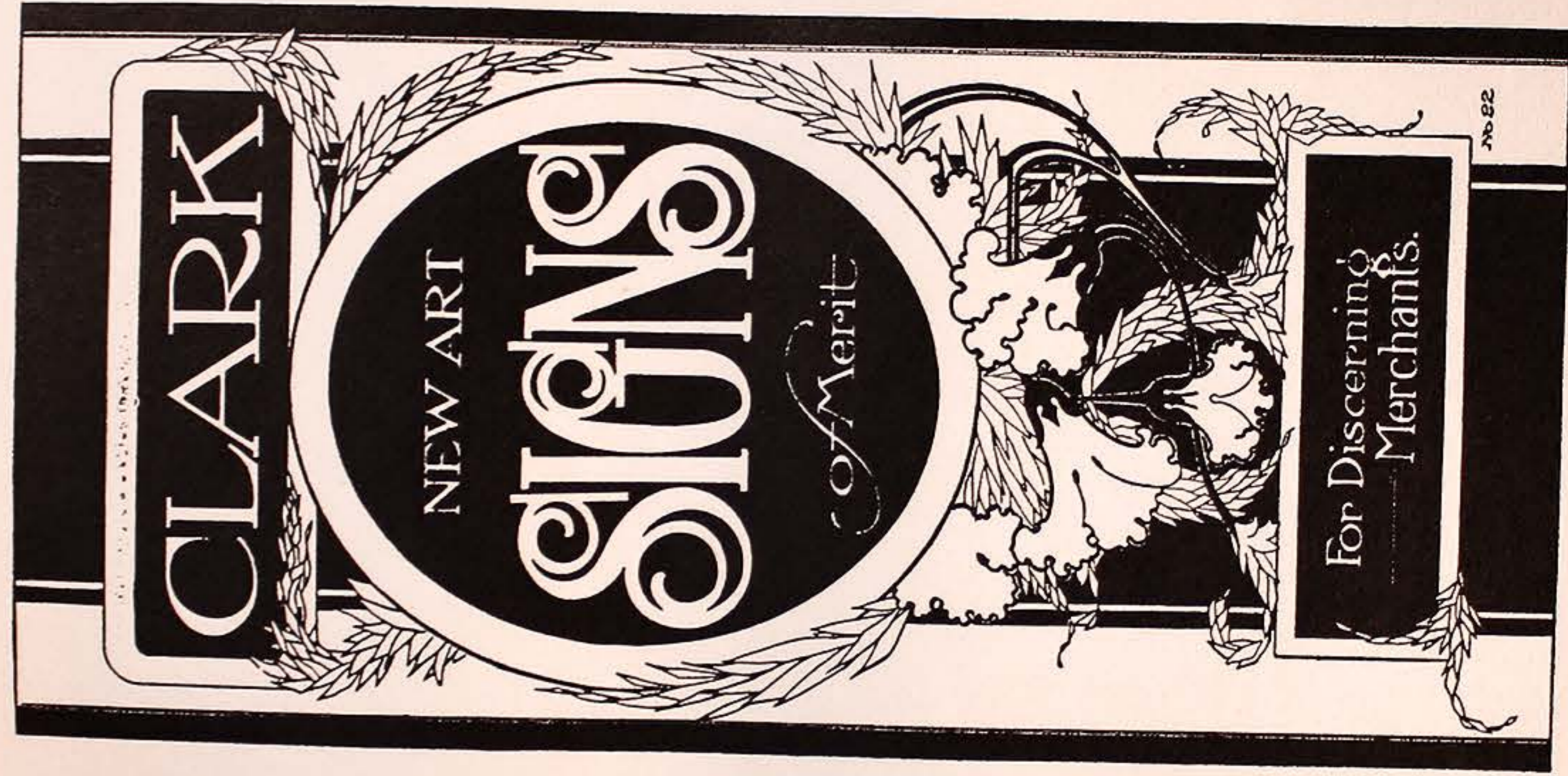
Panels on end solid gold; lettering on same in black. "Signs" panel, very deep rich vermillion ground. Word "signs" in gold, heavy black outline. Border on "signs" panel, light vermillion. Fine line on border in black. Main border on design in medium old gold. Outside fine line medium yellow. Wide line and two fine lines "split" on main border in tuscan red. Main ground, deep chocolate color; letter in gold.



No. 21. DESIGN FOR DRUM SIGN.

AFTER W. H. ABBOTT, NOTED "MODERN" OF NEW YORK CITY.

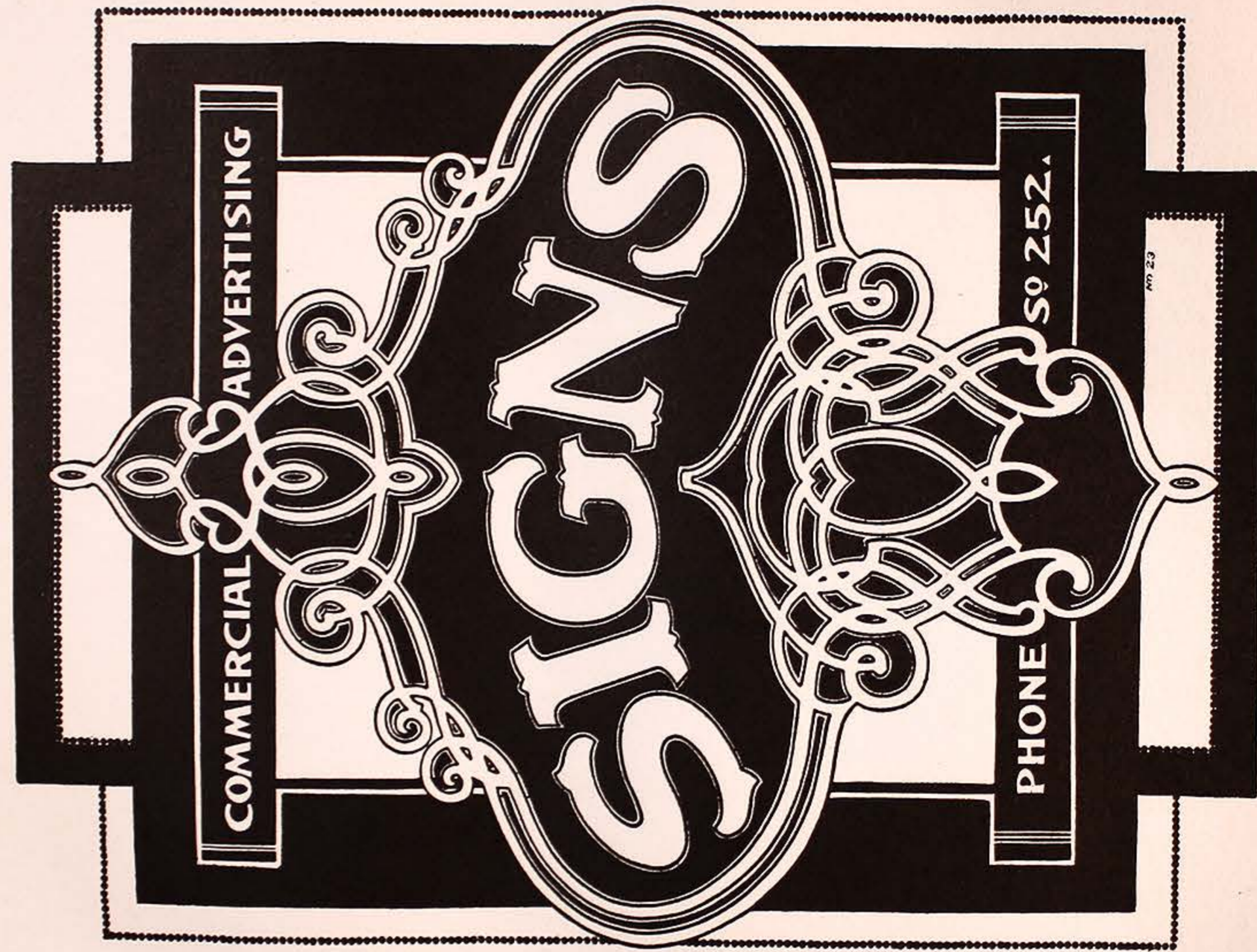
Do the background in deep burnt umber. Matt or border in medium rich old gold. Matt line, medium rich blue inclined to paleness. "Signs" panel, tuscan red ground, gold border. The word "Signs" XX gold, outline of pale vermillion. Firm name panel, pale gold. Firm name, rich old gold; white outline. Scroll, pale gold. Small lettering on main ground, deep gold. Number at top, white, gold outline; ground, deep vermillion. Narrow panel behind scroll and firm name panel in black.



No. 22. DESIGN FOR PANEL BETWEEN WINDOWS.

ATKINSON.

Do the background in deep warm drab, and do side border and back panel (running full length) in still deeper drab. Do "leaves" in rather medium dull grass green; detail in very bright pale tint of emerald green. Do "poster" blooms in pale purple; deeper purple for detail—panel at top; pale medium yellow border; deep "tan" ground, white letter; tuscan outline. Panel at bottom same as top panel. "Oval" deep vermilion ground, white letter, pale English vermilion border.



No. 23. DESIGN FOR BOARD PANEL.

AFTER JESSE WADDELL, PORTLAND, ORE.

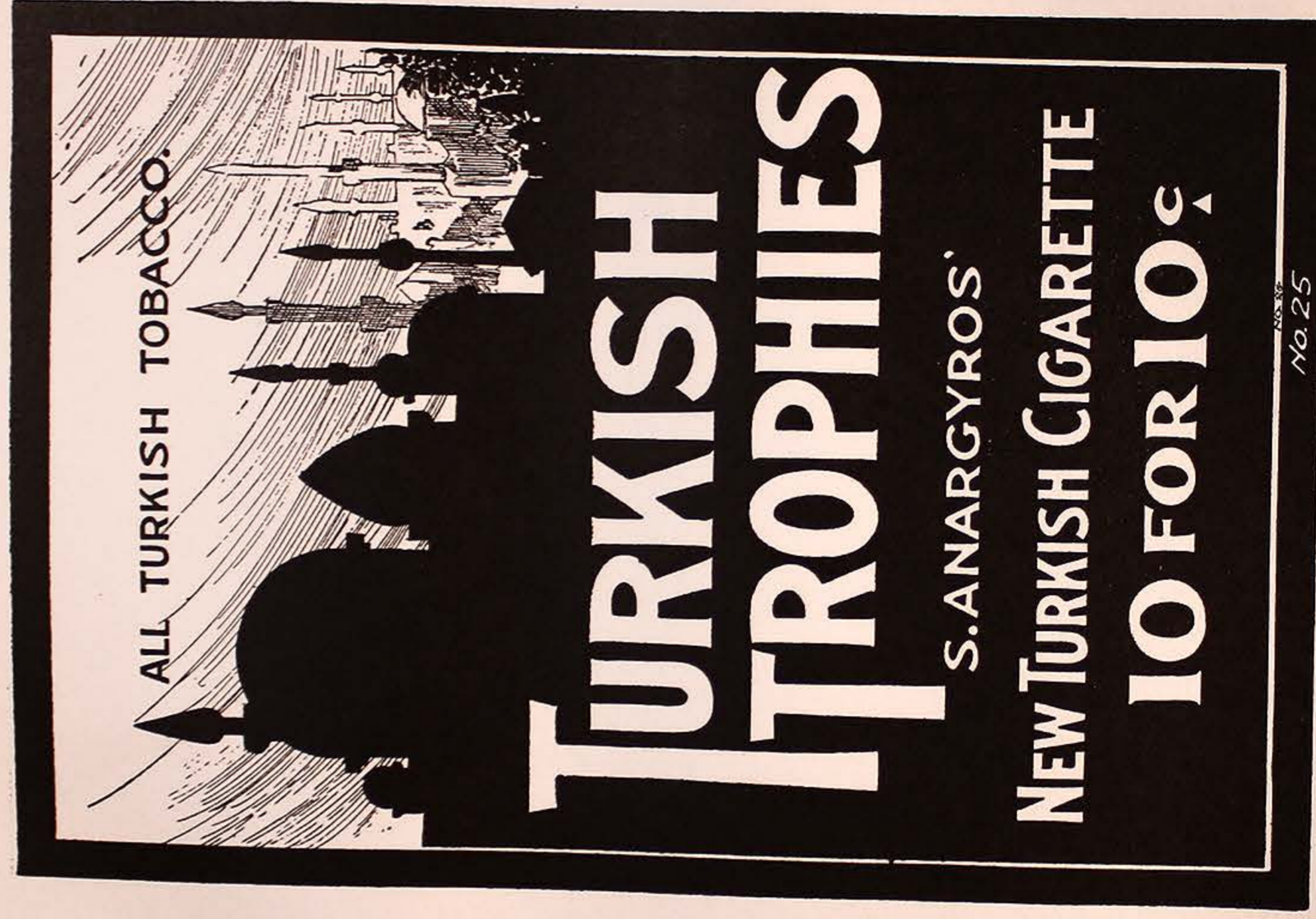
Background pale terra cotta; borders in deeper shades of same color. Small letter panels top and bottom of design in deep warm gray, letter white, black outline. "Signs" panel in deep rich blue; pale blue scroll with medium blue outline. "Signs" white letter, black outline; inside fine line medium gray.



No. 24. DESIGN FOR WINDOW.

ATKINSON.

Do all detail in panel in burnish gold, deep XX, stipple remainder of panel and gild, deep gold XX. Burnish gold outline all lettering and stipple centers; gild in deep gold. "Sign painters" gets blend shade of reds; split carmine. Do "stops" black and deep chocolate; blend "Vandyke" brown to medium Harrison's 1793 vermilion. Center or background of panel do in transparent "putty pounce;" balance of lettering rather wide outline of black.



No. 25. DESIGN FOR WALL OR BULLETIN.

AFTER E. W. DAVIS, OF GUNNING SYSTEM, CHICAGO.

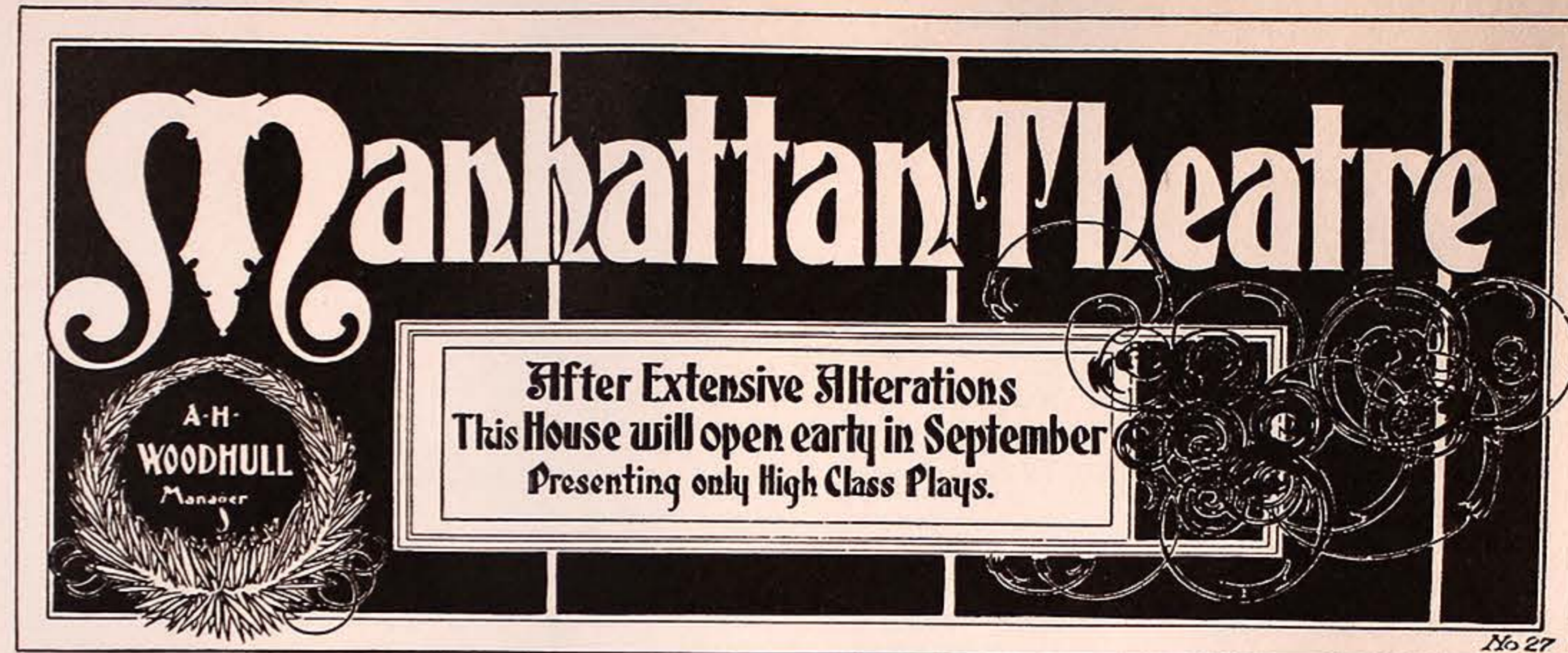
Use blend of medium and orange yellow in the sky; carry same color around for inset. Form silhouette and background in deep rich purple, leaving white letter "middle distance" pale purple; "far distance" in *very* pale purple. Border on sign light vermilion.



No. 26. DESIGN FOR BULLETIN.

AFTER LAWRENCE MAZZANOVICH, FAMOUS CHICAGO SIGN PAINTER.

Do background in pearl gray, rather light in tone. "The Referee" deep vermilion, wide white outline; "catch lines" in black. "Ribbon" in medium tone of cold purple, outlined in deeper purple. "Cigar" black with white outline. "The new 5c" black with red distant outline, leaving white next to letter.



No. 27. SPECIAL BULLETIN.

FROM DIRECT PHOTO, BY JOHN COLENUTT, FAMOUS THROUGHOUT
THE U. S.

Background dark olive green. "Manhattan Theatre" is white letter with red outline. On panel do borders and ground in pale bluish greens. Letter the panel in straight Prussian Blue. Wreath goes two tones of rather pale buff. Ground of wreath dark vermilion with white letter. Do the inset and vertical bars in pale lemon. Do scroll in medium old gold, cut in roughly, leaving white relief line as shown. Border on sign bright red.



No. 28. DESIGN FOR BULLETIN OR STORE SPACE.

AFTER A. R. HUSSEY, CHICAGO SIGN PAINTER.

Rococo panel gets red ground, white letter, black outline. Rococo scroll in pale bluish green. "Corsets" in very deep bottle green, black inset. Border medium olive green, white inset.



No. 29. BULLETIN OR STORE SPACE.

AFTER LARRY MAZZANOVICH, FAMOUS CHICAGO SIGN PAINTER AND
LITHO DESIGNER.

Do background in pale emerald green. Do both panels deep olive green ground, white letter, red outline, black shade. Borders on panels deepen emerald color a trifle, and for "trim" and scroll in borders make it still deeper. Wreath in medium grass green, darken for detail, and use the deepened color to "cut in" word "The." Do the "Torch" in medium old gold, model in dark old gold and a little umber and chromo green, and high light in medium yellow. Do vapor from torch in deepened background color. Ribbons in tuscan pink.

Fruits & Vegetables
IN SEASON
COFFEES,
SPICES,
TEAS,
Canned
Goods.

W. HAASSTEADT
Fancy
Groceries
AND

DELICATESSEN

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189-30

No. 30. BULLETIN.

BY JACK COLENUTT.

Drawing made from photo of same.

Main ground very pale olive green. Small lettering upper right hand corner in dark bottle green. Firm name in white, heavy black outline. Start scroll on circle lower left hand in deep olive "break blend" to real light in the ending. Ground of circle deep old gold blended to medium buff, white letter black heavy outline. Panel in medium dull purple, white letter, red outline, hang with pink ribbon. Address in black. Border in medium olive with white inset.



No. 31. BULLETIN OR STORE SPACE.

AFTER J. P. ZIRNGIEBEL, PORTLAND, ORE.

Main ground light buff to right of scroll division; same color for panel on left end. Ground back of left end panel in tuscan red. Letter left end panel in red with black outline. "Hop Gold Lager Beer" in medium strong bright yellow. "Cut it in" (form panel also) in tuscan red. Scroll and "matt line" medium old gold. Red border and white inset. For ribbon, deepen the background and detail in red. Letter it black.

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No. 32

No. 32. BULLETIN OR WALL.

AFTER E. W. DAVIS, WITH GUNNING SYSTEM, CHICAGO.

Bright strong yellow ground. Panel deep rich vermilion, white letter, black outline. Hand and watch natural color. Small lettering in black. Border on sign warm old gold.



No. 33.

No. 33. BULLETIN.

AFTER VAL COSTELLO, NOTED CHICAGO AND WESTERN SIGN PAINTER,
LOS ANGELES.

Do matt in rather pale emerald green; do all the cut stuff on design same color. Panel top and bottom pale bluish green letter, medium olive green ground. Main ground in deep olive green. Script in white with black outline, red shade. Border in deep vermilion.



No. 34. BULLETIN.

AFTER FRANK NICHOLSON, NOTED EXPOSITION SIGN PAINTER.

Ground outside of panel very pale olive green; ground inside of floral border deepen same color a trifle. Floral border in two tones of dull purple (pale and medium). Panel is white letter, black outline, deep vermilion ground. Balance of lettering inside of floral border in deep purple. Small lettering in corners of design in black. Border in strong orange yellow.



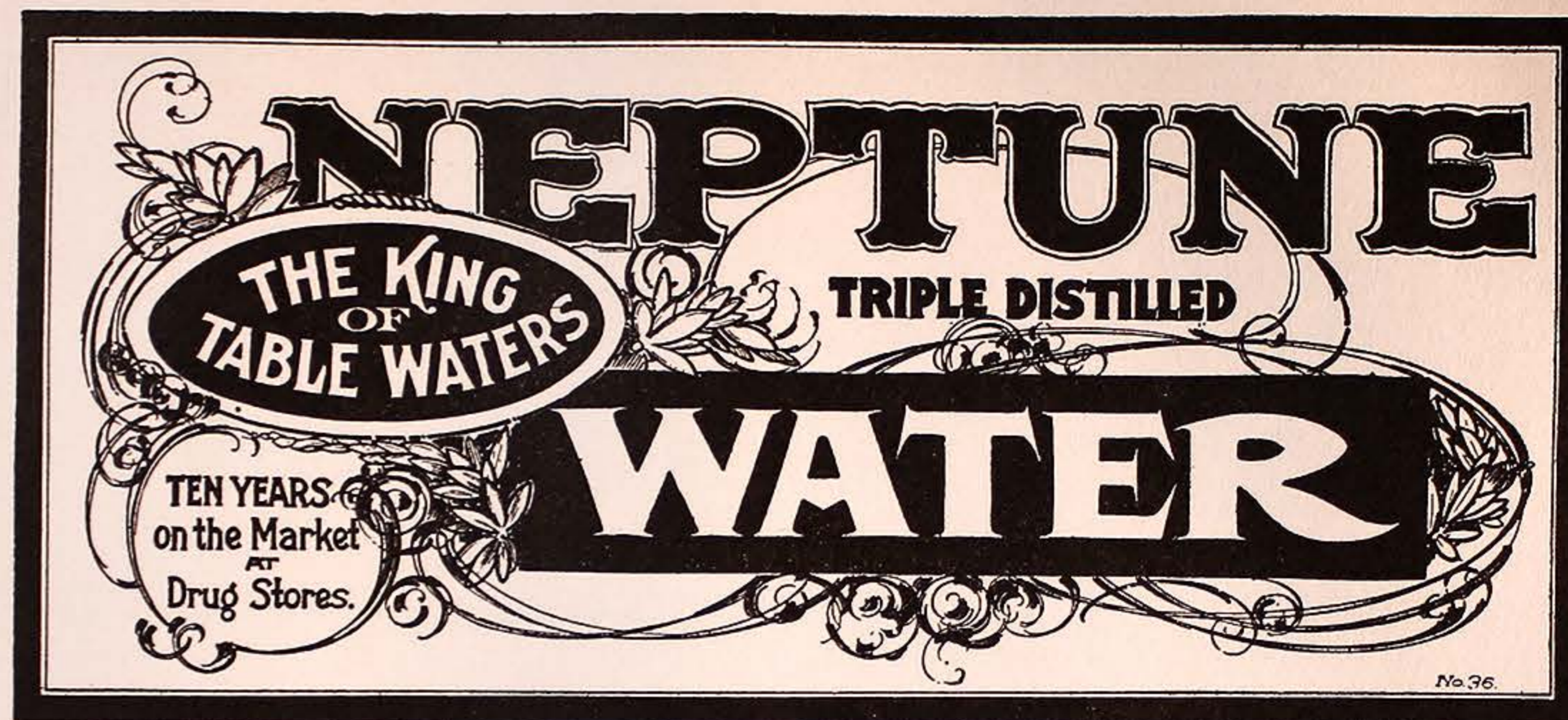
No. 35

No. 35. SPECIAL NEW YORK BULLETIN.

BY JOHN COLENUTT.

(Drawing made from photo.)

Medium pale buff outside border, inset fine lines lemon yellow, main ground deep rich chocolate, *wide matt* in medium old gold, and ground inside of matt almost straight burnt umber, with little poster floral in tuscan, with tuscan purple rough outline. Semicircles at top in pale orange, lettered black. Panel at left, blend of pale old gold to pink and letter black; circle panel pale vermillion band, white letter, deep vermillion ground. All scrolls in rich pale old gold with medium old gold outline.



No. 36. BULLETIN.

AFTER HARRY HOAG, FORT WORTH, TEXAS.

Pale, warm green ground. Oval in pale blue letter, deep blue ground, pale blue border. "Neptune" dark bottle green, double outline in same color made lighter in two tones. "Water panel" in red ground, white letter, black outline; small lettering in black. Deepen ground color for "leaves" and do scrolls in greenish gray strong enough to "show." Red border on sign and red, fine line for inset.



No. 37. BULLETIN.

AFTER G. W. PATE, NOTED SIGN PAINTER OF KANSAS CITY.

Extremely pale burnt umber background. Panel at end gets rich pale bluish green letter "cut in" with deep dull blue. Border on same in rather pale old gold. Cut or outlined trifle deeper old gold. "Zepto" deep vermilion, outline black and inset tuscan red. "Tooth cleaning pencil" deep warm drab, inset black, "cut in" with bright saffron yellow, leaving wide outline of white. "Antiseptic panel" same as end panel. Border in red, white inset.



No. 38. SPECIAL NEW YORK BULLETIN.

BY JOHN COLENUTT.

(Drawing made from photo.)

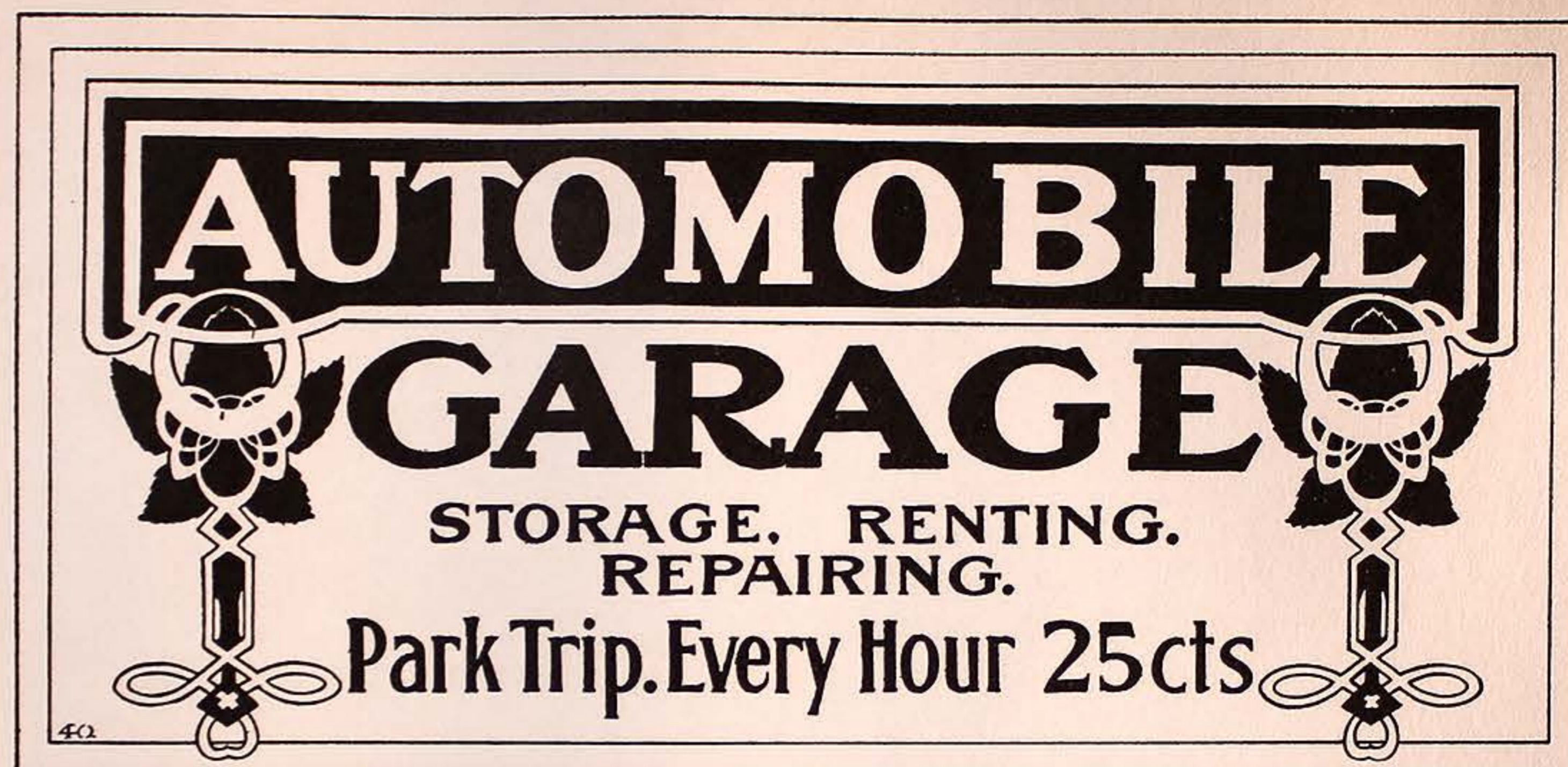
Background in deep, dull blue. Medium old gold border, and pale old gold inset. Panels in pale saffron with borders in orange, toned rich with burnt sienna. Display lettering in chocolate with tuscan outline; scrolls in pale, bluish green or strong pink. Do the "back" panels in lighter shade of background color. Small lettering in red and black.



No. 39. BULLETIN.

AFTER WILLARD CLARK, 244 E. MADISON ST., CHICAGO.

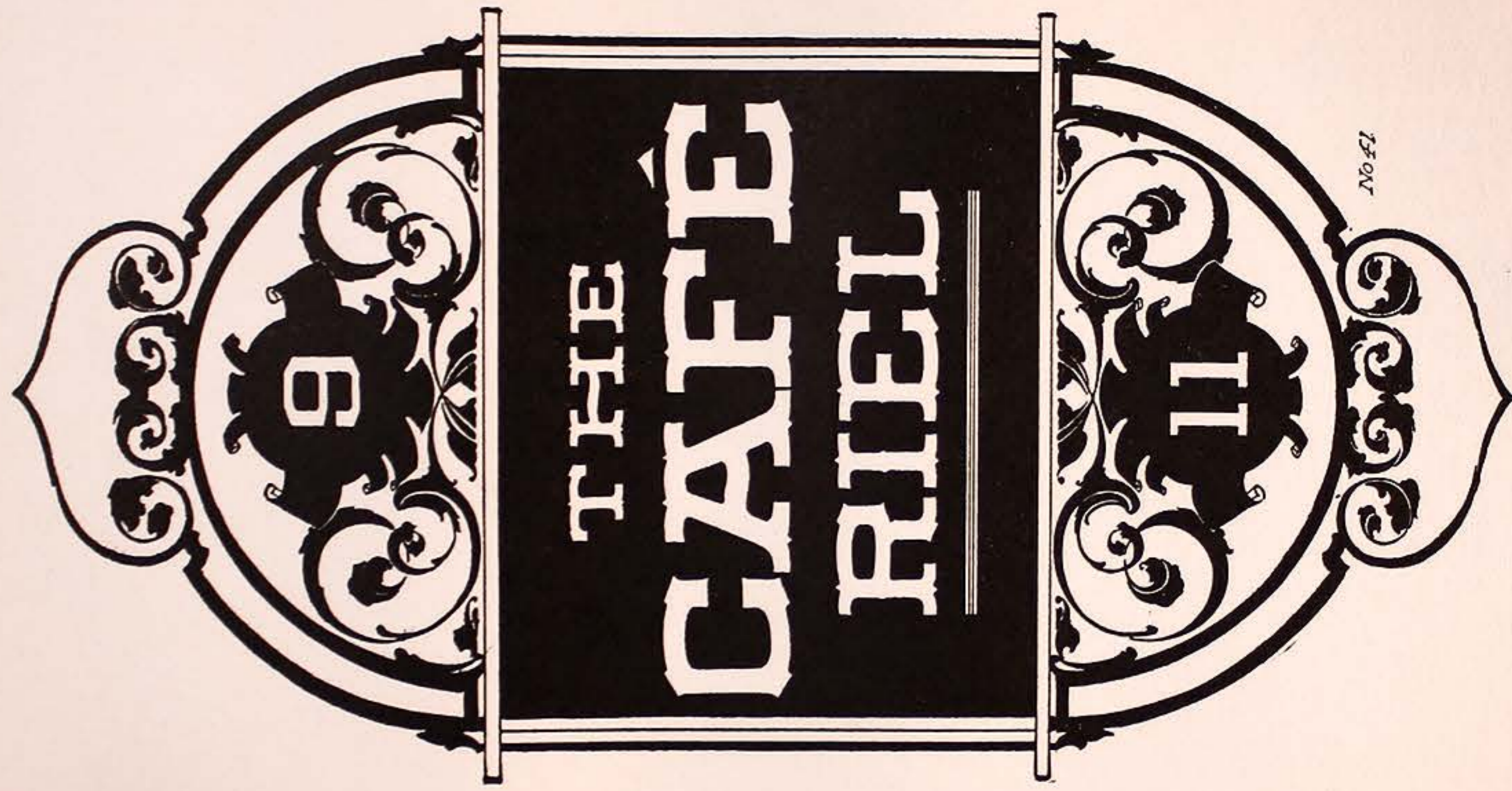
Pearl gray matt with borders in vermilion. Panel is black ground, pale, greenish yellow letter with heavy white high light. Scrolls and matt lines in vermilion. Small lettering in black.



No. 40. ROOF BULLETIN.

AFTER A. R. HUSSEY, CHICAGO.

Do background in pale gray, inclined to purple. Do borders and end ornaments light and medium bluish green. Cut in "Automobile" dark bluish green, leaving white letter; give it wide black outline. "Garage" in dark bluish green, medium blue inset, black outline. Balance of lettering deep olive green with black inset. Red borders.



No. 41. DESIGN FOR DOOR LIGHT (GLASS).

ATKINSON.

Outline entire design and lettering in bright gold. (XX) deep. Stipple scrolls and background and gild in lemon gold. Fill centers of lettering in black. "Open" ground at top and bottom of design do in whitening putty pounce. Wide outline of black around entire outside of design.

CASINO GARDEN

OPENS
JUNE 1st

CHANGE OF BILL
EACH WEEK

CONCERTS
BY
LEHMANN

Harry B. RICHMON
SOLOIST

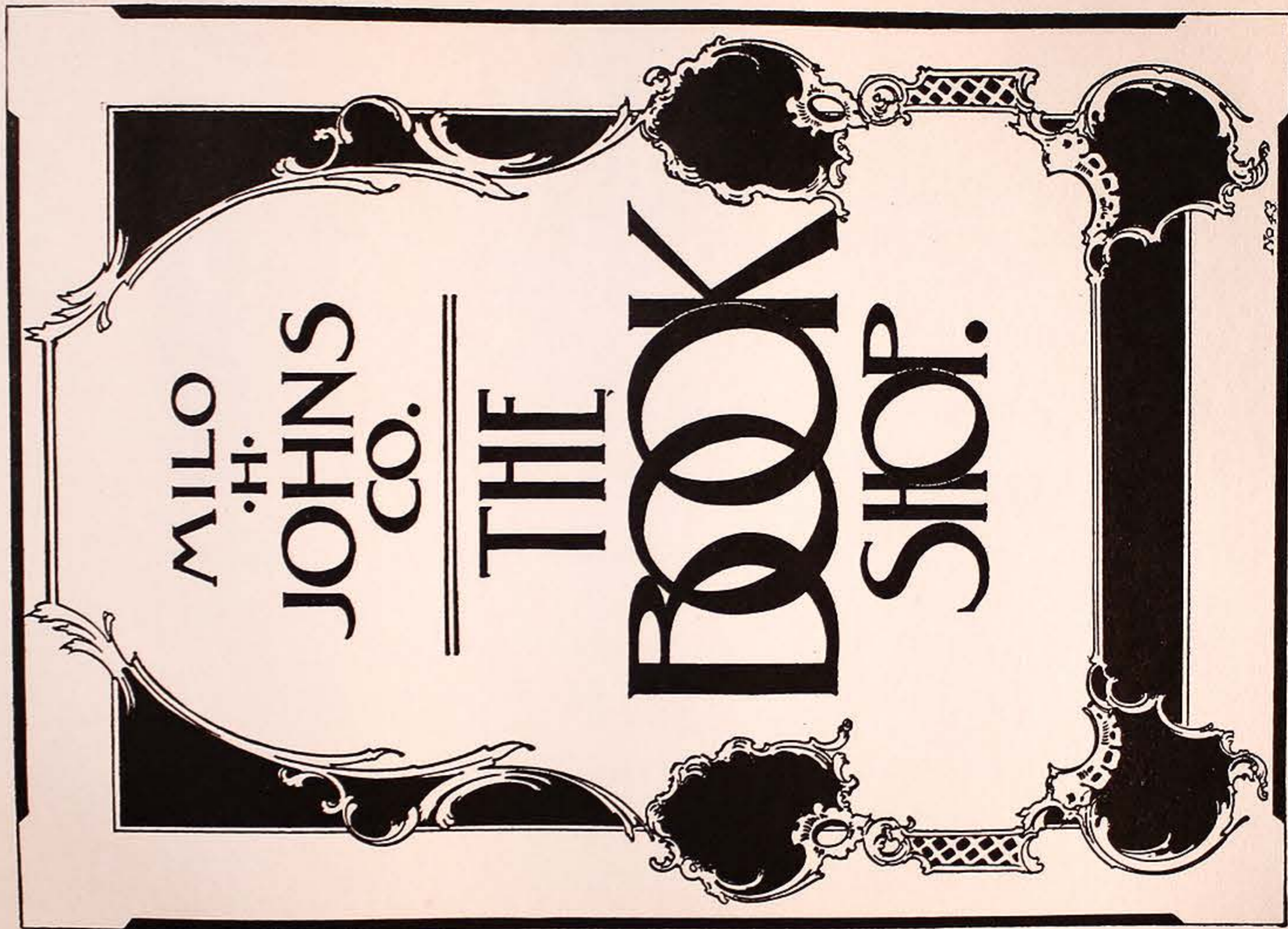
Marie SUMMERS
SOPRANO

No. 42

No. 42. FOR OILCLOTH OR MUSLIN.

FRANK S. NICHOLSON.

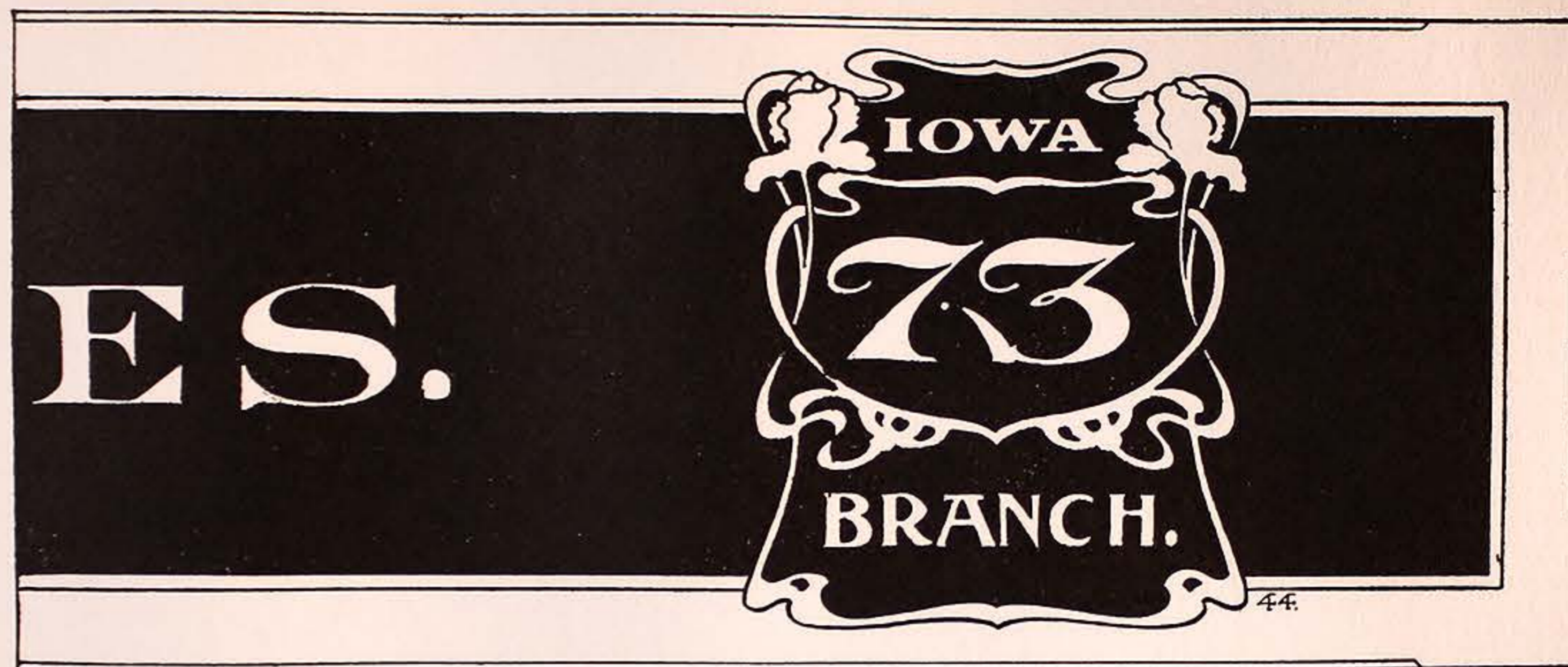
Do panel old gold ground, pale buff letter. Decorative stuff, pale buff, outlined orange yellow. Casino Garden deep drab, black high light, and pale purple wide "poster outline." Small lettering in black. "Concerts by, etc.," in two bright reds, white or pale gray background.



No. 43. DRUM, SMALL PANEL OR TABLET.

ATKINSON.

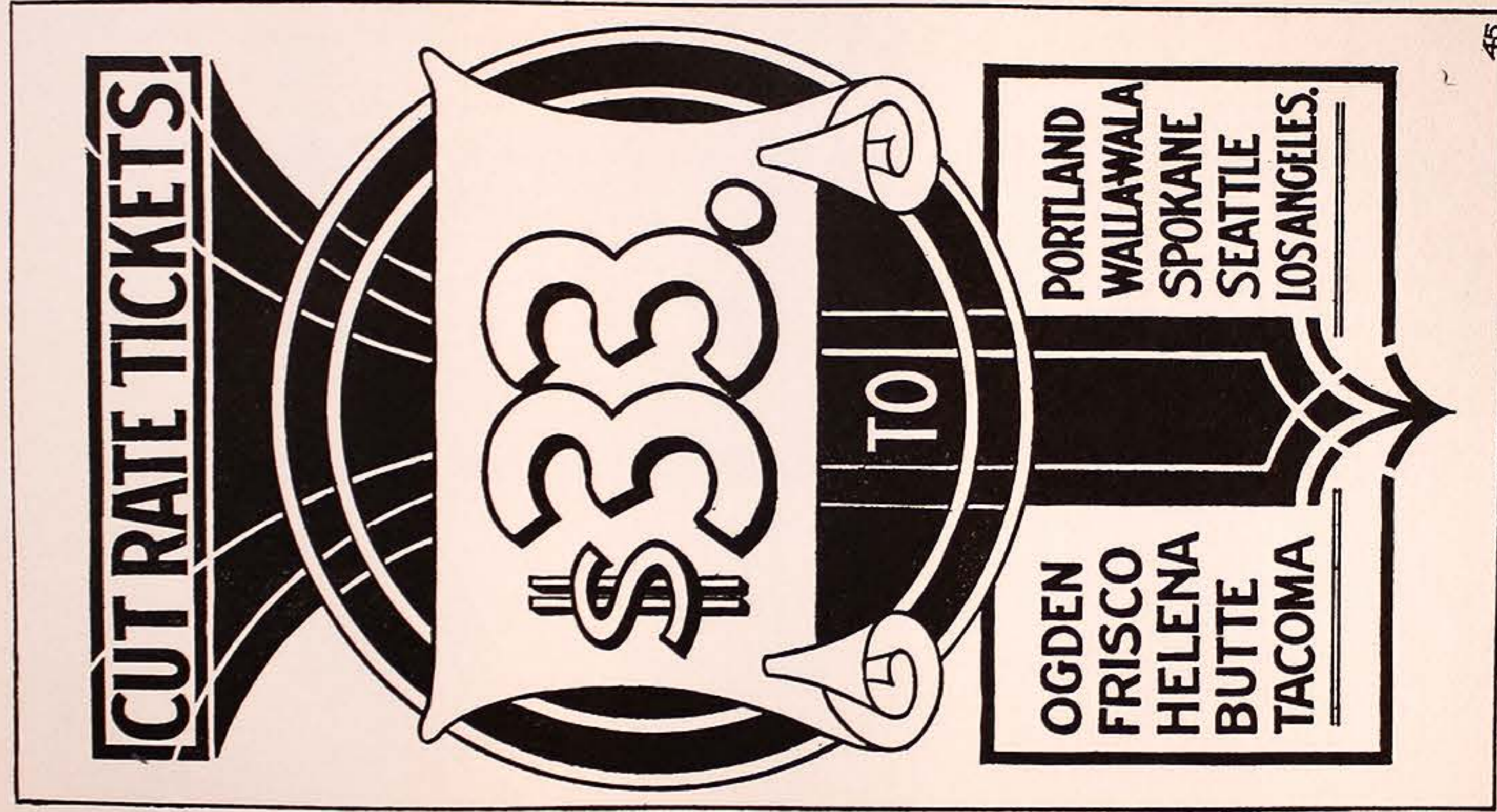
Ground of panel solid gold—letter in black. Matt medium olive green—matt line in silver. Ground inside of matt deep olive green. Rococo scroll in lemon gold outlined in pale buff color. "Centers" of scroll at corners and side, fill in deep oxidized copper.



No. 44. ART NOUVEAU "END" FOR FASCIA BOARD.

ATKINSON.

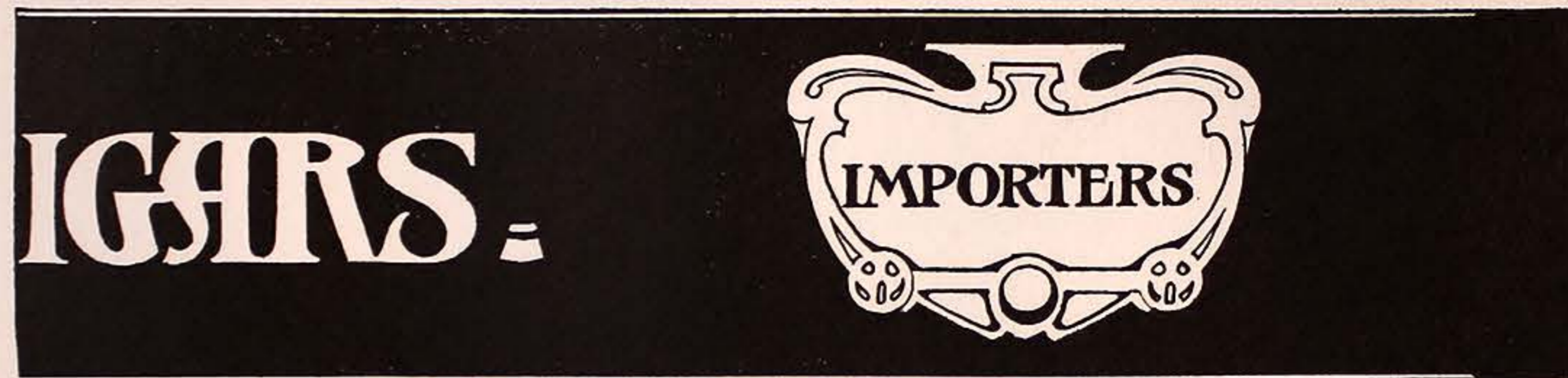
Main board, black smalt ground—surface or raised gold letter. Deep olive green matt—gold matt line, panel in gold, top and bottom "cut in" medium rich chocolate—outline gold letter in black. Center of panel "cut in" deep chocolate, black outline on letter.



No. 45. SUGGESTION FOR LARGE SIDEWALK SIGN,
BOARD PANEL OR OILCLOTH

HARRY HOAG.

Do background in rather pale lemon yellow. "Banner" in center, pale orange yellow. Little panel at top in white ground—black lettering. Balance of design rich pale old gold (quite strong), leaving white show on circles and stripes as in design. Panel at bottom, white ground, with red letter. "\$33" pale English vermilion, outlined and shaded in deep Harrison's vermilion.



No. 46. "END" FOR FASCIA BOARD.

Panel solid gold detail and lettering in black. Main board, black ground, gold letter. (Raised or surface.)



No. 47. "END" FOR FASCIA BOARD.

Do panel solid silver. Scrolls in white—outline and detail in pale terra cotta, stripe line in black. Main board, silver letter outline tuscan, background in medium rich chocolate, finish in spar varnish.

PHONE YARDS 1306.



768 Thirty first St.

No. 48. DESIGN FOR SIGN PAINTERS' STATIONERY.

Can be used for Letter Head, Bill Head and Card.

ATKINSON.

Make drawing four times larger than "cut" desired. Have zinc etching made from same.



No. 49. SWELL DESIGN FOR VERY SPECIAL WINDOW.

AFTER HARRY BRIDWELL, CINCINNATI, OHIO.

Do entire detail of design and outline on lettering in burnish XX deep gold. Heavy stipple on solid parts of design, and gild XX deep gold.

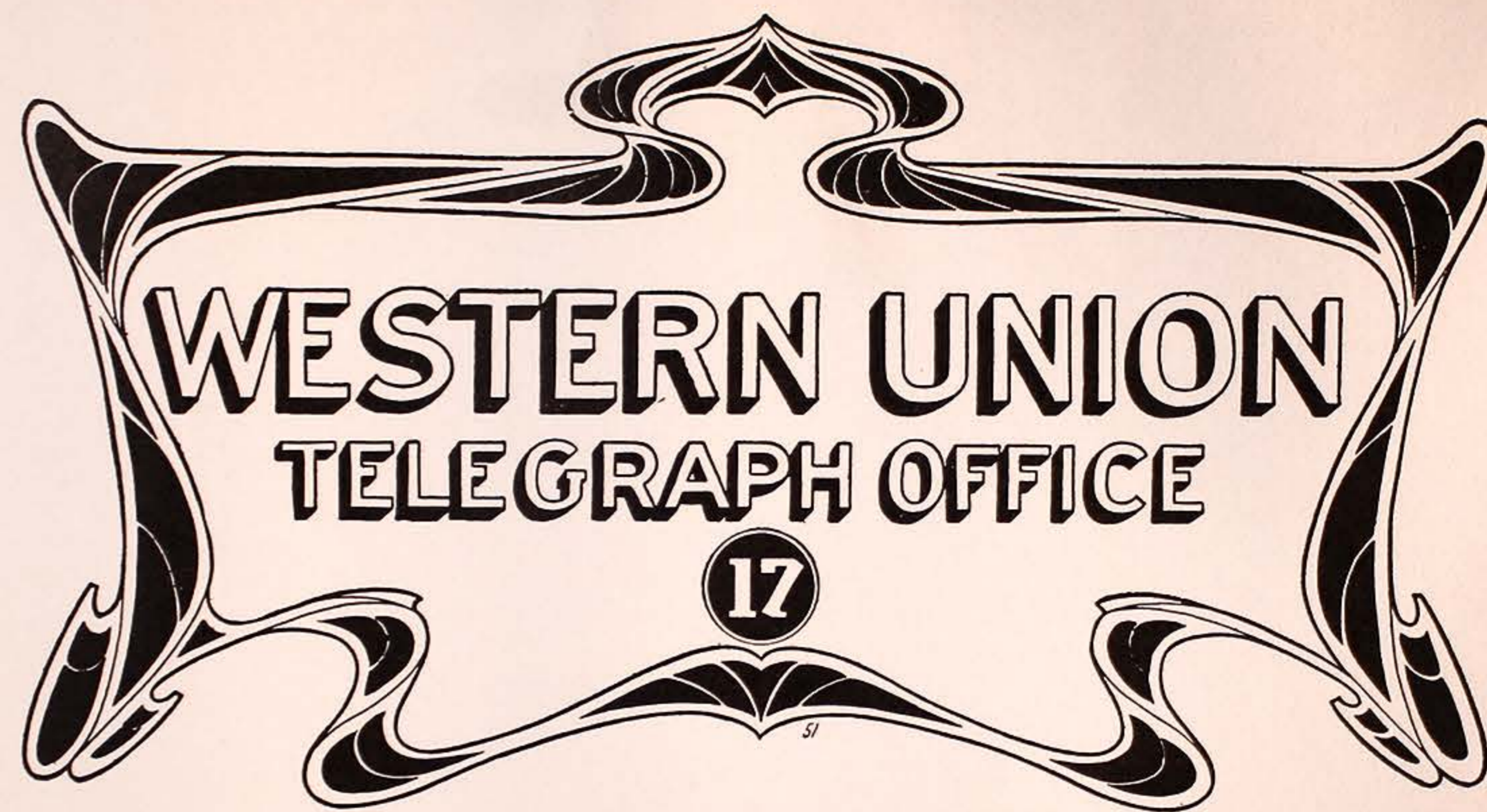
Note.—The solid black on design is clear glass. Fill lettering solid black.



No. 50. DESIGN FOR WINDOW.

AFTER ED. MILLS, PORTLAND, ORE.

Burnish silver outline on lettering and scrolls. Do border in solid silver. Fill lettering in deep rich blue. Shade lettering in neutral tint of ground color. Fill scroll in stipple silver. Rather deep tone of pale rich blue on matt, and do the background in stipple of very pale warm lead color.



No. 51. WINDOW DESIGN.

Outline lettering heavy, in medium rich blue and frost centers in white. Shade with same color, trifle lighter. Do Nouveau border in rich pale blue, and stipple ground in rich pale terra cotta tone.



No. 52. WINDOW DESIGN.

ATKINSON.

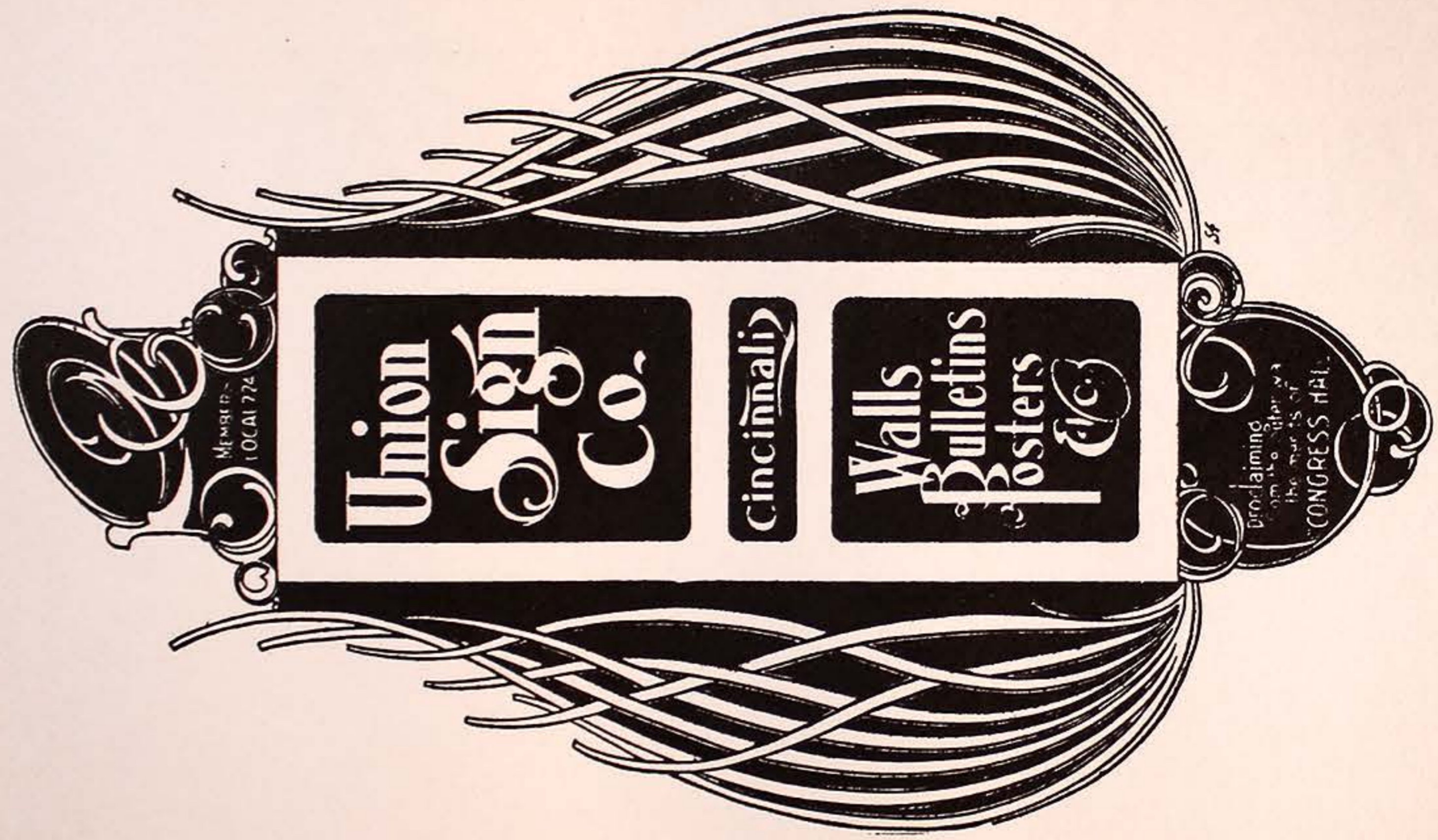
Outline entire design in burnish gold XX deep. Fill all small lettering deep old gold color, stippled. Fill "Grant's Printery" stippled lemon gold. Split shade of black and dark warm olive green. Stipple centers of "Printing" pale buff, wide outline of tuscan on same, with slant shade of black. Put in ground of panel in deep warm olive green. Fill border and scrolls stippled lemon gold. Putty stipple space each side of number panel. Outline the number in black and put in ground of deep vermilion.



No. 53. GLASS PANEL FOR BOTTOM OF WINDOW—
OXIDIZED COPPER FRAME.

G. W. PATE, K. C.

Outline all detail in panels in burnish gold, stipple and gild in same gold. Lettering in panels, outline gold XX deep, stipple centers, and gild lemon gold. "Florist," burnish gold outline; stipple lemon gold centers. Deep chocolate ground.



No. 54. NARROW PANEL FOR GLASS.

AFTER FRANK QUEHLE, NOTED SIGN PAINTER OF CINCINNATI, OHIO.

Outline entire design, lettering included in XX deep burnish gold. Stipple lemon gold on border of panel. Fill design outside of panel in nice tone of warm yellowish green, rather pale. Background of panel in deep rich peacock green. Black outline on lettering, and stipple centers in white. Main ground of sign in deep rich purple. For matt line, use medium purple, strong enough to show on ground color. Fill sprigs at side in rich old gold color.

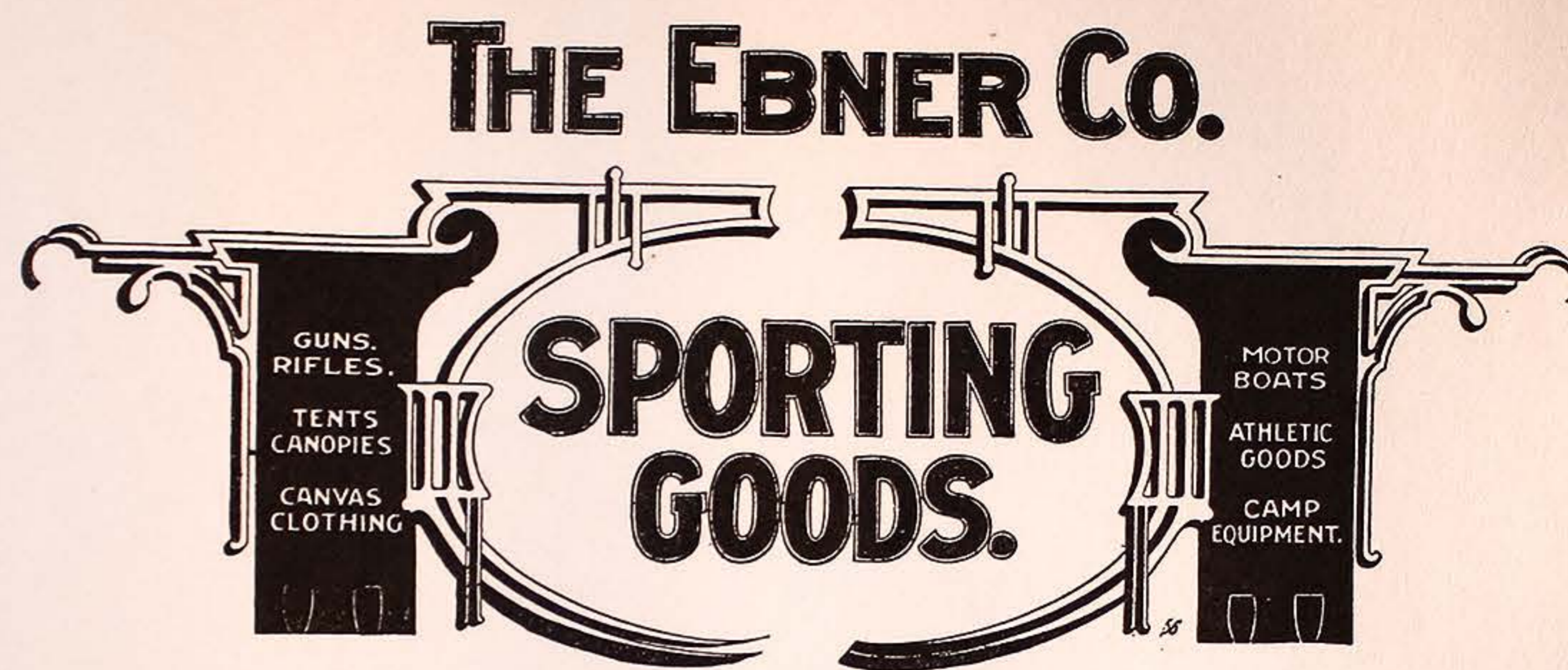
RESTAURANT

FOR
LADIES
AND GENTLEMEN.

No. 55. WINDOW.

FRED WATRIN, PORTLAND, ORE.

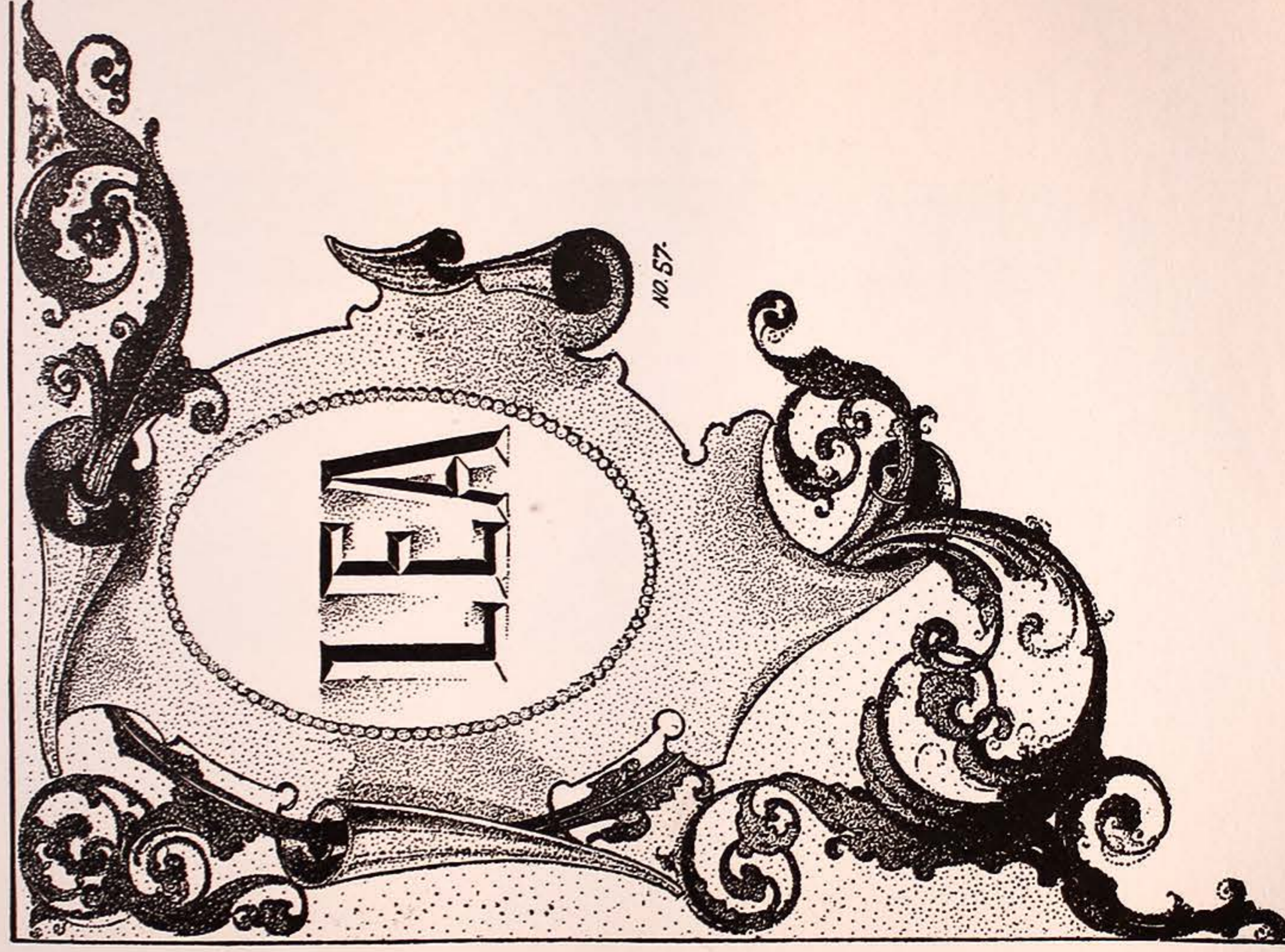
Burnish outline of gold, wide "varnish line" inside carried close to outline, and do all inseting in varnish. Fill "Balls" different colored bronzes. Black outline, and split shade of black and warm chocolate quite deep in tone.



No. 56. WINDOW DESIGN.

AFTER FRANK S. NICHOLSON

Line whole design in XX deep gold, and outline all lettering in deep gold. "Sporting Goods," stipple center, and gild lemon gold; double color outline of black and red, black next to letter. Fill space above oval panel in deep vermilion, stippled. Lettering in side panels, fill in black, and outline the letter in black at the same time. Ground of side panels in pale warm buff, stippled. Firm name gets stippled deep gold, with double color outline of black and red. Fill between fine lines in design in rich medium bluish green.

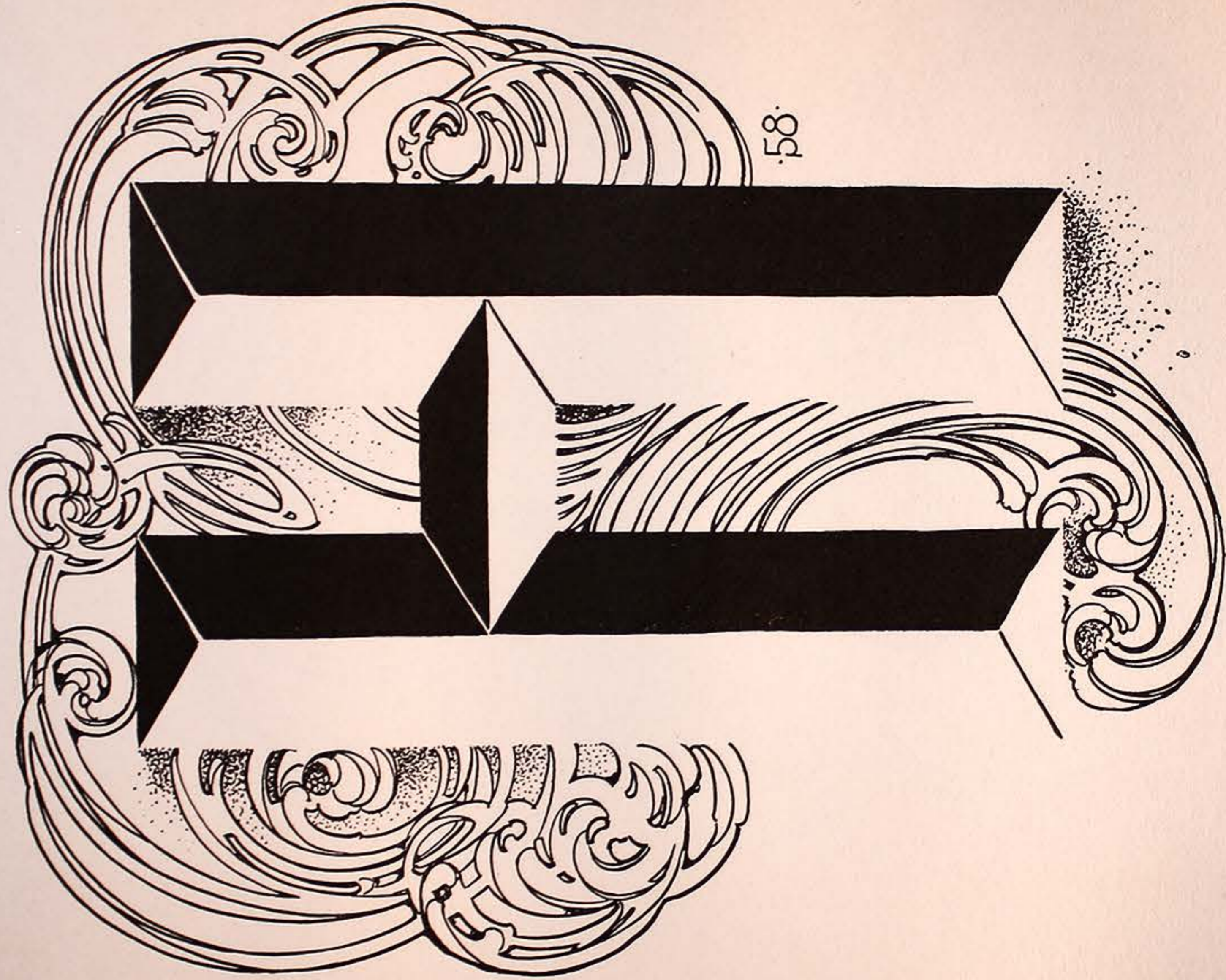


NO. 57.

No. 57. SCROLL SUPPORT FOR "BOX" FASCIA.

BY ATKINSON.

Blend flat surface in pale tones of olive green, old gold and pink, also pale rich purple. Do "Returns" in red blend. Scrolls, medium old gold, shade and high light. Letter convexed in black and warm gray, outline in XX deep gold leaf.

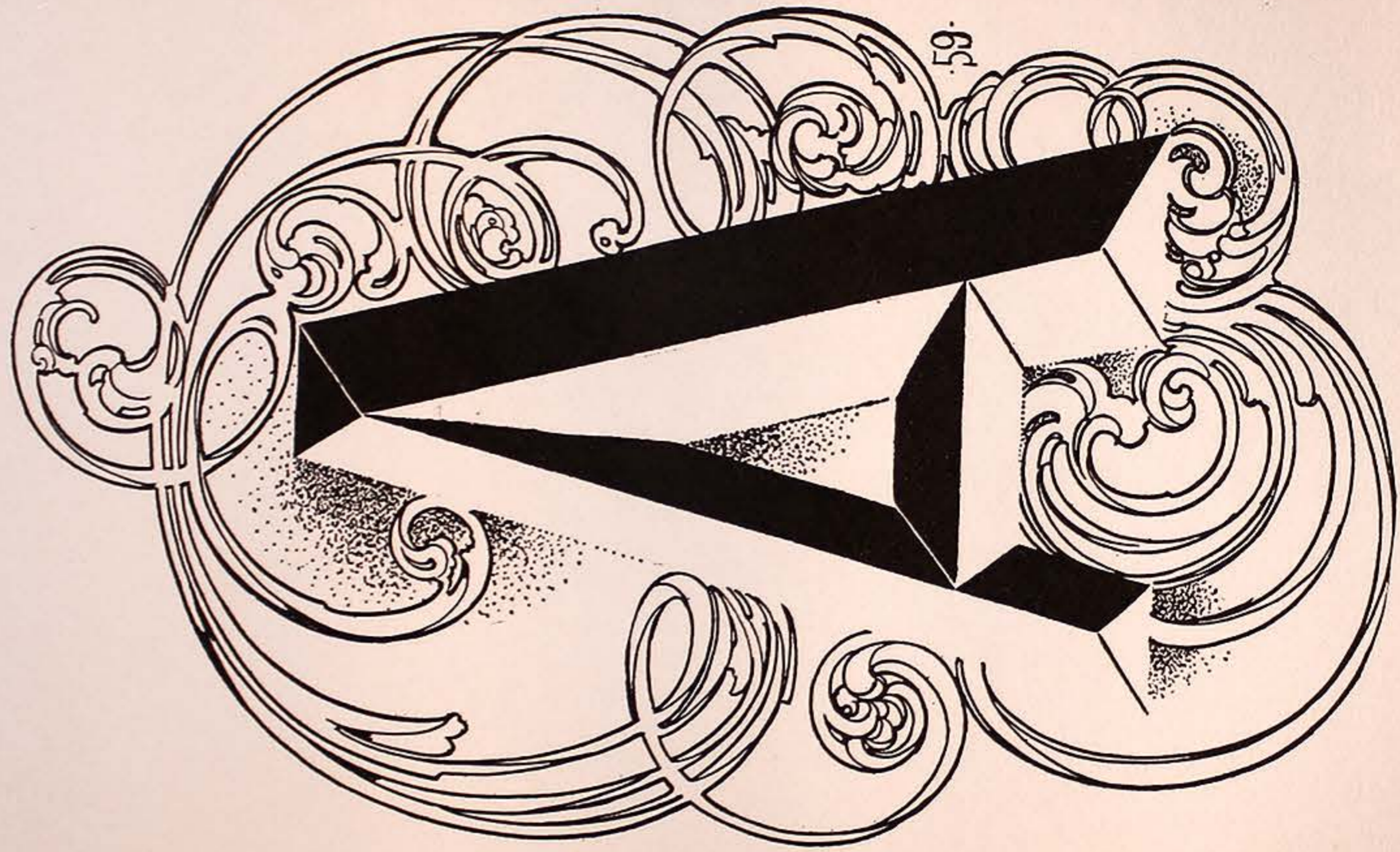


58

No. 58. "CAP."

BY ATKINSON.

Convex in two tones of rich blue. Do scroll in pale terra cotta, edged in lower tone of same color. Pale warm gray ground.



No. 59. "CAP."

BY ATKINSON.

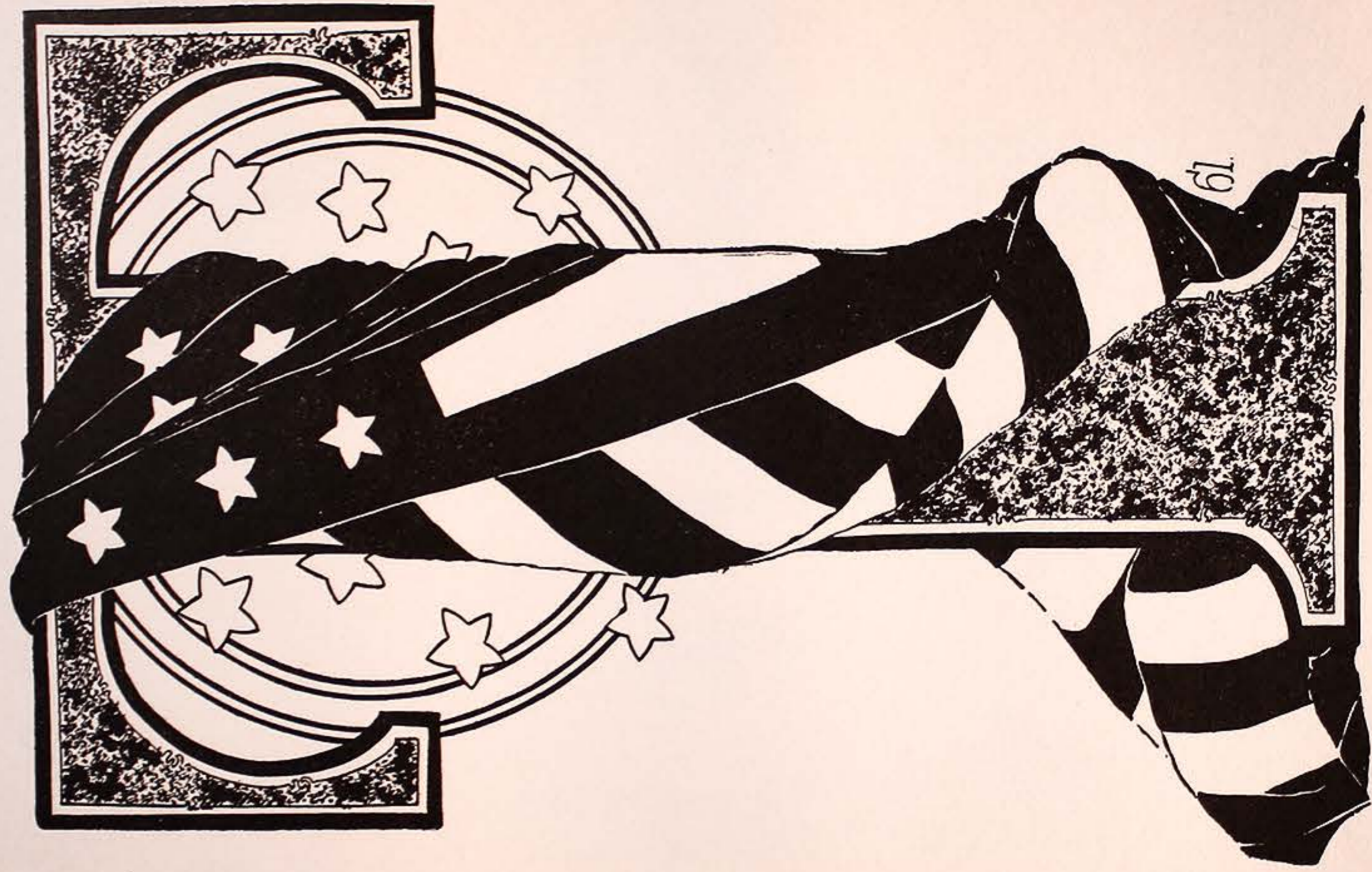
Do the "convex" in light and deep vermilion. The scroll in medium old gold or pale green. Edge in lower tone of either color. White or pale yellow ground.



No. 60. FOR BUSINESS CARD OR SIGN.

BY ATKINSON.

For "Window" work up in black and gold, using lemon gold stipple in lettering and scroll centers.



No. 61. "CAP."

BY ATKINSON.

Do "Drape" in pale blue, pink and white, poster style, *no blend*;
(Not red, white and blue). Do letter in two tones of deep cadet blue
(use dry sponge for stippling), outline in black. Do circles in pale
old gold, and stars in golden yellow. This on white or pale gray
ground.



No. 62. "CAP."

BY HI MOTT ALLEN, OF BUFFALO.

Scroll added by Atkinson.

Blend letter from deep red to pale vermilion (starting at bottom).
Outline and shade in black. Scroll in pale greenish yellow, edged in
medium olive green. Ground of panel deep olive. Border of panel
same as scroll. Pale yellowish green ground on sign.



No. 63. PANEL.

BY G. W. PATE, K. C.

Engraved from original drawing.

"Atkinson" white letter, wide light blue outline with deep blue edge. Background in very pale rich, blue. "Panel" in medium rich chocolate with vermilion poster "gags" in it. Small letter in rich blue, white outline "cut in" poster style. Border, rich red with white inset.

—OR THIS—

"Atkinson" pale English vermilion, wide white outline. Ground pale yellowish green. "Panel" modeled in deep green. Small lettering straight tuscan red with white poster outline. Red border, white inset.

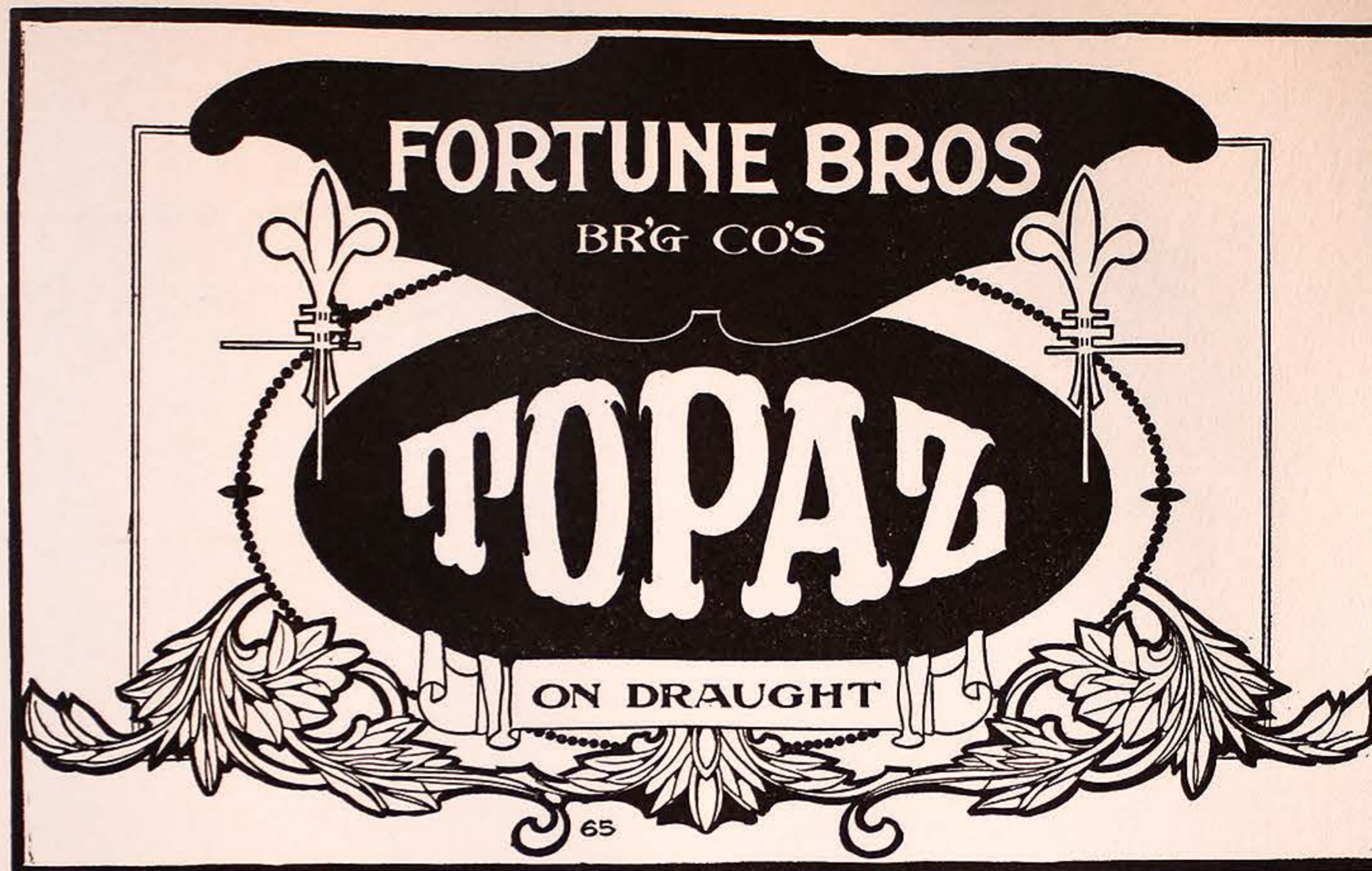


No. 64. PANEL.

BY G. W. PATE, K. C.

Engraved from original drawing.

"Signs" deep rich red, wide poster outline in pale English vermilion with broken fine-line in deep red. "Splits" in lettering pale vermilion. Wreath in light yellowish green. "Cut in" center of "S" tail dark warm green, outline wreath same color. "The Hello Kind" in bright green, strong enough to show well on white. Scrolls in pale old gold or light pink.



No. 65 PANEL.

M. D. PRICE, CHICAGO.

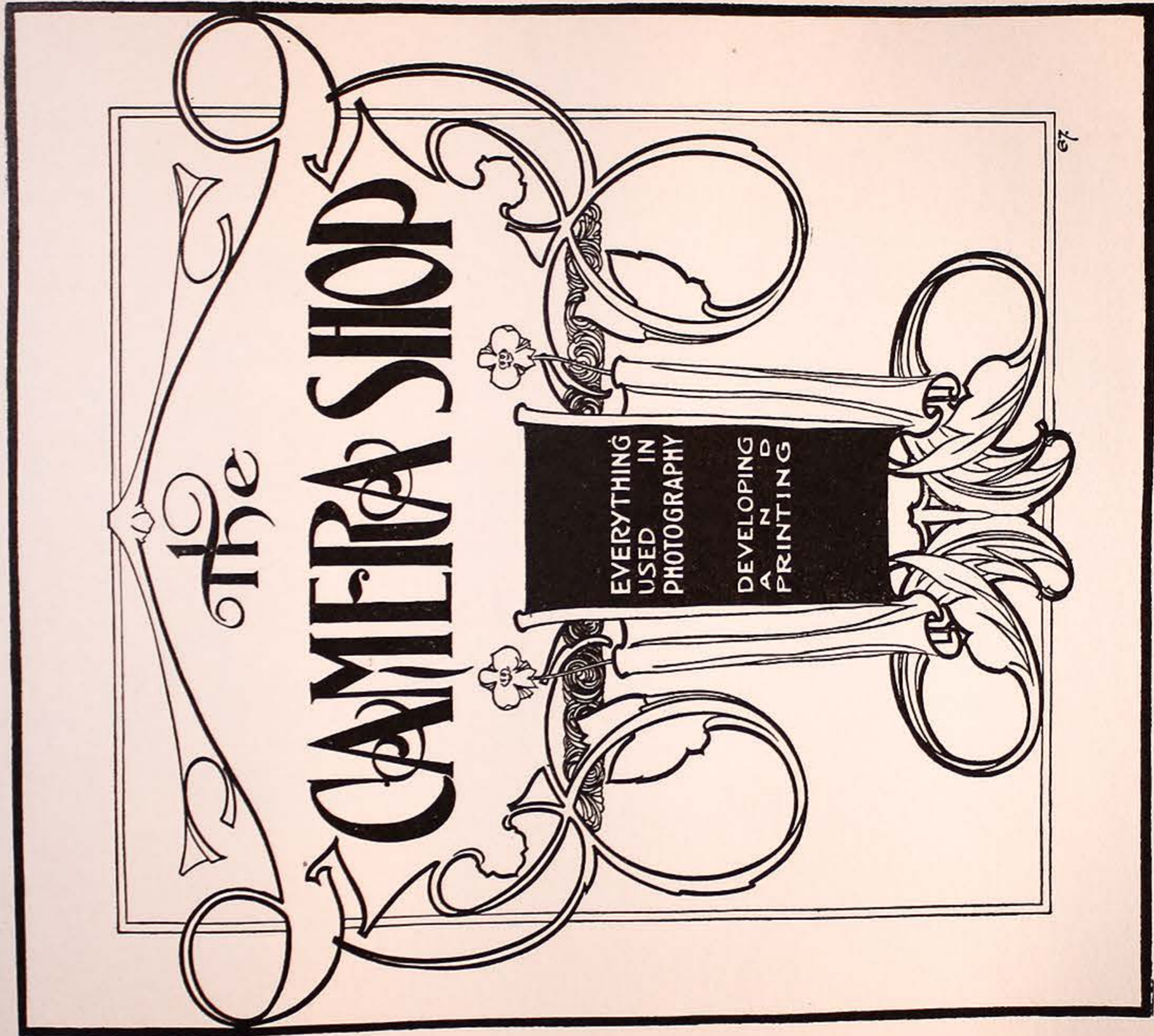
Top panel tuscan red ground, gold letter, black outline. Oval panel get deep chocolate ground, medium tone of terra cotta for border and gold leaf for beads. "Topaz" wide outline of gold, saffron yellow for center, and a heavy edge of black. Scroll in medium old gold, detailed in deeper tone of same color. Ribbon at bottom, solid gold leaf. Letter in black. Main ground deep olive green. Matt line pale blue. Matt in medium olive green. Silver bevels.



No. 66. BULLETIN LARGE OR SMALL.

M. D. PRICE, CHICAGO.

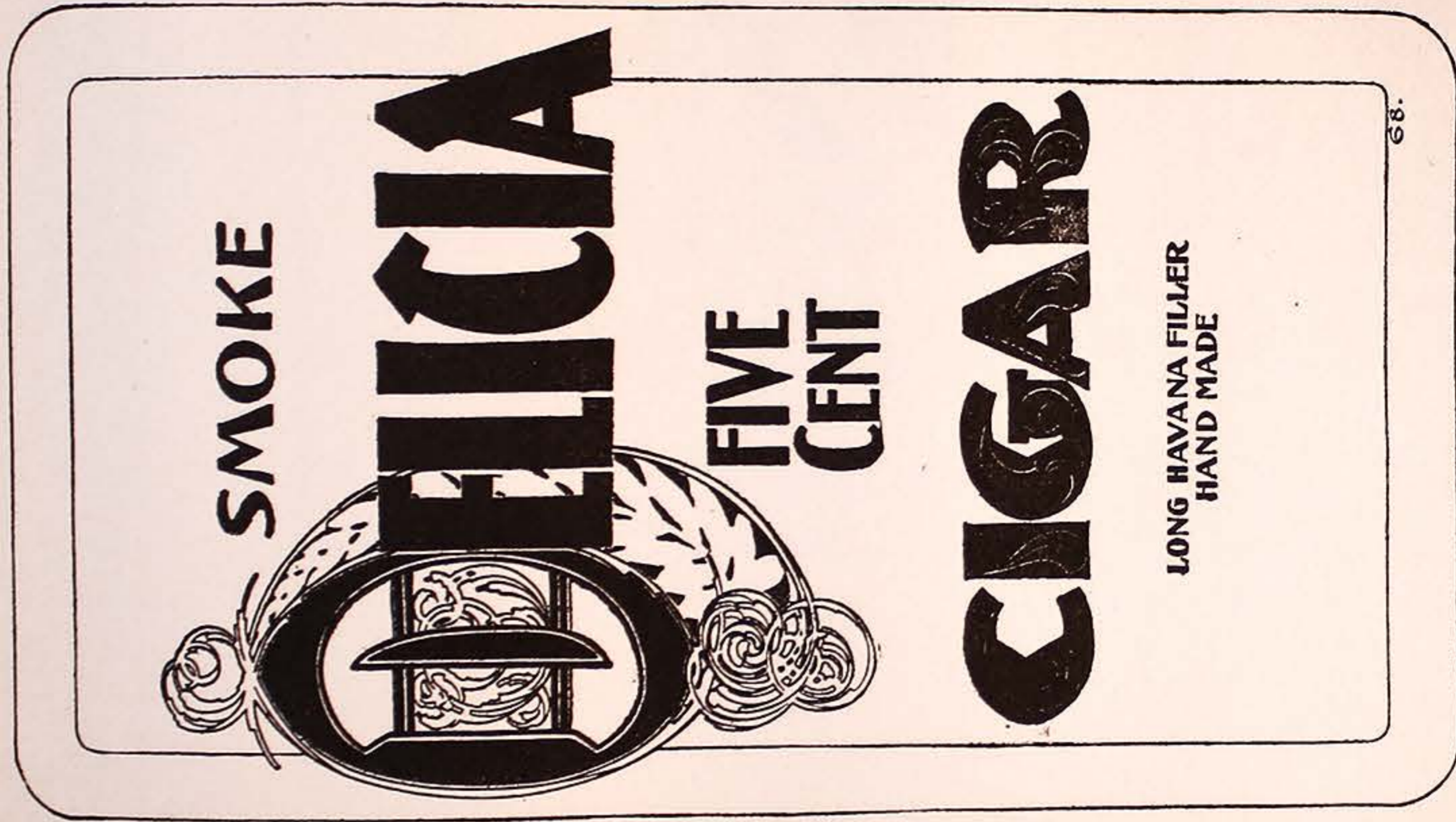
"Ravinia Park" in dark bottle green, with black inset. Panel gets bright red ground, white letter with black outline. Leaves at sides in bright yellowish green, detail in deeper tone of same color. Panel at bottom in very pale chr. green, letter in black. Ribbons at sides pale lemon yellow, detail in deeper tone of same color. Little panels at bottom in tuscan red. Main ground of sign pale warm grey. Olive green for border.



No. 67. DESIGN FOR SMALL PANEL.

HENRY THIEDE, CHICAGO.

Background and matt in two rich tones of citron yellow. Panels and scrolls in warm deep tones of slate color, detail in black. Lettering in gold leaf outlined in rich vermilion.



No. 68. SMALL PANEL.

BY LAWRENCE MAZZANOVICH, NEW YORK.

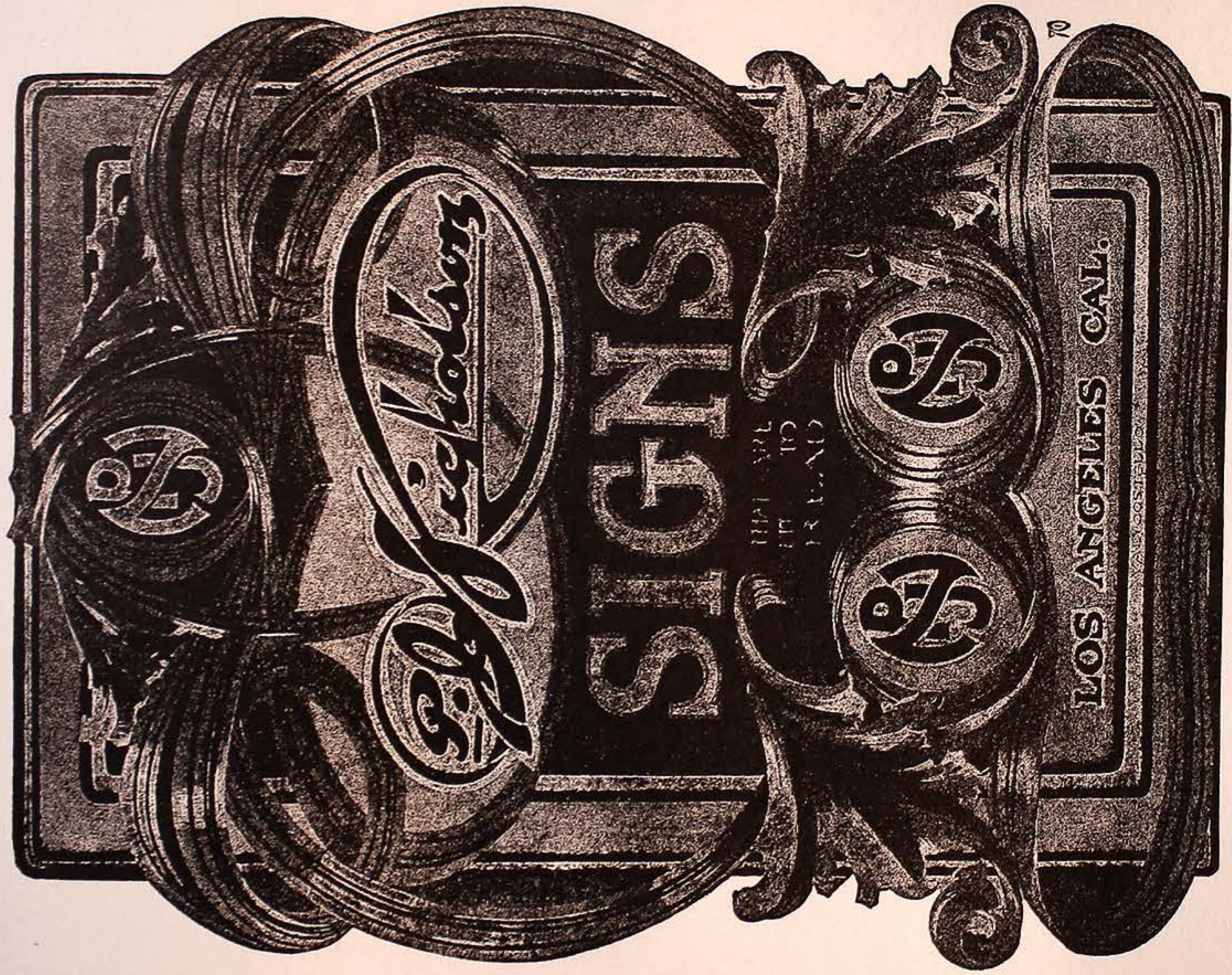
Initial panel has deep bottle green ground with scroll in old gold, spring at side, pale blue, detailed in deeper tone of same color. Letter "D" in two tones of vermilion with gold leaf outline, edge and drop shade in black. Remainder of word "Delicia" is black with double outline of gold and deep vermilion. "Smoke" in olive green, outlined medium blue. "Cigar" deep slate color with double outline of purple and pale emerald green. Small lettering, medium grass green. Background in very pale tints of terra cotta, grays, purple and buff.



No. 69. TABLET FOR INTERIOR DISPLAY.

ATKINSON.

Medium slate color ground. Do poster scape in black, also "brush" at bottom. Letter in gold leaf. Lemon gold leaf bevel or border.



No. 70. DESIGN FOR BUSINESS CARD.

DESIGNED BY VAL COSTELLO, NOTED SIGN PAINTER, OF LOS ANGELES, CAL.

Engraving made from his original drawing.



No. 71. SMALL PANEL BY VAL COSTELLO

Engraved from original drawing.

Do the background in dark Brewster green. The heavy white matt and outer rim of circle in bright vermilion. Inside matt line in pale bluish green. Outside matt line in strong pink. "Break on" circle (inside of red) in sharp greenish yellow and detail olive green. Do little poster in dark olive and light blue. "Greens" red letter, heavy white inset. Balance of lettering very pale chr. green tint.



M
CM
VI
72
S.P.A.C.

No. 72. POSTER BY VAL COSTELLO.

From original drawing.

Background in pale buff. "Art Students League," red with white inset. Porte crayons in old gold. Tube at top in white. Color from tube very deep purple. Lettering top and bottom in black. Matt and bars in deeper tone of ground color. Border citron yellow.



No. 73. OIL CLOTH OR MUSLIN.

BY HALM, NOTED CHICAGO SIGN PAINTER.

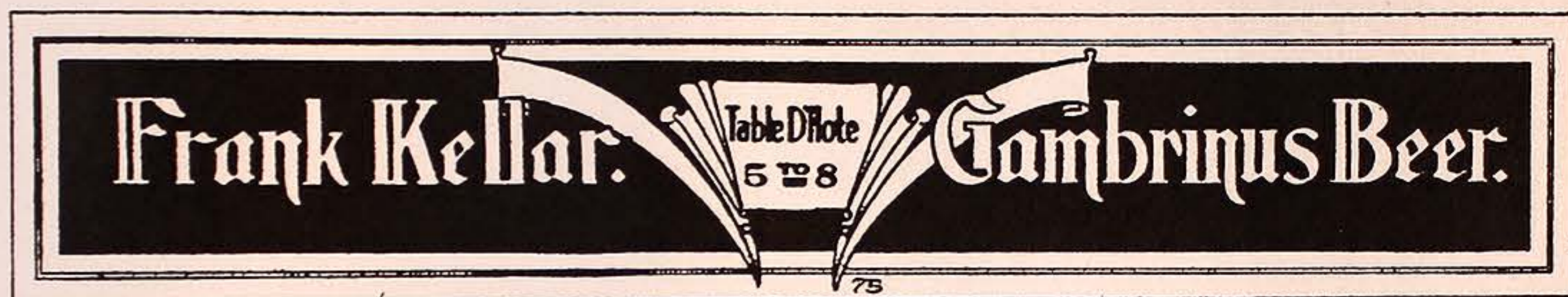
Tint ground of pale terra cotta. Do ornamental stuff in two tones of old gold. Panels at end in medium tones of terra cotta and if lettered use straight burnt sienna. Display lettering in olive greens and reds.



No. 74. DESIGN FOR CARDS.

HI MOTT ALLEN, OF BUFFALO.

Black and white same as plate.



No. 75. CHEAP BUT ATTRACTIVE WINDOW PANEL.

FRED WATRIN, PORTLAND, ORE.

Black letter—pale gray ground—pale blue border, white matt line—panel in center detailed in deeper tone of border color, ground of panel in very pale buff.



No. 76. BULLETIN.

ATKINSON

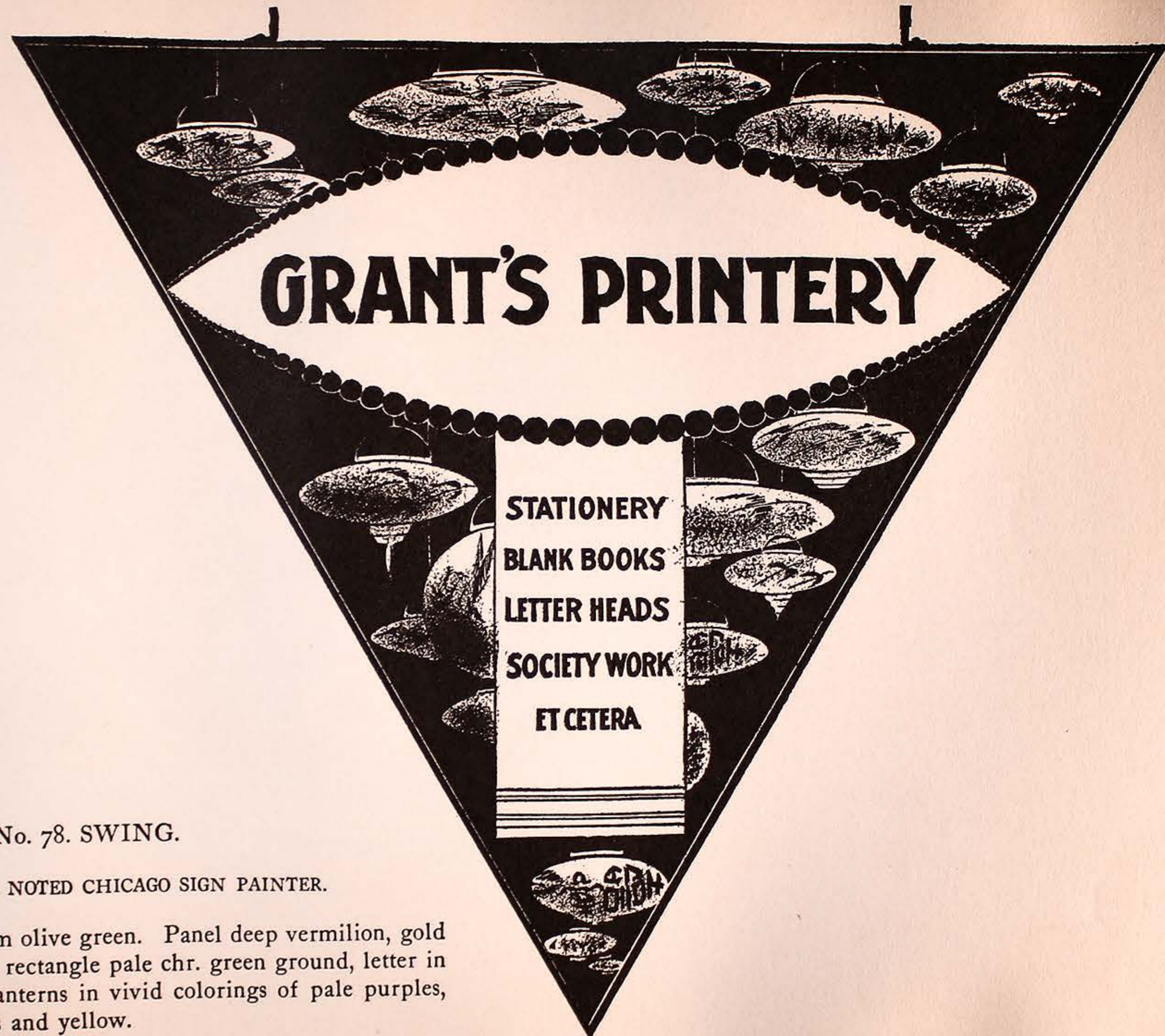
Main panel gets red ground—white letter. Upper panels at ends in olive green, pale chr. green letter, pale olive border. Rectangles in medium buff, letter in citron yellow, pale buff bars and borders. Sprigs in pale olive, outlined in deeper tone of same color. Beads old gold, touch of high light and shade. Main ground in pale buff, border in red.



No. 77. SMALL PANEL.

ATKINSON

Do side scrolls in dark olive, touches of gold high light on them.
Do panel scroll lemon gold leaf, outlined in black. Do the EYE
natural color, lettering deep gold leaf. Black ground varnish.



No. 78. SWING.

BY W. D. TATE, NOTED CHICAGO SIGN PAINTER.

Background in medium olive green. Panel deep vermilion, gold letter, wide black outline, rectangle pale chr. green ground, letter in dark bottle green. Do lanterns in vivid colorings of pale purples, pinks, terra cottas, greens and yellow.



79

20c

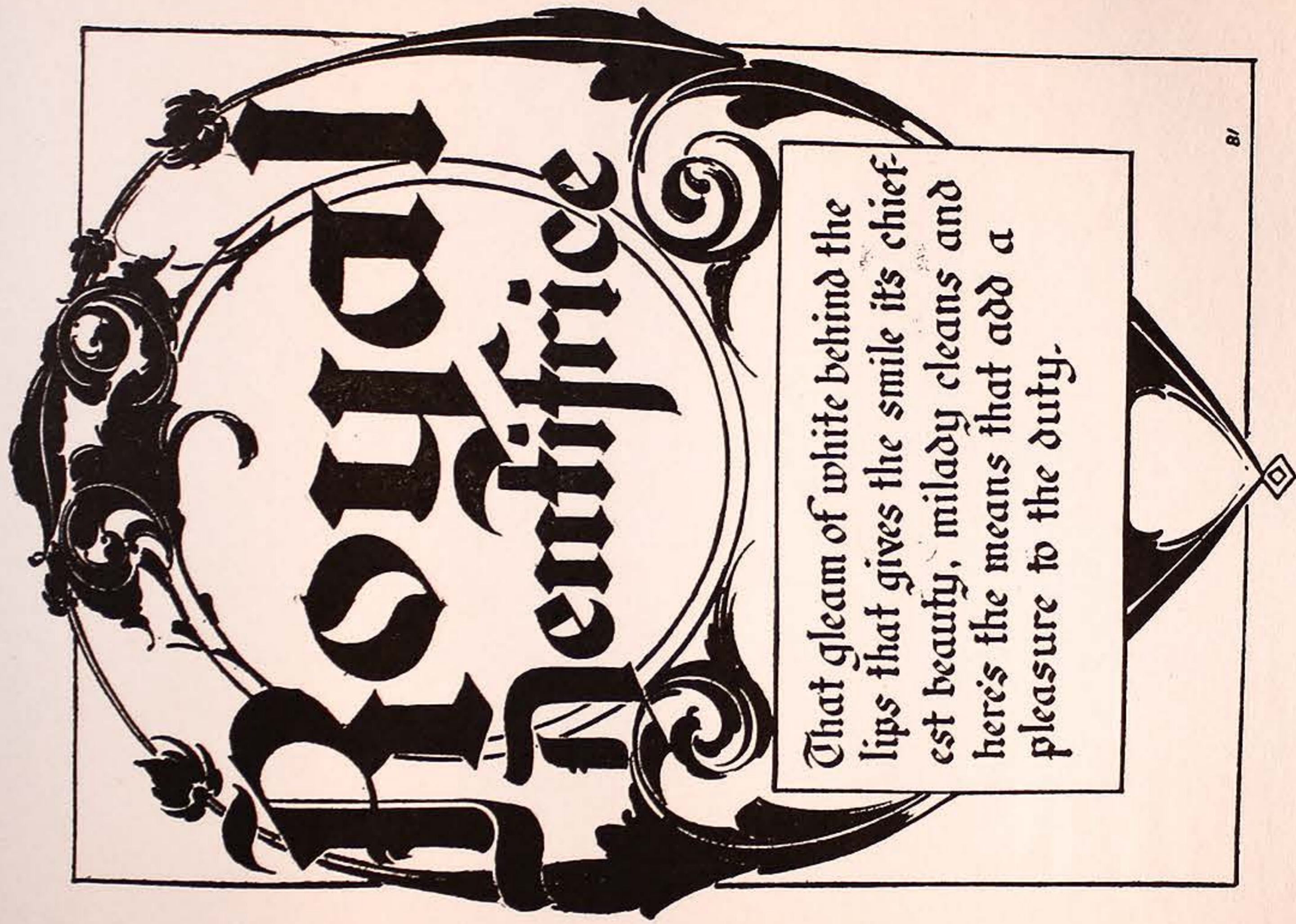
No. 79. SWING SIGN.
BY F. H. SOWDEN, BURLINGTON, IA.

Black and gold.



No. 80. DISPLAY SHOW CARD.

Gold bronze scroll, panel at bottom in deep vermillion, white letter, black, outline. Main ground of card mottle in pastel crayons, using pale green, pale purple and pale orange. Little panel at top medium bluish green, white letter, black outline. "\$15" in black, rest of lettering grass green.



That gleam of white behind the
lips that gives the smile its chief-
est beauty, milady cleans and
here's the means that add a
pleasure to the duty.

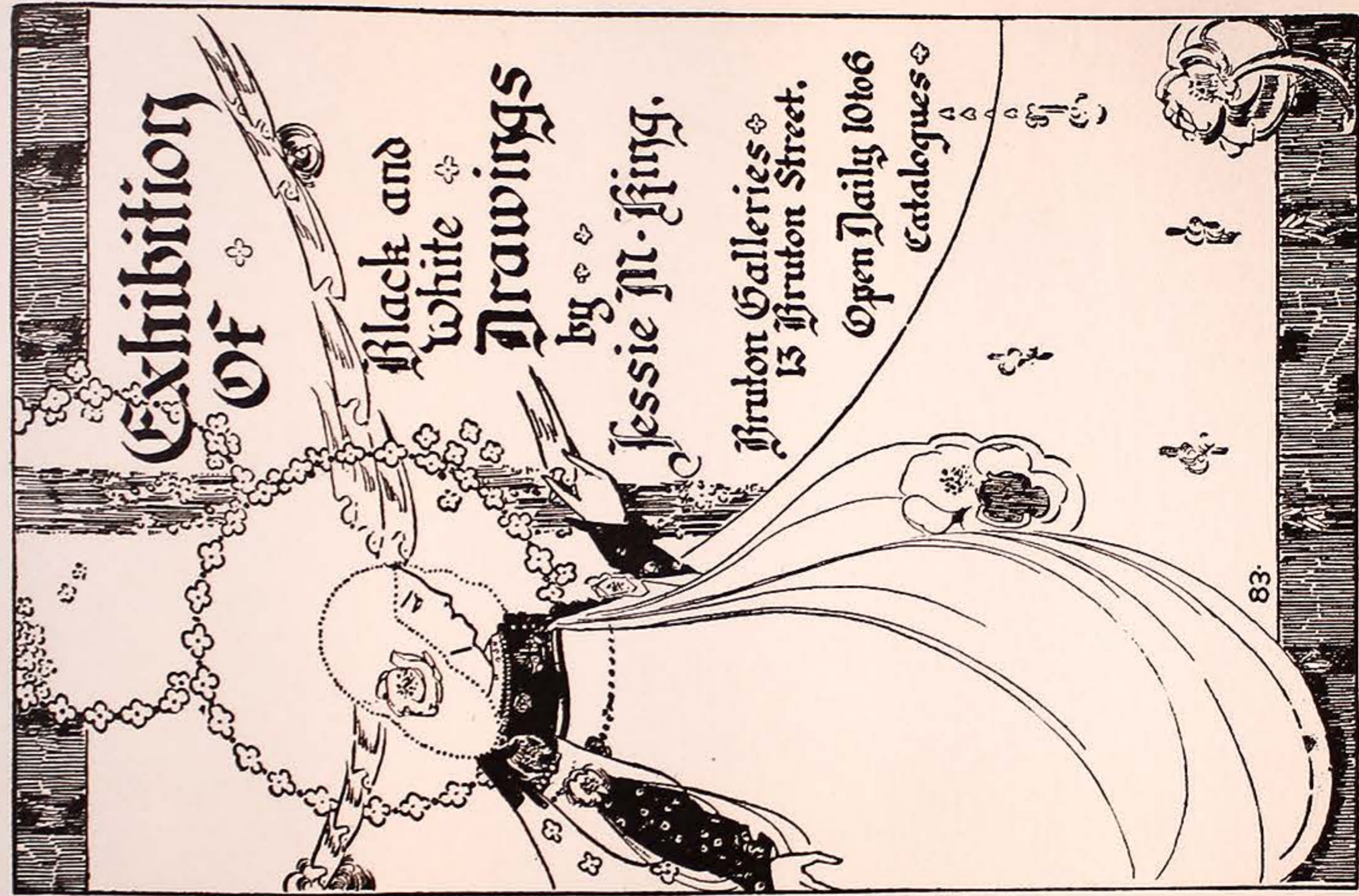
No. 81. SHOW CARD.

Pale gray card, do the scroll in pale blue, letter in very deep blue.
Display letter gets outline of pale old gold. Rectangular panel gets
ground of pale orange.



No. 82. SHOW CARD.

Pale gray card do the "stencil" poster in black. Letter in bright pink tuscan outline and red inset. Small letter at bottom in red.



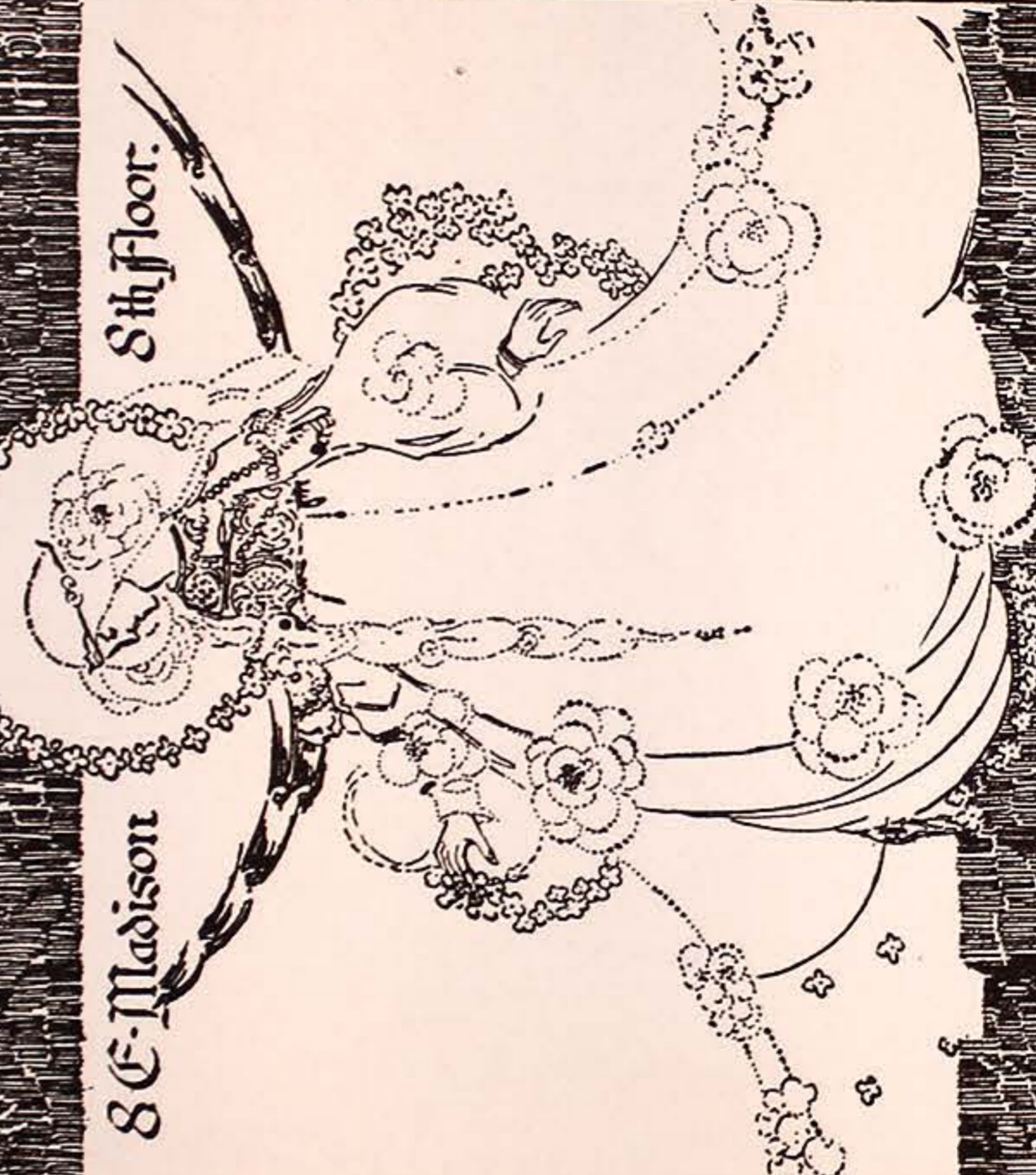
No. 83. SHOW CARD.

Do poster girl in aluminum lining bronze, on dark chocolate card. Bars top and bottom in pale old gold. Letter in pale buff, white "caps."

Chicago Academy of Fine Arts

8 E. Madison

8th Floor.



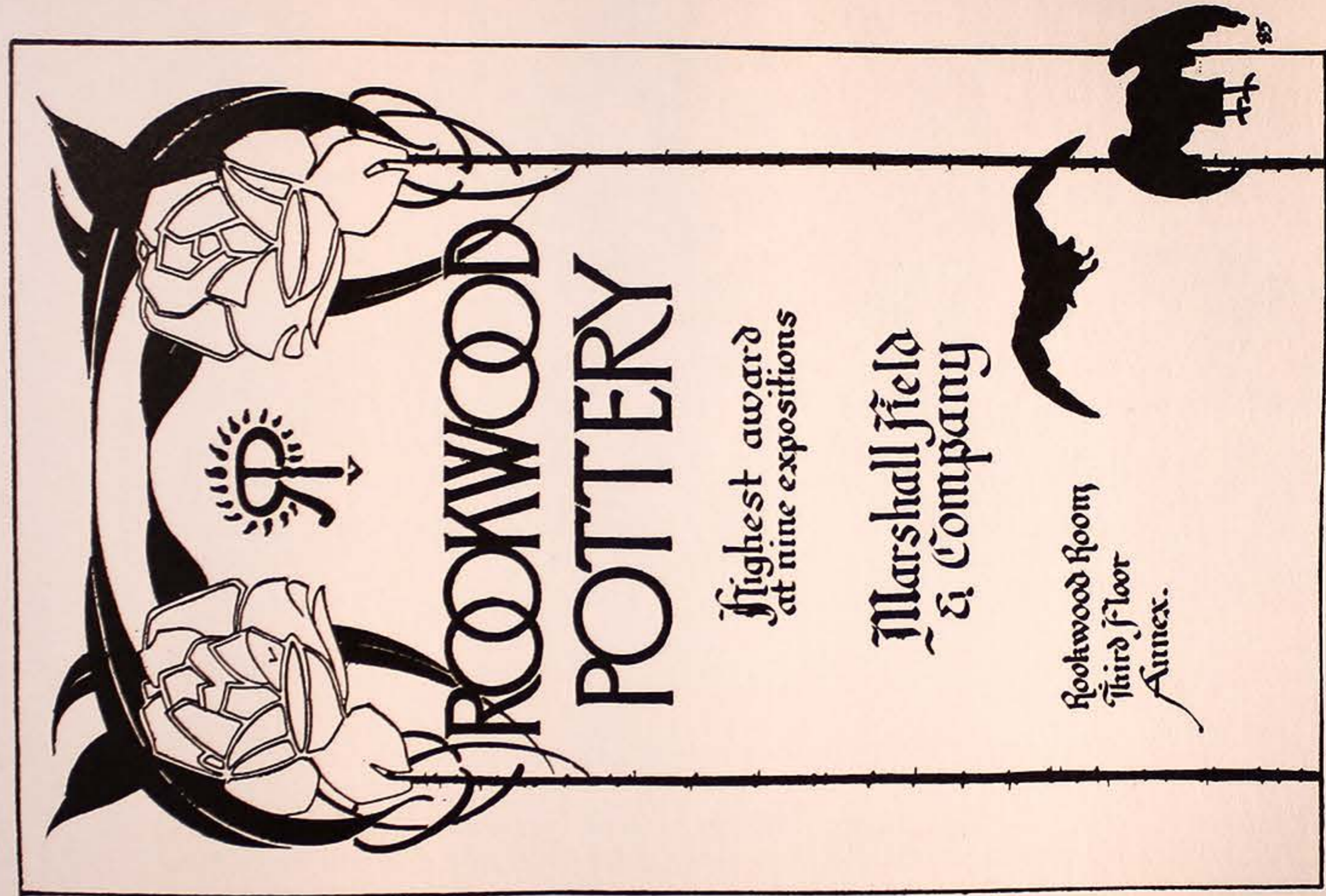
The Directors request the honor of
your company at the Annual Exhibition
of Charcoal Drawings done by the
Students of the night class under
W. J. Reynolds.

March 8th to 29th.

84

No. 84. SHOW CARD.

Do poster girl in gold bronze outline on dark olive card, also
the bars top and bottom. Letter in white with red "caps."



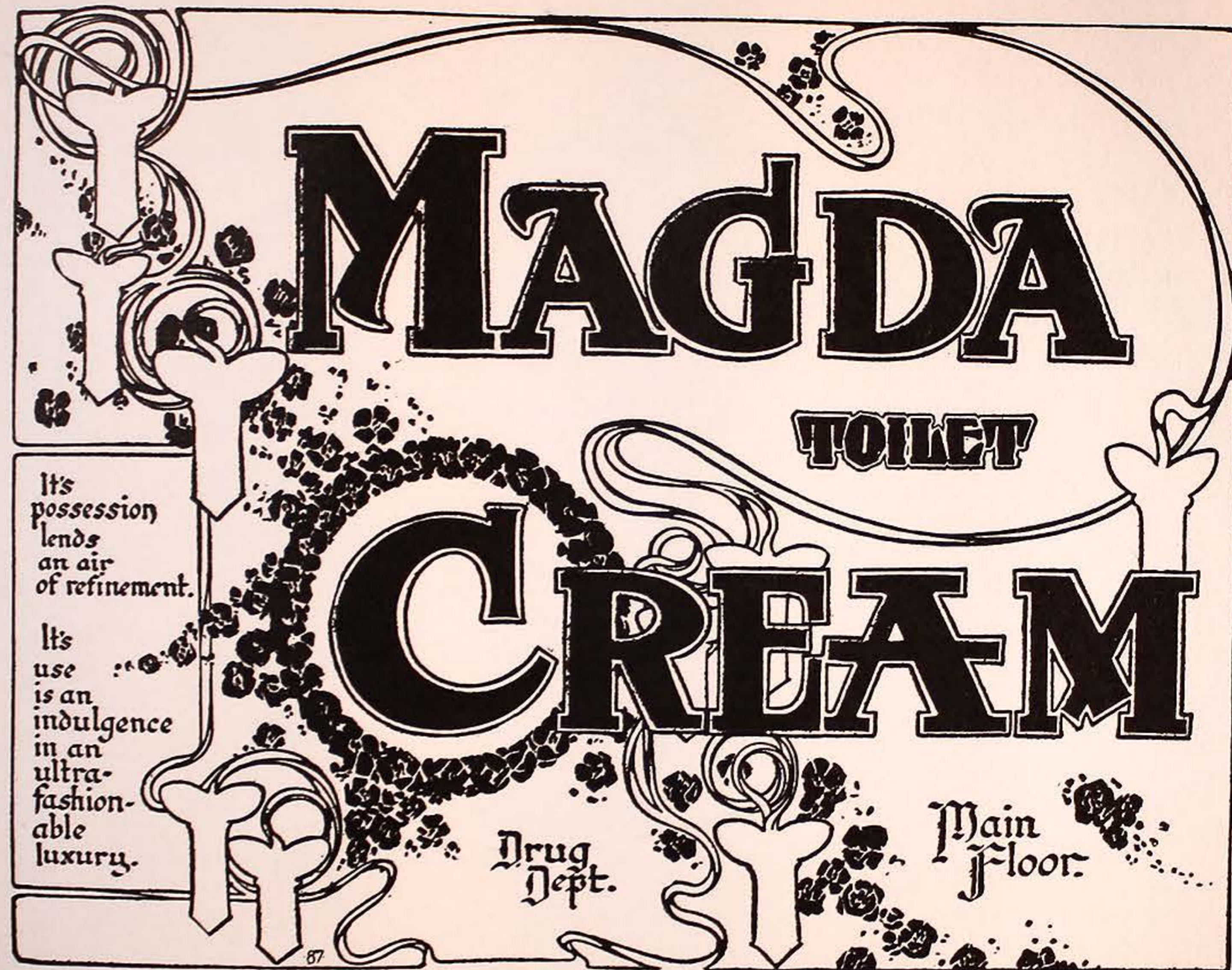
No. 85. SHOW CARD.

Use pale gray card, do poster border in black and orange. Letter in pale rich blue. Outline the display line in deep blue.



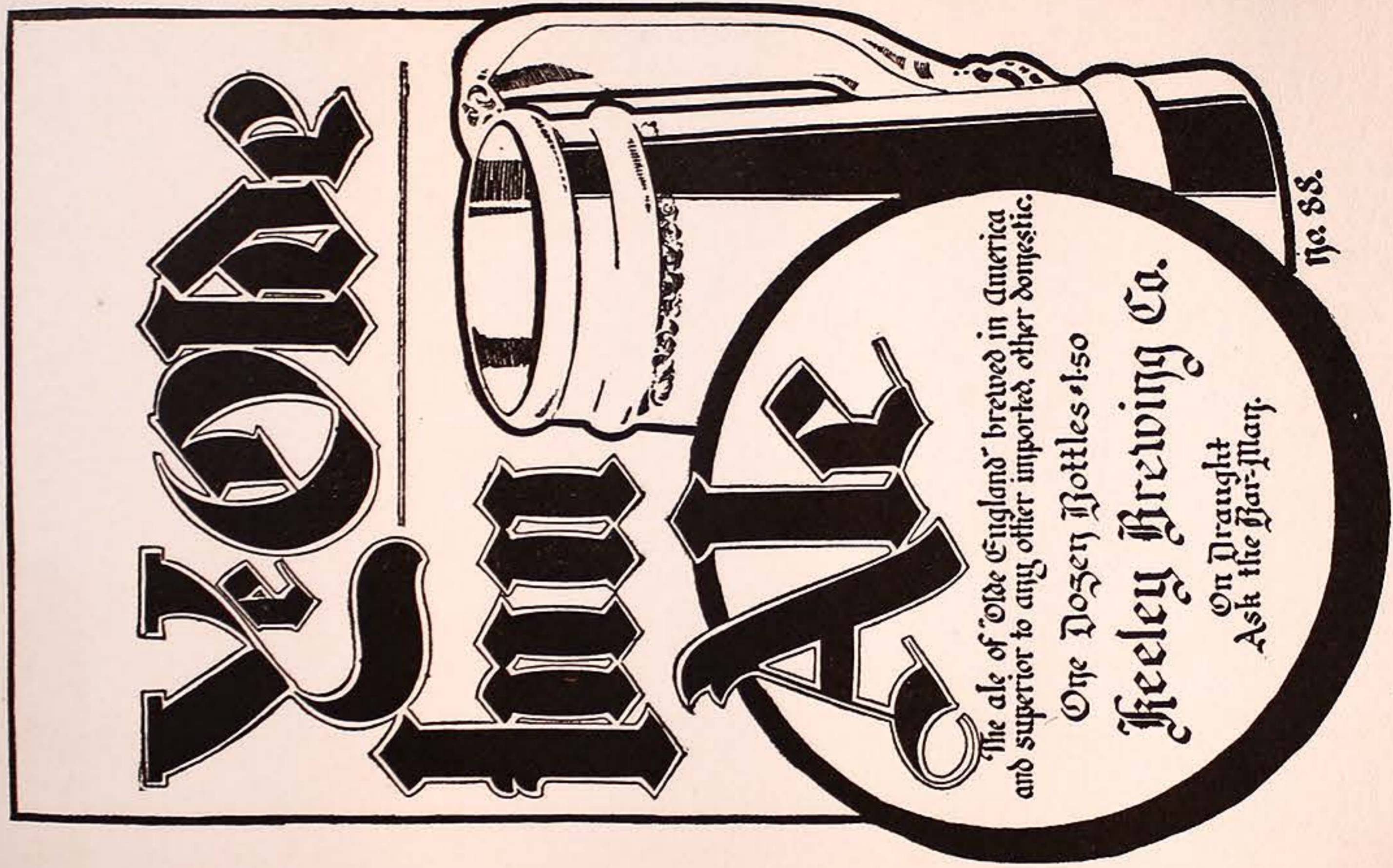
No. 86. MANOGRAPH DESIGN.

Do ornamental stuff in greenish greys. All lettering in black, with top line outlined in pale emerald. Ellery's Band, outline of red and pale cold grey. Ground of little panel two tones of pale purple. White ground.



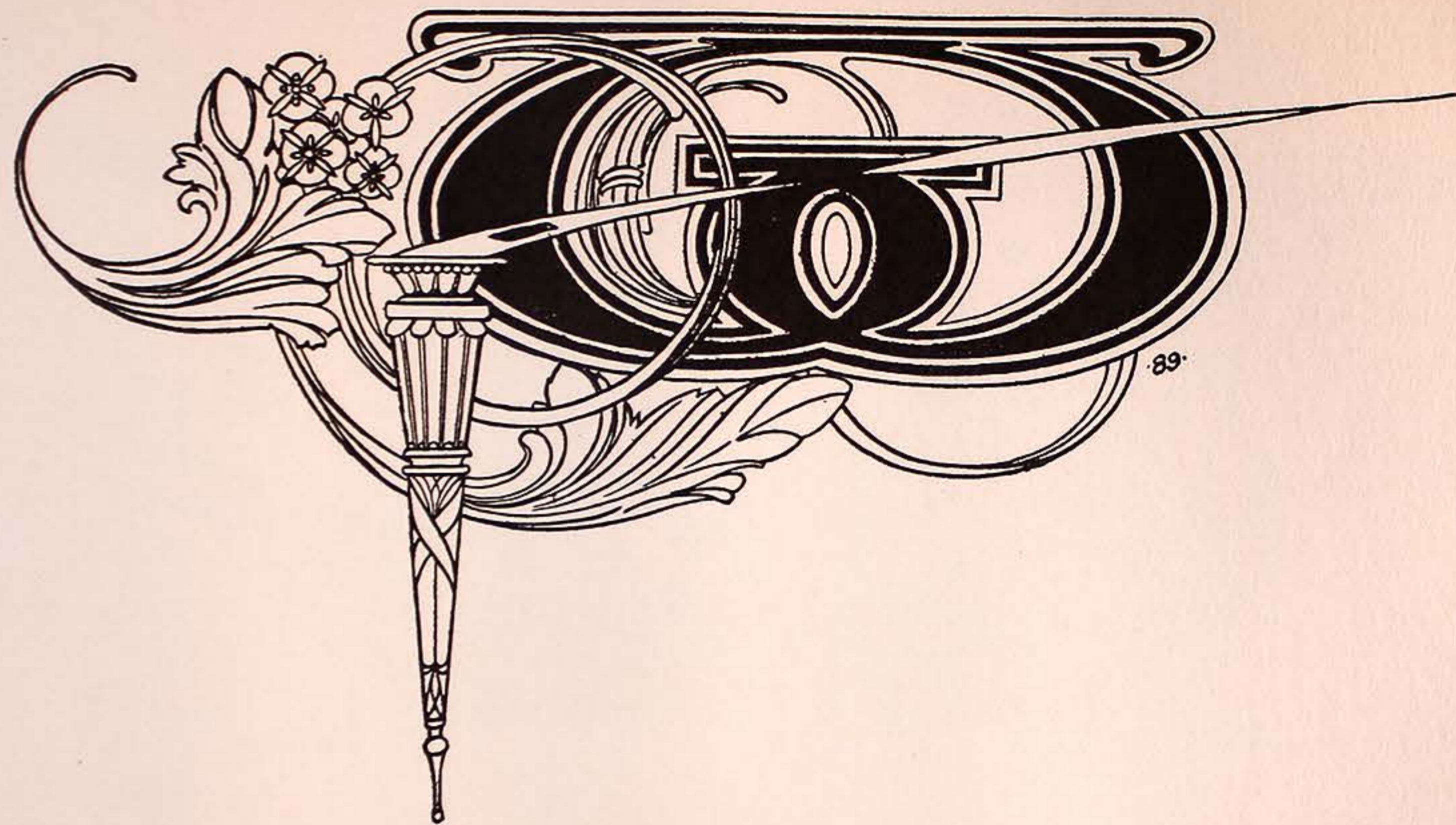
No. 87. SHOW CARD.

Use dark grey card and do all ornamental stuff in pale and deep gold bronze. "Magda Toilet Cream," white with red outline, fill in black roughly on ground inside of gold on upper part of design, do the poster blossoms in red. Two white panels lower left of design in pale olive, letter bright blue. "Drug Dept.," "Main Floor.," pale blue, orange border.



No. 88. SHOW CARD.

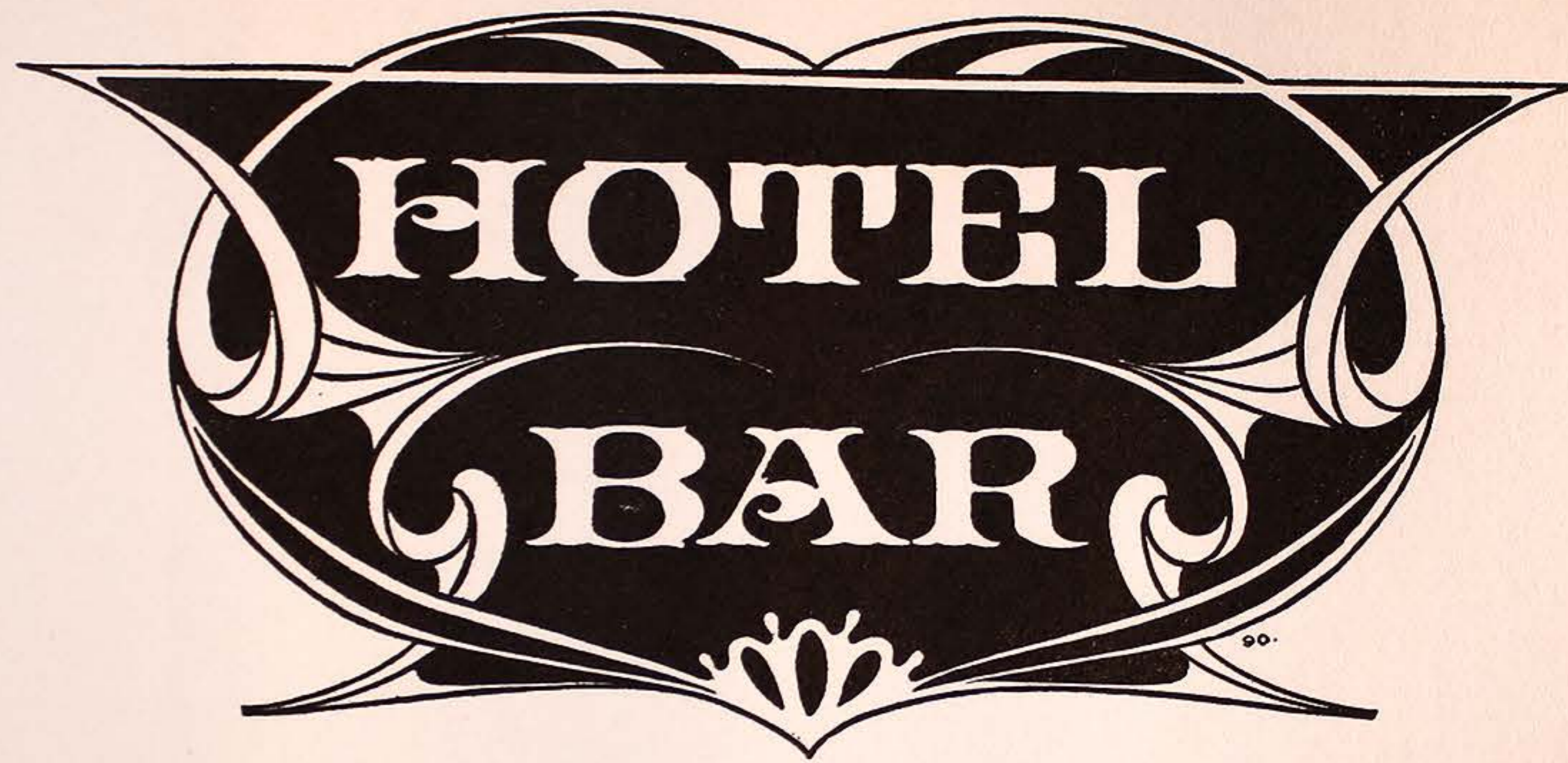
Use uncoated card and "rub-in" some pale tones of burnt sienna, warm gray and purples, using soft pastels with cotton pad. Do the stein in warm medium tones of gray and old gold. Panel in pale bluish green, letter in deep olive, border on panel deeper tone of blue green. "Ye Olde Inn Ale" black lower case, Red "Caps."



No. 89. INITIAL, GLASS OR BOARD.

GARNER, CHICAGO.

Do the "caps" in double outline of black and gold, fill center in deep vermilion. Do the scroll and torch in bright outline of lemon gold leaf and fill in aluminum bronze.



No. 90. DOOR LIGHT PANEL.

GEO. OLSEN, WITH GUNNING SYSTEM, CHICAGO.

Do the Nouveau border in bright gold outline, stipple center
same on lettering—black ground.



No. 91. POSTER DESIGN—2 COLORS.

BY VAL COSTELLO, LOS ANGELES, CAL.

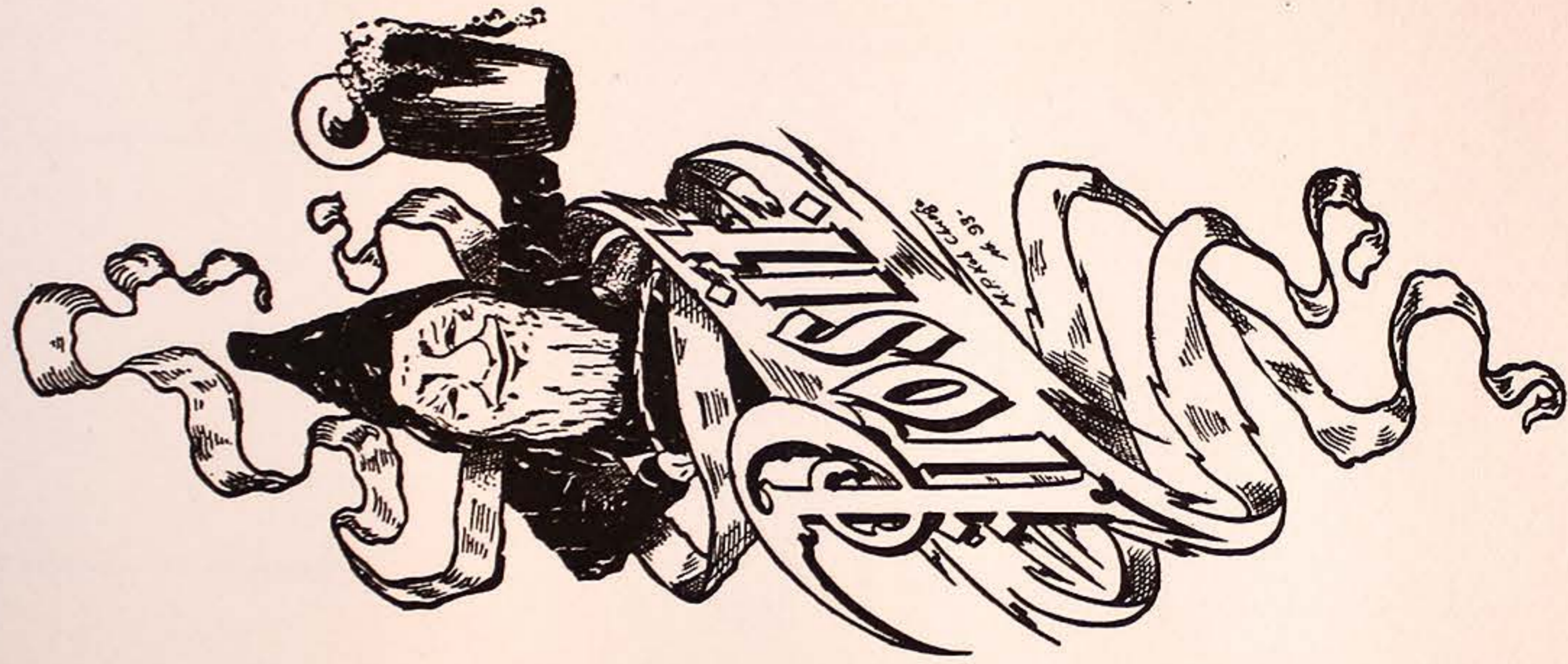
Either black or red.
or—pale chr. green and dark olive.
or—bright buff and old gold.
or—pale emerald and deep purple.



No. 92. LETTER HEAD, CARD OR POSTER.

AFTER M. WHELAN, N. Y.

For poster do top line in two tones of old gold, outline and drop shade in tuscan. Do ornamental stuff in pale yellowish grey, and outline it in medium tone of cold old gold. Main panel, blend ground of deep to light vermilion—white letters—black outline. Panel at left of design, pale yellowish green, letters in deep green. Address lettered in black.



No. 93. DESIGN.

BY M. P. KOB, CHICAGO.

Do the ribbon in dull tone of buff, outline and detail same in medium old gold. Lettering in deep vermilion, high light in pale vermilion. Stroke of black on shade side. Do "Figure" in poster style, using abbreviated natural color. White ground.



No. 94. "SWING."

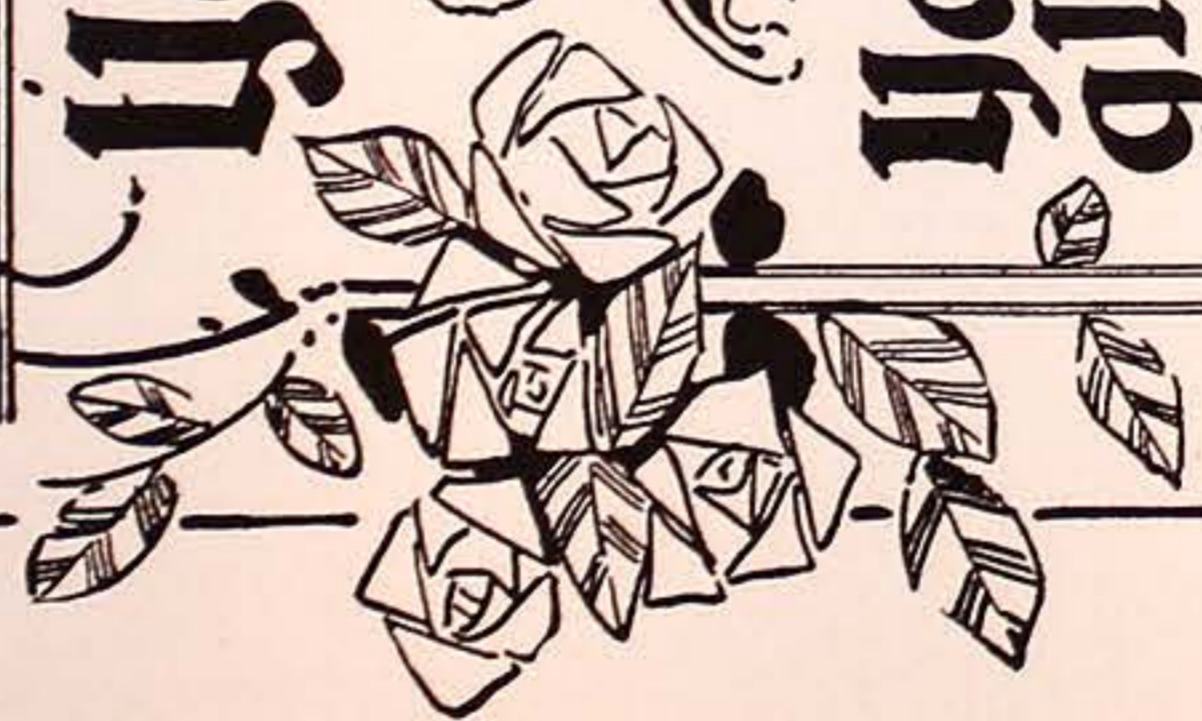
BY M. P. KOB, CHICAGO.

Scroll top in gold color, high lighted and shaded. Blended deep green ground. Main panel, warm, deep orange yellow ground, white letter, with black outline. Rough stroke shade in deep vermilion and carmine. Bevel of panel in pale gray. Small lettering in black.

After
You have used



Sanitol



Your teeth will
gleam like ivory
and your breath
will have the
delicate fragrance
of the rose.

The Sanitol Co.

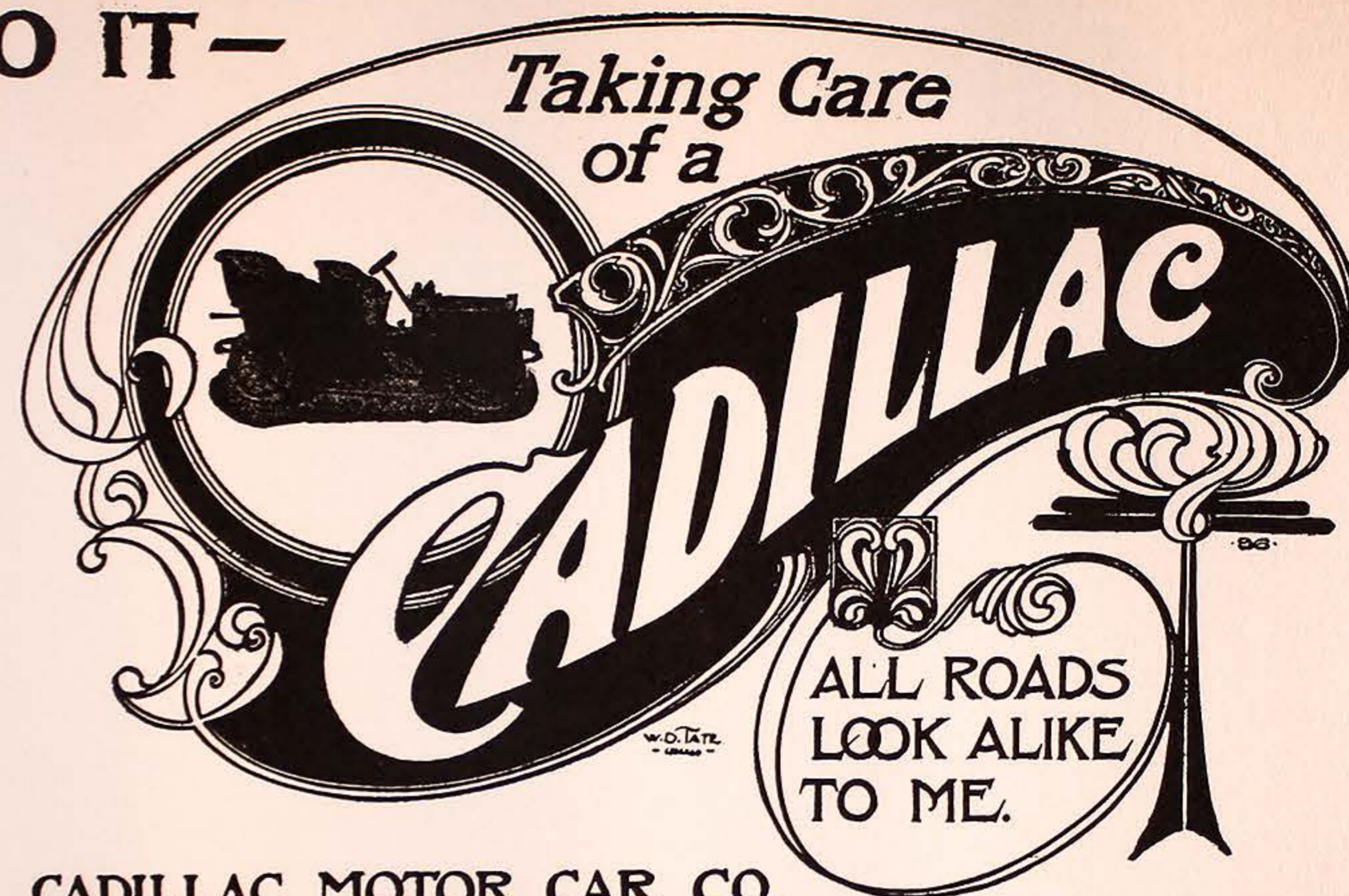
No. 95

No. 95. SHOW CARD.

BY GEO. OLSEN, WITH GUNNING SYSTEM, CHICAGO.

Use uncoated card, rub in pale tones of green, purple and pink—
letter dark red and olive green. Do poster roses in copper and cold
bronzes.

NOTHING
TO IT—



CADILLAC MOTOR CAR CO.
Detroit, Mich.

No. 96. DESIGN FOR BULLETIN OR WINDOW.

ENGRAVING MADE FROM ORIGINAL DRAWING BY W. D. TATE, NOTED
CHICAGO SIGN PAINTER.

For bulletin do work upon scroll in medium old gold, where detail occurs use deeper tone of same color. Ground inside of scroll at top of design, pale lemon yellow. "Taking Care of" lettered in Tuscan red. Display panel "cut in," using deep rich purple, white letter with wide black outline; also inside wide outline of orange yellow. Lower small panel deep vermilion ground, white letter. Lettering in main ground deep gray with black high light. Main ground in very pale tone of warm gray. Bright vermilion border.

ALPHABET DIVISION

ATKINSON FANCY ROMAN

J. Q. P L O W
M I G H T V E X
Z. D. B U R K E ' S
& F A N G Y &
even job, foxy bu
kin, cuts logs sqare
with an adz R i i i
12 3 45 m 8 6 7 T I 9

WESTERN ROMAN ('normal')

RSE FLJKMVWHD TU
ABCDEFGHIJL
MNOPQRSTU V
ABW XYZ & 1234
56789 abcdefghijklm
R^{fl} nopqrstuvw R^{fl}
& xyz R^{fl} R^{fl}

ABCD
PQRS
ssab
ABCDE
abcdefg

HDTU
HIJL
UV
234
hijkm
wR *Alternative*
R *Alt.*

MODERN 1908 CLASSIC

ABCDEFGHIJKLMNO
PQRSTUVWXYZ &
ssa b c d e f g h i j k l m n p r t u w

CLASSIC BLOCK

ABCDEFGHIJKLMN O P Q R S T
U V W X Y Z &
a b c d e f g h i j k l m n o p q r s t u v w x y z

ABCDEFGHIJKLMNO
PQRSTUVWXYZ &
abcdefghijklmnopqr
stuvwxyz 123456789

HALF CLASSIC ROMAN

ABC
NOP
12345
efghijk

MNO
Z &
opqr
789

ABCDEFGHIJKLM
NOPQRSTUVWXYZ
1234567890&abcd
CHICAGO TUSCAN
efghijklmnopqrstuvwxyz

NEW YORK ROMAN
A B C D E F G H I J K L M N
O P Q R S T U V W X Y Z & &
a b c d e f g h i j k l m n o p q
r s t u v w x y z 1 2 3 4 5 6 7 8 9

A B C D
O P Q
a b c d e f
8

LMN
YZ & &
no pq
56789

Modernized Ideal Classic

ABCDEFGHIJKLMN
OPQRSTUVWXYZ
abcdefghijklmnopqrstuvw
8965C&2347

Bulletin Stub
A B C D E F G H I J K L M N O P
Q R S T U V W X Y Z abcdefghijklmnop
qrstuvwxyzk

A
CD
BE
GHI
LMNO
STU
WX
Zδ

KNOP
kijlmnop

A
CD
BEF
GHIJK
LMNOPOR
STUV
WXY
Z&

FRENCH ROMAN

1
234
5
6
7
89
0

a
dcb
efg
hijlmnok
prstq
uv
w
xyz

Heavy Sign Script
A B C D E F G H I J K L M N O P
Q R S T U V W X Y Z abcdefghijklmnop
qrstuvwxyz

A B C
N O P
E acbde
S S E
S E E

*No 2
ghijklmn*

Eccentric French

**A B C & D E F F G J H I K L M
N O P R S T U V W X Y Z &**

F a c b d e f g h i j k m n o p r s t u v w x y z

**S S E S S & & & L ^{also} E E L
_{Some Modified Alternatives}**

S E E L ^{on French Roman in General} L E NAMES

A
G B C C
DEF
GHIJK
LMNOPQR
STUV
WXY
Z
&

1
423
5
6
7
8
9
0

a
dc b
ef o
hijlm^onok
qrstp
uv
xwy
z

ABC
MN
V
abcd
S
12

a
dcb
efg
lmnok
rstp
uv
kwy
z

"Spike Spur" French

A B C D E F G H I J K L

M N O P Q R S T U

V W X Y Z &

a b c d e f g h i j k l m n o p q r

s t u v w x y z

1 2 3 4 5 6 7 8 9 0

Show Card French

ABCDEFGHIJKLMN
OPQRSTUVWXYZ

Z &

abcdefghijklmnopqr

aaaf xystuvwz g s w
l 3 2 4 5 6 7 8 9 3

LMN
XY

opqr
g s w
9 3

Sign Painters' Plymouth

ABCDEFGHIJKLM
NOPQRSTUVWXYZ
&XYZ&
abcdefghijklmnopqr
stvwxyz
1234567890

ABCDEFGHIJKL
MNOPQRSTU
VWXYZ
abcdefg & hijklmn
opqrstuvwxyz
123456789

ABCDEFGHIJKL
XYZ abcdefg
ABCDEFGHIJKL
9 abcdefg
ABCDEFGHIJKL
OPQR
abcdefg

JKL
TUV

klmn
yz
9

Single Stroke Block for Music and Cards

A B C D E F G H I J K L M N O P Q R S T U V W
X Y Z a b c d e f g h i j k l m n o p q r s t u v w x y z &

Modern Italic for Cards

A B C D E F G H I J K L M N O P Q R S T U V W X Y Z R R R P Q S
9 a b c d e f g h i j k l m n o p q r s t u v w x y z & & 1 2 3 4 5 6 7 8

Detroit Single Stroke Antiqua

A B C D E F G H I J K L M N
O P Q R S T U V W X Y Z
a b c d e f g h i j k l m n o p q r s t u v w x y z &

"CHICAGO" TUSCAN ROMAN

A B C D E F G H I J K L M N O
P Q R S T U V W X Y Z & 1 2 3
4 5 6 7 8 9 a b c d e f g h i j k l
m n o p q r s t u v x w z y

MODIFIED TUSCAN ROMAN

A B C D E F G H I J K L M N O P Q R
S T U V W X Y Z & 1 2 3 4 5 6 7 8 9
a b c d e f g h i j k l m n o p q r s t u v w x y z

ALTERNATIVES

C E X G J S E E
E E S X T

ALTERNATIVES

A B C
R S
a
1 2
a b c d e f g

L M N O
& 1 2 3
h i j k l
w z y
N O P Q R
3 7 8 9
v w x y z
E E

ALTERNATIVES

Extreme French

A B C D F G H I J K L M N O P Q
R S T U V W X Y Z & E
a 1 2 3 4 5 6 7 8 9 w y x z
a b c d e f g h i j k l m n o o p q r s s t u v

Modified Antique Tuscan Roman.

A B C D E F G H I J K L M
N O P Q R S T U V W X Y
Z & & 1 2 3 4 5 6 7 8 9 0

pack my box with five dozen liquor
jugs.

Single Stroke Tuscan

GO! LAZY FAT VIXEN
BE SHREWD JUMP QUIC

K pack my box with five dozen liquor
jugs

1 2 3 4 5 6 7 8 9 0 T T Alternates
T

A B C D E F G H
a b c d e f g h i

A B C D E F

K L M
W X Y
O
en liquor

N
P QUIC
zen liquor

Alternates.
T T
T

Condensed French

ABCDEFGHIJKLMNOPQRSTUVWXYZ & 12345678

abcdefghijklmnopqrstuvwxyz RR

Eccentric French

A B C D E F E F G H I J K L M N O P Q R S T U V W X Y Z &

Antique Roman.

A B C D E F G H I J
K L M N O P Q R S T
U V W X Y Z &

E S *Limit of Elongation*

abcdefghijklmnopqrst
vwxyz 123456789

A B
K L
T U
a b c
p q r

HIJ
RST
&

pqrst
89

*Tuscan Full Block
Upper and Lower Case.*

A B C D E F G H I J
K L M N O P Q R S
T U V W X Y Z & &
a b c d e f g h i j k l m n o
p q r s t u v w x y z
1 2 3 4 5 6 7 8 9 0.

^{"Stonehouse" Egyptian}
ABCDEF GHIJKL MNQPRRSTUVWXYZ &
abcdefghijklmnopqrstu vwxyz

^{Engrossing Text}
A B C D E F G H I J K L M N O P Q R S
U V W X Y Z abcdefghijklmnopqrstu vwxyz
abcdefghijklmnopqrzotuvwxyz

ABC
YQR

ABCD
RS

VWXYZ&

Z

NOPQRS

rstuvwxyz

Heavy Egyptian

**ABCDEFGHIJKLMN
YQPRSTUVWXYZ&**

Antique thick & thin

**ABCDEFGHIJKLMNOPQ
RSTUVWXYZ&**

·Egyptian·

ABCDEFGHIJKLMN OPRST

UVWXYZ & I2

x 345678 y

abce fghijkn 9mopqrstuvw

z

OPRST

y
tuvw

Sign fainlers' De Vienne.

ABCDEFGHIJKLMNPOQ

RSTUVWXYZ & & &

1234567890

abcdefghijklmnoqr

uvwxyz

GO!
LAZY FAT VIXEN
BE SHREWD:
JUMP QUICK!
abcd & efghi
1982jklmnop34567
qrstuvwxyz TUSCAN BLOCK (heavy.)

A
B
DE
GHI
LMNO
STU
WX
Z
&

XEN
D;
G K!
i
34567

USCAN BLOCK (heavy.)

"ADVERTISERS" "THICK & THIN PLUG"

| | | |
|---------|----|-----------|
| A | I | a |
| BC | 23 | dc b |
| DEF | 4 | ef g |
| GHIJK | 5 | hi jlmnok |
| LMNOPOR | | qr stp |
| STUV | 6 | uv |
| WXY | 78 | w |
| Z | 9 | xy |
| & | | z |

WESTERN "SINGLE STROKE"

AaBbCcDdEeFfGgHhIiJjKk
LlMmNnOoPpQqRrSsTtUuV
9876 vWwXxYyZz 12345
ABCDEF GHIJKLMN OPQRSTU
& VWXYZ 89
abcdefghijklmnopqrstuvwxyz 1234567

GUNNING "SINGLE STROKE"

hliJjKk
sTtUuV
12345
RSTUV

1234567

WESTERN "LIGHT" TUSCAN ROUND BLOCK

A B C D E F G H I
J K L M N O P Q R
S T U V W
X Y Z
&

Tuscan Full Block

A B C D E F G H I J K L O
M N P Q R S T U V W X
Y Z & a b c d e f g g h i j k k l
& m n p q r t u y 1 2 3 4 5 6 7 8 9 0

Full Block (Thick & Thin)

A B C D E F G H I J K L M
N O P Q R S T U V W Y Z
& a b c d e f g h i j k l m n o p q r t u
v w y y z 1 2 2 3 4 5 6 7 8 9 0

A B C
N O P

a b c d e
s t u v

J K L O
W X
i j k kl
5 6 7 8 9 0
K L M
W Y Z
op q r tu
7 8 9 0

Broken Poster

**ABCDEFGHIJKLM
NOPQRTUVWXY
Z &
abcdefghijklmnopqr
stuvwxyz
123456789**

ROUND BLOCK (Thick & Thin)

A B C D E F G H I J K
L M N O P Q R S T U
V W X Y Z & a b c d e
f g h i j k l m n o p q r s t
u v w x y z 1 2 3 4 5 6 7 8 9

A B C D E
N O P
Y Z & a b

A B C D E F
a b c

I J K
T U
c d e
q r s t
6 7 8 9

Poster Block No. 2.

A B C C D D E F G G H I J J K L M
N N O P P Q R R S S U V W X
Y Z & a b c d e f g h i j k m n o p q r s t u v w x y z

'1908' Classic 'Plug'

A B C D E F G H I J K L M N O P Q R S T U V W X Y Z &
a b c d e f g g h i j k l m n o p q r s t u v w x y z

Full Block (Upper and Lower Case)

ABCDEFGHIJKLMNO
PQRSTUVWXYZ &
efghijklmnopqrstuvwxyz
" ' ; : 1 2 3 4 5 6 7 8 9 0 S ab cd

Half Block (Upper and Lower Case)

ABCDEFGHIJKLMN OPQRSTU
VWXYZ & aabcdefghijklmnopqr
stuvwxyz 1 2 3 4 5 6 7 8 9 0 C S

ABCD

ABCSJG

JQSC

M N O
&
x y z
o c d
Q R S T U
m n o p q r
30 C S

Spar Egyptian

**ABCDEFGHIJKLMN OPQRS
TUVWXYZ &**

Modifications (Light)

**ABC SJG · ABC SG CSJG · CSG ·
JQ S C S FM 123456789 S S**

Spur Egyptian
ABC CDFEGGHJJKL^LMNOPQRSSTUUVW
abc defghijklmnn **XYZ&** opqrstuvwxyz

Spur Egyptian (Light)
ABCDEFGHIJKLMN **OPQRSTUVWXYZ&12345**
6789 abcdefghijklmnopqrstuvwxyz

ABC
PQR
abcde

Z

RSSTUVW

uvwxyz

XYZ&12345

wxyz

"NICHOLSON" FRENCH

ABCDEFGHIJKLMNO

PQRSTUVWXYZ&

abcdefghijklmnopqrstu

wxyz

234567891

A B C D E F G H I J K L M
 N O P Q R S T U V
 W X Y Z & A
 B C D E F G H I J K L M
 N O P Q R S T U V
 W X Y Z & A

A B C
 L M
 W X Y
 m n o p
 3 4 5 6 7
 A B C C
 Q R R S S
 l m n o p
 8

K L M
N O P
Q R S
T U V
W X Y
Z
a b c
d e f
g h i
j k l
m n o
p q r
s t u
v w x
y z
1 2
3 4
5 6
7 8
9 &
&
A B C
D E F
G H I
J K L
M N O
P Q R
S T U
V W X
Y Z
a b c
d e f
g h i
j k
l m n
o p q
r s t
u v w
x y z
&
1 2
2 3
3 4
4 5
5 6
6 7
7 8
8 9

Antique Block

A B C D E F G H I J K
L M N O P Q R S T U V
W X Y Z a b c d e f g h i j k l
m n o p q r s t u v w x y z 1 2
3 4 5 6 7 8 9 & &
A B C C G D E F G H I J K L M N O P
Q R R S S T U V W X Y Z a b c d e f g h i j k
l m n o p q r s t u v w x y z
& 1 2 2 3 3 4 4 5 5 6 6 7 7 8 8 9

Single Stroke Block

"Modified" for Show Cards.

A B C D E F G H I J K L M N O P Q R S S T U V W X Y Z a b c d e f g h i j k
h h n p r l m m n n o p q r s t u v w x y z 1 2 3 4 5 6 7 8 9 0

A a a a B b c d e F f F G h i j k l m n o p q r s t u v w w x y z

A B C D E F G H I J K L M N O P Q R E F C G S U T V W X Y Z a b c d
e f g h i j k l m n o p q r s t u v w x y z A B C D E F G H I J K L M N O P Q R S T U V U X
Y Z
a b c d e f g h i j k l m n o p q r s t u v w x w z a b c d e f g h i j k l m n o p q r t u v w x y z
A B C D E F G H I J K L M N O P Q R R S S T U V W X Y Z &

A B C
M N O
W X Y
l m n o p
1 2 3 4

Round Full Block

A B C D E F H G I J K L
M N O P Q R S T U V
W X Y Z & a b c d e f g h i j k
l m n o p q r s t u v w x y z
1 2 3 4 5 6 7 8 9 0

Y Z a b c d e f g h i j k
6 7 8 9 0

y z

V W X Y Z a b c d
E F G H I J K L M N O P Q R S T U V W X
Y Z

e f g h i j k l m n o p q r s t u v w x y z

V W X Y Z &

Fancy Roman.

A B C D E F G H I J K L M N
O P Q R S T U V W X Y
& E Z I I

Bulletin 'Plug'

ABCDEF GHIJKLMNOP QRTUV
abcdefghijklmnop WXYZ Enopqrstuvwxyz

ABC
MNO

abcdef

2

**KLMN
OXY
I**

**PQRTUV
stuvwxyz**

POSTER BLOCK

ABCDEFGHIJKL

MNOPQRSTUW

XYZ&

abcdefghijklmnopqrstu

vwxyz

2345678910

A B C D E F G H I J K
L M N O P Q R S T
U V X Y Z *scroll Capitals*

ABCDEF GHIJKLMN OP
QRSTU VWXYZ &
French Plus R R S

A B C
D E F
G H I
J K L

A B C D E F G H I J K L M N O P Q R S T U V W X Y Z

**M N O P
&
S**

Unconventional 'Caps'

A B C D E F G H I J K L M N O P Q R S T U V W X Y Z

Art Nouveau

A B C D E F G H I J
K L M N O P Q R S
T U V W X Y Z

AB CD EFGHIJKLMN
OPQRSTUVWXYZ *Eccentric Roman*

A B C
M N
&
a b b c
r z p p

H I J
K L M N
O P Q R S
T

K L M N

Eccentric Roman

BRADLEY

A B C D E F G H I J K L O
M N P Q R S T U V W X
& G Y Z & H
a a b b c d d e e f g h i j k l m n n o
r z p p q r r r s s t a u v v w x y

FRENCH ROMAN (LIGHT)

A
BC
DEF
GHIJK
LMNOPQR
STUV
WXY
Z
&

4123
956
78
0

a
dcb
efg
hijlmnok
pstq
uv
w
xy
z

A B
K L
Q R

a
dcb
efg
hijlmnok
pstq
uv
w
xy
z

ATKINSON TUSCAN ROMAN (Light)

A B C D E F G
H I J K L M O P
Q R S T U V W
X Y Z
&

Bulletin "Plug"

ABCDEFGHIJKL MNOPPPRRRSTUVXY
89 Z & abcdefgghijklmnopqrstuvwxyz 1234567

Modified "Plug"

ABCDEFGHIJKLMNOPRST
SSUVWXYZ & 12345678
9 EFF abcdefghijklmnoprstuvwxyz

Q
B
DE
GH
LMNO
ST
W
Z
&

STUWVXY
yz 1234567

QPRST
5678
wxyz

(heavy) FRENCH ROMAN

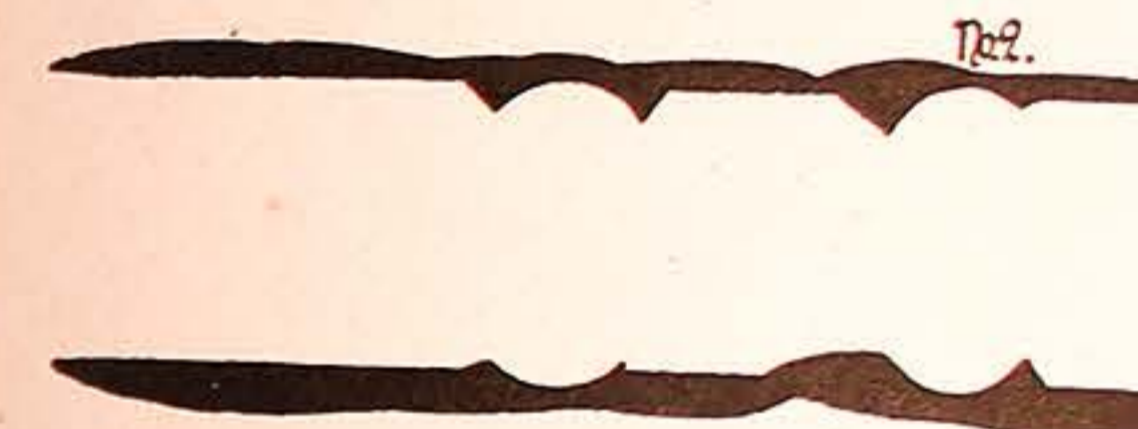
| | | |
|----------------------|--------------|------------------------|
| A | 24567 | a |
| B G | 319 | dc b |
| D E F | R | ef g |
| G H I J K | | h i j l m n o k |
| L M N O P Q R | R | q s t p |
| S T U V | | u v |
| W X Y | 8 R | w sp |
| Z | R | x y |
| & | | z |

| | | | | |
|------|-------|-------|---|---------|
| B | C | A | E | U |
| P | F | N | L | Y |
| R | J | M | I | X |
| wyz | D | S | Q | l m n |
| rst | G | u v w | O | d e f g |
| W | Z | H | y | K |
| hijk | o p q | abc | | |

NEOPO

Background Sta

122.



Complete

NEOPO

U
Y
X
l m n
d e f g
h
a b c

NEOPOLITANS

Background Stencil



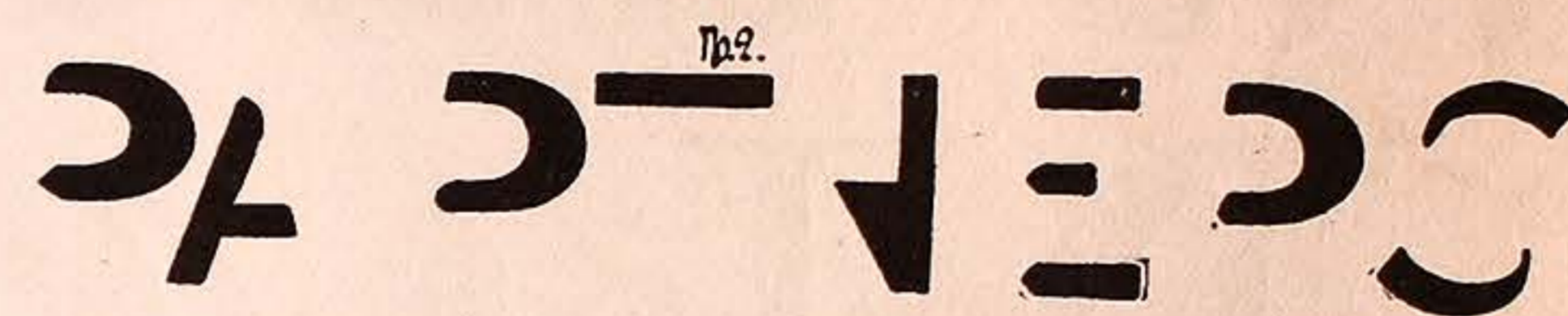
NEOPOLITANS

Complete

1 PARTNERS

No. 1

Surface Letter Stencil



PARTNERS

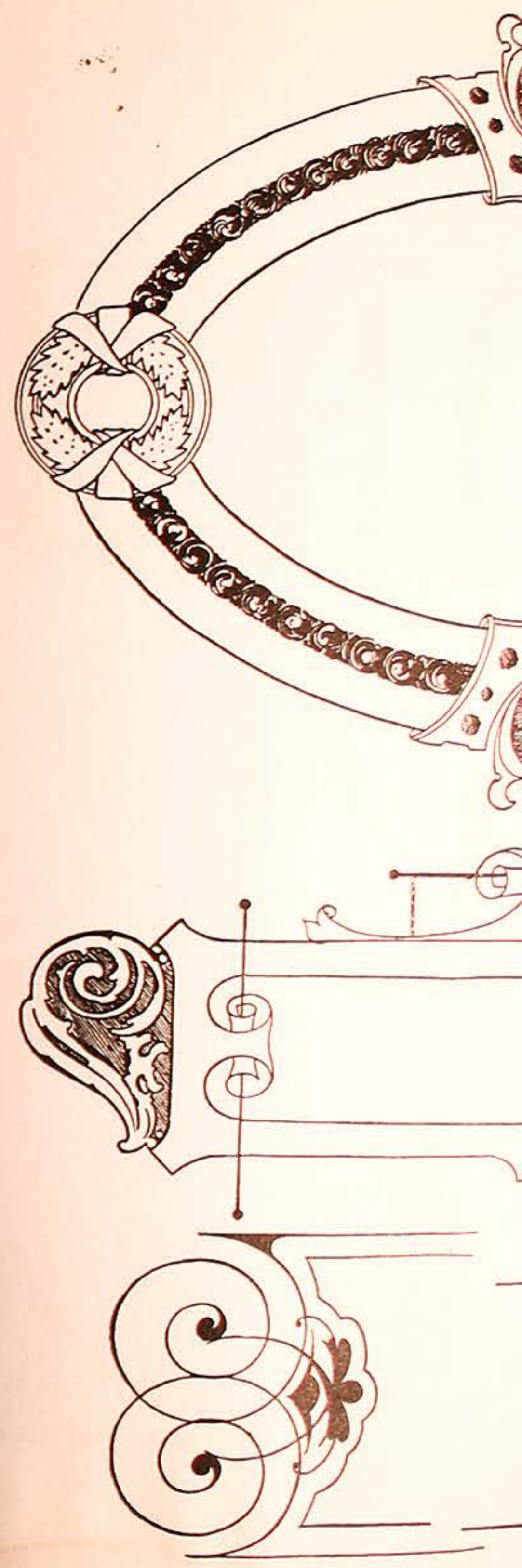
Complete

Convex Effect

A B C D S & G O R J
 I N S I M I

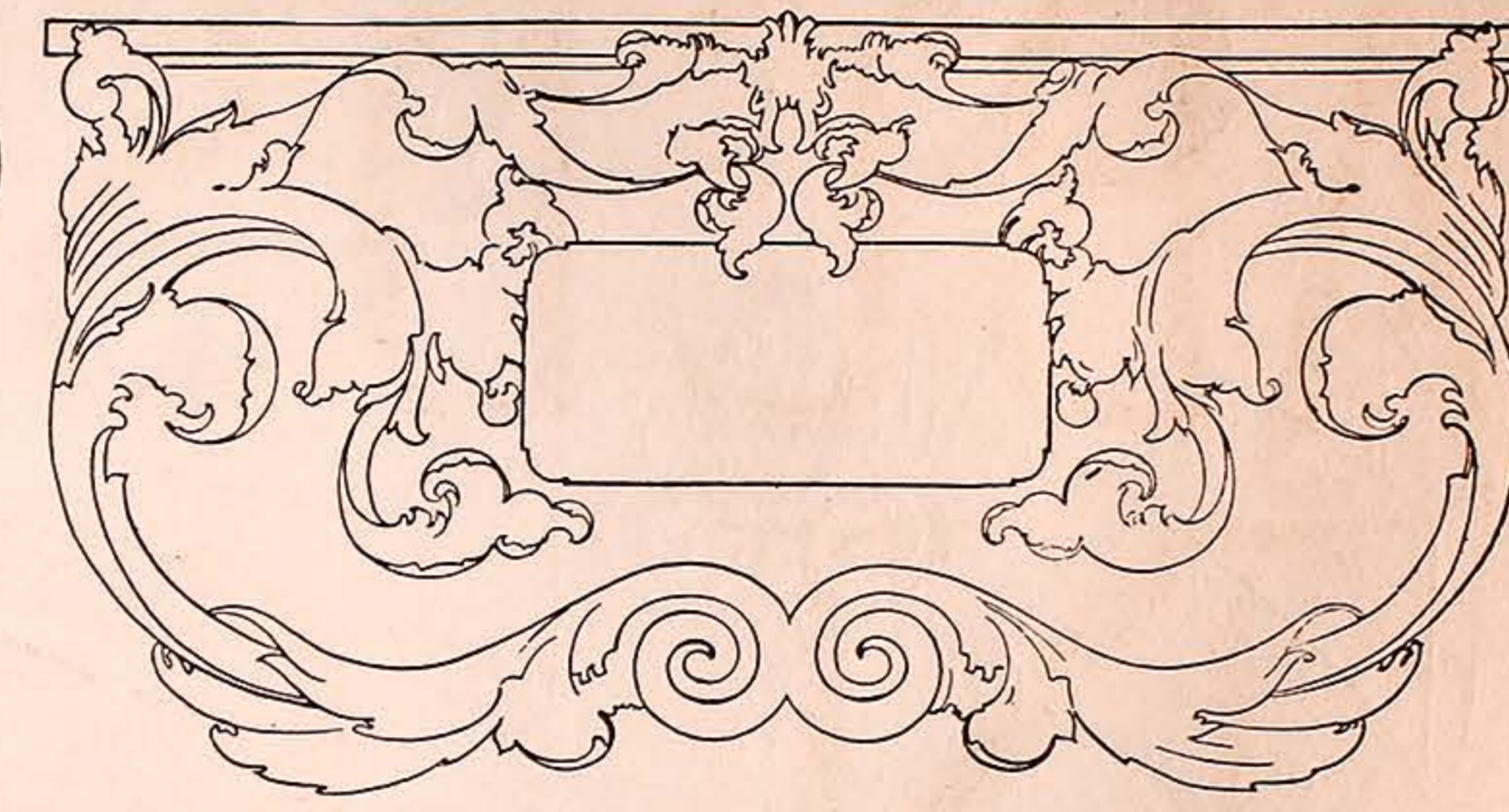
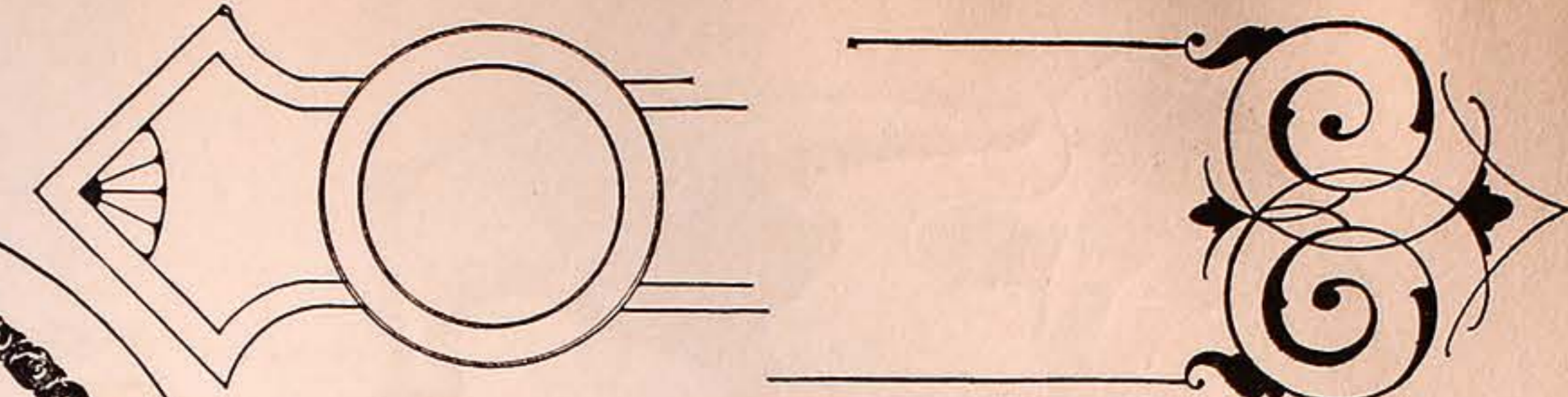
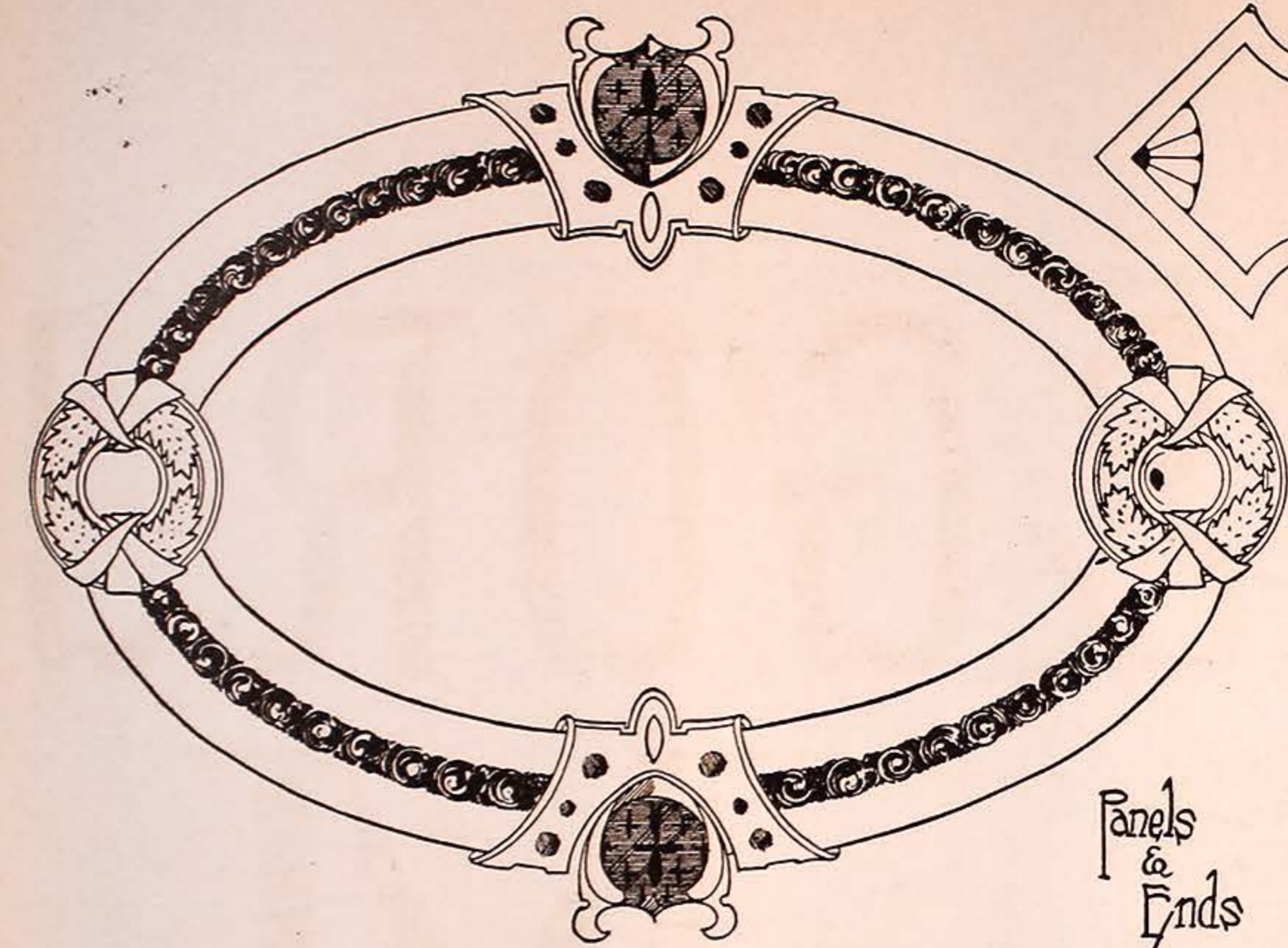
Deep Gold Stipple Centre
Deep Gold Stipple
Deep Gold Sumish
Lemon Gold Stipple
"On Glass"
Heavy Black Outline
Drop Shade - Deep Chocolate

bandso

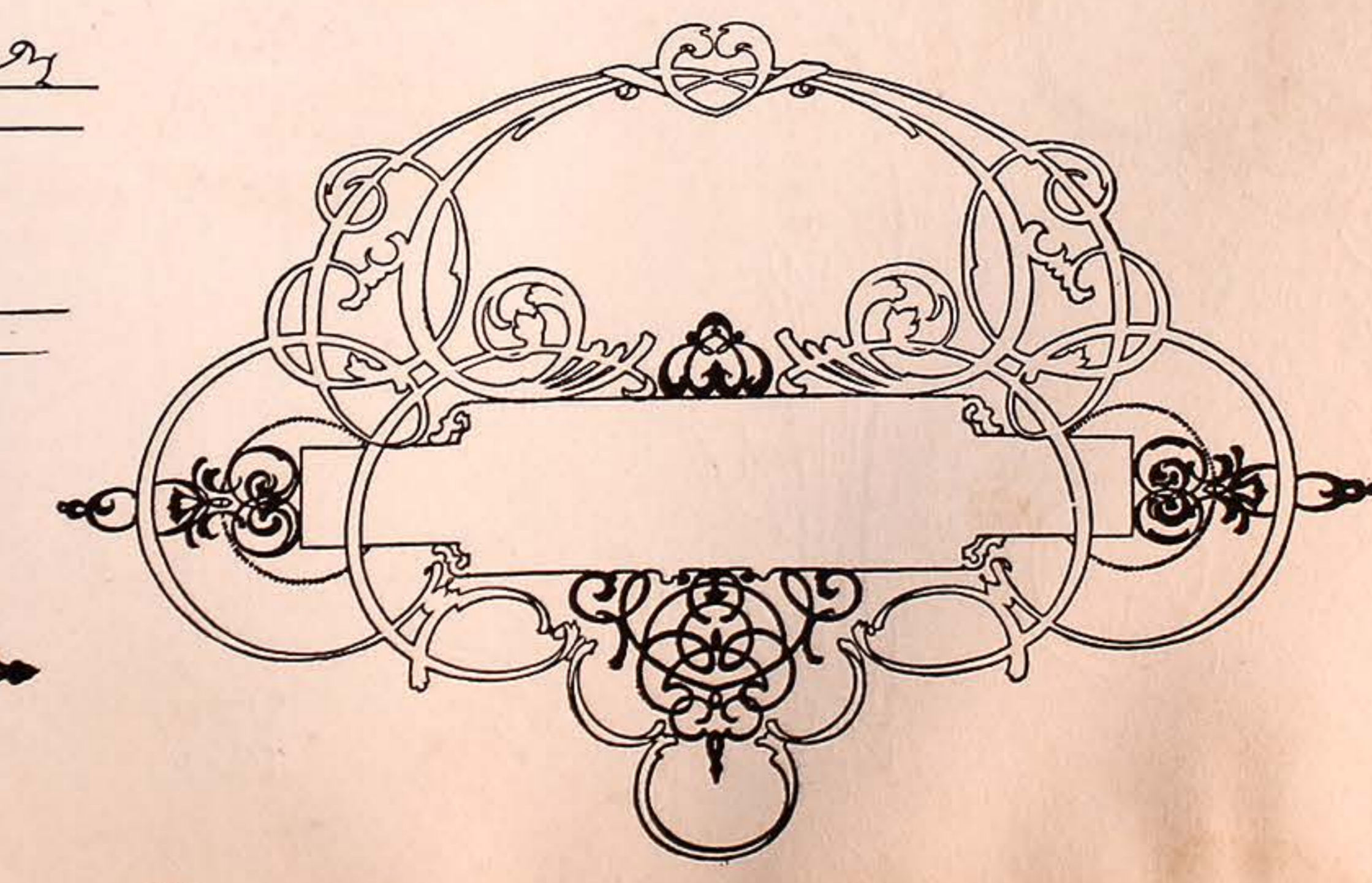
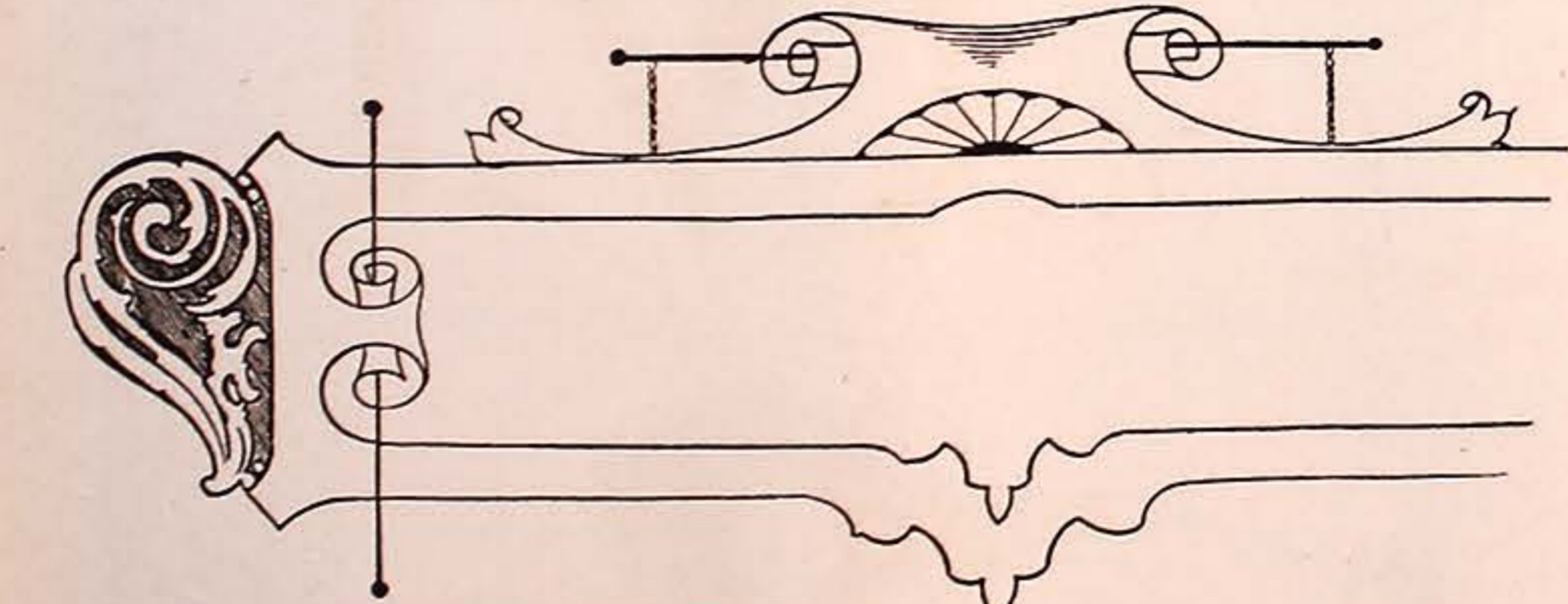


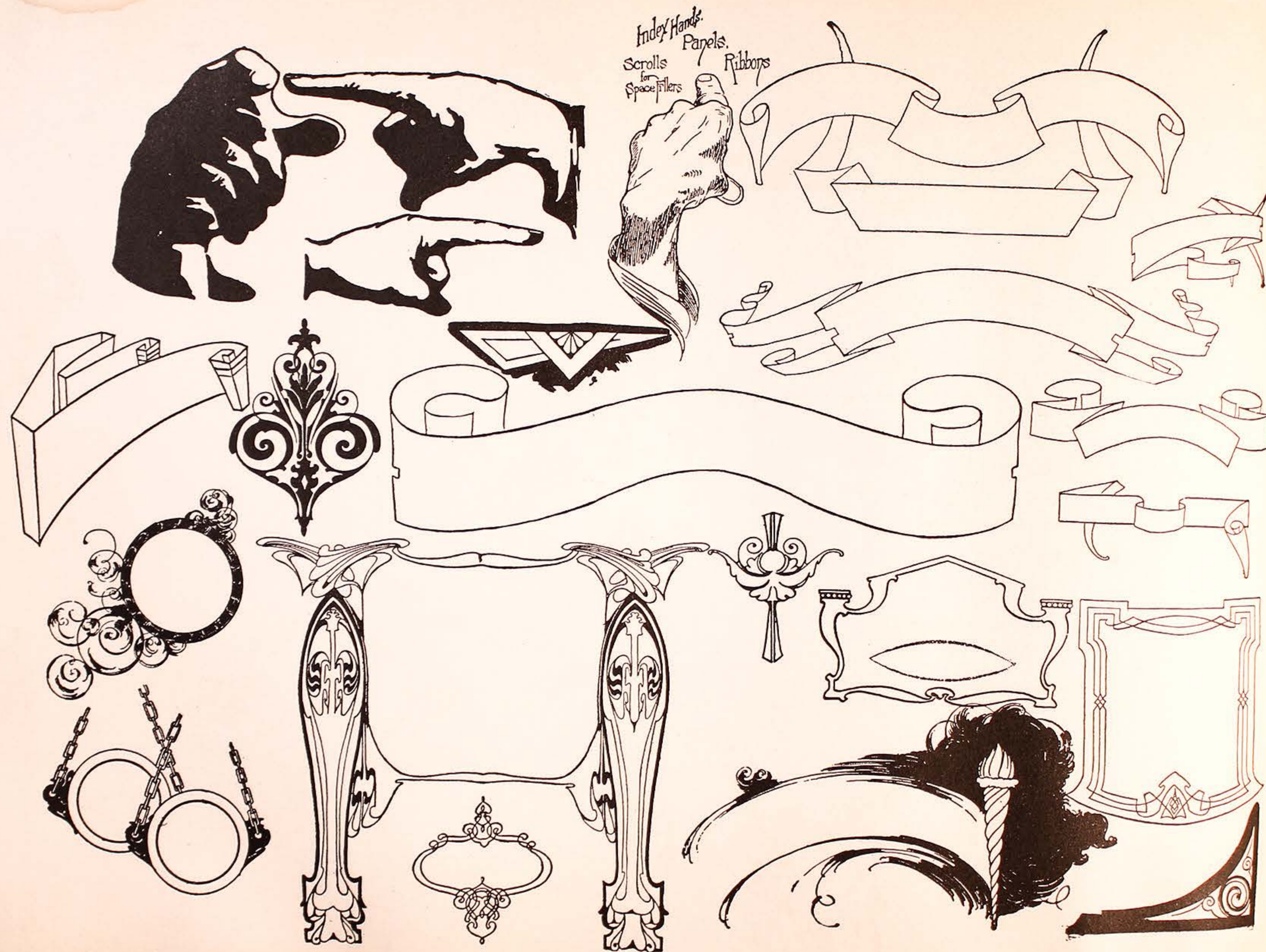
ORJ
MI

boards

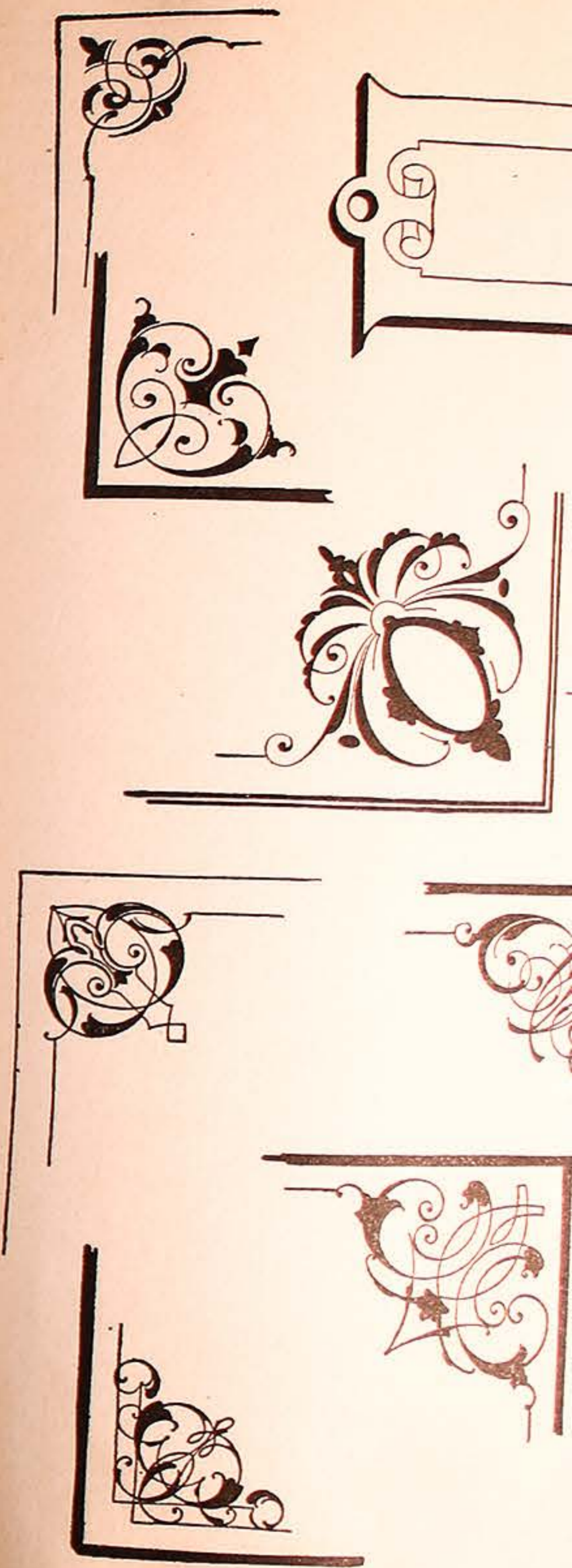


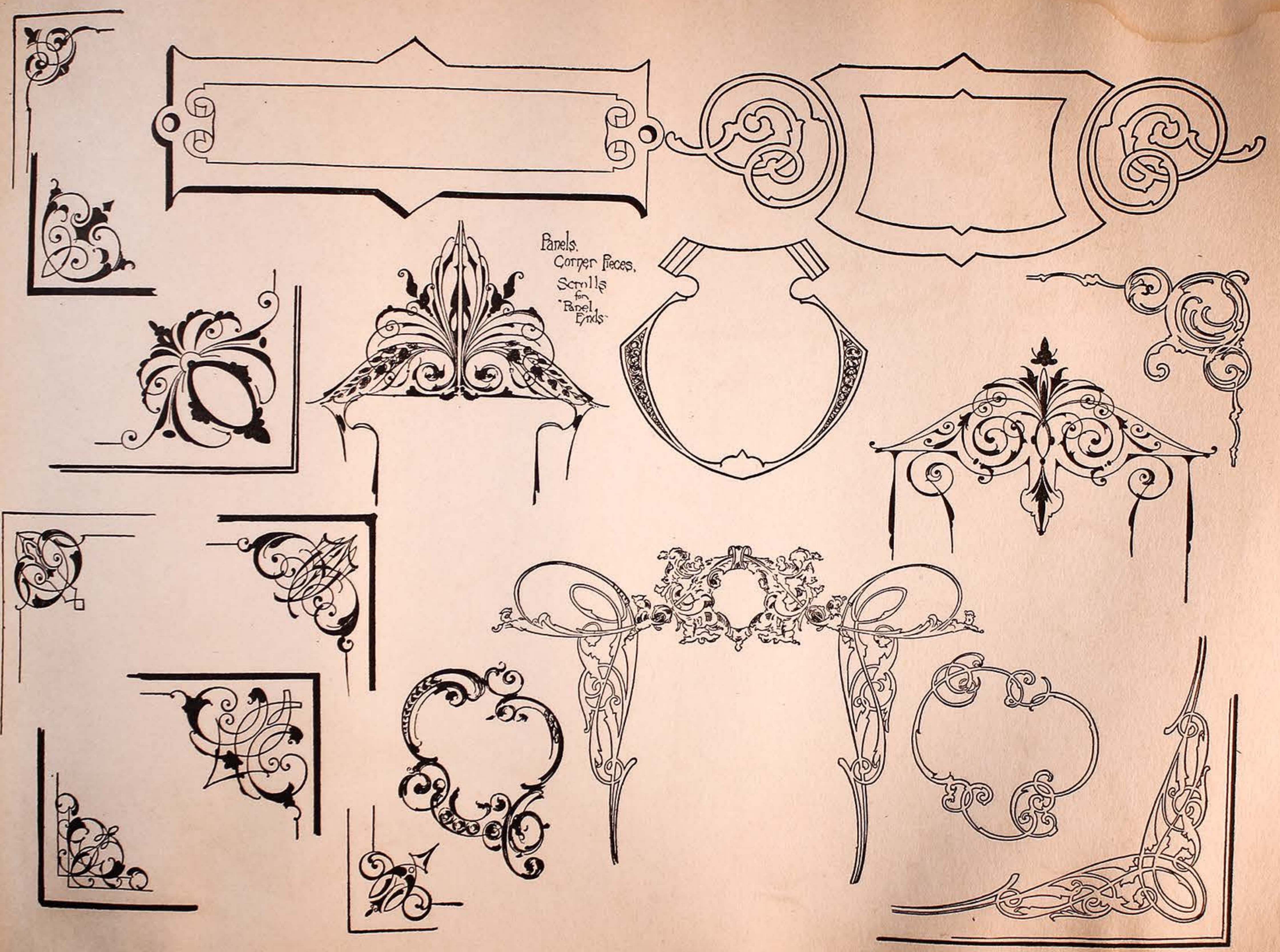
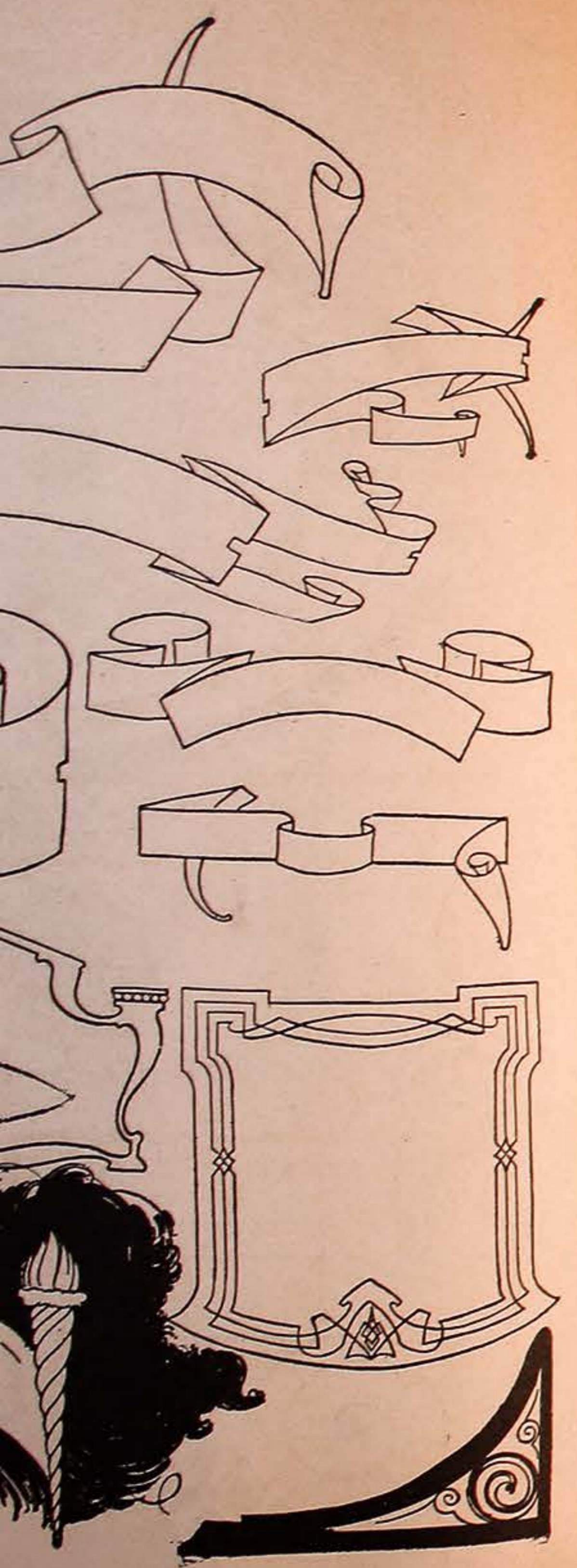
panels
&
ends





Index Hands.
Papers.
Scrolls
for
Space Filler
Ribbons





Panels.
Corner pieces.
Scrolls
for
Panel
Ends

OUTDOOR DISPLAY SECTION

OUTDOOR DISPLAYS.

In presenting the rough pencil sketches shown in this section "Atkinson" is complying with the many requests received from men prominent in the business all over the country since the first edition of this book appeared.

There has been no intent to render these sketches too seriously; they are rough, and merely suggest layout, positions, and style of letters used, together with "color" indicated in the body of the sketch.

The pencil sketches shown are for the most part from kodak prints of current showings. The author desires to express his indebtedness to Mr. Harry Fulford, who for a number of years was the leading outdoor designer in this country. These examples are largely "Fulford's," though a few are by Mr. Willard Clark and some by Mr. Atkinson himself. It is hoped that these sketches will aid the progressive designer and bulletin painter to the extent that they offer many agreeable compositions and suggestions on layouts, which will prompt their use as composites or in their entirety for the proposition at hand by simply changing titles and features.

Versatility will pave the way to using practically everything shown, and their transposition will be found virtually inexhaustible. For example, do not say you cannot use the "Holland Creamery" for a clothing design. Simply substitute "fashion figures" in place of the Dutch figures shown, show a small landscape for background, and change the inscription to read:

NEXT TIME ASK FOR
STEIN-BLOCH QUALITY CLOTHES.

JOSEPH & SON,
103 S. WATER ST.,
'PHONE WALNUT 286.

The general layout and color scheme can be easily adhered to, and the "Holland" has answered a purpose in this way. In proportion to your versatility you can adapt this whole series of "outdoor rough pencils" to your present needs. "HIMSELF."



THE UNITED STATES ARMY
WANTS MEN
 SPLENDID OPPORTUNITY FOR
MECHANICAL AND ELECTRICAL
 TRAINING AT GOVERNMENT EXPENSE
 RECRUITING STATION
488 So. State St.

WHITE - RED OUTLINE
D. GREEN GROUND
L. GREEN TINT
L. GREEN TINT
LT. OLD GOLD

ROUGH BLEND PICTORIAL INTO BACKGROUND

Enjoy a day in the beautiful Fox River Valley

FREQUENT SERVICE VIA THE ^{orange}

Aurora, Elgin & Chicago RR

Get Our Outing Folder

PHONE HARRISON 5388

L. PURPLE
OLD GOLD BORDER
RED WHITE OUTLINE
LT. ORANGE, WHITE HIGH LIGHT, HEAVY BLACK OUTLINE
VERY DARK SYLVAN GREEN GROUND
LT. GREEN TINT
WHITE

LANDSCAPE POSTER STYLE - FOREGROUND IN SEMI-POSTER

MATINEE DAILY 25-50¢

RED WHITE

in &
30 RR

Get Our
Outing Folder

PHONE HARRISON
5388

AMERICAN
MUSIC HALL
Wabash Ave & Peck Ct.
Presents All The Notable Foreign & American Artists in
Vaudeville

MATINEE
DAILY
25-50¢

COMING

BLUE
LT. YELLOW TINT
ORANGE OUTLINE
RED
OLD GOLD
ORANGE
D. PURPLE GRAY GRAY GROUND.
RED WHITE

STUDEBAKER ^{HPD 1st 2nd} ^{DBLUE GRD} NOW PLAYING

Charles ^{WHITE} Dillingham ^{WHITE H.L. RED.} Presents ^{Med. Blue Green 2nd} **MONTGOMERY** in a New Musical Comedy Production

— **STONE** —

THE OLD TOWN ^{HEAVENLY}

by GEORGE ADE and GUSTAV LUDERS ^{WHITE}

REG.

Y
 YING
 in a New
 Musical Comedy
 Production
 N

Ask for Our Booklet
 "STORY OF STORAGE"

ELECTRIC VAN
 ELEVATOR

MOVING
 PACKING
 SHIPPING

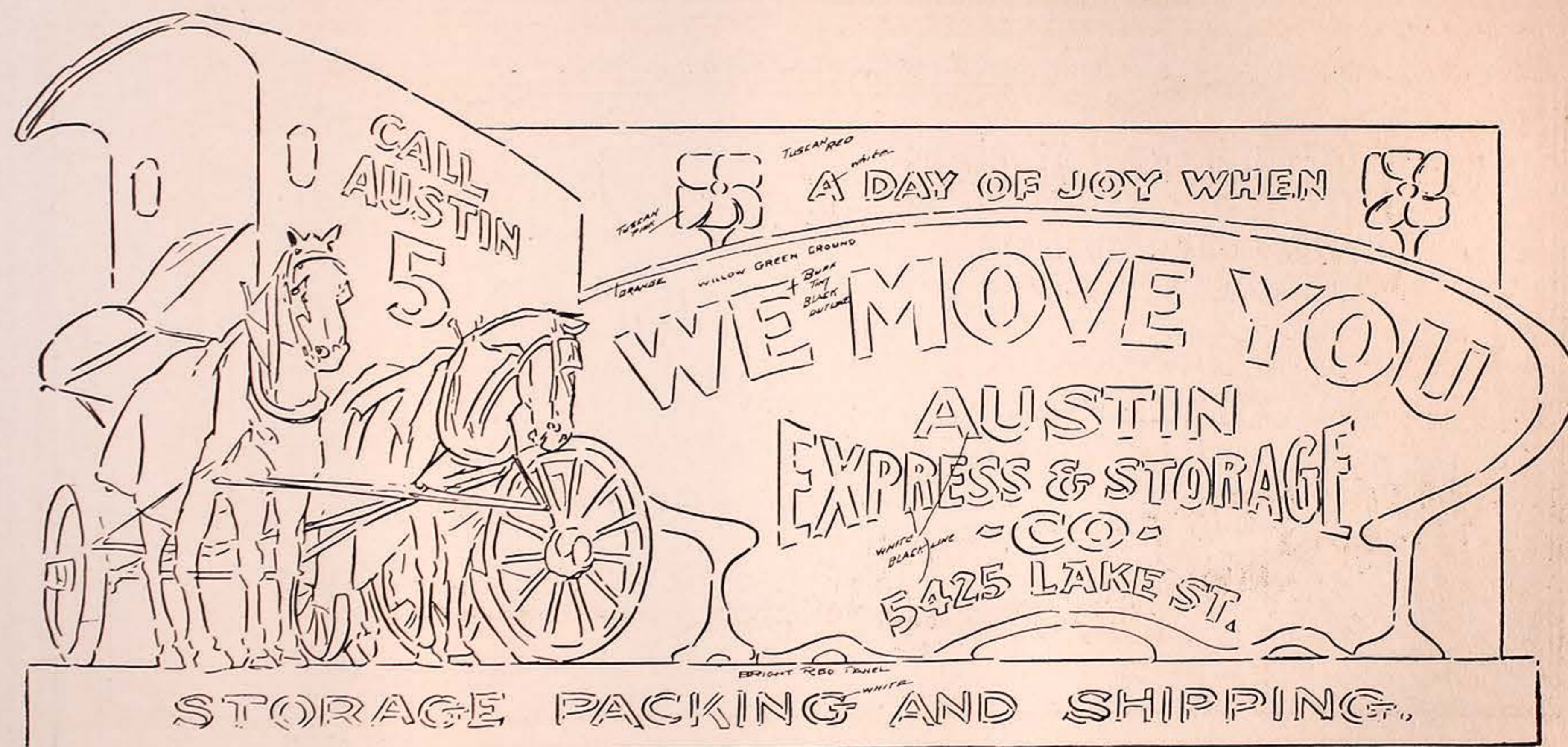
POSTER STYLE
 IN Black & Orange

GARFIELD PARK
STORAGE
 COMPANY

3111-3117 W. MADISON ST.
 PHONE KEDZIE 827.

RICH CHOCOLATE
 GROUND
 BLACK
 PENT BULLETIN - "CUT OUT"





Get away for a day
3 Blue
 IN THE BEAUTIFUL
 FOX RIVER VALLEY

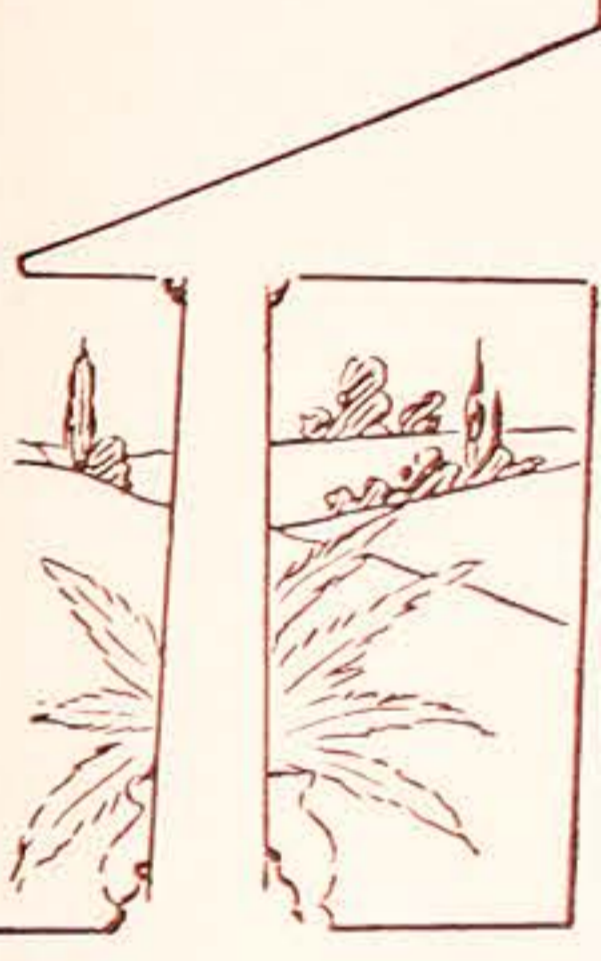


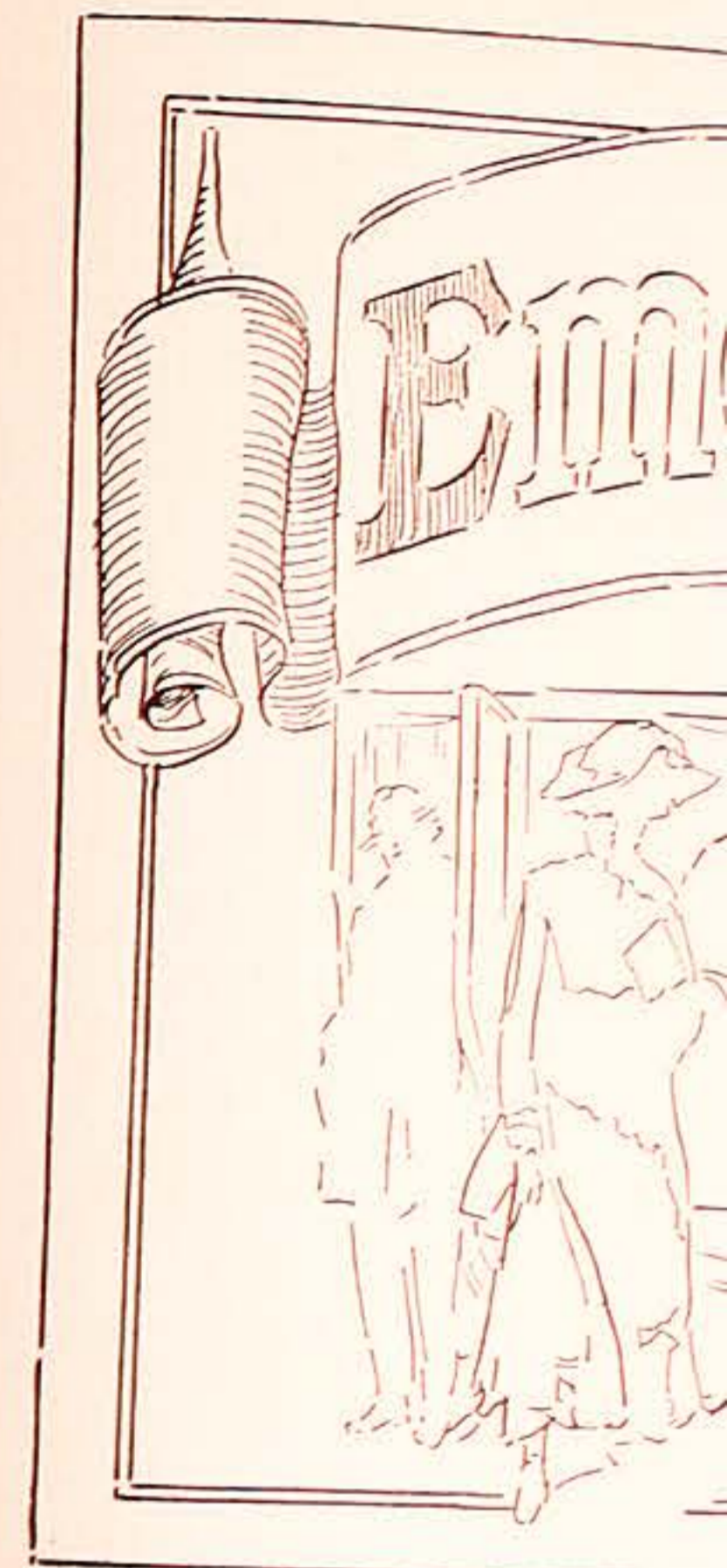
Blue Via The **Aurora,
 Elgin &
 Chicago RR** White
 Black
 Shade
 The Great Third-Rail Electric
 TERMINAL, 5th. AVE.
 NEAR JACKSON BLVD.

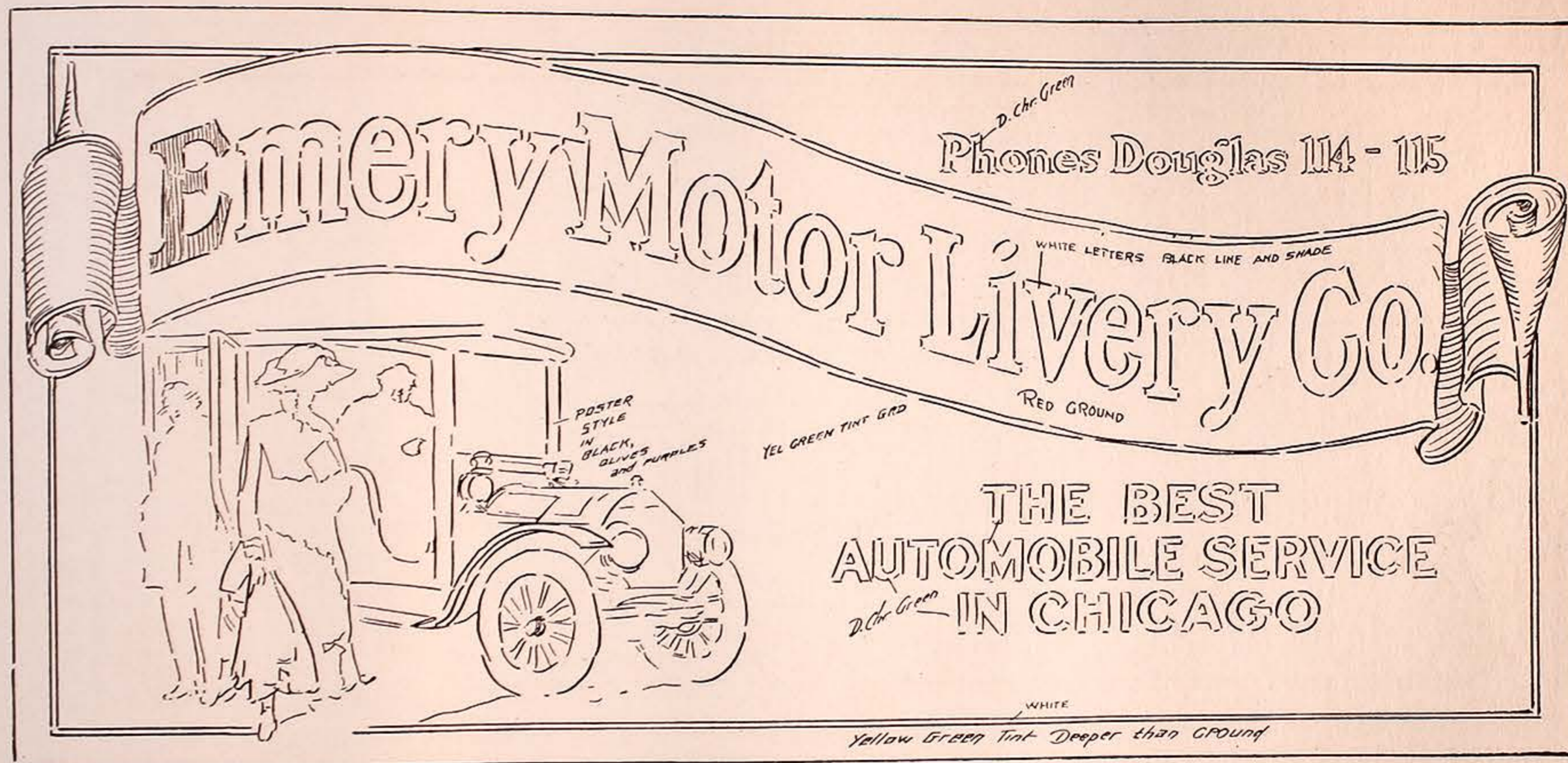
1 Yellow Tint
Warm Old Gold

Reini-Pöster Toronto

YEL. TINT
OR. TINT
YEL. TINT
ORANGE TINT







3 BLUE
OLYMPIC THEATRE
ORANGE TINT GRD
DUVE
 BEGINNING SUNDAY NIGHT NOV. 21ST
white
 AND CONTINUING THEREAFTER
 FOR A LIMITED ENGAGEMENT

THE
 POPULAR
 COMEDIAN

DEWOLFF HOPPER

 IN THE LATEST
 MUSICAL COMEDY
 SUCCESS

3 RED
A MATINEE IDOL
WHITE - TUSCAN OUTLINE
DEEP BLUE
ORANGE LINE



RE
 IN THE LATEST
 MUSICAL COMEDY
 SUCCESS
 OL



Gregg School
 of Shorthand and
 Typewriting

INVESTIGATE - OR
WE BOTH LOSE

151 WABASH AVE.

white - wide - force - some
golden tint
white - wide - force - some
golden Brown ground
L. Purple
yellow inlets

12 x 25 - 3/4 in = 1 foot
 Pictorial in natural color

French Auto Oil

THE REMEDY FOR 90% OF YOUR AUTO TROUBLES

French Auto Oil

REDUCES THE UP-KEEP

The AUTOMOBILE SUPPLY CO.
1335 MICHIGAN AVE.
DISTRIBUTORS

AT FIRST CLASS GARAGES.

White - Red outline
or Geo. Brown.
Yellow Pink
White
Yellow Pink

12' x 25 3/4 = 1784-

DUO COPY SANDER

POSEN PICTURAL

THE

EX

Phones

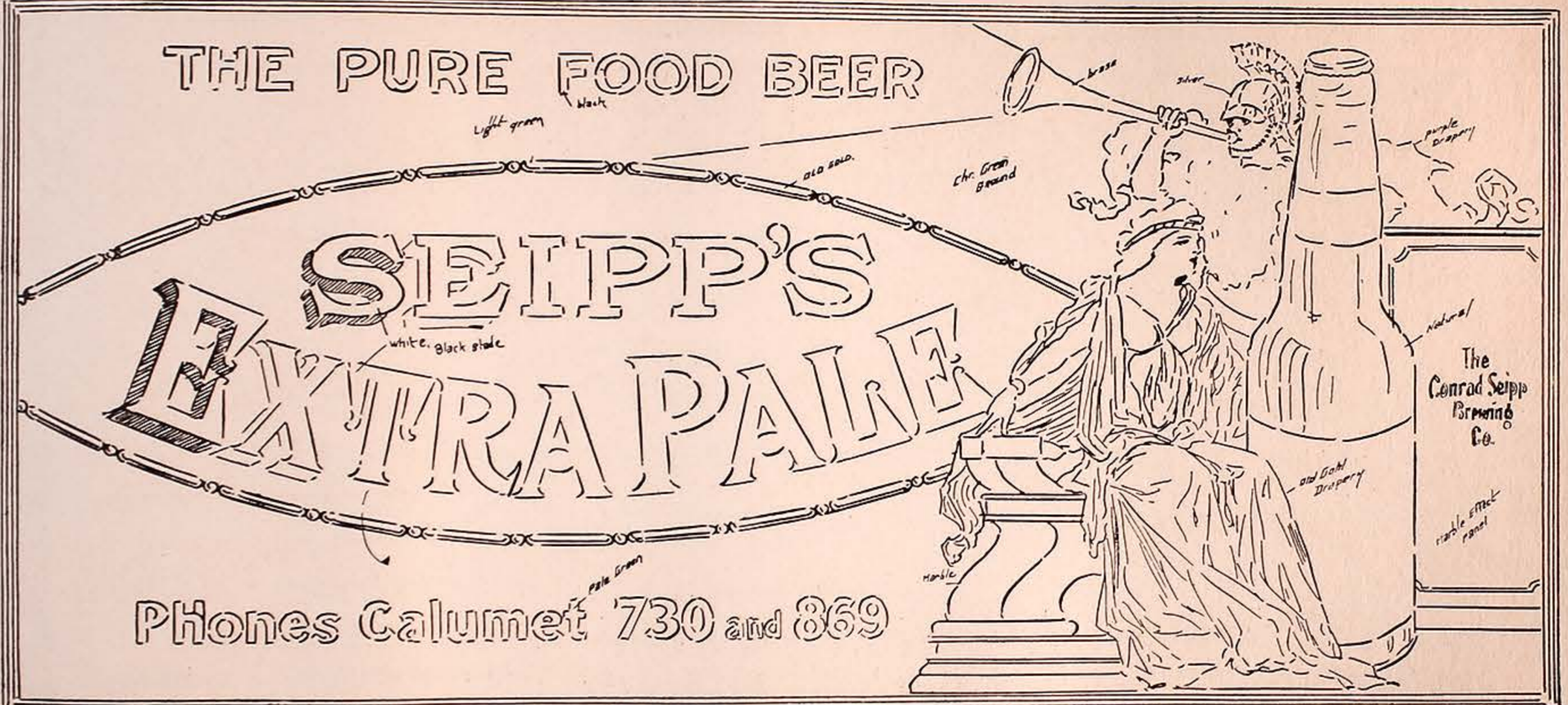
0%
ES



REDUCES Yellow
UP-KEEP

SUPPLY CO.
AVE.

THE PURE FOOD BEER



Phones Calumet 730 and 869

12 X 25

PURE MILK!

SIDNEY WANZER & SON

Studied Sanitisation
from Cow
to Consumer

Wanzer's Germ-Free Milk
from Healthy Well-fed Cows
PASTEURIZED PURITY ABSOLUTE

Agents for Crab Tree Certified Milk
2 Hours from Dairy to Consumer.

PHONE and WAGON CALLS
207 Hyde Park - 817 Douglas

Color notes: D GRAY (PURPLISH), HOLSTEIN COW, BLUE GREEN, L. GREEN, BUTTER, TURKISH, RED PINK, BUFF TINT, ORANGE TINT, DEEP CHOCOLATE, LAVENDER TINT, D PURPLE.

EVERY NIGHT
MATINEE
SATURDAY ON

LIMITED

AM

1077
F. Ziegfeld Jr.'s
SENSATIONAL
MUSICAL COMEDY
SUCCESS

Ziegfeld

K!

ents for
Tree
 Milk
 2 Hours
 try to Consumer.

DEEP CHOCOLATE

EVERY NIGHT
 MATINEE
 SATURDAY ONLY

COLONIAL THEATRE
 BEAUTIFUL

LIMITED ENGAGEMENT - STARTING SUNDAY DEC. 26TH

ANNA HELD

MISS INNOCENCE

with Chas. A. Bigelow and
 Ziegfeld's Original New York Beauty Chorus

DELIVER
 PAPER
 WHITE
 POSTER
 OUTLINE

BLACK CRO
 ONE WHOLE YEAR
 IN
 NEW YORK

LT. RAW UMBER TINT BACKGROUND



POSTERIZE FIGURES AND LANDSCAPE
SUNSET SKY AND LANDSCAPE IN PURPLE GRAYS





YELLOW GREEN TINT GROUND / D. ORANGE

MATINEES WED. & SAT. COLONIAL THEATRE BEAUTIFUL

AT YEL TINT / METROPOLITAN PRODUCTION / KLAW & ERLANGER / PRESENT THE NEW MUSICAL COMEDY

THE AIR KING

WITH JOHN SLAVIN AND A GREAT CAST

and Chorus of PRETTY SINGING GIRLS

100 PEOPLE 100

WHITE LETTER - BLACK OUTLINE

D. LIVE RED GROUND - MED OLIVE

YEL TINT

GRAYS

Wear a Smile
and a
WASHINGTON SHIRT
they go together

*Show English Collar
in this panel*

*white
black line
& shade*

**JACKSON
& DEARBORN**

**WASHINGTON
SHIRT Co.**

dark blue ground

**DEARBORN
& WASHINGTON**

*is yellow shade
with black*

87-189 LA SALLE ST.

**FURNISHERS TO HIS MAJESTY
THE AMERICAN CITIZEN**

*and
also gold*

*ORIGINAL DESIGN
QUARTERSIZE
COLLARS*



SHIRT
together
BORN
WASHINGTON
ORIGINALS OF
QUARTER SIZE
COLLARS

Friend of
the athlete
Budweiser
ANHEUSER-BUSCH
St. Louis
Strengthens
Refreshes


*D. BLUE.
WIDE WHITE.*

*very lt blue green tint
Background*

orange tint

Rough blend Pictorial into ground.

L. BUFF TINT GRD



WOODLAWN

CAFÉ

ORCHESTRAL MUSIC
EVENINGS

Cor. 63rd and Cottage Grove Ave.

CUISINE UNEXCELLED

WARM AND COZY

Med. old Gold Border

Bright High Key Pictorial.

Annotations:
 D. CHOCOLATE, WIDE WHITE OUTLINE
 L. YEL. TINT
 D. CHOCOLATE
 GREENISH OLD GOLD
 L. YEL. TINT



THE WASHINGTON
SMITHSONIAN INSTITUTION
Furnishers to His Majesty
1871
JACKSON & DEARBORN

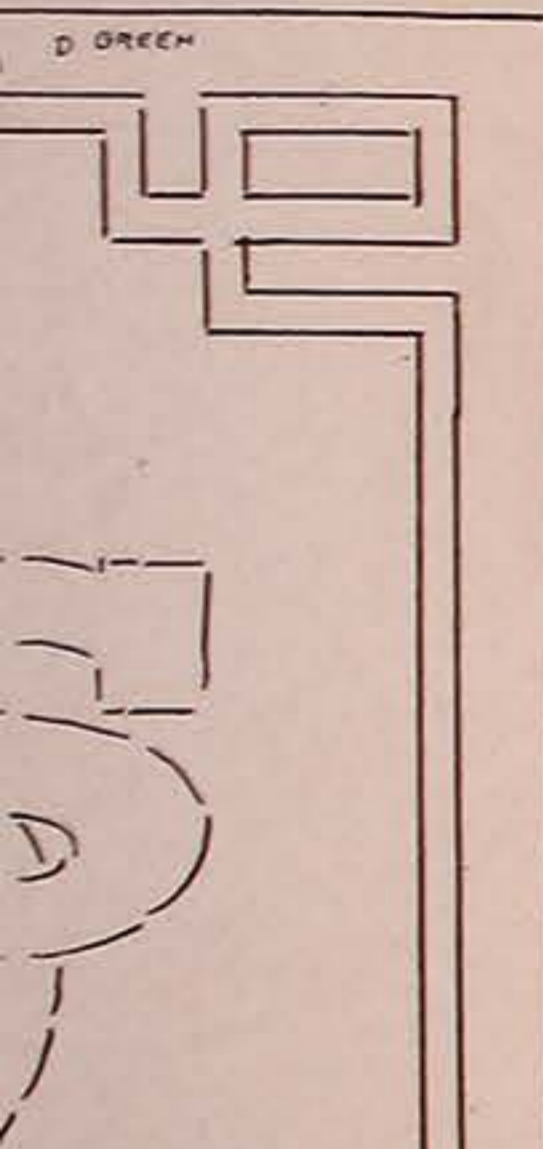
The Pure Food Beer
 SEIPP'S
 Extra Pale
 THE CONRAD SEIPP BREWING CO.

PHONES CALUMET 703 and 869

The Green Ground
 LT. YELLOW
 Red Panel
 WHITE BLACK OUTLINE
 also GOLD D GREEN



D GREEN



THE
CONRAD
SEIPP
BREWING CO.



"SAVE
WORRY
AND
HURRY"

NAT COLOR

RED
WILLOW
GREEN

BUFF
TINT

D BLUE GROUND.

Take home a Ready-to-serve dinner-

HILLMAN'S

"SPOTLESS"

GROCERY DEPT.

Makes a specialty of this service

STATE & WASHINGTON STS. "COME UP FOR LUNCH"

Welcomed
 to the
 Home

SEIPP'S
 Extra Pale

Scientifically Pure. Health-giving

BREWED BY
 "Seipp Process"

PHONES —
 CALUMET
 730 and
 — 869

Seipp's
 EXTRA PALE

Picture 1 High Key Nat. Color

410 6000

D'S
 le
 th-giving
 PHONES —
 CALUMET
 730 and
 — 869
 at every shop

Oak Park's Popular Play House

The Warrington

OPENS EARLY IN SEPTEMBER
PRESENTING HIGH CLASS PLAYS

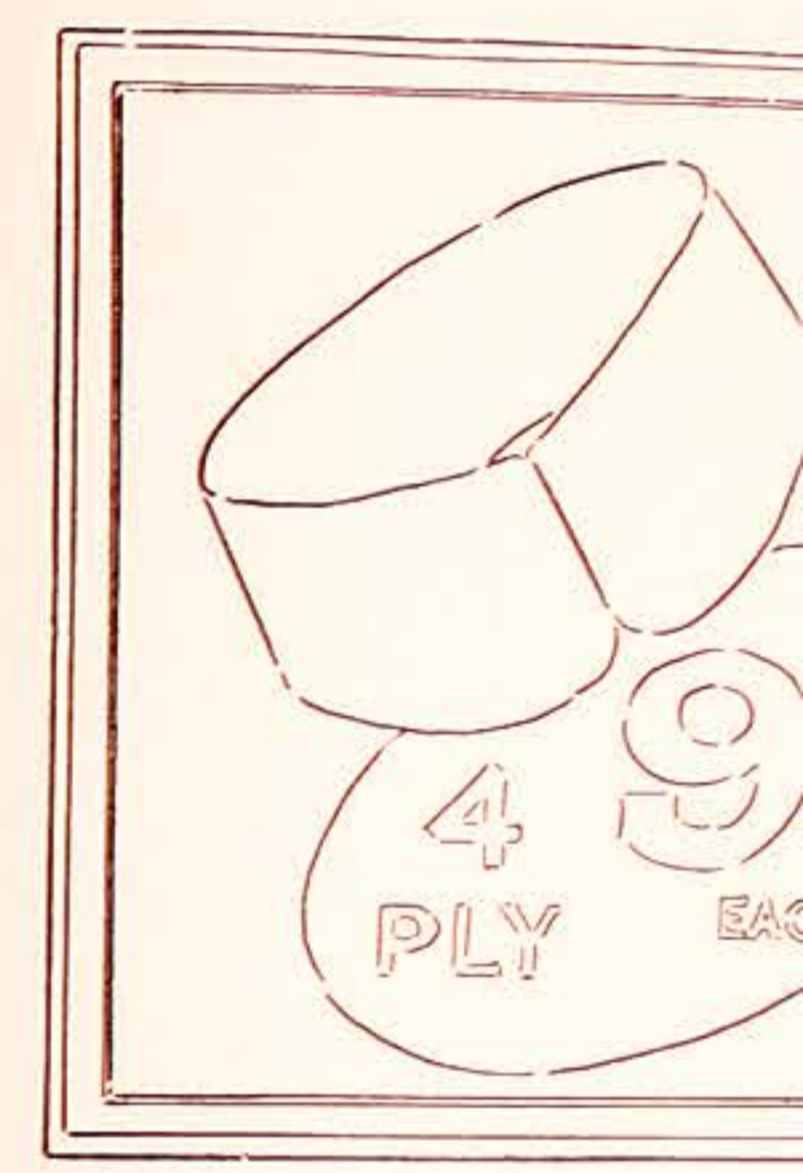
Handwritten color notes:
 - Tuscan
 - Purple Tint
 - D. Purple
 - Pale Green tint
 - Old Gold
 - Buff Tint
 - Erd
 - orange
 - blue


KAISER BREWERY
BUDWEISER

Budweiser
is a friend
of mine

ANHEUSER-BUSCH
St. Louis.

BLACK LINE Around Bottle
L. BLUE GREEN SHADE
MED. GRN. GREEN
L. GREEN TINT GROUND
ROUGH BLEND INTO GRD
TUSCAN
Red BORDER



IT
nd
e"


Blue Ground *White-wash shade* *Warm Green* *Light*

We Collar Chicago

1/4 SIZES - ALL STYLES

4 PLY 9¢ EACH

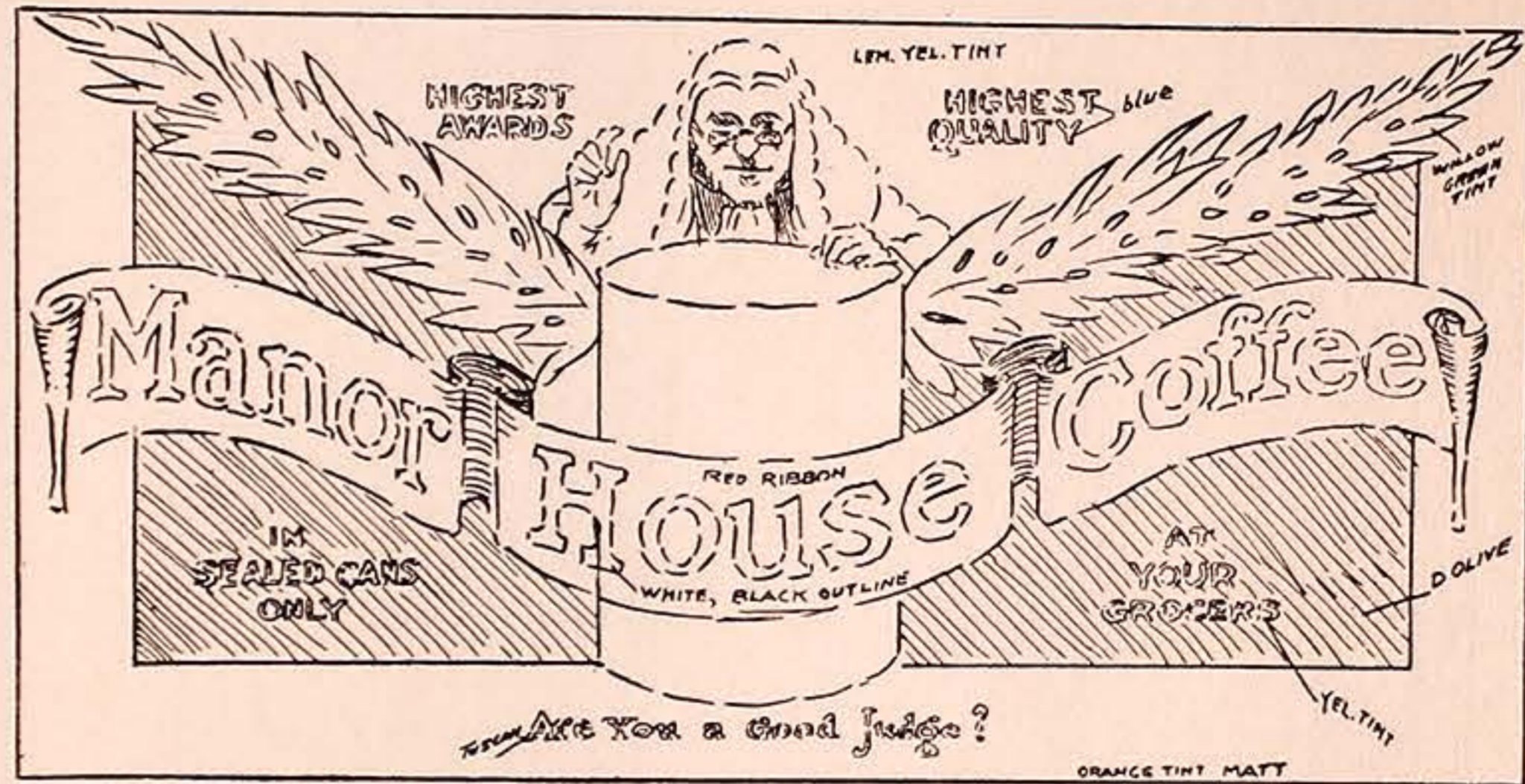
THE WASHINGTON SHIRT CO.

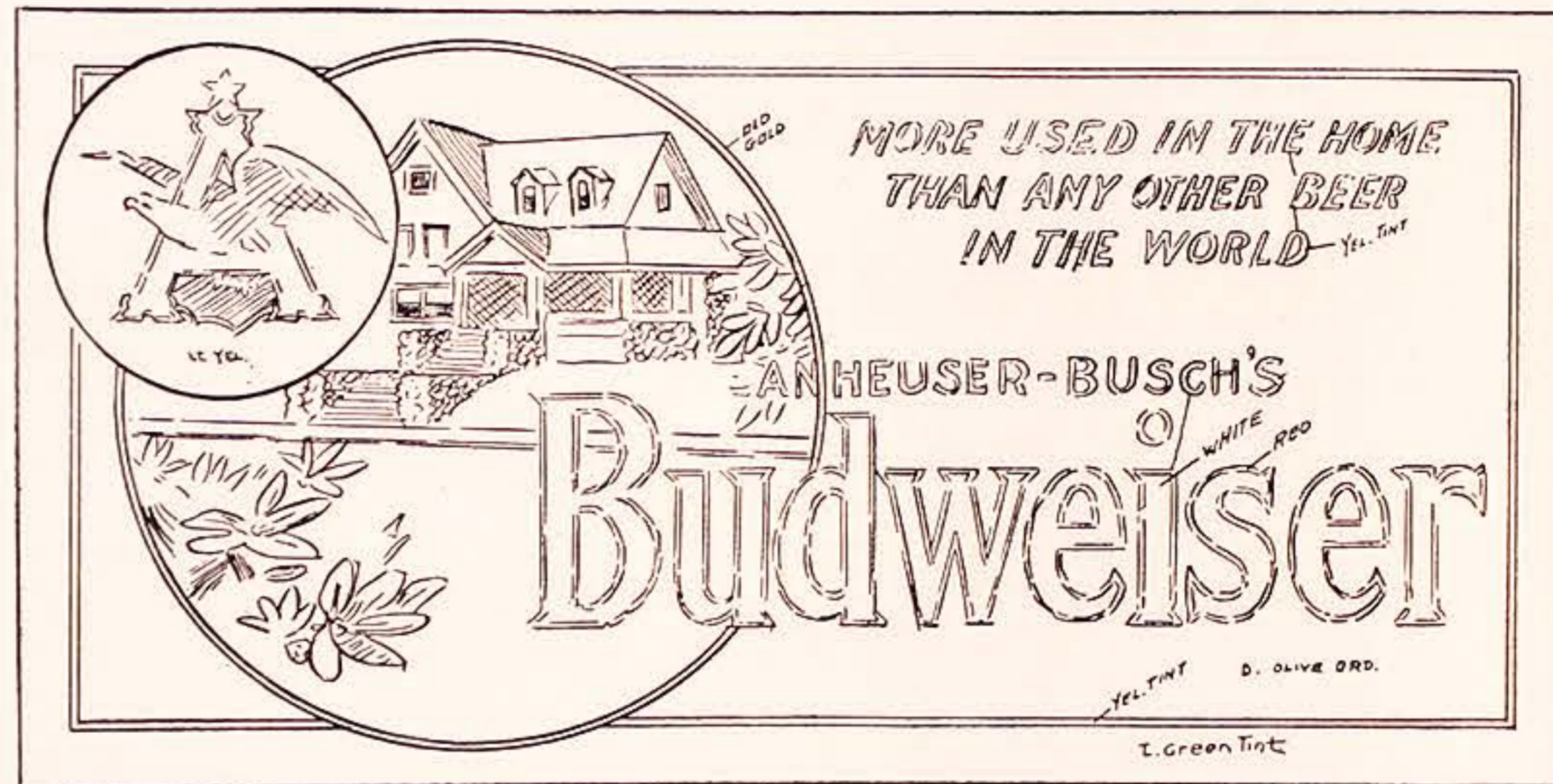
5 PLY 12 1/2¢ EACH

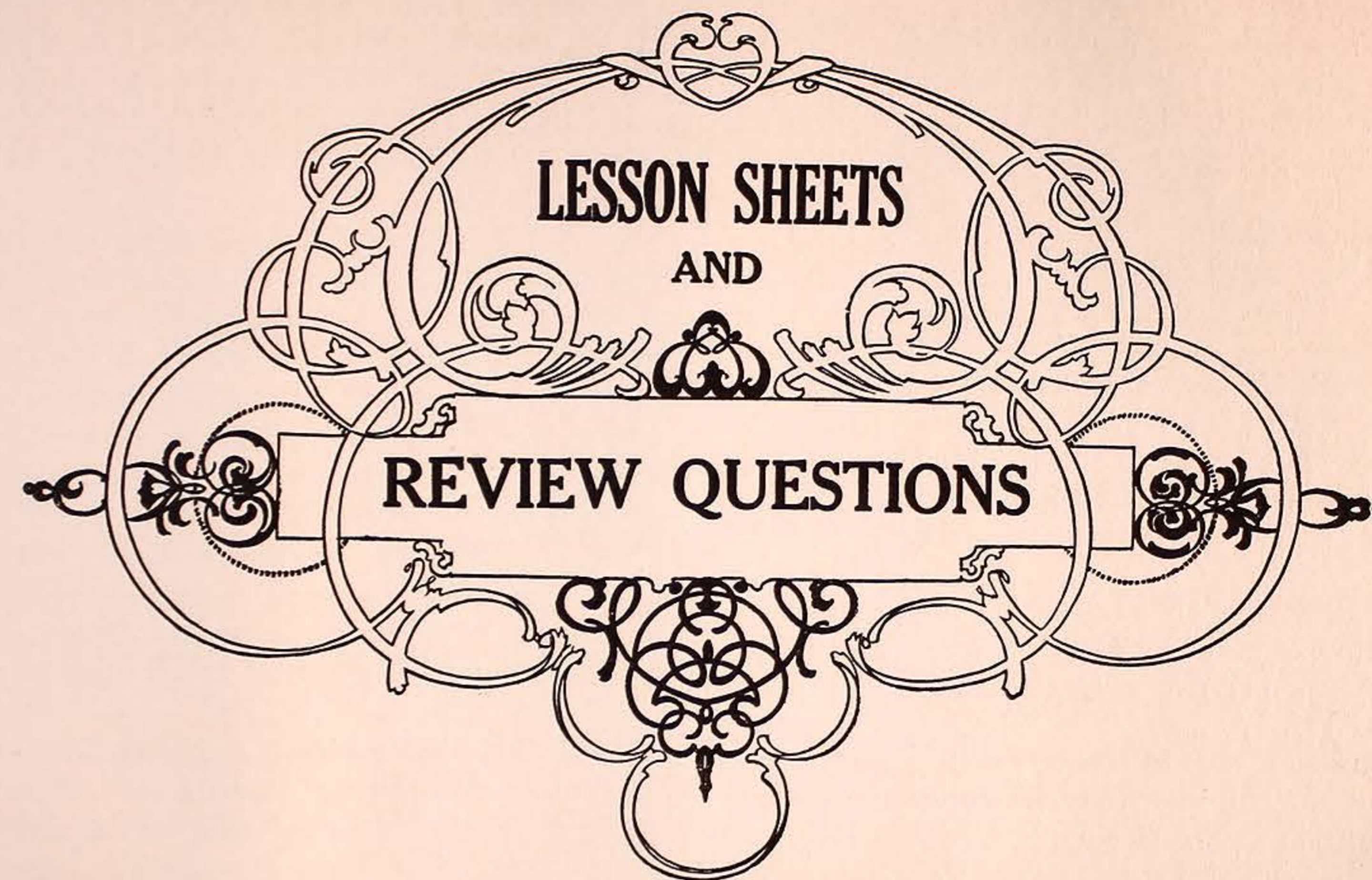
JACKSON'S DEARBORN **OUR LOOP STORES** **137 & 139 LA SALLE ST.** **DEARBORN & WASHINGTON**



d
ut A
nse





A decorative, symmetrical frame with intricate scrollwork and floral patterns. The frame is centered on the page and contains the text 'LESSON SHEETS AND REVIEW QUESTIONS'. The text is arranged in three lines: 'LESSON SHEETS' at the top, 'AND' in the middle, and 'REVIEW QUESTIONS' at the bottom. The frame has a central oval shape with a smaller oval inside it, and the text is placed within these shapes.

LESSON SHEETS
AND
REVIEW QUESTIONS

LESSON SHEET No. 1.

Student provides himself with:

- 1 Drawing Board, 23x31 in.
- 1 Set of Drawing Instruments.
- 3 Sheets of Transfer Paper.
- 1 "T" Square 30 in long, fixed head.
- 1 9 in. Triangle, 5 deg.
- 1 Box Charcoal.
- 1 Small Piece of Chamois Skin.
- 1 doz. assorted Hard and Soft Lead Pencils.
- 1 doz. Thumb Tacks.
- 1 piece Kneaded Rubber.
- 1 piece Hardmuth's Pink Rubber, for pencil.
- 1 Sponge Rubber.

Ordinary buff-colored wrapping paper, having rather a smooth surface, yet with "tooth" enough to take lead pencil well.

Cut paper into pieces 22x28 in. in size; pin to drawing board and proceed per following:

With pointed charcoal "sketch in" roughly any design chosen, on the 22x28 paper, being careful to maintain same proportions, giving the drawing same comparative weight in enlarged sketch. (DO THIS FREE HAND).

If design has uniform shape, such as panels, etc., find middle of paper, draw vertical line, and correctly draw but one-half of same. Lay transfer paper underneath, carbon side up, trace with hard pencil point, which will give an impression on reverse side. Now turn paper over on other side or half and lay transfer paper underneath, carbon side down, trace as before, which will give complete drawing of the panel. Next "draw in" all lettering correctly; when done take a full impression by tracing entire drawing upon a second and clean piece of paper, using transfer paper underneath or between, carbon side down.

We also advise the student to provide himself with a large black-board; or better, prepare one entire side wall of a room, with black-board slating. With white school crayons practice "drawing in"

each design in mammoth proportions (larger the better). This is excellent practice and familiarizes the student with large form and proportion which is so essential in the profession.

WE FEEL THE GREATEST ESSENTIAL IS THE ABILITY TO DRAW, AND DRAW WELL, GET PROPORTIONS QUICKLY AND WITH FEELING. WHEN THE STUDENT REACHES THIS POINT THE MASTERY OF THE MANY PHASES OF THE ART ARE COMPARATIVELY EASY.

We desire to emphasize this and impress the student with its importance; also with the declaration that the art of lettering, designing and sign painting is dependent solely upon this one feature. To draw poorly or indifferently leaves one in the mediocre class; to excel in drawing brings added powers and recognition.

In the art of Lettering we have no fixed rules, the law is one based entirely upon approximates, with the laity or people outside of the profession the supposition is that all letters are the same size formed on mathematical lines. Nothing is farther from the truth. All letters are the same size in appearance and that is just where technical knowledge steps in when it comes to designing a line of lettering; some letters must occupy more space, other less to produce the appearance of uniformity.

Composition in lettering is almost too intangible to define by any rule. All the mathematical formulæ ever given on the subject are incapable of equaling the result that may be obtained by spacing and producing the effect solely from artistic experience and intuition. The final result should always be judged by its effect upon the eye, which must be trained until it is susceptible to the slightest deviation from the perfect whole.

It is more difficult to define what good composition is in lettering than in painting or any other of the more generally accepted arts, and it resolves back into the same problem. The eye must be trained by constant study of good and pleasing forms and proportions, until it appreciates instinctively almost intangible mistakes in spacing and arrangement.

This point of composition is so most beautiful, individual letter produce as pleasing an effect as an artists when their composition is good.

This quality has been so much of lettering that it is important the student to it with additional force, in order feeling for his work.

All designing is free hand execution, the aid of feet and inches are called into use only to render c

LESSON SHEET

Make test drawings of following: Full Block, Half Block, and Egyptian composition on paper 22x28 in., t Block Lettering:

H. W. C
Law

and

DEL
5c Th

LESSON SHEET

Make test drawings of alpha Plain French on 22x28 in. paper. on 22x28 in. paper, in plain French

MME. I
FASHIO
MOD

Also

rtions (larger the better). This is
es the student with large form and
n the profession.

ST ESSENTIAL IS THE ABIL-
Y WELL, GET PROPORTIONS
ELING. WHEN THE STU-
NT THE MASTERY OF THE
ART ARE COMPARATIVELY

nd impress the student with its im-
n that the art of lettering, designing
solely upon this one feature. To
es one in the mediocre class; to excel
and recognition.

e no fixed rules, the law is one based
a the laity or people outside of the
all letters are the same size formed
is farther from the truth. All let-
nce and that is just where technical
es to designing a line of lettering;
pace, other less to produce the ap-

most too intangible to define by any
ulæ ever given on the subject are in-
at may be obtained by spacing and
n artistic experience and intuition.
e judged by its effect upon the eye,
susceptible to the slightest deviation

what good composition is in lettering
he more generally accepted arts, and
blem. The eye must be trained by
sing forms and proportions, until it
intangible mistakes in spacing and

This point of composition is so important that an inscription of most beautiful, individual letter forms, badly spaced, will not produce as pleasing an effect as an arrangement of more awkward letters when their composition is good.

This quality has been so much disregarded in the consideration of lettering that it is important the student's attention should be directed to it with additional force, in order that he may begin with the right feeling for his work.

All designing is free hand execution dictated by the artist's conception, the aid of feet and inches, and the use of mechanical tools are called into use only to render details accurately.

LESSON SHEET No. 2.

Make test drawings of following alphabets, using 22x28 in. paper: Full Block, Half Block, and Egyptian. Also compose in your own composition on paper 22x28 in., the following inscriptions in Full Block Lettering:

H. W. CAPPER,
Lawyer.

and

DELPHI
5c Theatre.

LESSON SHEET NO. 3.

Make test drawings of alphabets, Tuscan Block Roman and Plain French on 22x28 in. paper. Also layout following inscriptions on 22x28 in. paper, in *plain French*:

MME. LEONE
FASHIONABLE
MODISTE

Also

ROUND & WETTEN
REAL ESTATE
BROKERS

in Roman.

LESSON SHEET No. 4.

Make test drawings of Tuscan Roman and the Bradley Text. Also layout on 22x28 paper.

HATS
AND
CAPS.

Tuscan Roman.

Also

BOOTS
AND
SHOES.

Tuscan Roman.

LESSON SHEET No. 5.

Make test drawings of Western Full Block Alphabet. Also layout on 22x28 in. paper the following in Plain Egyptian:

GALVANIZED IRON
AND
SHEET METAL WORK
STOVE REPAIRS
FOR
EVERY STOVE IN THE MARKET.

LESSON SHEET No. 6.

Make test drawings of Spurred Egyptian. Also layout in Full Block following on 22x28 in. paper:

HATS
CAPS

Also

LESSON SHEET No. 7.

Make test drawing of the Old English Alphabet. Also layout the following on 22x28 in. paper, in Plain French:

CIGARS
TOBACCO
NEWS AND PERIODICALS

Also

DELICIOUS
ICE CREAM
SODA 5c

LESSON SHEET No. 8.

Make test drawing of the Modern Italic Alphabet. Also layout in Plain Egyptian the following on 22x28 in. paper:

TO RENT
W. H. BOWER & CO.
34th and Indiana Av.

Also

FOR SALE
THIS CHOICE PROPERTY
(60x120)
W. M. BRINKMAN
31st and Indiana Av.

LESSON SHEET No. 9.

Layout and design the following inscriptions, choosing your own styles in alphabets. Use 22x28 in. paper.

W. M. BRINKMAN
AGENT FOR
AETNA INSURANCE CO.
REAL ESTATE. LOANS. RENTING.
JULIUS FERNBACH & CO.
MAKER OF THE
FAMOUS CYRILLA CIGAR.

LESSON SHEET No. 10.

Layout and design, choosing your own styles in alphabets, on 22x28 in. paper:

WE MOVE ON OR ABOUT
MAY 15 TO OUR NEW
AND COMMODIOUS BUILDING.
151-153 63rd St.

Also

OLD RELIABLE
CLEANERS & DYERS
LADIES' & GENTS' CLOTHING
CLEANED, DYED & REPAIRED.

LESSON SHEET No. 11.

Design in your own style on 22x28 in. paper:

THE AUTO REBUILDING CO.
OUTFITS FOR CONVERTING
ALL MAKES OF AUTOMOBILES.
REPAIRING. ACCESSORIES.

Also

THE FLOWER SHOW
OPENS OCT. 1.
FERULLO'S BAND.
AND MANY SPECIAL
ATTRACTIONS

LESSON SHEET No. 12.

Design in your own style on 22x28 paper:

MINTZ'S ART STORE
MANUFACTURERS OF ALL KINDS OF
PICTURE FRAMES.

Also

EXHIBIT
OF
AMERICAN TERRAZZO
TERRA COTT
CERAMICS.

REVIEW Q

No.

- 1—What is flat coating?
- 2—Give different methods of sn
- 3—How are damp pencils taken
- 4—What letter is best adapted
- 5—Define "Cutting in."
- 6—How is backing up color ma
- 7—What is a Brush Palette?
- 8—What is chloroform used for?
- 9—How do you letter raw canva
- 10—How do you straighten a war

REVIEW Q

No. 2

- 1—Name all liquids used in sign
- 2—How are pale lettering colors
- 3—What use have we for fusel oi
- 4—What letter is best adapted fo
- 5—What is gold bloom?
- 6—Name best colors for glazing
- 7—What is flock?
- 8—What is smalt?

EXHIBIT
OF THE
AMERICAN TERRA COTTA CO.,
TERRA COTTA, ILL., U. S. A.
CERAMICS. ART POTTERY.

REVIEW QUESTIONS.

No. 1. List.

- 1—What is flat coating?
- 2—Give different methods of snapping *lines*.
- 3—How are damp pencils taken care of?
- 4—What letter is best adapted for high elevations?
- 5—Define "Cutting in."
- 6—How is backing up color made?
- 7—What is a Brush Palette?
- 8—What is chloroform used for?
- 9—How do you letter raw canvas?
- 10—How do you straighten a warped pencil?

REVIEW QUESTIONS.

No. 2. List.

- 1—Name all liquids used in sign work.
- 2—How are pale lettering colors made to cover on dark grounds?
- 3—What use have we for fusel oil?
- 4—What letter is best adapted for high elevations?
- 5—What is gold bloom?
- 6—Name best colors for glazing on wagon work.
- 7—What is flock?
- 8—What is smalt?

- 9—Describe correct and incorrect methods of shading.
- 10—What is a one stroke letter?

REVIEW QUESTIONS.

No. 3. List.

- 1—What is the first step or operation in mounting muslin or oil-cloth?
- 2—What use have we for LePage's Glue?
- 3—How do we care for bristle brushes?
- 4—For what purpose is a stylographic pen used?
- 5—What is a Porte Crayon; how used?
- 6—How do we layout Japanned tin?
- 7—What happens if gold is applied before proper "tack" is reached?
- 8—What is a background stencil?
- 9—What is a surface letter stencil?
- 10—How do we care for a stencil brush when not in use?

REVIEW QUESTIONS.

No. 4 List.

- 1—How do we smalt a large panel?
- 2—What is meant by the term "elongate?"
- 3—What is meant by the term "condense?"
- 4—What is the cause of sags and runs?
- 5—How much space will one book of gold cover?
- 6—What gilding method is used in surface gilding?
- 7—How do you proceed in laying out cheap glass gilding on second floor and above?
- 8—Give lettering mixture for raw canvas.
- 9—How do you prepare canvas that is subjected to much rolling and handling?
- 10—Give several methods of correcting errors on muslin signs.

REVIEW QUESTIONS.

No. 5 List.

- 1—What happens when oil is mixed with Japan colors?
- 2—How do you letter and execute silk banners?
- 3—What material is used to cause aluminum leaf or bronze to adhere to glass?
- 4—How is gold and silver applied to glass?
- 5—What is the best method of imitating ground or frosted glass?
- 6—How do you waterproof Show Cards?
- 7—What is the process of burnishing gold and silver on glass?
- 8—What material is used for laying gold on glass?
- 9—What styles are best adapted for Show Card work?
- 10—What are the most popular alphabets?

REVIEW QUESTIONS.

No. 6 List.

- 1—How do you prepare a sign for a varnish finish?
- 2—What is the best backing for the preservation of window lettering?
- 3—What liquid is used to gloss face card lettering?
- 4—How is flitter applied to letter faces?
- 5—For what other purpose is flitter appropriate?
- 6—What material is used to imitate frost and snow on Holiday Cards?
- 7—What effect has oil upon asphaltum?
- 8—Why do you add quick rubbing to asphaltum?
- 9—How do you keep oil and Japan colors?
- 10—How is water size prepared?

REVIEW QUESTIONS.

No. 7 List.

- 1—Which side of a letter do we customarily shade?
- 2—How do you remove gold lettering and paint from glass?
- 3—What is the first precaution in window lettering?
- 4—Why are distemper colors preferable in Card Writing?
- 5—What brushes are most suitable for muslin and oilcloth?
- 6—How do you affix pearl to centers of letters on glass?
- 7—Describe a background stencil.
- 8—How do you produce a zinc stencil?
- 9—Define Elongating.
- 10—Define Condensing.

REVIEW QUESTIONS.

No. 8. List.

- 1—How do you emboss a gold ground?
- 2—How do we etch gold on glass?
- 3—For what purpose is fusel oil used?
- 4—How do we prepare galvanized iron for coating?
- 5—Describe different matt processes on glass.
- 6—What is gold bloom; how removed?
- 7—Why do we use fat oil thin?
- 8—What is fat oil?
- 9—What is jute cloth?
- 10—Give method best for laying out office doors.

REVIEW Q

No.

- 1—When is a "block" shade used?
- 2—Describe the method of painting.
- 3—How do you prepare to letter?
- 4—Why do we use stale beer in lettering?
- 5—How do you remove particles not been properly pounced?
- 6—What do you have in end of card?
- 7—What do you have at end of card bulletins?
- 8—Name most popular glazing.
- 9—What use have we for an alcohol?
- 10—How do you scale a pictorial?

REVIEW Q

No. 10

- 1—What are distemper colors?
- 2—What are oil colors?
- 3—What are Japan Colors?
- 4—What is shellac used for?
- 5—Describe different kinds of shading.
- 6—How do you grind dry vermilion?
- 7—How do you keep orange mineral?
- 8—What liquids are used for glass?
- 9—Why does paint peel?

QUESTIONS.

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ing and paint from glass?
indow lettering?
rable in Card Writing?
for muslin and oilcloth?
s of letters on glass?
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QUESTIONS.

List.
und?
used?
d iron for coating?
es on glass.
oved?
ut office doors.

REVIEW QUESTIONS.

No. 9 List.

- 1—When is a "block" shade used?
- 2—Describe the method of painting art objects on glass.
- 3—How do you prepare to letter on a finished wagon panel?
- 4—Why do we use stale beer in "laying out" on glass?
- 5—How do you remove particles of gold from a ground that has not been properly pounced?
- 6—What do you have in end of chalk line when lettering muslin?
- 7—What do you have at end of chalk line when lettering wooden bulletins?
- 8—Name most popular glazing colors used in wagon lettering.
- 9—What use have we for an alcohol lamp?
- 10—How do you scale a pictorial subject?

REVIEW QUESTIONS.

No. 10 List.

- 1—What are distemper colors?
- 2—What are oil colors?
- 3—What are Japan Colors?
- 4—What is shellac used for?
- 5—Describe different kinds of shading.
- 6—How do you grind dry vermilion in distemper?
- 7—How do you keep orange mineral in suspension?
- 8—What liquids are used for glass drilling?
- 9—Why does paint peel?

No. 11 List.

- 1—What is the mahl stick?
- 2—Why do we add lead to "cutting in" color?
- 3—Why is raw oil used in "cutting in" color?
- 4—How do we do direct pictorial work on glass?
- 5—What precaution is necessary to successfully etch gold on glass?
- 6—What is the height of the ideal male figure?
- 7—What is the height of the ideal female figure?
- 8—What is meant by "cutting in?"
- 9—What is a surface letter?
- 10—How do we produce a light colored letter or dark varnish ground?

REVIEW QUESTIONS.

No. 12 List.

- 1—Describe cold color combinations.
- 2—Describe warm color combinations.
- 3—How do we "smalt" a large panel?
- 4—What occurs if we allow lard oil to come in contact with any color or paint?
- 5—What use have we for the indelible pencil?
- 6—Why do we "shellac" knots and "pitchy" places on new work?
- 7—Why do we shellac red lettering on old work before proceeding to coat same for repainting?
- 8—Why do we suggest buying press can stock?
- 9—What do you do with "fatty" color?
- 10—What use have we for nitric acid in sign painting?

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**BOOKS THAT REALLY TEACH
 YOU THE THINGS YOU WANT TO KNOW**
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