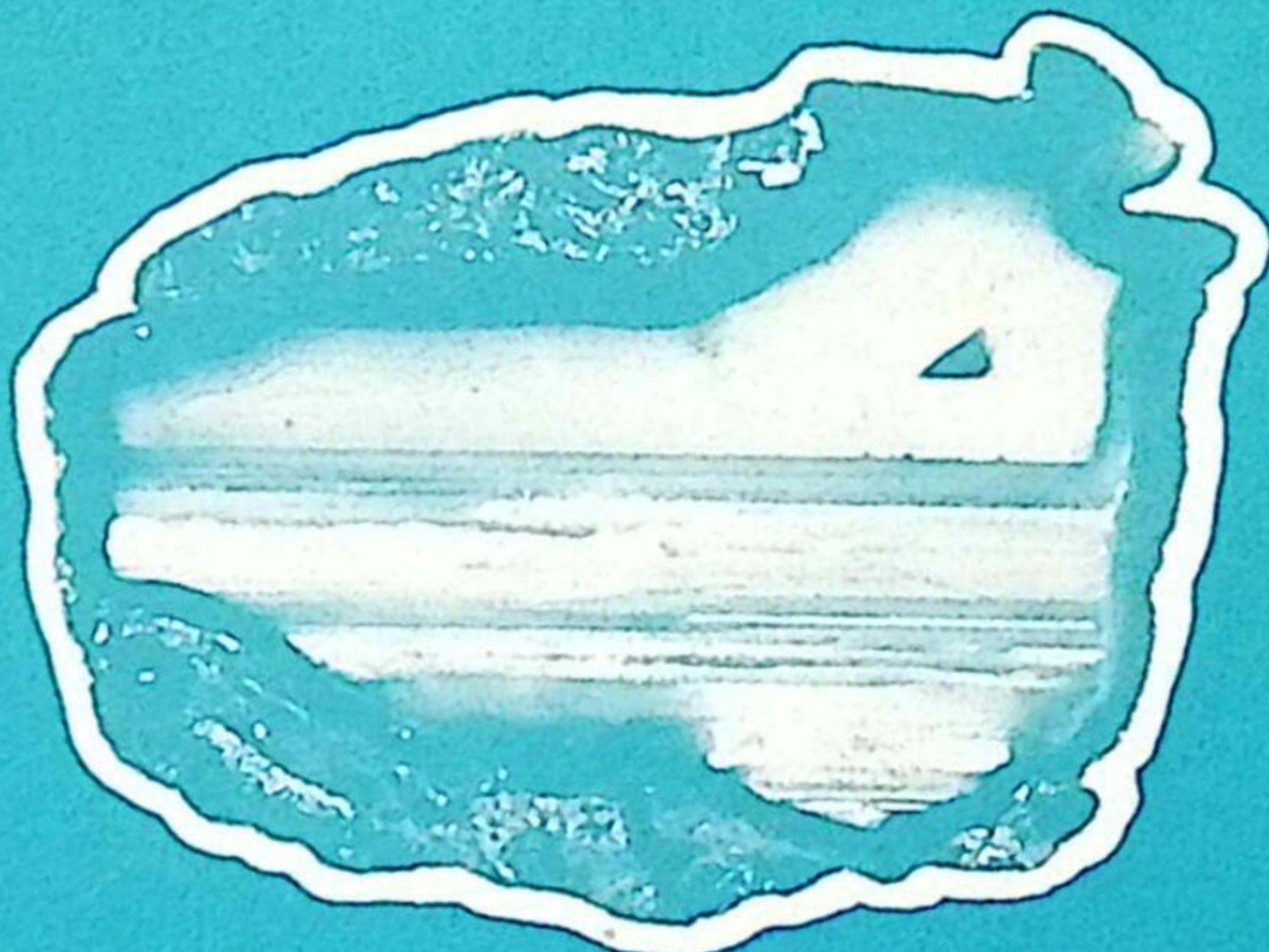


The

Lapidary Journal

AUGUST, 1949



THE SURF
IN A TEXAS AGATE

A National Magazine for
GEM CUTTERS + COLLECTORS + JEWELRY CRAFTSMEN
Hollywood, California

VOLUME 3

50c PER COPY

NUMBER 3

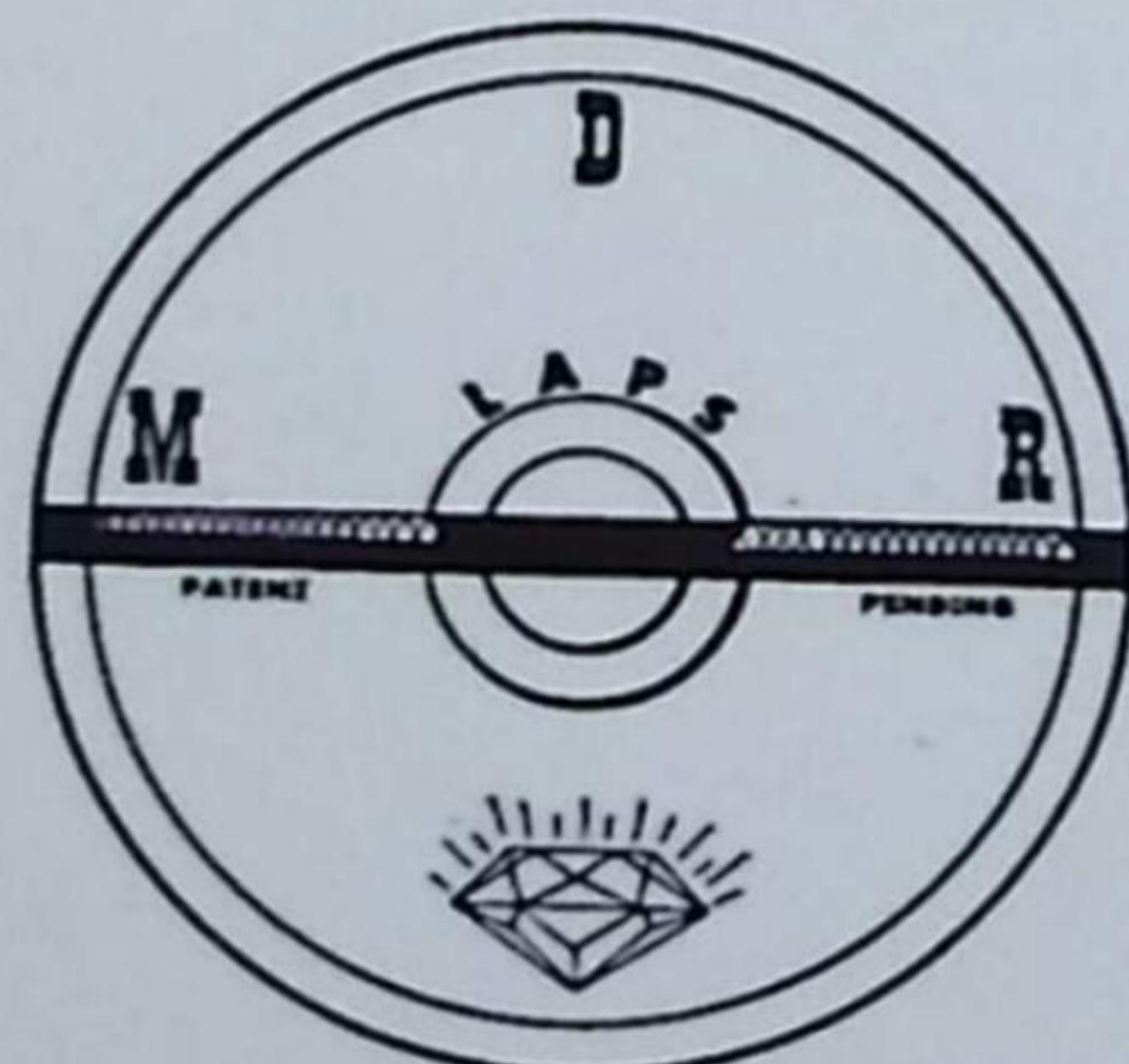
THE MASTER FACET UNIT No. 8824 FOR COMMERCIAL AND AMATEUR CUTTERS

A precision tool with the following features: Non corrosive construction throughout except set screws and pivot bearings—Finger tip control—fast and positive compound angle feature (Exclusive on MASTER). Hardened steel needle point pivots, insuring a lifetime of wear. Adjustable gib in mast to compensate for wear. $\frac{1}{4}$ " collet type chuck. Calibrated column to enable the cutting of a number of stones of the same size. Available in Right or Left hand models. 64 Index standard equipment. 72, 80 and 96 Index gears available on request. Permits the cutting of hearts, marquise and pendeloques with the same ease as cutting round brilliants. Price \$146.00 with No. 427 Master lap assembly, No. 438 Slide base and No. 440 copper splash pan. California purchasers add sales tax.



M.D.R. LAPS FOR FACETING

Precision cutting and polishing laps for all stones. Made of cast dural with an insert of tin, type metal, tin and type, lead or pitch. This type of lap assures you a true polishing surface.



No. 27—Tin	\$14.20	No. 30—Type ...	\$7.95
No. 28—Tin & Type	\$10.95	No. 31—Pitch ...	\$7.95
No. 29—Lead	\$ 7.95	No. 33—Lucite ..	\$4.20
No. 32—Diamond, impregnated copper, 400 grit one side, 800 grit other side, price			\$31.38.

Something new—grind and polish on same lap.
No. 34—Combination copper and tin. $1\frac{3}{8}$ " of copper impregnated with 800 diamond, with $1\frac{7}{8}$ " insert of tin, \$33.41.

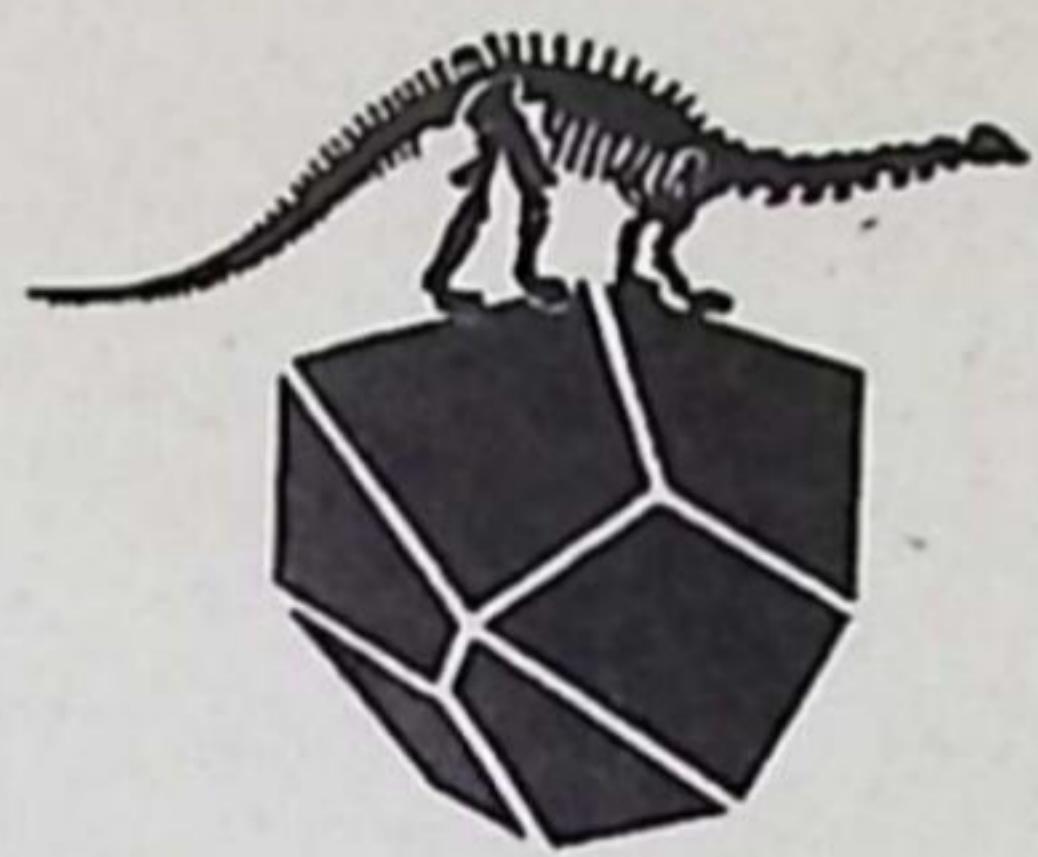
Above prices are for 8" laps— $\frac{1}{2}$ " arbor. If your dealer cannot supply you write direct to factory. All prices F.O.B. Los Angeles, subject to change without notice.

M. D. R. Manufacturing Company

4853 W. Jefferson Blvd.

Republic 2-7889

Los Angeles 16, Calif.



Cut Gems

SYNTHETIC STONES

	10-8	12-10	14-12	16-12	18-13	20-15
Aquamarine (<i>light blue Spinel</i>)	\$ 1.30	1.80	2.50	3.00	4.50	6.00
Sapphire (<i>burma-blue Spinel</i>)	\$ 1.30	1.80	2.50	3.00	4.50	6.00
Tourmaline (<i>green Spinel</i>)	\$ 1.30	1.80	2.50	3.00	4.50	6.00
Zircon (<i>green-blue Spinel</i>)	\$ 1.30	1.80	2.50	3.00	4.50	6.00
Light green Spinel	\$ 1.30	1.80	2.50	3.00	4.50	6.00
White Spinel	\$ 1.30	1.80	2.50	3.00	4.50	6.00
Sapphire (<i>Corundum</i>)	\$ 1.75	2.75	3.80	5.20	7.00	9.75
Golden Sapphire (<i>Corundum</i>)	\$ 1.75	2.75	3.80	5.20	7.00	9.75
Kunzite (<i>Corundum</i>)	\$ 1.75	2.75	3.80	5.20	7.00	9.75
Alexandrite (<i>Corundum</i>)	\$ 1.75	2.75	3.80	5.20	7.00	9.75
Garnet (<i>Corundum</i>)	\$ 1.75	2.75	3.80	5.20	7.00	9.75
Ruby, dark red	\$ 1.60	2.00	3.00	4.20	5.70	7.50
Ruby, light red	\$ 1.60	2.00	3.00	4.20	5.70	7.50

BRILLIANT CUT

	3	4	5	6	7	8	9	10mm
Spinel, all colors	\$.60	.80	.90	1.00	1.15	1.35	1.70	2.00
Ruby	\$.80	1.00	1.20	1.40	1.65	1.70	2.10	2.40
Corundum, all colors	\$.90	1.15	1.30	1.50	1.75	1.90	2.35	2.80
	10-8	12-10	14-12	16-12	18-13	20-15		
Onyx	\$.30	.35	.42	.45	.50	.56		
Onyx with 1 center hole 2mm	\$.34	.39	.46	.49	.54	.60		
Opal balls, 2mm, fine quality					\$ 2.00	per dozen		
Opal, round cabochons, 2 - 8mm					\$ 3.75	per carat		
Opal, oval cabochons, 6 - 4 up to 12 - 10					\$ 3.75	per carat		

All other precious and semi-precious stones available.

Custom cutting by well experienced cutters!

Terms: Check with order or cash against documents.

Minimum order \$10.00. Larger quantities special discount.

All shipments by airmail within two weeks after order receipt.

Checks on American banks may be sent to Germany. Cash, postal notes or money orders should be sent to my American representative, Mr. A. Kietz, Box 225, Route 4, Bellevue, Wash.

All materials sold on a satisfaction guaranteed basis and refunds will be made through Mr. Kietz.

I GREATLY ENJOYED MY VISIT AT SACRAMENTO AND THE COURTESIES EXTENDED BY SO MANY. IT WAS WORTH THE LONG TRIP FROM GERMANY TO MEET YOU.

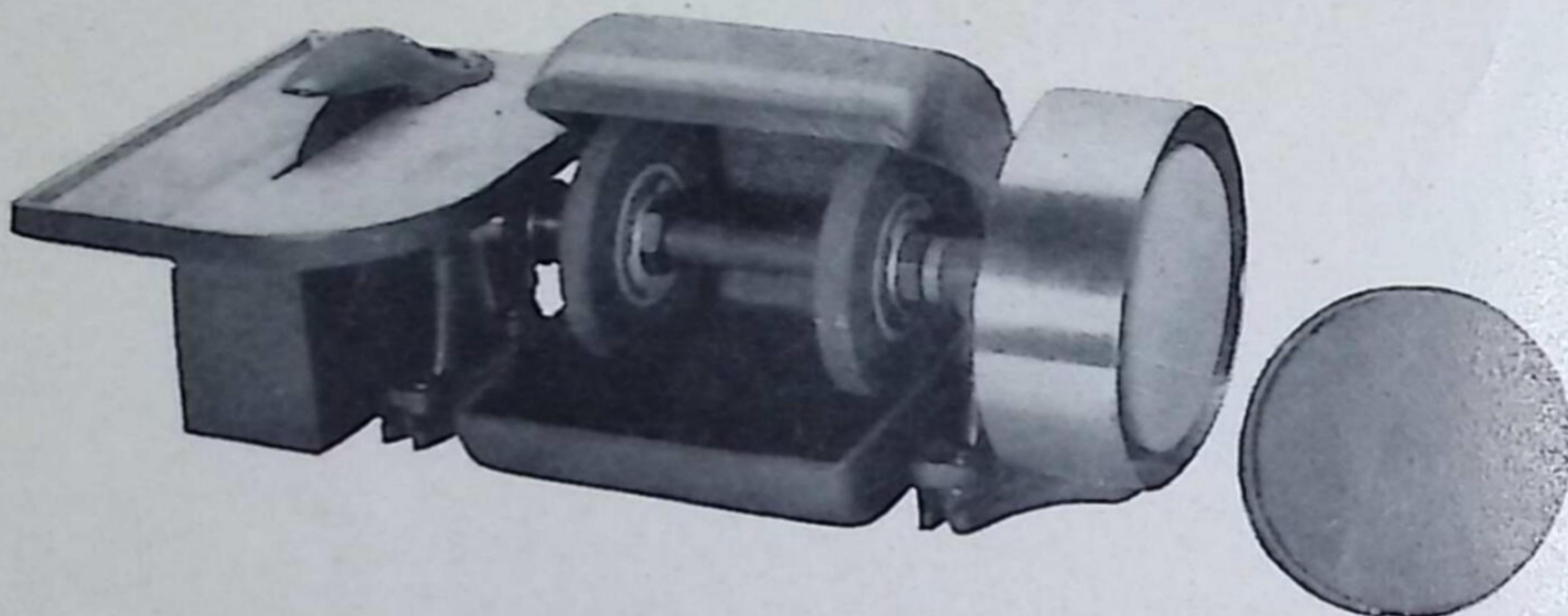
Dealers write for special discount terms.

J. HEINRICH A. MUELLER

14 Heinrichstrasse, Hamburg-Lohbruegge (24A) Germany (British Z)

LOOK!

IDEAL FOR BEGINNERS



JUNIOR GEM CUTTER

Polish Rocks into Beautiful Gems

Start this Art now with your stones or with stones included with the Junior Gem Cutter. Mount them in rings, bracelets, necklaces, etc.

An Ancient Art Made Modern with This New and
Inexpensive Machine

Anyone can learn! The whole family will enjoy this fascinating art. Easy and complete instructions are included with each Junior Gem Cutter.

ORDER NOW—\$37.50

★ Write for our New Free Catalog ★

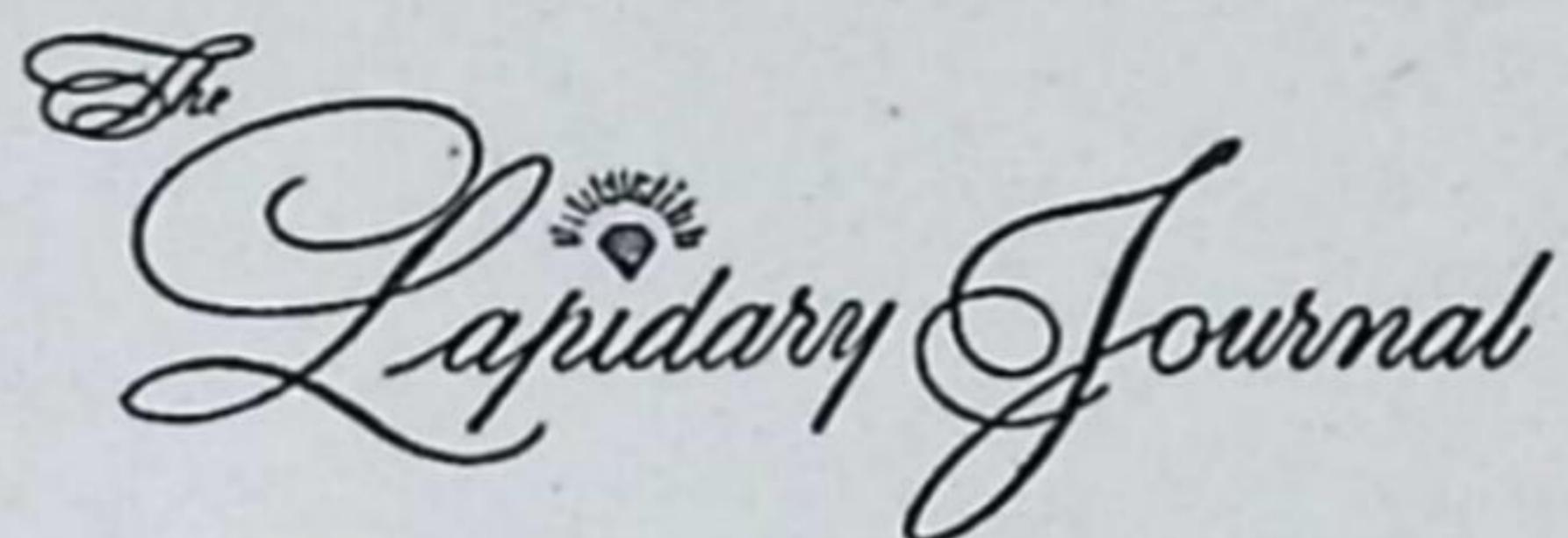
ALLEN LAPIDARY EQUIPMENT CO.

3632 W. Slauson Ave.

Los Angeles 43, California

GENE ALLEN, Proprietor

Telephone AXminster 2-6206



A NATIONAL MAGAZINE
for
THE GEM CUTTER, COLLECTOR
AND JEWELRY CRAFTSMAN

THIRTEENTH ISSUE

PUBLISHED BI-MONTHLY ON THE FIRST OF FEB.-APR.-JUNE-AUG.-OCT.-DEC.

Volume Three

August, 1949

Number Three

TABLE OF CONTENTS

COVER — Scene of the surf in a Texas agate. See information on Page 206.

	PAGE
AGATE AND SILVER TABLEWARE by J. W. Anderson	164
BOUQUET AGATE by Rudolph Fahl	174
FACETING TECHNIQUES FOR DIFFICULT MATERIALS by Griffin Grant Waite	178
THE STORY OF SYNTHETICS by S. V. Perricone	184
CARTOON by Millie	188
THE STANDARD BRILLIANT CUT	190
BEGINNERS PAGE	192
SHOP HELPS	196
WHO SAID IT'S JUNK? by Edwin S. Kirkland	200
PERSONAL FACETS by Lelande Quick	208
CALENDAR OF EVENTS	209
ANSWERS TO INQUIRIES	210
ROCKHOUNDS ARE HUMAN by Goldie Montaith	214
THE BIGGEST SOCIETY SHOW	216
GEM NEWS	218 through 221
NEWS OF THE SOCIETIES	222
GEMS FROM THE MAIL BAG	226
CLASSIFIED ADVERTISING	233-234
INDEX TO DISPLAY ADVERTISERS AND CATALOG LIST	235

Published by LAPIDARY JOURNAL, INC., 7231½ Santa Monica Blvd., Los Angeles 46, California. Address all correspondence to Lapidary Journal, P.O. Box 1228, Hollywood 28, Calif. GRanite 3478.

Manuscripts on lapidary, gem and jewelry subjects, as *contributions*, are solicited. Correspondence should precede submission. Copyright, 1949 by Lapidary Journal, Inc. ALL RIGHTS RESERVED. NO PART OF THIS WORK MAY BE PRODUCED IN ANY FORM, BY MIMEOGRAPH OR ANY OTHER MEANS, WITHOUT PERMISSION IN WRITING FROM THE COPYRIGHT PROPRIETOR.

Entered as second-class matter April 12, 1948, at the Post Office at Los Angeles, California, under the act of March 3, 1879.

Subscription rates \$2.00 per year (6 Issues)
In the United States and Its Possessions
Foreign Postage: 35 Cents Extra

Current Issue and Back Copies
50 Cents per Copy
(Oct. 1947 and Jan. 1948 not available)

Display Advertising Rates
Furnished on Request

LELANDE QUICK *Editor and Manager*
ALETAH QUICK *Circulation Manager*

◆ Agate and Silver Tableware

(Article Number Two)

By J. W. ANDERSON
3614 Ednor Road, Baltimore 18, Md.

This is the second article under this title by Mr. Anderson. The first appeared in the October 1947 issue of the *Lapidary Journal*, now out of print. It was one of the most popular articles we have ever printed. Mr. Anderson never took a silver lesson in his life. His only instruction was what he gleaned from William T. Baxter's book *Jewelry, Gem Cutting and Metalcraft*. Since making his first pieces, illustrated in these pages in October 1947, the author has made remarkable progress with his original investigation and his work received a Gold Cup Award at the Sacramento convention in June of the combined exhibits of the National and California Federations of Mineralogical Societies.

Many years ago a little boy told me that his father was a jeweler and blacksmith by trade. That seemed quite ridiculous to me until I began making agate and silver tableware.

Less than three years ago I took up silver work for the first time. I had cut six butter knife handles from a slab of Montana agate, intending to have a silversmith furnish the blades. Learning this would be costly I decided to do the work myself. This article is an account of my experiences in this new line of work. My only instructor was William T. Baxter's book *Jewelry, Gem Cutting and Metalcraft*. In the interest of brevity I shall not discuss such questions as hard soldering, sawing, pickling and polishing. That information may be found in many good books on jewelry making.

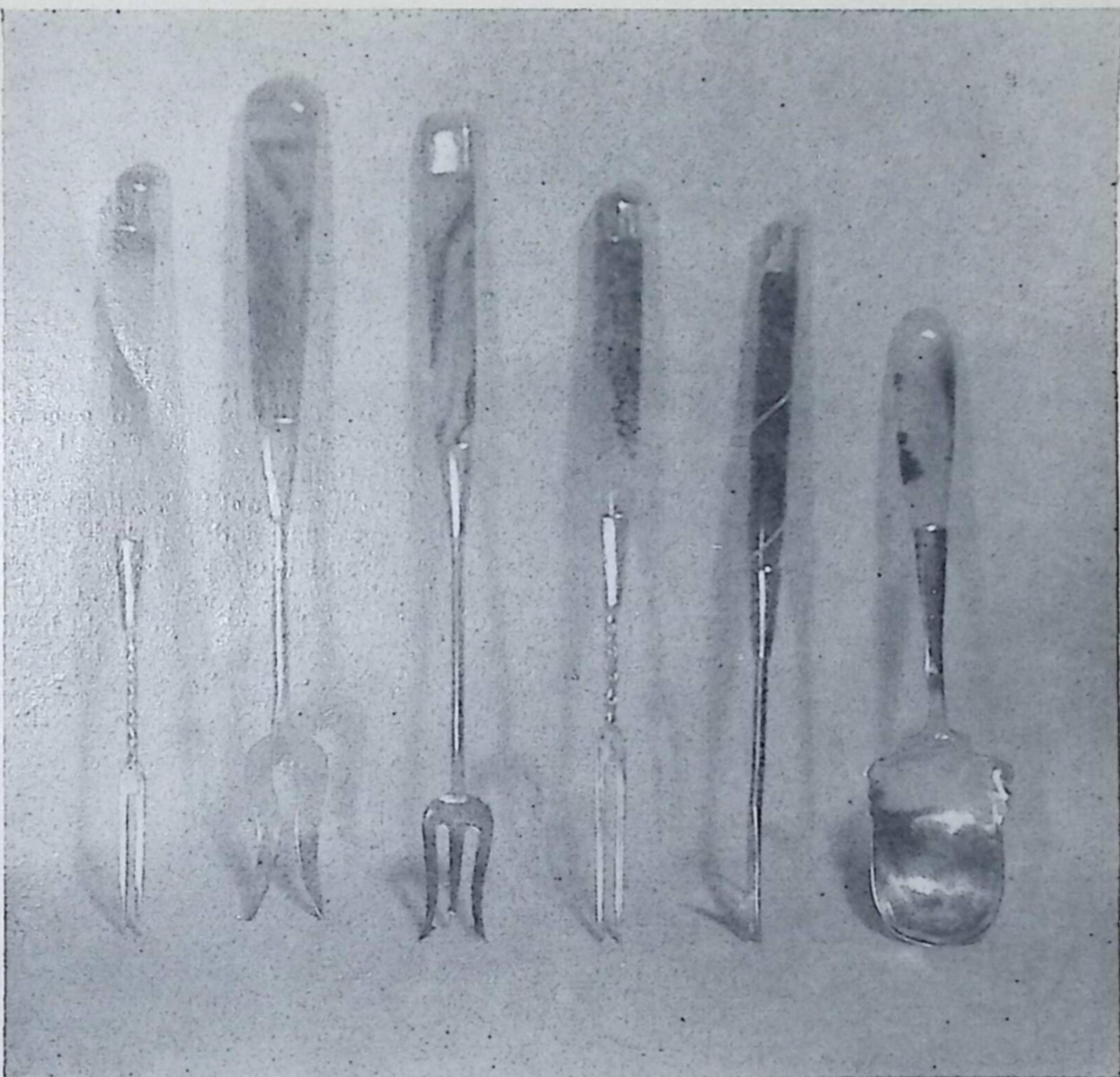
Besides the usual jeweler's tools you should have the following: one soldering derrick made from a piece of sheet iron, 3x16". Corrugate this lengthwise for stiffness and then bend into the shape of a letter L with the upright piece 12" high. Punch a double row of holes in the upright piece 1" apart.

This derrick is for holding long pieces upright when soldering them to cones for holding agate handles. One also needs a small derrick 5" high; one copper pickling pan 12x4x4"; one 12x12x1/2" asbestos soldering pad; several large files; one steel anvil 4x4x3"; one upper anvil 2x4x1/2"; several hardwood mandrels 12" long and from 1 to 3" in diameter; an assortment of tapered iron pieces to fit each size of cone to be made; some short square steel pieces; an assortment of

round-headed bolts 4" long for doming silver on a wooden block; an applewood block 6" in diameter and 30" long with assorted holes in the ends for making silver domes; one heavy hammer; one large pair of tin snips; one 6" bench vise; and one 10" pair of pliers for twisting heavy square silver wire.

As a rule the silver for this tableware is made in three separate parts and then joined together with hard silver solder. First there is the blade of the knife or the tines of the fork or the bowl of the spoon, as the case may be, then the shank and the cone for holding the agate handle. No drilling into the handle is required.

My first error when making a knife was when I finished the blade before soldering it to the cone. This left it soft and without temper. The proper method is to cut a rough rectangular piece narrower and thicker than the finished blade will be. Solder this to the cone and then hammer it to the required width for the blade, and then shape and finish the blade. This hammering restores the temper to the silver. To avoid deep hammer marks, place the rough blade between the anvil and upper anvil and use a heavy hammer. Follow this same procedure in making forks so the tines will be tempered. Spoon bowls should first be shaped and then soldered to the shank. The shape of the bowl gives it needed strength. For a straight knife blade cut the silver slightly curved. Hammering the cutting edge thinner than the back will straighten the blade. All spoon and ladle bowls are shaped on a wooden block with a wooden mallet. The silver should



Some of the author's earlier pitces

be annealed several times during this operation by heating it and dipping it into water.

Many types of shanks are used, depending on the size and nature of the work. In all cases they should be strong enough to stand hard usage. Some of my first ones were not heavy enough. The craftsman must rely on his own judgment in the selection of shanks. Round heavy wire, wire rope, square twisted wire and shanks cut from heavy sheet silver are all good.

When soldering a heavy shank to the bowl of a spoon or ladle of lesser thickness, file a notch in the end of the shank so the top of the shank is even with the inside of the bowl and allow the underside of the shank to extend under the bowl about $1/8$ ". This makes a neat and strong connection.

There are several types of cones for holding the agate handles. For butter knives the cones should be about $3/4$ " long with an inside diameter of about $1/4 \times 1/2$ ". It should taper very little and the small end should be capped with a piece of half round silver wire with a base of about $1/3$ ". To this the rough unfinished knife blade is soldered, using the small soldering derrick. This method is a great improvement over the one I first used which is described in the *Lapidary Journal* of October, 1947.

For large punch ladles and berry spoons, a round thimble cone is used. These taper slightly and are about 1" long and $3/4$ " in diameter. In making them, a heavy domed piece is soldered to the small end. Use the large soldering derrick when soldering a heavy 6" shank

to this cone. A modified form of this cone may be used when making small lamps or candle sticks where the base and upright part is of agate or onyx. For this purpose cones should not taper. Make the cone 1" high and 1" in diameter. To one end hard solder a 2" round disc. To the underside of the disc hard solder three short heavy brass screws. Set these with rapid stone cement into holes drilled into the base.

For handles only the best materials should be used. For strength and color my first choice is good quality Wyoming jade but the price is almost prohibitive. Poor quality jade is not satisfactory and is difficult to polish. My next choice is Montana agate but this cuts to a loss of about 90% due to cracks so that this fine material can seldom be considered. The most satisfactory agate I have yet found is called Escadillo agate and comes from Western New Mexico. Much of it is almost free from cracks and it takes a fine polish. It is very light blue in color, slightly banded, and sometimes contains a streak of crystals which are very attractive when worked into large, wide handles. I do not like highly colored moss or plume agate for handles unless the agate is translucent with but a trace of color or pattern. Handles should be notched near the small end before setting them in the cones with rapid stone cement. This cement may be purchased cheaply at any dental supply house. It is a creamy colored dry cement which should be mixed with water to the consistency of thick cream. Insert it into the cone with a pen knife, making sure it contains no air bubbles. It will harden in an hour but the implement should not be used for several hours. When fully hardened the handle cannot be removed without cutting the cone open or breaking the agate handle. All silver work should be completed before setting the handle. File the corners from the large end of the cone and burnish inward slightly before inserting the agate handle, which may then be tapped into the cone with a wooden or rawhide mallet.

Handles must properly balance the silver, both as to shape and weight. This is very important. Small round handles are suitable for pickle forks and their appearance is enhanced by capping the end with a translucent gem stone. For

something super-special, make a pickle fork with a round jade handle tipped with an Australian opal set in a band of gold. Such a fork would evoke favorable comment in any millionaire's home or in a King's palace.

A silver rope may be put on round handles of the harpoon pickle fork type. Solder twisted silver rope at an angle of 45 degrees to the cone and a tightly fitting cap for the end of the handle. Allow 1½" of extra rope for winding around the handle. Fasten cap securely to the handle and twist the handle in a cone filled with rapid stone cement until the wire rope fits tightly.

Knife handles should be flat with rounded corners and end. Spoon handles should curve and a cross-section should be elliptical in shape. Avoid both austerity and garishness but when in doubt hold to the simpler forms. Test all handles for strength before shaping them. Better to break weak ones before they are finished.

This work is still in the experimental stage. The best materials for handles and their designs, together with the proper weights of silver are all problems yet to be worked out. At present I am using the following weights:

For a light-weight nut bowl, gauge 21 from discs 5" in diameter. These bowls may be mounted on three small carnelian agate spheres. Punch bowl ladles 4½" in diameter, gauge 15. Punch bowl shanks six inches long from square twisted wire, gauge 4. Table spoon shanks from sheet silver, gauge 11. Pickle fork shanks from round wire gauge 6 or 8. For most cones, gauge 25. All silver should be heavy enough to stand hard usage for generations.

For the beginner, I would recommend making five small 6½" two tined pickle forks. For these the following amount of silver would be needed and would cost about \$4.70, or 94 cents per fork.

For the tines, sheet silver 3 x 13/4"—gauge 15.

For cones, sheet silver 1 1/8"—gauge 25.

For tip bands for setting gem stones, 1/8 x 9"—gauge 22.

For shanks, six and one-quarter inches of round wire—gauge 8.

From the six inch strip of 25 gauge silver cut a keystone shaped piece, the top being 1 1/4" long and the bottom

THE 1949 FALL EDITION OF GRIEGER'S "ENCYCLOPEDIA AND SUPERCATALOG OF THE LAPIDARY AND JEWELRY ARTS" \$1.00 PER COPY

Will be available after August 15th. This unique publication has been revised and many new pages added. It will contain at least 200 pages 9"x12" in size, and many new informative articles on jewelry work by authors such as Louis Wiener, Emil Kronquist and Wm. Baxter.

An extensive article entitled "WHAT DID I FIND?" by Mr. E. V. Van Amringe of Pasadena City College will be worth more than the price of the catalog. Charts and pictures will show you how to identify the various specimens you may collect.

New articles on facet cutting, a new field trip, and other outstanding features will make it imperative that you own a copy.

Sent Postpaid in U.S.A., Its Territories and Canada for Only \$1.00

READ THESE REMARKS BY THOSE WHO PURCHASED THE FIRST EDITION: "I would still buy it at \$3.00 to \$5.00 as it contains as much if not more meaty information for the lapidary and jeweler than any of the books on the market selling in that price range." "The amount we paid is so little for so much catalog." "It is better than most lapidary handbooks." "It is the only satisfactory catalog of lapidary supplies and materials that I have ever seen. It is superbly illustrated and superbly printed." "I haven't seen anything like it at any price."

THE 1949 REVISED EDITION WILL BE MUCH SUPERIOR TO THE 1948 EDITION RUTILE RAINBOW GEMS

RUTILE IS THE GEM OF THE HOUR—IT IS NOW A REALITY

After years of experiments, synthetic Rutile is now available in cut gems of unbelievable beauty. This magnificent substance has been given the name of "TITANIA."

TITANIA must be PROPERLY CUT. We are VERY PROUD of the FINE QUALITY GEMS produced by our cutters. NO SALE IS FINAL unless you are perfectly satisfied with the cut gem you purchase from GRIEGER'S. We will mount TITANIA GEMS in any type mounting and GUARANTEE A PERFECT JOB.

"THE STORY OF RUTILE" is a pamphlet which is sent free upon request. It gives all the facts about this AMAZING NEW GEM. . . . The colors range from almost colorless to a light canary diamond color. Then there are occasional blue green gems and other odd colors for the connoisseur of rarities.

Be the first in your community to own one of these beautiful new Rutile or Titania Rainbow Gems!

DEALERS' INQUIRIES SOLICITED

Everyone to whom you show this new gem will wish to purchase one of them. Send for details of our discount plan that will permit you to own one of these new gems at no cost to you. You merely sell several to your friends and the discount you earn will pay for yours. We can mount these in beautiful gold earrings, rings, brooches, pendants, etc.

Our store will be closed to all drop in trade during August. Mail, phone and telegraphic orders will be promptly filled by our regular staff.

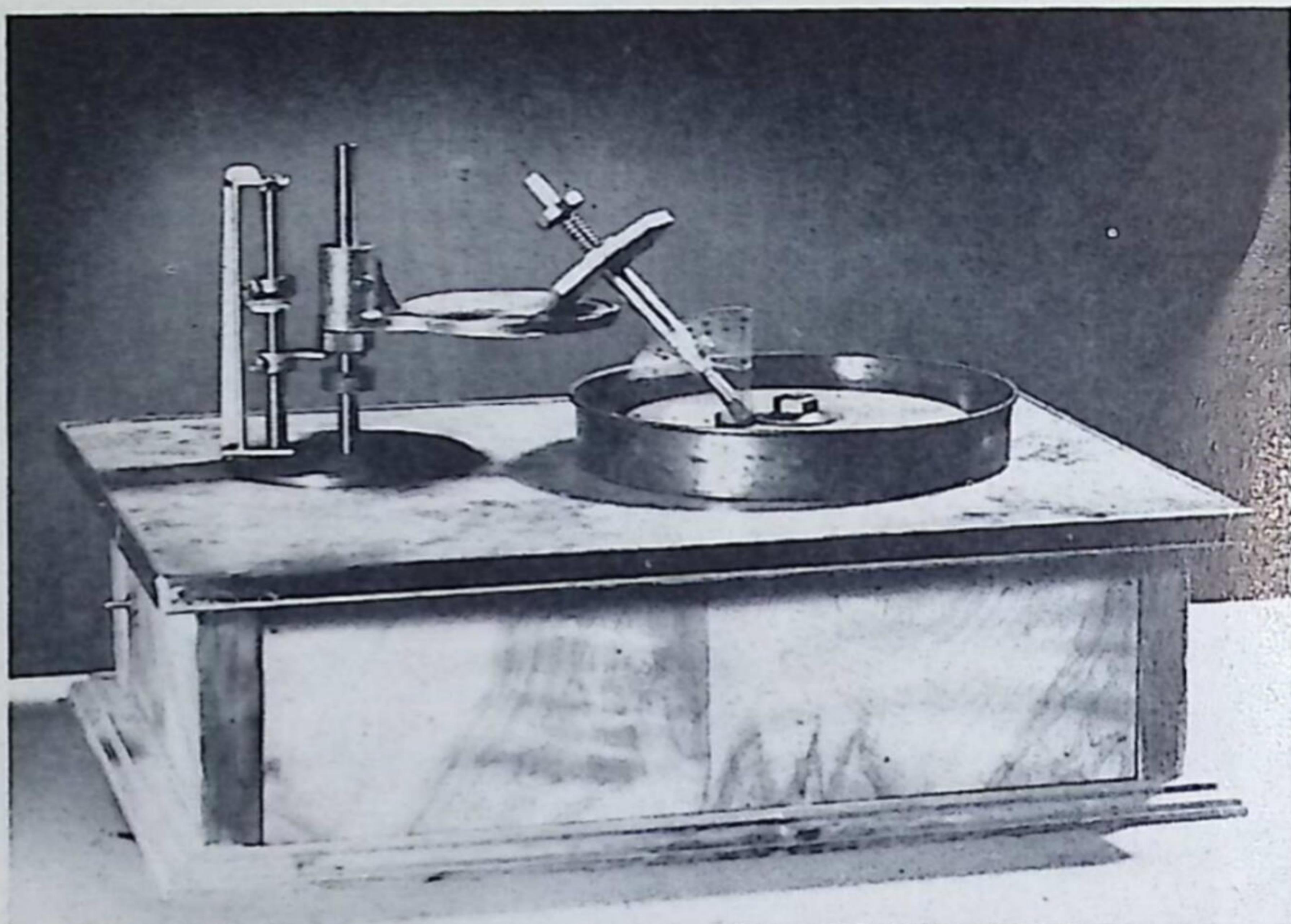
Griege's

1633 EAST WALNUT STREET
PASADENA 4, CALIFORNIA

Phone SY. 6-6423

Open on Friday and Saturday only 8:30 AM-5:30 P.M.
Monday thru Thursday open by appointment only

SACRAMENTO . . . '49



THE O'BRIEN FACETING HEAD

For YOU — the visitor—a superb convention and a wonderful time.

For us — the acid test for our new tool—the test that YOU—many hundreds of you—told us we passed with flying colors.

To bring out a new tool is not too difficult. First you get an idea. Then you give up a few (and quite a few) hours of sleep in thinking it out; a few hours sketching; a few more hours correcting the first designs; a few days making a test model; a few months' testing; more corrections; more testing and THEN comes the DIFFICULT part—PUBLIC APPROVAL and ACCEPTANCE.

But YOU, who have seen and used and bought the tool removed that last test from our hands—YOU praised it and accepted it beyond our greatest hope.

YOU know the simplicity—for many of you who thought it impossible to facet told us that now you could do so on our tool.

YOU know what the total freedom from constant hunting of index numbers for each and every facet means to you—for you told us how our tool would save you all that wasted time and mental effort.

YOU know what it means to return to any row of facets from any other row and be on the cut accurately—for you told us our tool requires no trial cuts when equalizing the facets.

YOU know how difficult inspection of your gem can be when using any of the fixed dop-arm type of heads—for many of you told us you regarded our free dop stick as a great advance in faceting history.

This is what YOU said — We say THANKS!!

THE O'BRIEN FACETING HEAD

Standard Model \$39.50 Professional Model (with vernier) \$44.50
(Without table as illustrated)

Prices F.O.B. Hollywood, Calif. Shipping weight approximately 7 lbs.
Our new factory on Wilcox Ave. in Hollywood, will be completed about August 15th.

PROFITABLE DEALERSHIPS OPEN — WRITE FOR DETAILS

The O'Brien Faceting Head will be demonstrated at the Glendale Show

Send a postal today for your copy of our literature and see for yourself how simple and easy faceting can be.

O'BRIEN LAPIDARY EQUIPMENT CO.

1125 N. HUDSON

GLADSTONE 3986

HOLLYWOOD 38



Upper row—Mustard spoons, butter knives, servers, paper cutters, sardine scraper, pie and pickle forks.

Middle row—Ladles, servers and berry spoons with a bracelet and belt between the rows.

Bottom row—Ladles, iced tea spoons and servers with napkin rings and mustard pots below.

7/16". Shape into a cone and hard solder. Cut 1 1/4" from round wire and solder to the cone. Cut a piece 1 3/4 x 5/16" for tines and solder to the wire shank, first flattening the tip of the shank to the proper thickness. Pickle and place the rectangular piece between the anvil and the upper anvil and hammer to restore temper to the silver. Saw out the center to form two long tines; then file, sand and polish.

For a handle cut a piece 7/16" wide from an agate slab 7/16" thick and 3" long. Grind the handle round and taper it to fit the cone. Fit a 1/2" silver band to end of the handle to hold the gem-stone. Set the stone in the band and set the handle in the cone with rapid stone cement. Approximate time for all these operations is about four hours.

A slight trace of hammer marks adds character to hand-wrought silver. Hand-wrought work should always look the part. A high, glossy mirror-finish suggests costume jewelry or articles made from stainless steel. One should not consider factory perfection the ideal for this

work. It should rather resemble the old hand-wrought work of two hundred years ago.

A set of hand-wrought spoons or forks or knives should be alike and resemble each other without being identical—just like the leaves on a tree. God never made two things exactly alike. The craftsman should not fail to make the most of this advantage over the factory and the opportunity it presents for originality in designs. Working out original patterns is one of the greatest joys of hand-wrought work. Some teachers frown upon originality in their pupils, lest their work reflect discredit on the teacher. Some pupils fear originality lest their work expose their ignorance of art. If what we make is pleasing to the eye, and serves well the purpose for which it was made, nothing else matters. Art is not an exact science, especially today. As a friend of mine said to me, "Modern Art does not create what we see but what we feel." I like that statement. Have courage to be original and do things the way you *feel* like doing them. If they turn out badly,

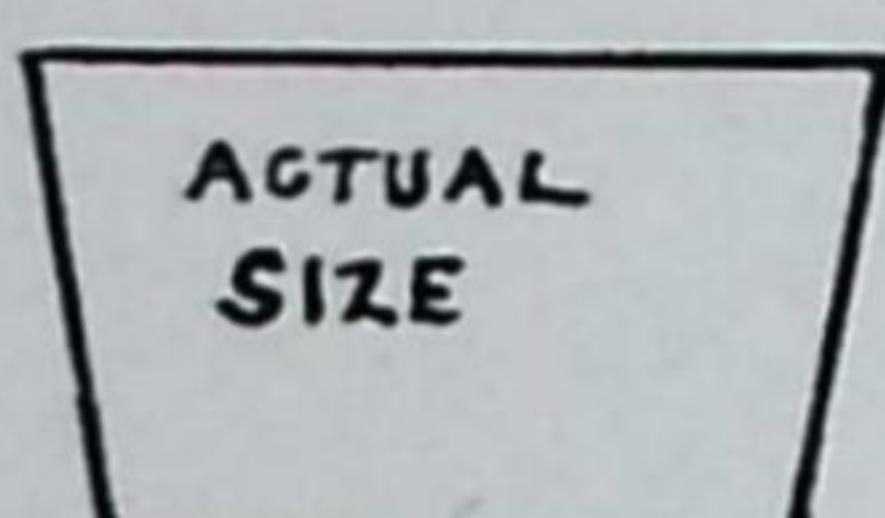


FIG. 1



FIG. 2

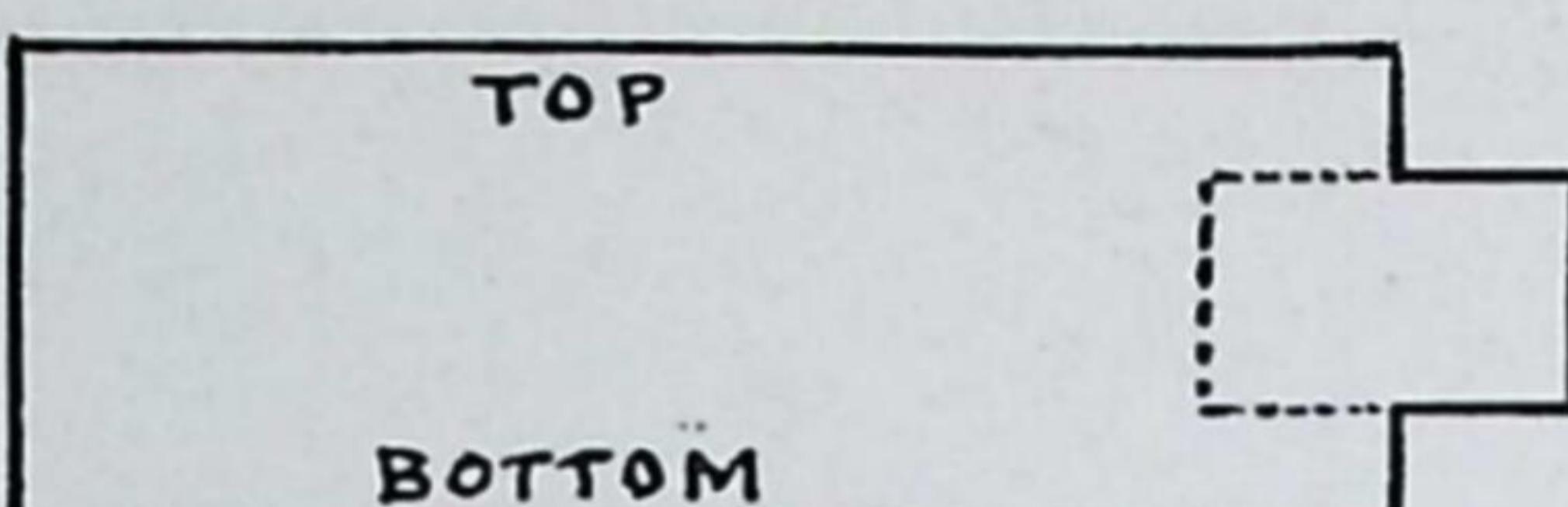


FIG. 3

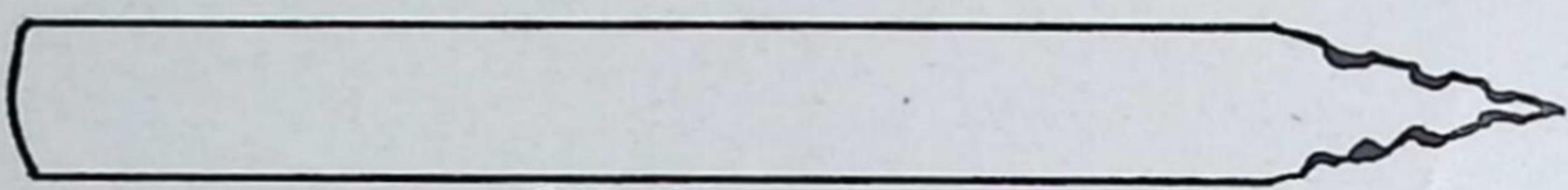


FIG. 4

find satisfaction in the fact that it's your own original creation and the only one of its kind in all the world and that if you are patient someone will come along and tell you it's the finest thing you ever made.

The exact reproduction of a painting is not Art and in literature a reproduction is plagiarism and is unlawful. What a shock it would be to receive a beautiful letter from a friend and later find the identical letter in a book on letterwriting. Exact reproductions suggest mass production, or Federal Housing projects where all houses are alike save for the street numbers above the front doors. Originality is not always inspirational but rather the task of working out some problem.

Once I was making a paper knife from silver and agate. I wanted the blades to cut to advantage from the silver sheet so that ruled out fancy shaped blades. Next I wanted a round agate handle which would necessitate a round silver cone which must be fastened to the blade. After many unsatisfactory designs I hit upon the idea of bending the end of the blade upwards and inserting the cone through this upright piece. This was very satisfactory and I think entirely original. It did not come like a flash of light but followed hours of experimenting. Using some of my discarded designs I worked out another original letter opener in which a gem stone is set in a bezel the entire length of the handle.

Use binding wire sparingly. Silver need not be bound together for hard soldering. It is sufficient that the two

pieces make contact. The capillary attraction of the solder tends to hold the two pieces together. No harm will follow the unsoldering of a joint providing there is no stress on the joint to pull it apart. For soldering domes use granulated solder. Spread the solder thinly on a smooth surface and after fluxing set the dome on granulated solder. Enough will attach itself to the dome to allow all vapor to escape before the solder flows. It will not be necessary to hold or wire the dome in place. When making a silver agate belt the domes will become unsoldered when soldering the links of the belt together. To prevent the domes from shifting let the dome rest in a depression in the charcoal soldering block and the weight of the belt will hold the dome in place. When possible use the force of gravity to hold unsoldered joints together rather than binding wire.

Much time will be saved by using long pieces of wire solder rather than small pieces of sheet solder which must be heated slowly to prevent it from jumping off the work. Simply flux the work and then apply a good strong flame to the silver and when it turns a dull red, touch the solder lightly to the silver. With a little practice this method will save a lot of time.

The commercial possibilities of this work should not be overlooked. There would be little or no competition for years to come. It does not lend itself to mass production so the market should never be flooded. On the Pacific Coast the conditions are ideal for the organiza-

GEMINLAP MART - SUMMER BARGAINS

The prices quoted here on quality items are normally given for larger quantities only. Don't delay. Take advantage now. Prices good *only until September 30, 1949*. All items post paid. All items **STERLING** unless otherwise stated.

1 doz. Earwires with 7 MM pads.....	\$.75
1 doz. Earwires with 11 MM pads.....	1.00
1 doz. Assorted round pendant mountings.....	5.40
8 Assorted 18" neck chains SS & GF—light to heavy.....	4.00
1 doz. Spring rings—scant 1/4"—sterling OR gold filled.....	1.00
1 doz. Fancy fishhook type clasps.....	1.00
1 doz. Spring type safety catches.....	1.00
5 1/4-lb. sticks red rouge for metal polishing.....	1.00
5 ft. Light fine silver bezel stock.....	.50
5 ft. Heavy fine silver bezel stock.....	1.00
3 pr. Earmountings for 8x10 MM oval stones.....	1.00
3 Assorted ring mountings—hand made—engraved for large stones (2 ladies', 1 men's).....	3.90
1 doz. Pairs ring shanks—all different.....	5.00
6 doz. Thin wire jump rings 3/16"—most popular for chains, hanging bangles, etc. Never offered elsewhere.....	.50
1 gross Assorted GF jump rings in box.....	1.00
2 lbs. Golden Tiger Eye in 1/4 to 1/2 lb. pieces. No. 1 quality.....	2.00
5 ft. Assorted brass bezel wire for practice.....	.50
1 ft. #1 SS heavy bezel wire (fancy).....	.72
1 ft. #2 SS light bezel wire (fancy).....	.40
1 ft. #3 SS medium bezel wire (fancy).....	.60
1 ft. #5 SS edge bezel for pendants.....	.40
3/4 oz. GML #33 Silver Solder.....	1.00
1 Pint Gemol, postpaid. Makes 60 pints sawing solution.....	1.00

"EXTRA SPECIAL TIGER EYE ANNOUNCEMENT." Recent arrivals of tiger eye in fancy two and three colored pieces, blue, blue-green, red, choice straight grain golden and very fine close banded golden make it possible to offer you this material at rock bottom prices. Write The GEMINLAP MART for prices today.

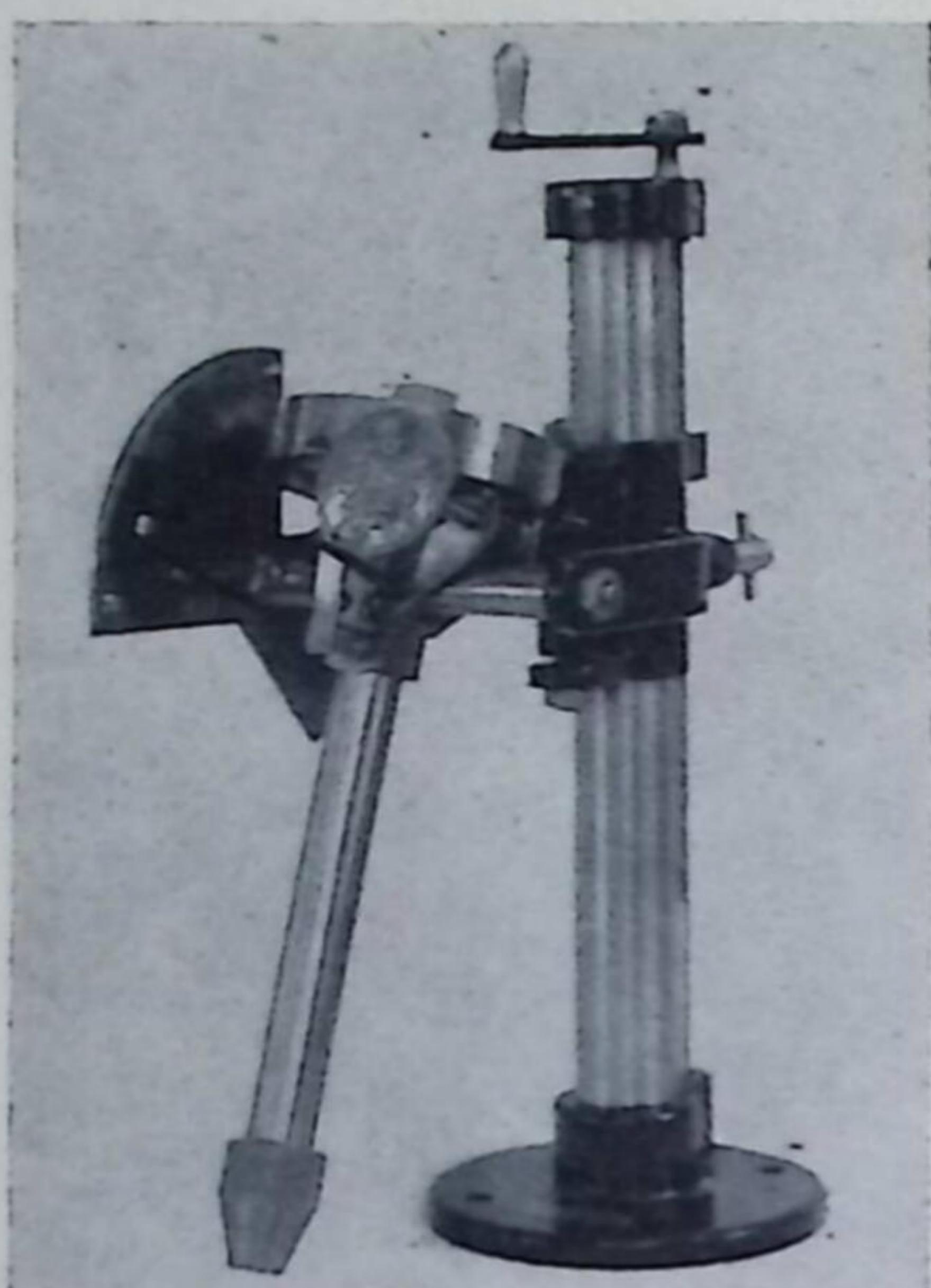
NEW ILLUSTRATED CATALOG for the Jeweler and Gem Cutter will be ready about September 15th. Don't do anything else until you have written a card for this splendid FREE catalog. Many, many illustrations so that you can see what you are buying. We can't list them here because there isn't any more room.

The GEMINLAP MART

Your Wholesale Jewelry and Lapidary Supply House

4604 S. 49TH ST.

MILWAUKEE 15, WISCONSIN



P. S.

That stands for Past Sacramento. If you went and enjoyed the exhibits and meeting the "gang" as much as I did then your time was well spent. It was a good show and the Sacramento bunch deserves a good hand.

After comparing the features of the Taylor with the various other faceting heads, what do you think?

Write for complete information on the various models priced at \$47.50, \$62.50 and \$72.50.

M. D. TAYLOR
1560 Picardy Dr. Stockton, Calif.

tion of a hand-craft guild, within the framework of present organizations, for manufacturing and selling agate silver tableware. You already have many trained lapidaries and silversmiths and people of wealth from which to build up a select clientele. Starting in a small way, selling only quality goods stamped with your own trademark, such a guild could become nationally famous in a few years. We are attempting a movement of this kind for teenagers in Baltimore but we must start from zero and train them first in lapidary work. We have more than seventeen thousand Boy and Girl Scouts in Baltimore and we hope to have several hundred of them doing lapidary work within the next two years.



The author examining his art

GEM CUTTING

by *J. Daniel Willems*

Order Through Your Dealer or Direct

3298 Duroc Bldg.

Peoria 3, Illinois

→ THE MANUAL ARTS PRESS ←

RX

JIFFY GEM CUTTER

RX offers an entirely new type of lapidary machine. One that will run accurately for a lifetime and on which you can perform any lapidary operation with a satisfaction not found in any other equipment.

The RX **JIFFY GEM CUTTER** costs so little that anyone can buy it. By adding a few accessories from time to time you soon have an outfit that is fully complete for any lapidary operation. The **JIFFY GEM CUTTER** is the result of many years of building fine lapidary machinery. With it you can get started in your lapidary hobby in a very inexpensive way.

The RX **JIFFY GEM CUTTER** arbor is not just an arbor as one usually thinks of an arbor. IT IS A PRECISION MADE ARBOR. There is no comparison between this arbor and others now offered to the lapidary trade. A simple inspection of it will quickly convince anyone of this fact. It is made in a shop which for many years has specialized in the making of precision instruments.

The shaft runs in two sealed ball bearings and, in addition, spinning protection cup guards are used for each bearing, absolutely insuring protection from moisture, dirt or grit. It cannot be too strongly emphasized that moisture, dirt or grit coming in contact with a bearing means a short life and poor running qualities. This is an additional cost of manufacture but is positively necessary if you want a true running and long life machine.

The end of the shaft is threaded to accommodate any RX accessory. The bushing can be removed and it will then take any $\frac{5}{8}$ " bore. Wheels up to $1\frac{1}{2}$ " wide can be used.

RX accessories can be changed in a few minutes.

RX JIFFY GEM CUTTER arbor	\$29.26
Left hand Guard (which can be used on right)	8.70
Right hand guard	4.70
Plywood trim saw table	1.50
Tin oxide pan for hard felt buff	1.50
8 by 1" grinding wheel, 100 grit	5.10
8 by 1" grinding wheel, 220 grit	5.75
8 by 1" hard felt buff	6.75
8" cast iron lap (threaded)	7.00
8" Diamond saw .032	9.00
8" aluminum disc Sander	7.00
8" aluminum leather covered Polisher	7.00
8 by 3" quick change drum sander	8.00
Drain Pan	5.00
Crating charge	2.00

In ordering start with the **JIFFY GEM CUTTER** arbor at \$29.26 and add whatever accessories you need.

SEND FOR ILLUSTRATED LITERATURE

RX LABORATORY

1355A S. CHICO AVENUE EL MONTE, CALIF.

Prices F.O.B. El Monte, Calif.

◆ *Bouquet Agate*

By RUDOLPH FAHL
1106 N. Nevada, Colorado Springs, Colo.

The thrill of discovery is one of the greatest joys of the true rockhound but it is given to few to experience this keen rapture. Imagine hunting rocks over many thousands of miles through a dozen or more states and returning home to find one of the rarest and most beautiful specimens virtually in your own back yard!

That is what happened to Anton J. Burgard of Alpine, Texas, who has become famous throughout the country for his delicately lovely picture agates as a result of this find. Moreover it turned him from an amateur rock hunter into an agate expert and dealer within a few months, and gained him the title of "The Agate Magnet Man."

Like most folks, "Andy" Burgard took to rock hunting as a hobby. His vocation was pattern making and he is still a member in good standing of the Pattern Makers' League, which he joined away back in 1910. He was in supervision work in the pattern-making division of the Wright Aeronautic Company at Paterson, New Jersey, when the lure of the agate first caught him. It brought him to Texas where he settled in Alpine, Brewster County.

In the spring of 1946 he and Mrs. Burgard started on their pursuit of the agate. They hunted agates up and down the state of California, on up into Oregon, into Montana and on and on into most of the western states. Yes, they found agates, tons of agates, but Andy, the perfectionist, was never quite satisfied with his finds.

Shortly after they returned home they went on a hike in their own community and there, close by (not at the end of the rainbow they had been chasing) they found agates such as they had never seen before—plume agates, scenic agates, flower agates, and that rarest find of all, pure white plume agate, which was named Bouquet Agate by the editor of this magazine at the San Antonio rock convention in May.

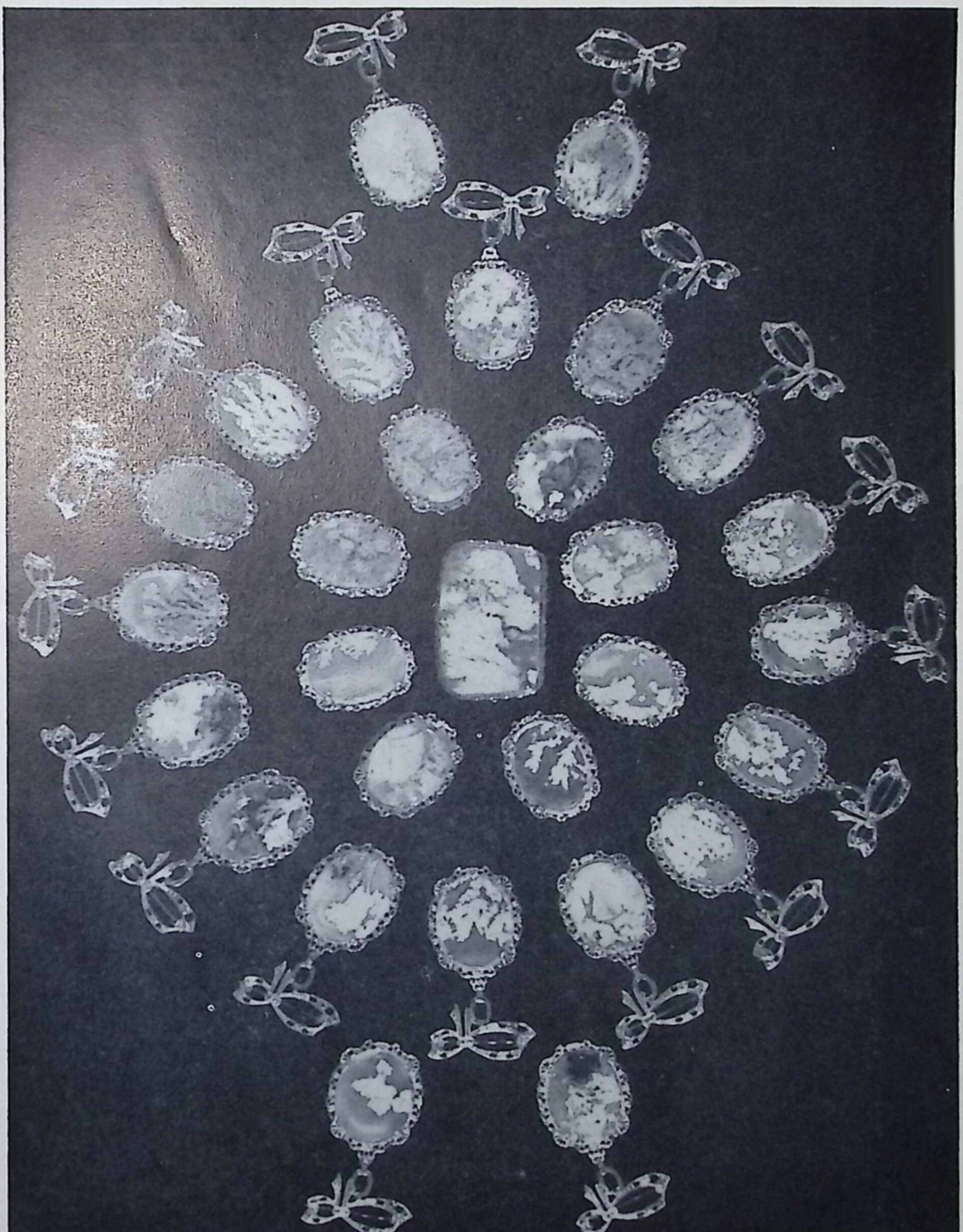
Andy sought out the owner of the ranch which bore this unique crop; showed her the agates and offered to pay for them. The ranch owner nearly keeled over from shock. She said rock hunters had visited the place many times but that Andy was the first to offer to pay anything for the rocks. From that time on it became Andy's ranch so far as rock hunting was concerned. He paid the owner for everything of value found on the premises and posted the property to keep it as his exclusive happy hunting ground. That was the first ranch posted for rock hunting in Brewster County.

Of course Andy was not selfish. Like all good rockhounds, his greatest joy was sharing his discovery with his fellow enthusiasts and he often led parties over the area urging them to dig to their heart's content. There are many rockhounds' heavens all over the country but those hunters who have gone with Andy insist that his "Elysian Fields" are the real paradise.

These groups have dubbed him "The Agate Magnet Man." They laugh as they tell about the pauses for lunch when, seated on the ground, Andy, a sandwich in one hand, suddenly reaches over and picks up an agate. Then, spying another, he puts his sandwich down, reaches for the new agate, then another and another. By the time he turns back to his sandwich the ants have taken care of it for him.

But what has he found? Perhaps carnelian plume agate, plume sagenite, or the lovely opalized white agate that is formed in volcanic ash. Many times he picks up small chunks that other collectors would ignore as too insignificant. In most cases, Andy says, he has found his most unusual pictures in these small agates, although he has found excellent gem-quality agates weighing as much as ten pounds.

How does he discover these amazing miniature scenes and objects? Andy says he literally *feels* his way in cutting into his agates. Perhaps his pattern-drafting



Tray of lapel pins set with Texas Bouquet Agate

experience is of help to him here. First he uses a diamond saw to cut a very thin sliver from the outer edge to see what the pattern is and how it is going to run. If this reveals nothing unusual he takes a slice from the other side. From then on what comes out of that agate seems to be sheer magic.

One of Andy's most famous ring settings is a perfect Joshua tree form almost a quarter-inch high in shades of brown and growing in black soil. The tree stands against a pale creamy translucent sky. Another ring-set shows a well-defined thistle and still another a blooming Cholla cactus in red and black against a milky sky. One of the most unique of the ring-sets reveals a tiny jack rabbit but if you turn the ring the object appears to be a running horse. Another ring-set contains a meditative stork poised on a black stump against an open sky of pale yellow. But, the most beautiful of all is pure white and imbedded in its clear translucency is a true plume of silvery white.

Some of Andy Burgard's most outstanding pendants and cabochons show vivid red trees against a blue-white sky, forest scenes with well-defined paths through the trees, floral shrubs resembling chrysanthemums in yellows, reds and tans. One shows a black thunder cloud, a streak of lightning running to the earth below and seemingly an ensuing grass fire. One gorgeous pink agate with fortifications in black and red, Mrs. Burgard calls, "Pearly gates to heaven." Another is a picture of a sunny yellow hillside covered with autumn maples while still another shows a bed of ferns with an overhanging branch of a tree. A black witch perched in a black tree against a light sky background is another amazing miniature, and there is a pelican in flight and a series of silver-gray hearts—hearts actually formed in the agate!

That Burgard is an artist in selecting designs from his material is acknowledged by all who have watched him work. When asked whether the Alpine plume agate undercuts or pits, Andy said he had been very fortunate in this regard as comparatively few pieces undercut or pit.

Mrs. Burgard takes part in all activities whether in the shop or on field trips. She laughed when the question was put to her whether rock hunting was her

hobby. "It had better be my hobby," she said, "or I'd be a rock widow."

AUSTRALIAN OPALS

(Direct from Australia)



CUTTING OPAL

Assorted Parcels of Green, Blue, Blue-Green, Red-Green and Red Fire
From \$2, \$3, \$5, \$10 per ounce
and upwards—Minimum trial lot \$15
Postage paid to your address

BOULDER OPAL SPECIMENS

From 1", 2", 3" to 6" in size
Green, Blue, Fire Colors in Brown Rock
Trial Parcel (20 to 50 Specimens) \$15
(Not recommended for cutting)

BLACK OPAL—FACED

(Partly polished)

All Colors, from \$1 to \$10 per
carat weight, and upwards

Also Zircons, Garnets, Topaz, etc.

Please remit by International P.O.
Money Order

Orders promptly executed
Satisfaction assured

Write for our Free List No. 460

ADDRESS

N. L. SEWARD

"Highlands", 2 Studley Ave. Kew.
VICTORIA, AUSTRALIA

Handbook For the Amateur Lapidary

HOWARD . . . PRICE \$3.00

The most complete treatise ever written on the subject of the theory and practice of gem cutting. Step by step instructions—simple—clear—concise, easily understood by the beginner.

New techniques—new tools—new helps, helpful for every advanced student.

Large—225 pages. Well illustrated—62 drawings and photos. Excellent cloth binding. Good index.

Logical arrangement.

ORDER TODAY FROM: Your Bookstore—your lapidary supply house—or the author and publisher

J. H. HOWARD

504 Crescent Ave. Greenville, S.C., U.S.A.

THIS IS IT TEXAS BOUQUET AGATE

This is the material lapidaries everywhere are talking about. They are talking about it because it is *NEW*. They are talking about it because it is *RARE*. They are talking about it because it is *the most beautiful flower and moss agate found anywhere*.

This is the material discussed on Page 174 of this issue and illustrated on Page 175.

This material was named **Texas Bouquet Agate** by the Editor of the **Lapidary Journal** at the Texas Mineral Show at San Antonio in April, 1949.

Texas Bouquet Agate cannot be purchased anywhere but from me for I control the deposit.

Your Moss, Plume and Flower agate collection is certainly not complete if you have none of this fine material.

Sold in slabs only. You see what you get. Selections of \$5.00, \$10.00 and \$20.00 in various colors sent postpaid.

Satisfaction guaranteed or money refunded.

This material is quite limited. I also have red plume agate and cabochons of Texas Bouquet in lapel pin or scatter pin sizes. Inquire for prices.

Stop in and see me if you drive through Alpine. Watch for the trailer at the motel on the right as you drive South out of town.

A. J. BURGARD

BOX 868

ALPINE, TEXAS

Fine Agate Jewelry For Sale

◆ Faceting Techniques for Difficult Materials

By GRIFFIN GRANT WAITE
38 St. Germain Avenue, Toronto 12, Canada

In the interval since writing Chapter 7 for J. H. Howard's *Revised Lapidary Handbook* the writer has been attempting to cut a number of minerals that are not ordinarily cut by amateurs and seldom even by professionals. The October, 1947 *Lapidary Journal* covered some of the techniques that the writer had found worked in some of these cases, particularly on the softer minerals. Certain modifications to equipment have since been of great help and we herewith describe the modified equipment and methods used. It is assumed that the reader has access to the October, 1947 *Lapidary Journal* so that repetition will be intentionally avoided as far as possible. (This issue is out of print. *Editor*)

"Difficult materials" seem to fall into three categories. The first category is where the material available is badly flawed or has many cracks and care has to be exercised to avoid thermal or mechanical shock extending the cracks into the region of the gem to be. This class of headache happens too often in the case of some rare item where the amateur lapidary counts himself lucky to get even a poor piece of the material.

The second category is where one has to deal with a material that is unusually sensitive to mechanical shock. Such materials are usually those with excessively easy cleavage, complicated sometimes by softness. The toughest example that comes to mind is trying to facet a nice gem from a book of muscovite mica.

The third category (and undoubtedly the most difficult to deal with) is where the material has extreme heat sensitivity. This is the case where the material has a high thermal coefficient of expansion made worse by a low coefficient of heat conduction.

In general the techniques required by difficult materials in the first category can be selected by a judicious exercise of

horse sense from those given for categories 2 and 3. No time will be spent on category 1 other than to state that it is very wise to treat such material as both mechanical shock sensitive and heat shock sensitive.

In order to make clear the modifications to equipment found helpful diagram 1 is hereby reproduced from Howard's *Revised Lapidary Handbook*. Photograph (Fig. 2) shows the hinged arm introduced between the standrod tube and the swinging quadrant. It will be perceived that this has two hinge points about which the dopped gem can swing. It results in making a large area of presentation to the lap available. This may not appear important until one realizes that every radius on the lap in this area has a different direction of travel relative to the stone. Fig. 3 shows the area of presentation, both with and without the hinged arm.

Any spot on the lap may be reached with the hinged arm and for low angles between the dop stick axis and the lap surface this can actually be done. Therefore for low angles (up to 30 degrees) any direction of polishing may be achieved. For higher angles however, any attempt to use the unshaded area of Fig. 3b would result in a wedging action of the stone and dop stick against the lap. The result of wedging will certainly knock the stone from the dop stick and perhaps break it.

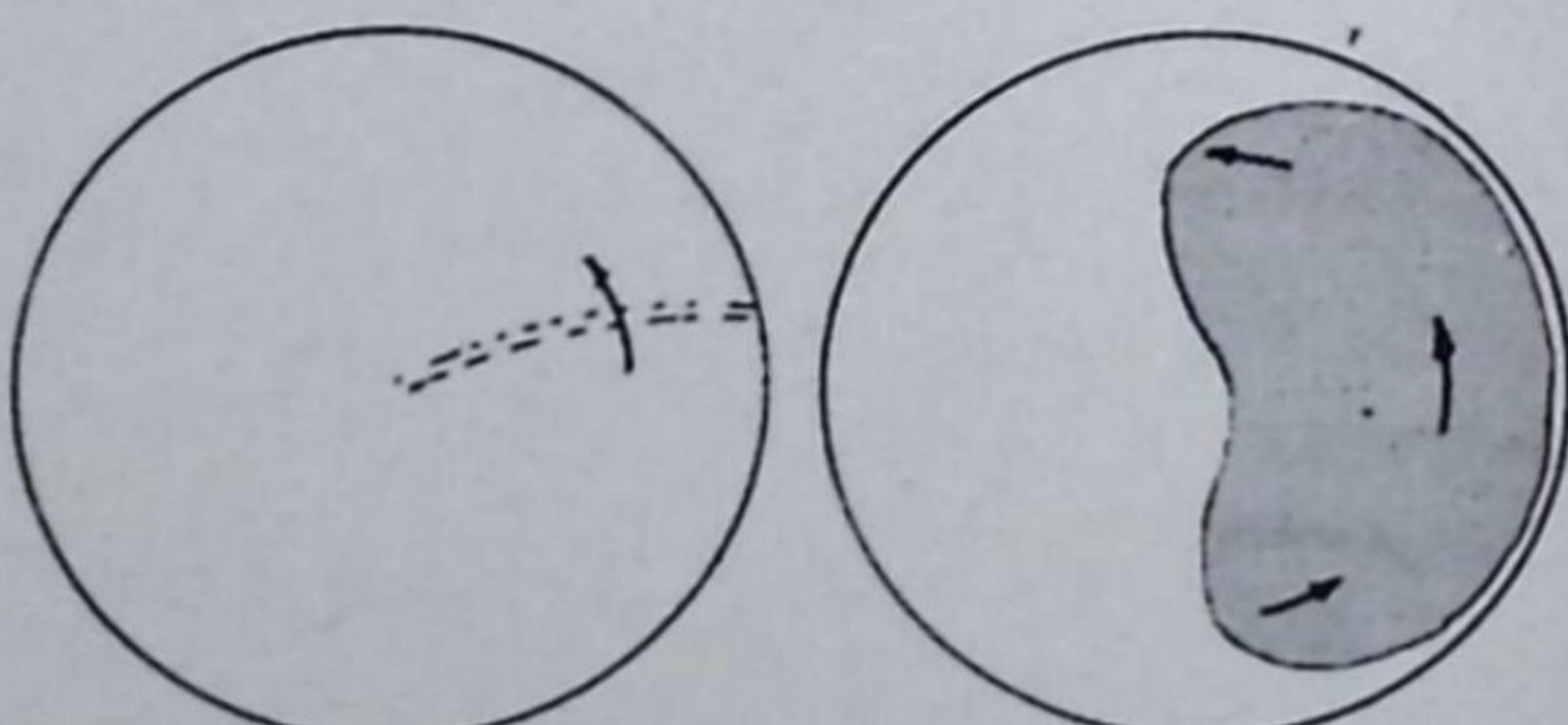
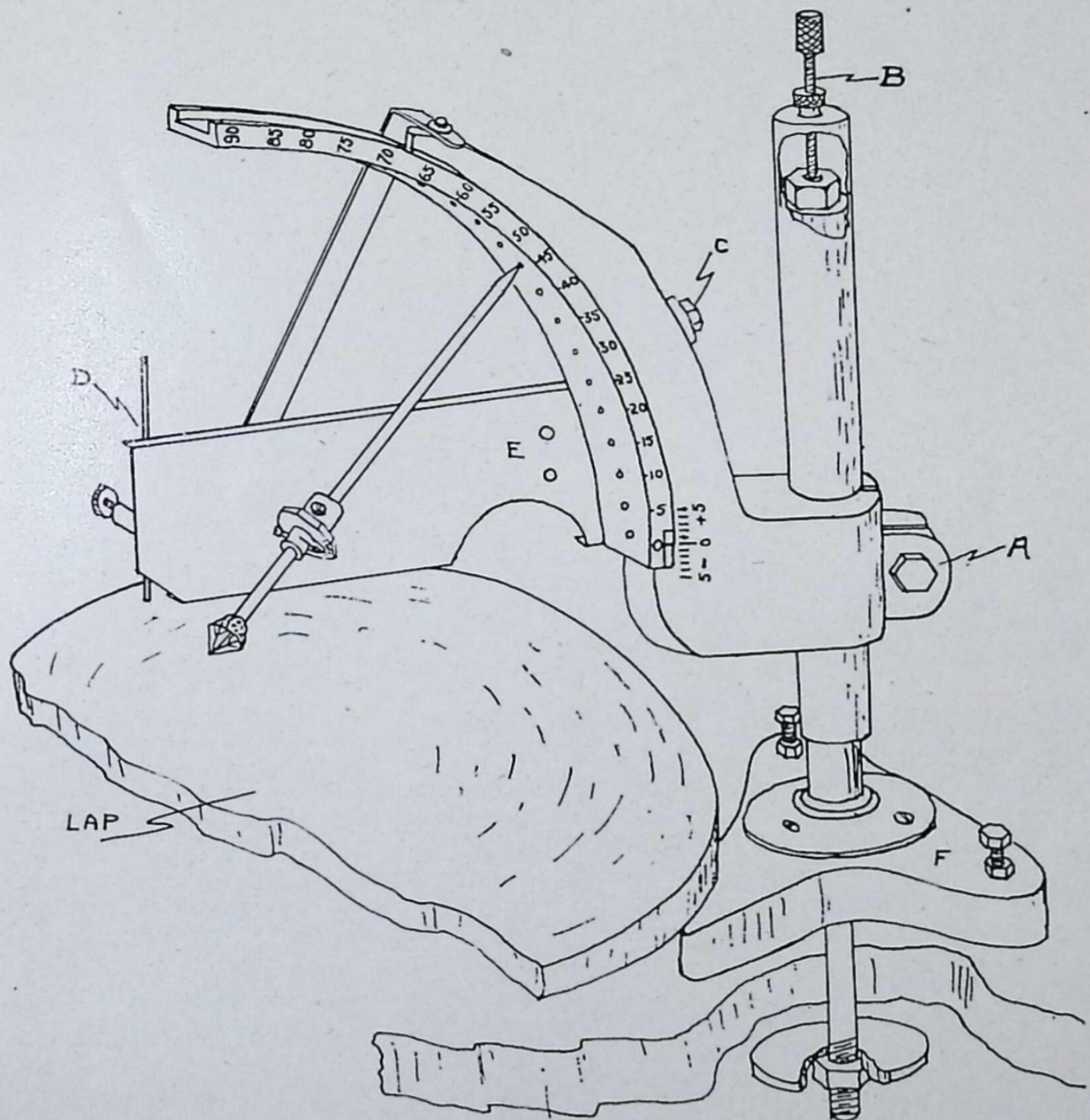


Fig. 3A

Fig. 3B



FACETTING EQUIPMENT

SHOWING DDP STICK AND GEM IN WORKING POSITION

- A - COARSE HEIGHT ADJUSTMENT
- B - FINE HEIGHT ADJUSTMENT
- C - FINE ANGLE ADJUSTMENT
- D - HEIGHT GAUGE USED WHEN CHANGING LAPS
- E - HOLES IN SIDE REST FOR BRIOLETTING ATTACHMENT
- F - ADJUSTABLE TRIPOD FOR GETTING MAST PARALLEL TO LAP SPINDLE

Figure No. 1 (refer to text)



Figure 2 (see text)

The great advantage of the compound motion of the quadrant lies in having a choice in direction of polishing. Certain facets are encountered in some gem stones that will only polish in a certain direction. While a complete choice of directions is lacking for the higher angles this feature often permits finishing a gem otherwise impossible to complete. There is a further advantage when polishing soft stones or others that tend to polish into ridges and grooves parallel to the lap motion. Such an undesirable pattern can be eliminated by a "stroking" of the gem in a direction to cross out the pattern tendency.

PHASE ADVANCER

If one might borrow a term from the Electrical Engineer's vocabulary, and thereby transfer its meaning from an electrical angle or time phase change to a mechanical angle or space phase change, we have a concise name for a very handy auxiliary piece of equipment. Fig. 4 shows what the writer has presumed to call a "Phase Advancer." Briefly it is a dop stick holder that takes a dop stick and advances it 90 mechanical degrees and then presents the stone to the lap. It fits into the index holes in the

swinging quadrant, seats against the side board and one can then go merrily ahead cutting or polishing *toward* the girdle instead of away from the girdle of a stone.

CUTTING AND POLISHING STONES SENSITIVE TO MECHANICAL SHOCK—Most of the minerals in this category have one or more directions of easy cleavage. Stones such as topaz, while having a perfect cleavage in one direction, are not so sensitive that undue care is necessary in manipulating them. Topaz seldom gives trouble unless one attempts to polish parallel to a cleavage surface. Stones such as Kyanite, Apophyllite, Vivianite and Tremolite are bad actors. Here you usually desire to put the table on approximately, but not exactly, parallel to a cleavage face. Usually you are quite content to aim at a simple, four-sided step cut stone. Both cutting and polishing should be done *toward* the girdle. Only the finest loose abrasives should be used for cutting. Alternately a very fine diamond impregnated lap can be used and a wiping pad held ahead of the stone to remove any loose fragments that could act as wedges to split the gem.

PRECIOUS METALS

and

JEWELRY FINDINGS *for*

Every Type of Need

Consult listing of products at right

INQUIRIES INVITED

SERVICE and QUALITY Since 1907

Sterling Silver Sheet:
All thicknesses and
widths.

Sterling Silver Wire:
Round, Half-Round,
Square, Triangular,
etc., in all sizes.

Sterling Silver Fancy
Wires: Bezel, Bead
Wire, Pearl Bead
Wire, Twist Wire,
etc.

Sterling Silver Find-
ings: Chain — Ear-
Wires — Tubing —
Hollow Balls, etc.

Nickel Silver Find-
ings: Pin-stems,
Joints, Safety
Catches.

Silver Solder Sheet
and Wire: Silver
Solder Flux.

Karat Gold Sheet,
Wire, Solder and
Findings.

WILDBERG BROS. SMELTING & REFINING CO.

San Francisco 2, Calif.
Department "G"
742 Market Street

Plant and Smelter
South San Francisco, Calif.

Los Angeles 14, Calif.
Department "G"
635 South Hill St.

REPAIRING

DIAMONDS

RECUTTING

OFFERS TO DEALERS, JEWELERS, LAPIDARIES. MINIMUM ORDERS \$10. ALL PRICES IN \$ PER STONE OR CARAT

SYNTHETIC RUTILE

3- 5 ct. 6.50 ct.
5- 7 ct. 5.50 ct.
7-20 ct. 5.00 ct.

ROUNDS (brilliants)

Amethyst, Garnet,
Topaz (citr.) Aqua 60cct.
Zircons—1 ct.—1.00
Syn. Ruby 2 cts. 1.25 stone

AQUAMARINE

Comm.—70, 1.25 ct.
Fine Stones 2,-3,-up ct.
11x9—3 cts. 2.25 stone

PRECIOUS STONES CUT

Sapphires from 3.00 ct.
Star Sapphires 3.00 ct.
Emerald 5.00 stone, up.
Also fine gems

GENUINE KUNZITE

(Rough)
Clean, for faceting 20.00
Large piece 15-20 gm.

ALEXANDRITE

(Synthetic corundum)
10x.8 2.00
12x10 3.25
14x12 4.50
Oval, octagon or cushion
faceted

SYNTHETIC STARS

Blue, Pink, Red, Corundum
10x 8 5.00
12x10 6.00
14x12 6.75

Faceted synthetics in all
sizes, shapes, colors,
plain, drilled, encrusted.
Also black onyx.

Solid Gold mountings for larger stones

TOPAZ (Citrine)

10x 8 1.30
14x10 3.25
14x12 and larger

CAMEOS, INTAGLIOS

16x12 Hematite 1.00
16x12 Tiger eye 1.00
Large shell cameo 2.00
Small pair matched 1.00

AMETHYST

Standard sizes per carat
.30, .85, 1.25 up
10x8 1.25 16x12 8.50

ROUGH - GENUINE

Star Sapphire 1.50 ct.
Faceting sapphire .20 ct.
Sphere Quartz 4.00 lb.
Smoky citrine 5.00 lb.

NEW ENGLAND DIAMOND CORP.

PRECIOUS & SEMIPRECIOUS STONES

800 EIGHTH AVE.

NEW YORK 19, N.Y.

CUTTERS & POLISHERS

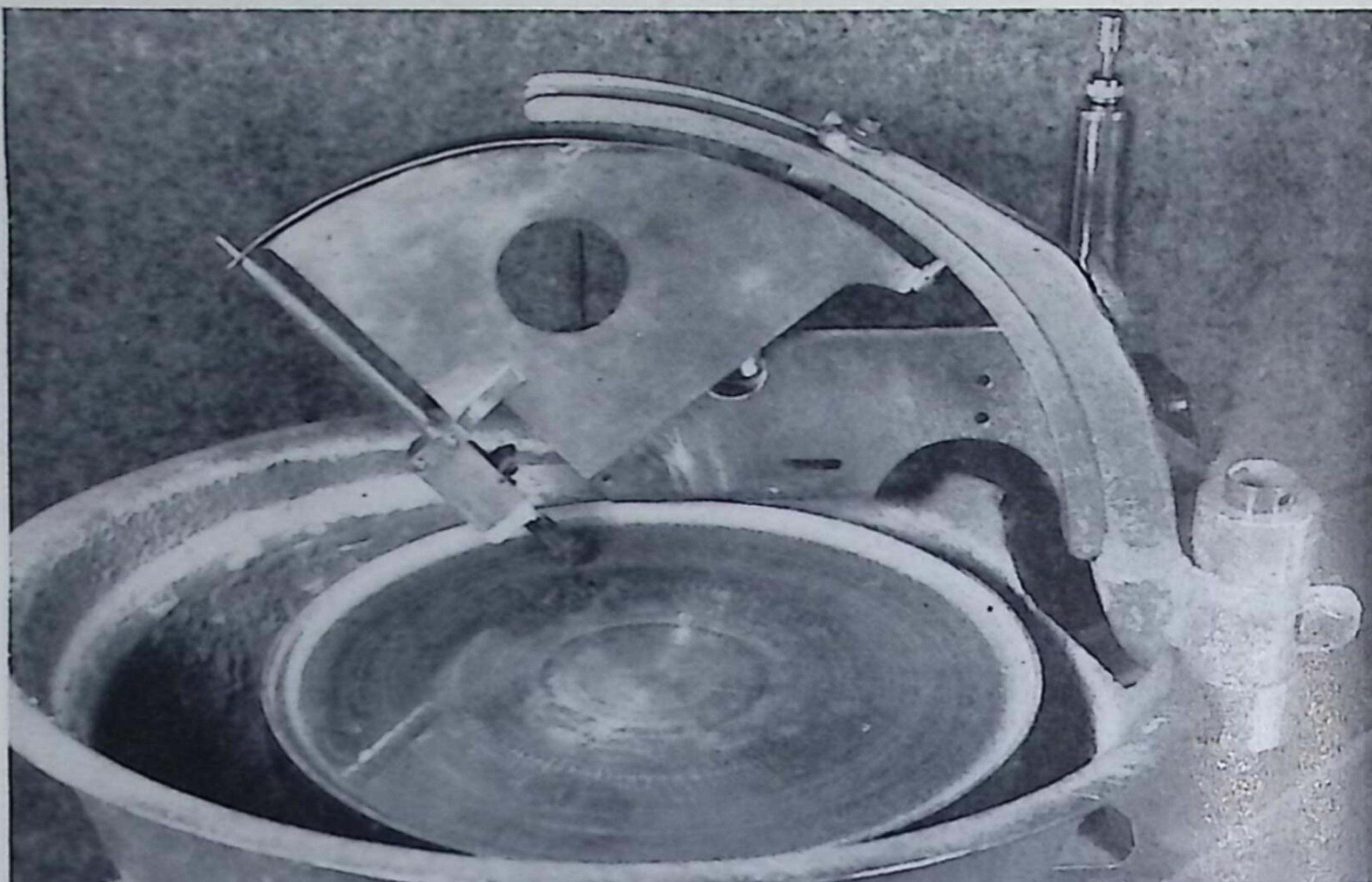


Figure 4 (see text)

It should hardly be necessary to point out that true running laps for both cutting and polishing are essential for a mechanical shock sensitive material. Unscored laps are thought to be less severe since there is less tendency to set up a vibration of the gem and dop stick. Control over the speed of the lap is a great advantage and almost an essential for the softer stones. Since variable speed motors are not widely known perhaps the following hint may be of help. Go to any good motor service shop and ask them to convert a Repulsion-Induction motor to Repulsion only and bring out a lever for brush shifting. The centrifugal brush lifting device and the commutator short circuiting device will be removed and a lever attached to the brush holder. By moving this lever, control over the speed of the motor is achieved. The rating of the motor is reduced in making this change so be sure to start with a fair sized motor. A one-third horsepower motor would probably de-rate to a one-quarter horsepower motor when operated in this way.

The above suggestion is only one way of achieving stepless control over speed and is a method that will appeal to electrical men. There are many other methods. The mechanical man may prefer something in the nature of an hydraulic

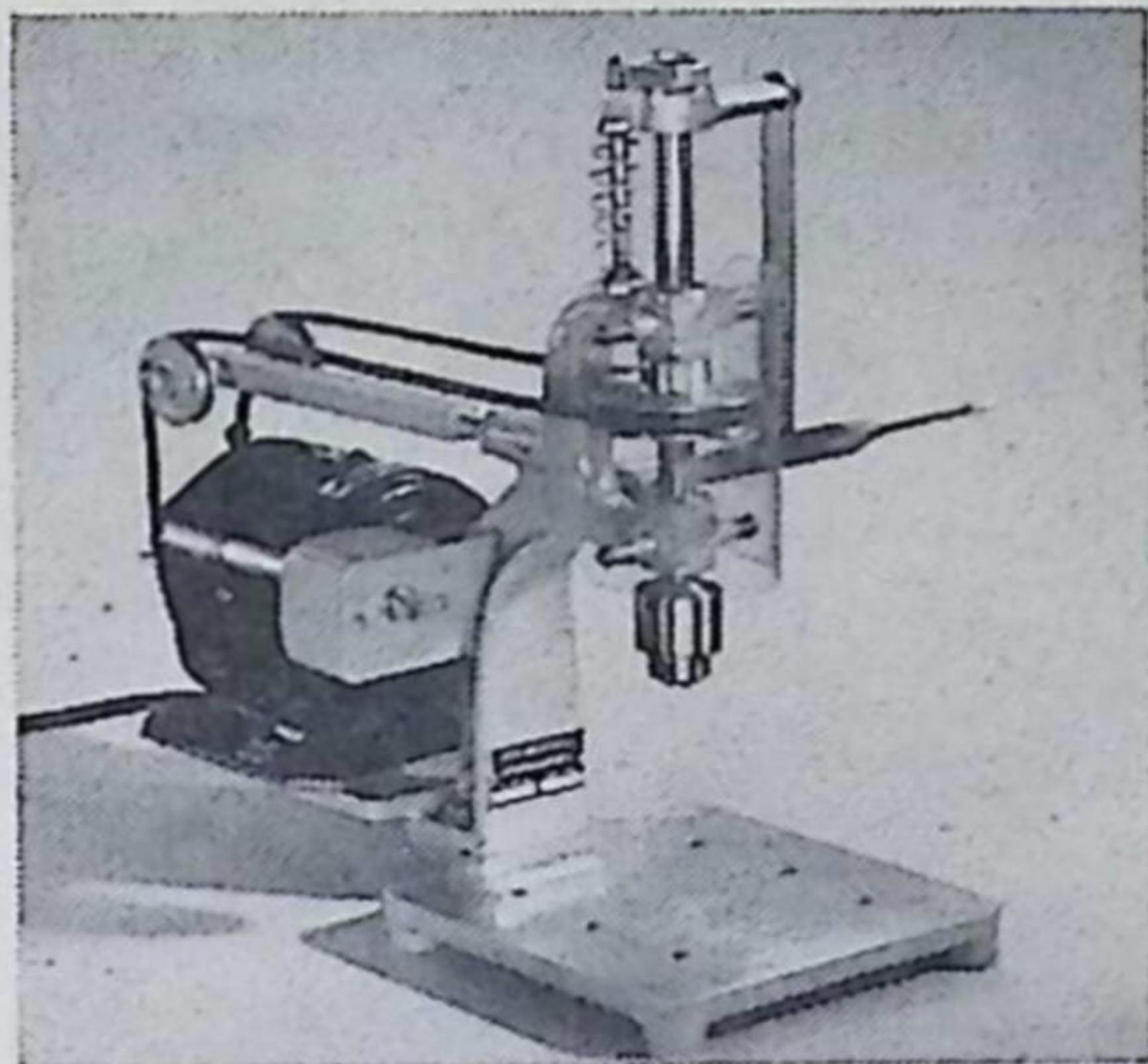
torque converter or even a variable friction drive. Whatever you do, get some control over the lap speed if only by a 3 or 4 step pulley arrangement.

CUTTING AND POLISHING STONES SENSITIVE TO THERMAL SHOCK—These are the most devilish ones you will have to deal with. It is difficult to judge when a temperature change is taking place, let alone taking place too rapidly. Dopping such stones is almost impossible by ordinary means. Dopping under water by means of Kerr's Compound is the only method the writer has found successful. For details of this technique see the October, 1947 *Lapidary Journal*.

Never hurry any operation! Add unlimited patience to all techniques. Don't mix up a batch of polishing agent using tap water and start using it immediately. Check it with a thermometer to see that it is at room temperature, or let it stand for a couple of hours before use. In fact let everything sit around till temperatures become equalized. Don't let your laps get dry or try any speedy dry polish stunts. Use very thin suspensions of polishing agents and apply copiously to the lap so that the normal evaporation on the lap surface will not lower the temperature of the lap too much. You will have many failures and only by noting the reasons will you finally succeed.

New Alta Gem Drill Press

Especially Designed for the Lapidary



A light-weight complete unit, easily handled, and can be taken on trips, to meetings, or any place you wish.

Features: All aluminum casting..

Spindle of machine comes with either needle or bronze bearings.

Other parts protected by ball bearings.

Equipped with $\frac{1}{4}$ " Jacob chuck and Dayton motor.

Plexiglass guard.

Measurements: Depth of throat 3"; height from plate to chuck 3"; spindle stroke $1\frac{1}{4}$ ".

Over-all Dimensions: 14" high, 15" long, and 6" wide.

Weight complete: 13 lbs. (Approx. shipping wt. 20 lbs.)

MODEL B: Price complete, ready to run . . . \$42.50 F.O.B. Pasadena.

MODEL C: Same as above with added feature of elevating table. Price . . . \$68.50 F.O.B. Pasadena.

(All sales in Calif. subject to State Sales Tax)

Send Postal for New Free Literature

ALTA INDUSTRIES

LAPIDARY EQUIPMENT

Manufacture and Design

915 East Washington Street
Pasadena 6, California

Other Alta Lapidary
Equipment

18" Power Feed Saw
Trim Saw — Belt Sander
Alta. Arbor

THEY STRUCK OPAL

The book opal lovers have been
waiting for

Printed in Australia . . . *They Struck Opal* is a fascinating and true story of the Australian opal fields. Written by E. F. Murphy, a well known opal buyer. For many years the undisputed king of opal mining personalities who flocked to the opal fields from the jewel centers of the world. 191 gripping pages. 3 full color plates, worth the price of the book alone. The finest color plates on opals we have ever seen. Showing 19 different types of Australian opal.

Price \$4.00 postpaid
plus 3% Sales Tax in California

The LAPIDARY JOURNAL
Box 1228 Hollywood 28, Calif.

CABOCHON MATERIAL

SPECIMEN IRIS SLICES—\$2 up.

HEELS—Each will make at least one good cabochon—per lb. \$1.25.

WYOMING DENDRITES—\$1 and \$2 lb.

MONTANAS, up to $2\frac{1}{2}$ "—\$2 lb.
Larger—\$3 lb.

WESTERN RIVER AGATES, small —
\$1 lb.

SMALL TEXAS BANDED—\$1 lb.
POSTAGE EXTRA ON ROUGH MATERIAL

SLICED TEXAS & PRIDAY PLUME on
approval.

NELSON LAPIDARY EQUIPMENT.

FULMER'S AGATE SHOP

C. H. Fulmer
5212 Rainier Ave. Seattle 8, Wash.

◆ *The Story of Synthetics*

By S. V. PERRICONE

8723 26th Avenue, Brooklyn, N.Y.

For a long time the scarcity of genuine stones and their high prices enabled the rich alone to indulge in a pleasure which others would have enjoyed with the same keenness had they been given the possibilities to do so. Instead they had to resort to cheap imitations of nature for the food for their dreams and yearnings for beauty.

Men of science were not contented with *imitating* nature; they endeavored to *reproduce* it. This miracle took place with the birth of modern chemistry. In the year 1902 an eminent former professor in the "Conservatoire des Arts et Metiers" in Paris, named Verneuil, discovered the secret which seemed to be hidden forever in stones. He found a process for obtaining industrially synthetic corundums. A similar process for obtaining synthetic spinel, followed.

Today, almost 47 years since this process was developed, we begin to fully recognize the importance of it. Aside from its place in the stone cutting field is the part it has played in the last war and the part it is to play in this jet-propelled, mechanized post-war era. This hard, wear resisting material has found many applications in modern industry and the opportunity it offers for new applications is unlimited. Wherever there is a wearing surface, a bearing surface or a point of friction synthetic corundum should solve the problem. A watch with its moving parts riding on synthetic sapphire jewels will last a life time. A modern battleship requires more than 4000 synthetic jewels for its chronometers, compasses and other precision devices. A modern pursuit plane needs as many as 100 sapphire bearings in its instruments. Synthetic sapphire is used for precision gauges, thread guides, extrusion dies, cutting tools, injector nozzles, phonograph needles, etc.

Before the young, war-born synthetic stone industry of the United States entered the picture, the world's production of synthetic corundum and spinel was concentrated almost exclusively in France, Switzerland and Germany. Up to then the

process used was basically the original Verneuil process of 47 years ago. Being the only successful operating procedure for the manufacture of synthetic stones, the general principles of which were known in the United States, the same process was applied by American industry.

Chemically, synthetic corundum is a particular crystal form of aluminum oxide. Briefly, the process by which synthetic stones are manufactured is as follows:

The starting material is ammonia aluminum sulphate which, by calcining, is transformed to alumina of an extremely low density. It is very important this alum be of unusually high purity or it will yield imperfect material. The calcining process is carried out in a refractory dish at a temperature of 1050°-1150° C. The spinel powder is calcined at a higher temperature.

The calcined alumina is then passed through a very fine screen of 240-300 mesh. This powder is now ready for crystallization by the oxy-hydrogen burners in a specially constructed furnace. The powder is placed in a container with a fine mesh screen bottom on the top of the furnace. Tapping by a trip hammer arrangement causes it to be fed intermittently into the oxygen tubing where the oxygen steam carries it down into the flame. The flame itself contains a large excess of hydrogen, the oxygen-hydrogen ratio being about 1 to 3. This oxygen-hydrogen flame is directed upon a ceramic pedestal perfectly centered within the refractory furnace upon which the boule (French for globule) itself is grown. From here on the final result depends upon the skill of the operator in feeding the powder, regulating the gas burners and maintaining the proper degree of temperature at various stages of growth. The melting point of the alumina is around 2050° C.

At the start of the boule forming process the powder is fed at a rather high speed. By skillful handling of the flame,

Variety

TITANIA or Synthetic Rutile: First Quality **Titania Gem Stones** that have been Facet Cut by Professional Cutters who also cut Rubies and other Precious Gem Stones. The Titania Gem Stones surpass the Diamond in their Brilliance and Beauty. Colors range from a Canary-Yellow to a very attractive Light Tint of Green and sometimes a Light Shade of Blue. The Yellow to Green Tint Stones are the most popular at the present time. Facet Titania of Approx. 1 Carat in size for **\$16.24** Each.

SODALITE (90%) Canada, Gem Quality: Sodalite of Beautiful Royal-Blue Color for Cabochons. 1 LB. for **\$10.22**.

MONTANA MOSS AGATE, Gem Quality: All Moss Selection of Montana Agates with various Moss Patterns. 1 LB. Mixed for **\$4.26**; 2 LBS. Mixed for **\$8.37**.

AMAZONITE, Colorado: Gem Quality Bright Green Amazonite for Cabochons. 1 LB. for **\$3.00**; 2 LBS. for **\$5.85**.

WYOMING MOSS AGATE, Gem Quality: We now have this choice Wyoming Agate with Beautiful Moss Patterns. 1 LB. for **\$4.26**; 2 LBS. for **\$8.37**.

GEODES * FINE DESIGNS * Gem Quality: These Geodes make interesting cutting if you are looking for something different. Remember that these Geodes are "Quite Heavy" according to their size. 1 LB. (1 or 2 Geodes) for **\$4.80**; 1 1/2 LB. (2 or 3 Geodes) for **\$7.15**; 2 LBS. (3 or 4 Geodes) for **\$9.45**.

OPAL #10—AUSTRALIA; Fair Cutting Quality: 1/2 OZ. for **\$2.75**; 1 OZ. for **\$5.25**.

OPAL #9—AUSTRALIA: A Better Cutting Quality Opal with more Color or Colors. 1/2 OZ. Mixed for **\$6.35**; 1 OZ. Mixed for **\$12.45**.

The above Prices include All Taxes, Postage and Insurance in the U.S.A.

Many New Items have been added to our "New Price List." To Avoid mistakes PRINT Your Name and Address when writing for Price List.

VISITORS WELCOME AFTERNOONS (including SAT. and SUN.) CLOSED THURSDAY.

Nonneman's

P. O. BOX 324—DEPT. 8

Residence: 107 Church St.

SALINAS, CALIF.

Appointments—Phone 8483

GEM ROUGH — LAPIDARY SUPPLIES

SMOKY QUARTZ: Brazil, (Champagne Topaz) Crystal clear with warm "hickory smoke" color distributed evenly throughout. Makes beautiful brilliant faceted gems and spheres of substantial value. In 1/2 pound to 3 pound chunks of very fine material. \$3.10 per pound.

CARNELIAN AGATE: from Brazil. **BANDED**, brownish orange to yellow in color, translucent. Sound cutting material that will cut excellent cabochons or pendant pieces showing the agate bands. Slabs 2 to 6 square inches and 7 m.m. thick. 35c per square inch.

TIGER EYE: from South Africa 50 pound lot in original unopened case, including the much sought-after honey-yellow color. Takes a high polish and has plenty of stripes. \$60.00 per lot **EXPRESS PAID**. Also available in small quantities of good grade material. \$1.75 per lb. F.O.B

TOPAZ-QUARTZ: from Madagascar. The rare madeira or sherry wine color (amber-yellow). Quantities always limited. In crystal fragments for cutting flawless faceted gems. From 1 to 2 1/2 gram pieces; 70c per gram.

SPECIAL: Leather Lap Wheels! Surplus! Brand New! First Quality! 8 x 1" @ \$2.98, 6 x 1" @ 2.69. Limited quantity. Please state arbor hole size.

SPECIAL: Gem pebbles in glass vials 1 3/4" long with plastic screw caps. Excellent material for gem and mineral collectors. **AUSTRALIAN BLUE SAPPHIRE:** Transparent material. Some terminated crystals. This material can be faceted into small calibre gems. \$1.25 per vial. **BURMA RUBY:** Small ruby crystals of various colors including the pigeon-blood red color. \$1.00 per vial.

AMAZONITE: from Canada. Bright green opaque with moonstone adularescence when properly oriented. In 1/2 to 3 pound chunks. \$1.50 per pound.

GARNET: from South Africa Pyrope variety. Bright red transparent material for faceted gems of good quality and fine color. In 1 to 3 gram pieces. 60c per gram. Cabochon quality, same material as above, \$1.25 per ounce.

WRITE FOR OUR FREE CATALOG

The following items are listed: 30 varieties of gem rough, slabs and blanks, synthetics, ring mountings, books, tools and abrasives, gem and ring cases, cut stones.

SATISFACTION GUARANTEED OR MONEY REFUNDED

TECHNICRAFT LAPIDARIES CORP.

LIONEL DAY

3560 Broadway Room 23

Import-Export

New York 31, N.Y.

which is directing the alumina at the pedestal, a temperature is maintained that does not fuse the alumina but allows a cone of sintered powder to form on the top surface of the pedestal. A fused tip of the cone is made to grow into a small rod of 5-7 m.m. length and 2-4 m.m. in diameter. This represents the "foot" of the boule. The foot serves to equalize the strain caused within the crystal when shutting off the furnace flame. When the foot has reached the desired length the flame temperature is slightly increased by adding more oxygen which automatically adds more powder. This causes the crystal to slowly broaden on its surface. This process is repeated until the desired width for the final boule is obtained. When the boule has reached the desired size the flame is shut off abruptly and the boule is allowed to cool for one hour inside the furnace. The time consumed from the point of putting the calcined alumina into the container to removing it from the furnace requires $4\frac{1}{2}$ hours. A synthetic spinel boule requires $5\frac{1}{2}$ hours for forming.

Different colors are obtained by adding various metal oxides in very small amounts to the ammonia alum before calcination, usually in the form of water soluble inorganic salts. The white sapphire consists of pure alumina. Synthetic Ruby, the most popular type of synthetic corundum, is obtained by the addition of one-half to four percent of chromic oxide, depending on the shade desired. Addition of small amounts of titania and iron oxide results in the blue sapphire crystals. It is well to note that no one has yet succeeded in producing corundum crystals of perfect emerald color.

The development and production of synthetic corundum and spinel in America is a story in itself which stands as a tribute to the ingenuity and resourcefulness of American chemists and engineers. Working under pressure from the government during the war the Linde Air Products Co., a unit of Union Carbide and Carbon Co., with very little information achieved a goal in less than two years which equalled 40 years of European experience. Another remarkable highlight of this country's production is the development of a long crystal form known as "rod corundum." European research experts spent 40 years attempting to produce rod corundum and finally reached the conclusion that it was impossible.

Synthetic materials are manufactured in Europe in France, Switzerland and Germany. The gem cutting industry is centered in France, Czechoslovakia and Germany. The center of Germany's stone cutting industry is the twin city of Idar-Oberstein, located in the French Zone. Almost every person in this city of 40,000 inhabitants makes his living either by cutting stones or dealing in them. There is hardly a home that does not have small scale facilities for cutting gem stones. The skill of stone cutting is passed down from father to son. The majority of stones manufactured here, as well as in France and Czechoslovakia, eventually find their way into the American jewelry industry. Today the Linde Air Products Co. exports a great deal of material to South America and Asia where it is cut and polished, finding its way back to American industry.

For all practical purposes synthetic corundum is identical in physical and chemical composition with the natural mineral. The density is approximately 4 and the hardness on Mohs' scale is from 9.0-9.3. Synthetic spinels also have the same properties as the natural stones of the same type, their density being about 3.6 and their hardness 8.

Synthetic corundum is manufactured in the following shades of color and called accordingly:

White Sapphire, Ruby, Burma Sapphire, Ceylon Sapphire, Golden Sapphire, Green Sapphire, Rose Sapphire, Garnet, Kunzite, Alexandrite, Paparadscha (orange), and Danburite (amber).

Synthetic spinels are also manufactured in various colors and are called as follows:

Burma Spinel, Blue Zircon, Green Zircon Tourmaline, Peridot, Green Spinel, Aquamarine, and Pink Spinel.

In conclusion I'd like to say that a synthetic stone, when properly cut and polished, is a stone of lasting beauty. A large degree of personal satisfaction is gained when you have mastered the proper cutting and polishing of a stone that is exceeded only by diamond in hardness. Contrary to all beliefs, a synthetic stone is very easy to cut and polish when one has the knowledge and the proper equipment to do so. This, however, is a subject entirely apart from the intention of this article. I'd like to say at this time that if any of the readers have any problems in the cutting or polishing of syn-

FACTS ABOUT TITANIA

There is quality in cut & polished stones

TOP QUALITY Brilliant Cut and Polished Stones. Clearest and finest materials used exclusively.

1 carat and up. Regular—\$7.00 per carat
Blue—\$8.00 per carat. Amber—\$8.00 per carat

ROUGH MATERIAL (Regular only)

Whole or half boules

75c per carat

Pieces, 15 carats and up
\$1.05 per carat

WE CUT and polish your material
\$7.00 per stone

★—★

OUR NEW DIAMOND DEPT.

offers direct from cutters to you
Finest American Finished Stones.
All Qualities and Sizes
Inquiries Invited

Regent Lapidary Co.

511 East 12th St. New York, 9, N.Y.
SEND FOR PRICE LIST

GLENDALE LAPIDARY & GEM SOC. (INC.)

cordially invites you to its
GEM AND MINERAL SHOW

Basement of the Civic Auditorium
1401 Verdugo Rd., Glendale, Calif.

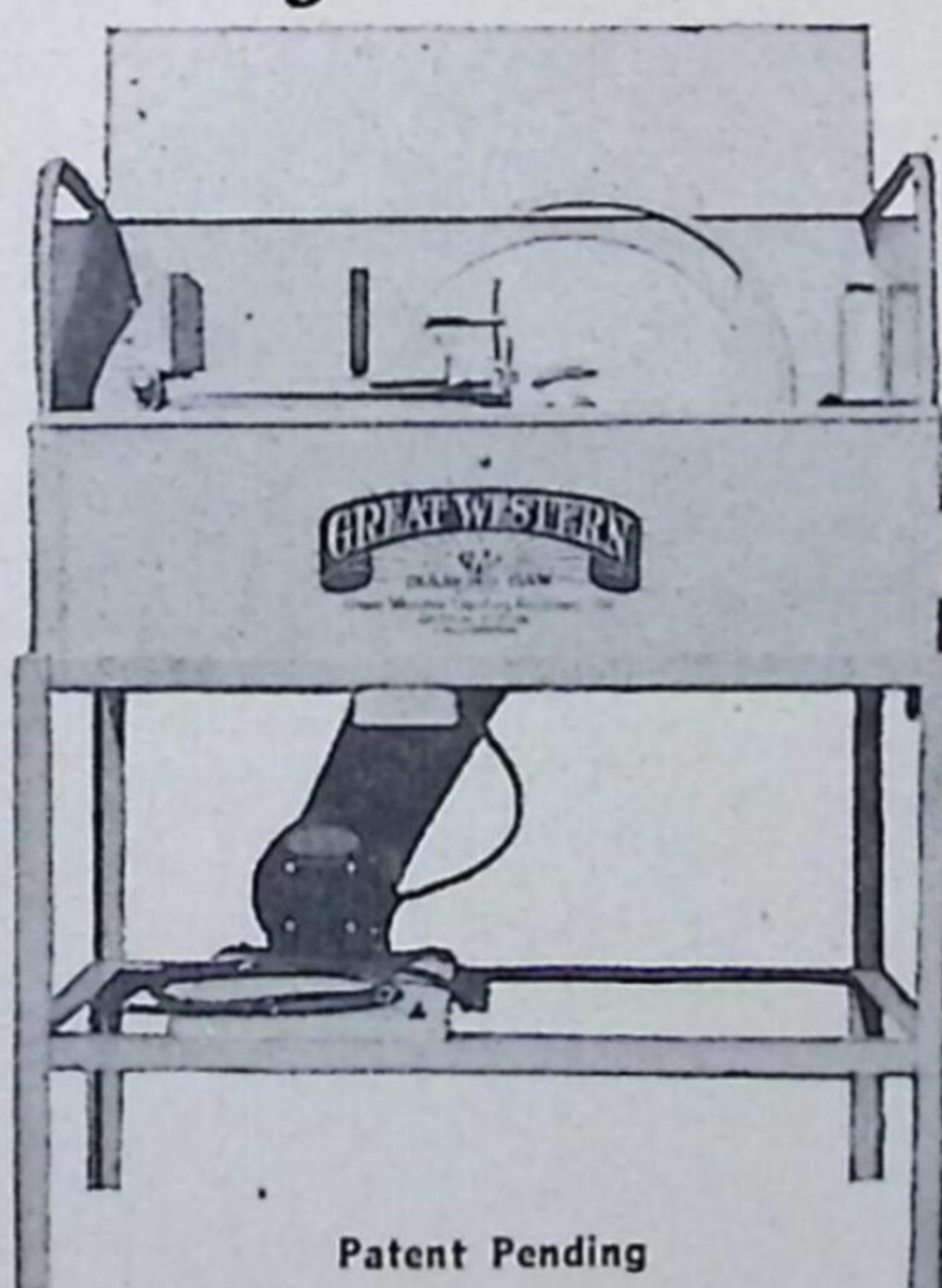
AUGUST 20 and 21

8 A.M. to 9 P.M. on Sat.
9 A.M. to 6 P.M. on Sun.

One of the world's largest star sapphires (227 carats) will be displayed by courtesy of Kazanjian Bros. of Los Angeles. This is the same gem that was exhibited at Sacramento.

Commercial displays
36 cases of gems and jewelry
Plenty of parking space
Refreshment stand
ADMISSION FREE

Great Western Hydraulic Controlled Diamond Saws



Patent Pending

The carriage on the Great Western Saws is controlled by an hydraulic cylinder which makes the smoothest cuts and gets the maximum wear from saw blades — no forcing, — no binding.

Vise has 8" opening with 4" cross-feed for slabbing, 1" arbor shaft takes 16" or 18" blade. The rigid frame makes it quiet and smooth running. Double hinge cover exposes front and top when open.

PRICE \$195

Price does not include 16" blade, stand, belt guard, motor mount or pulleys. F.O.B.
San Diego, Calif. Shipping weight 275 lbs. Crating charge \$4.00 extra.

GREAT WESTERN LAPIDARY EQUIPMENT CO.
P.O. Box 444, 740 Hilltop Drive, Chula Vista, California

FACETERS ATTENTION

THE BOOK OF GEM CUTS

Will be published on or about August 10th. This book gives large, clear and easily understood cuts of 16 facet styles. It gives cutting angles for 64 index equipment and recommended polishing agents and laps for all common gem minerals. You can't afford to be without this book for it costs less than a gram of good material.

**SAVE YOUR TIME — YOUR PATIENCE
YOUR MONEY**

*Send for this book at once
See sample article on Page 190 of this issue.*

\$2.50 Postpaid

California purchasers add 3% sales Tax

Published by

M. D. R. MANUFACTURING CO.
4853 W. Jefferson Blvd. Los Angeles 16, Calif.

King Helmet Shells for *CAMEOS*

\$4 per lb.

1-2 lbs. each

A. G. PARSER
INCORPORATED

15 W. 44th St., New York, 18

F.O.B. New York

Add tax where applicable

thetic materials I shall be pleased to answer each personally if you will address correspondence to me in care of the address listed at the beginning of this article. Having been a professional cutter for the past 10 years, and specializing in synthetics for the past 5 years, I feel confident I am qualified to do so.

ARIZONA

Agates, Jaspers, Petrified Woods, Chrysocolla, Blue Agate, Malachite, Azurite and others.

Rough, Sliced, Chips, Preform Cabs., or Polished Specimens.

Polished samples \$2.00

Unpolished samples \$1.00

Write for List

ARIZONA AGATE MINES
CAVE CREEK

ARIZONA



Can't you find anything on the dump but quartz—with liquid inclusions?

ANOTHER GREMLIN SPECIAL...

Perfectly faceted flawless ROCK CRYSTAL QUARTZ from Brazil. We wish the Gremlin would tell us where he picks up these amazing values. These prices have the F. E. Tax already figured in. 15 m.m. stone, \$1.50; 12 m.m. stone, \$1.20; 8 m.m. stone, 60c; 7 m.m. stone, 42c; 6 m.m. stone, 30c. Please include postage.

SOMETHING NEW FOR QUARTZ FANCIERS. We have recently obtained a number of sets containing SIX DIFFERENT COLORS of faceted and rough quartz. The colors include smoky, rose, green, amethyst, citrine and crystal clear. Each stone has the corresponding piece of rough material beside it for comparison of the 'before' and 'after' of the faceted stones. A real value for \$9.00 with the F. E. Tax already included.

PLEASE INCLUDE POSTAGE.

California Residents add 3% sales tax.

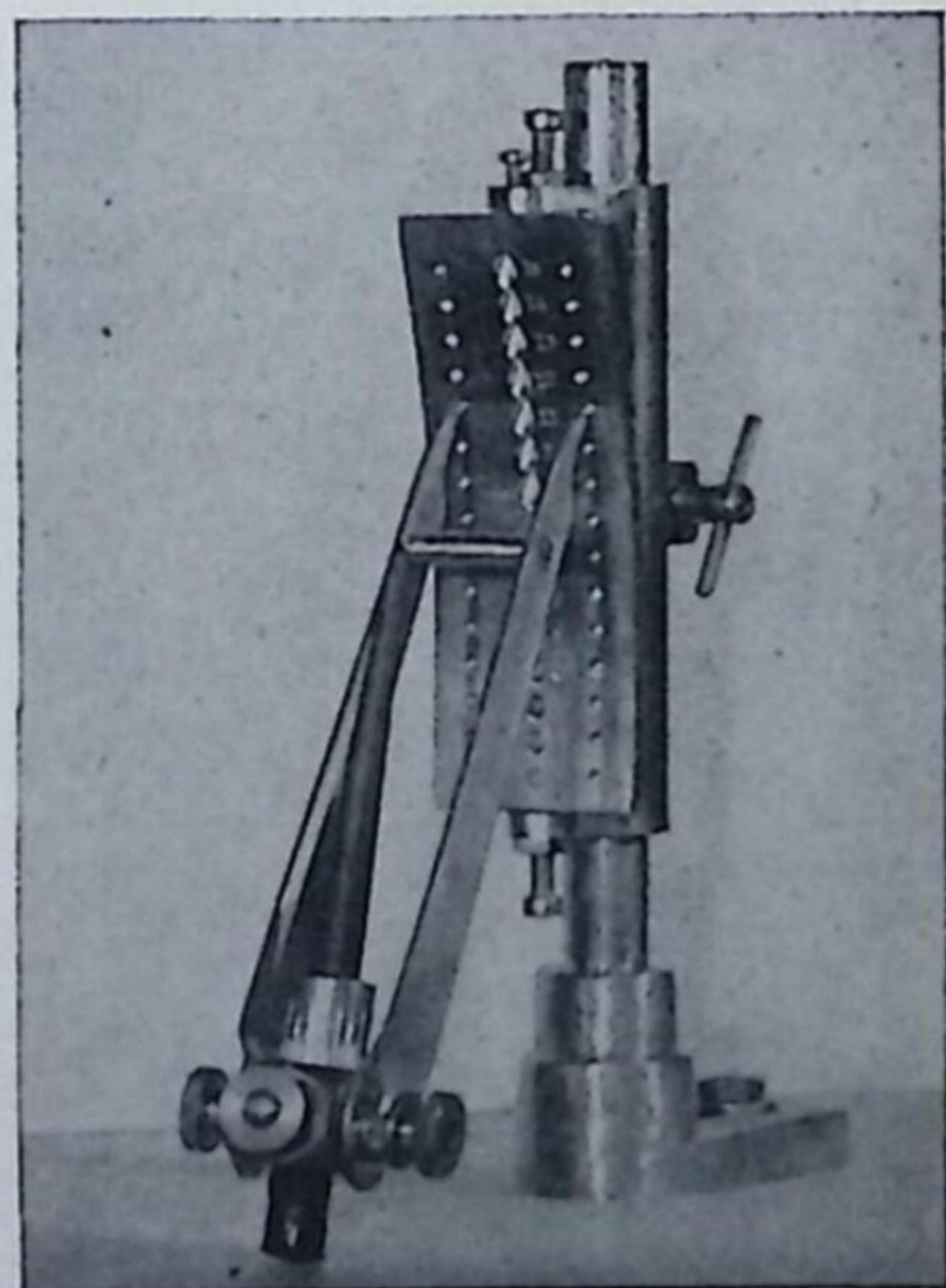
MINERALS UNLIMITED

Scott J. Williams 1724 UNIVERSITY AVENUE David B. Grigsby
BERKELEY 3, CALIFORNIA

"selections personal as your own"

The HANDY FACETER

A simple tool for cutting faceted stones. It comes nearer to any device on the market to duplicating the hand method and by this token is the most practical.



Designed by Anthony Esposito, a man who has been a lapidary in New York City for the past fifty years and used by him for the past seventeen years. It is suitable for Amateur and Professional.

Thirty-two (32) index standard equipment. Two adjustable masts and three dop sticks are furnished. Price \$50.00 prepaid, Greenwich, Connecticut. One per cent sales tax additional to Connecticut purchasers. Terms C.O.D. only. Money refunded within 30 days (less shipping charges) if the HANDY FACETER is unsatisfactory.

Attention Californians!—This device is on display at M. S. Sater's, 448 S. Hill St., Los Angeles.

Purl A. Anderson

DISTRIBUTOR

P.O. BOX 86

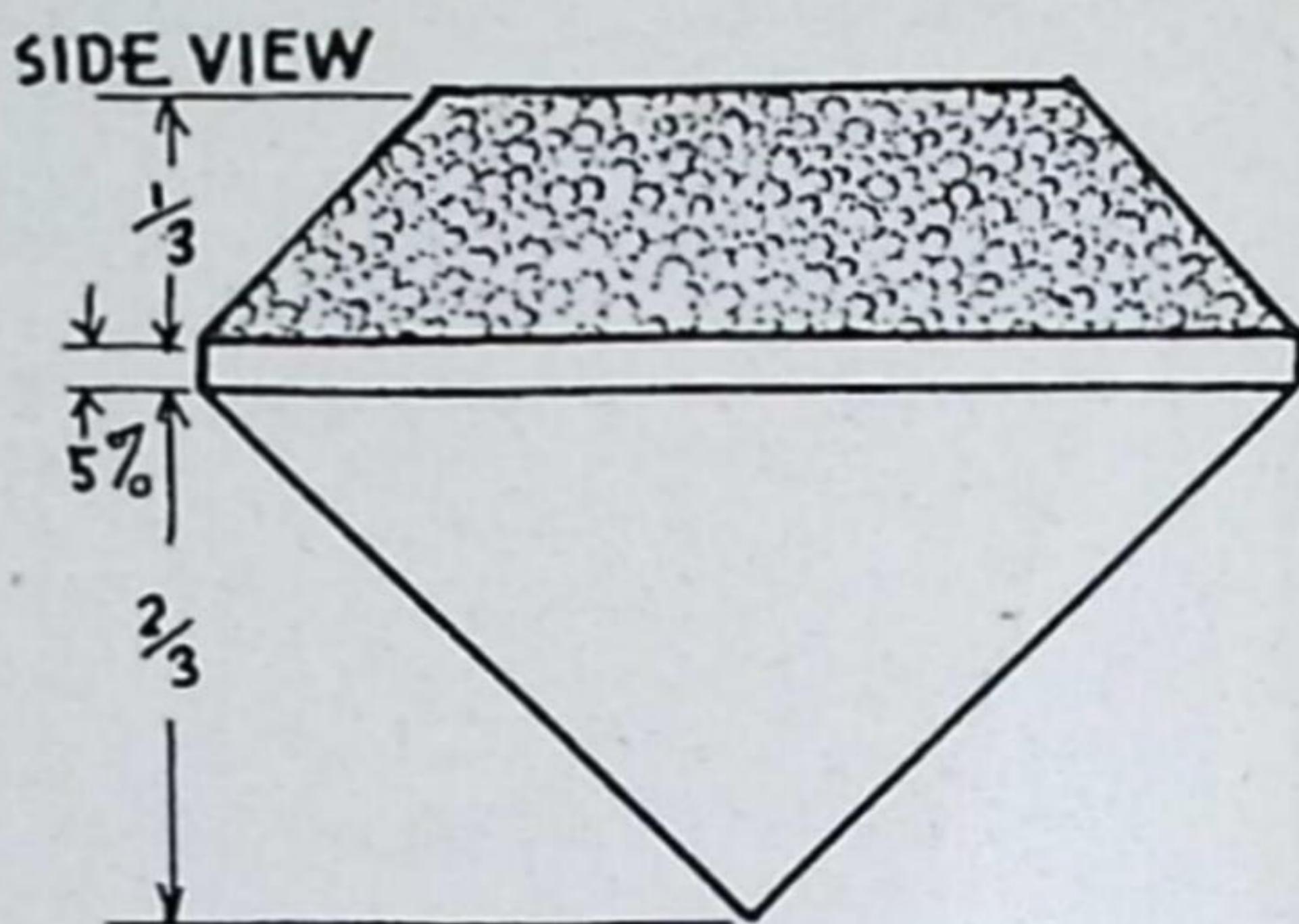
GREENWICH, CONN.

◆ The Standard Brilliant Cut

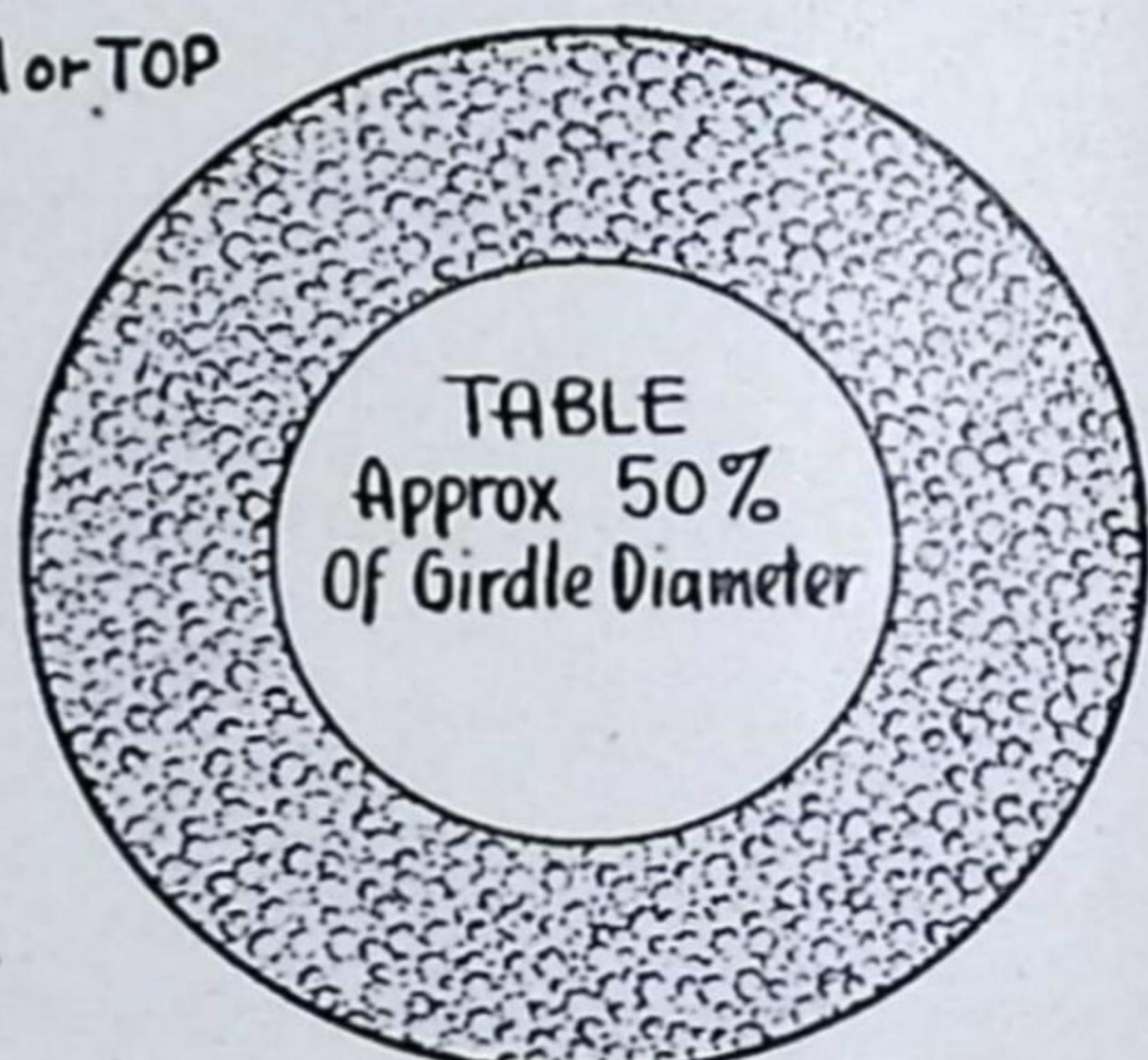
STANDARD BRILLIANT PREFORM

FACETERS ATTENTION

We take pride in presenting herewith the first in a series of sixteen facet cuts in which we give the angles for cutting. These are the recommended angles for quartz. The angles for other materials are given below. These charts have been prepared for us by M. D. R. Mfg. Co. (see ads on inside front cover and Page 188) and it is through their courtesy that they are being published. Those desiring to get all of the cuts NOW, rather than wait for three years, can purchase the series in a book called THE BOOK OF GEM CUTS which can be secured for \$2.50 postpaid from either the authors (M. D. R. Mfg. Co.) or the *Lapidary Journal* on or about August 10th.



CROWN or TOP



GEM	Hardness	Index of Refrac-tion	Angles		Tin Lap	Tin Type	Lead	Type	Pitch	Lucite
			Crown	Pavil-ion						
ANDALUSITE	7-7½	1.64	45°	41°	Tin Oxide					
APATITE	5	1.64	43°	39°	Tin Oxide	Linde A *	Linde A	Tin Oxide Linde A		
BENITOITE	6½	1.76 1.80	37°	42°	Tin Oxide					
BERYL	7½-8	1.58	42°	43°	Tin Oxide Cerium	Tin Oxide	Tin Ox. Linde A		Cerium Oxide *	
CORUNDUM	9	1.76	37°	42°	6400 Diamond with kerosene *	German Tripoli	Chrome Oxide		6400 Diamond with Kerosene	
EPIDOTE	6-7	1.75	37°	42°	Tin Oxide					
GARNET	6½ to 7½	1.73 to 1.89	37° 43°	42° 40°	Ruby Dix Tin Oxide		Linde A *			
OLIVINE	6½-7	1.68	43°	39°	Ruby Dix					
PHENACITE	6-7	1.66	43°	39°	Tin Oxide					
QUARTZ	7	1.55	42°	43°	Tin Oxide		Tin Oxide		Cerium Oxide *	
SPINEL	8	1.72	37°	42°	Ruby Dix	Tin Oxide	E-111 *Linde A Chr.Ox.			
SPODUMENE	6-7	1.66	43°	39°	Tin Oxide					
TOPAZ	8	1.62	43°	39°	Linde A Damas. Ruby Ruby Dix		Linde A *		Linde A Cerium Oxide	
TOURMALINE	7-7½	1.63	43°	39°	Ruby Dix Tin Oxide	Tin Oxide	Tin Ox. *Linde A			
ZIRCON	7½	1.92 1.95	43°	40°	Damas. Ruby Ruby Dix		Linde A *			

*Preferred

STANDARD BRILLIANT No. 1

★

CROWN FACETS

(64 Index Gear)

Table should be approximately 40% of the width of the stone at the girdle.

Cut and polish table in the 45° angle dop.

Grind 1st. Eight main facets at 42° , Indexing at 64, 8, 16, 24, 32, 40, 48 and 56.

Grind 2nd. Eight Table facets at 27° , Indexing at 4, 12, 20, 28, 36, 44, 52 and 60.

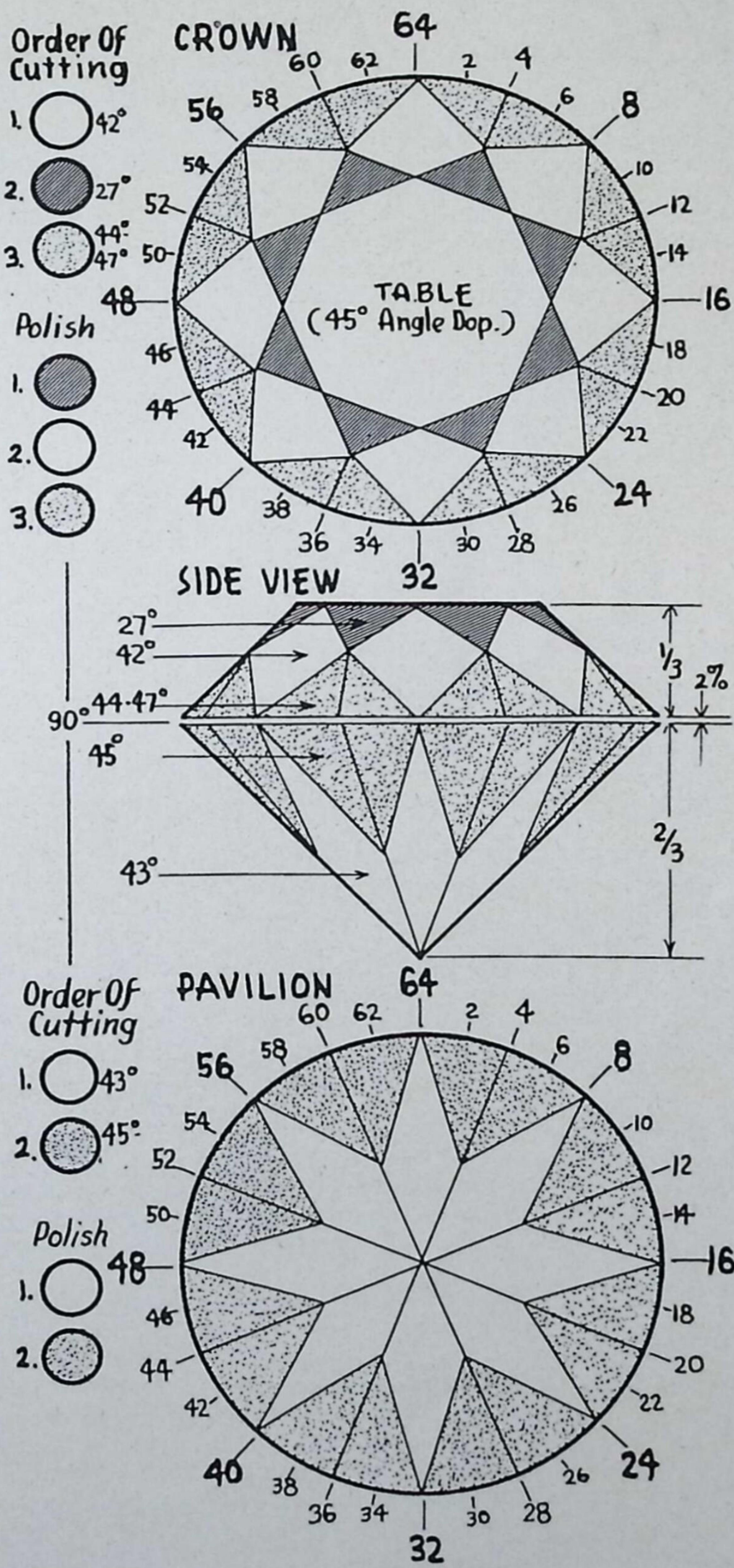
Grind 3rd. Sixteen Girdle facets at 44° - 47° (varies with size of Table), Indexing at 2, 6, 10, 14, 18, 22, 26, 30, 34, 38, 42, 46, 50, 54, 58 and 62.

PAVILION FACETS

Grind 1st. Eight main facets at 43° , Indexing at 64, 8, 16, 24, 32, 40, 48 and 56.

Grind 2nd. Sixteen Girdle facets at 45° , Indexing at 2, 6, 10, 14, 18, 22, 26, 30, 34, 38, 42, 46, 50, 54, 58 and 62.

Use
CERIUM
OXIDE
on a
LUCITE LAP



◆ *Beginners Page*

A visitor recently came to the *Journal* office. He works with the veterans in the hospitals, and he said: "I find great interest in the *Journal* among the veterans, so many of whom are doing lapidary and silver work with the facilities we have provided. Almost daily someone asks me 'What is a blank?' or 'What is a pre-form?' etc., etc. I think it would be a good idea for you to run an article defining simple terms that appear in your advertisements. Many of them are puzzling to a beginner."

We immediately perceived that the idea was good for *all* beginners and we went to work on it right away. We offer definitions of the many terms used in our ads and articles. In addition to this article we believe every lapidary should possess a copy of "Dictionary of Gems and Gemology," procurable from our office for \$5.50 postpaid. This dictionary gives thousands of definitions of gems and gem terms and certainly no dealer who is writing advertisements should be without a copy. Every society library should have it too.

SYNTHETIC STONES—These are manufactured stones having the same physical properties of the genuine gems. They are not glass or imitation. They are as hard as the genuine stone. The law of the land says that any synthetic gem offered for sale must be so stated. It can therefore be safely assumed that gems offered in our ads not labelled synthetic are the real thing.

SLAB—This is a slice of rock that has been cut from a piece of rough rock just the same as a slice of bread is cut from a loaf. Several gems can be cut from a slab and it is sold at so much per square inch.

BLANK—This is a small slab, usually cut square or oblong, from which a single gemstone can be cut.

PREFORM—This is a blank on which some work has been done. Cabochon material is usually ready for sanding and polishing. Faceting preforms need to have the facets ground.

DOPPING WAX—Material for fastening rough gems to sticks for ease in handling.

THUNDER EGGS—Nodules or solid balls of rock containing some agate filling, usually star shaped. The agate portion often contains "scenes." See cover photo of this issue for an excellent example.

SCENIC AGATE—Agate containing inclusions which resemble scenic paintings.

MOSS AGATE—Agate with mineral inclusions in spots or streaks. Under this bracket are sagenite agate with hair-like inclusions; fern agate with fern-like markings; spicule agate with tube-like inclusions; plume agate with feather-like inclusions; bouquet agate (see article on page 174) with inclusions resembling bunches of flowers; etc., etc.

IRIS AGATE—Agate in which thin sections exhibit all the colors of the spectrum when viewed with transmitted light.

GEODE—A hollow nodule. Often lined with crystal formations.

SPHERE MATERIAL—Suitable for cutting into spheres like a billiard ball.

TRIM SAW—For light sawing of blanks from slabs which have been cut on a larger (slabbing) saw and for trimming blanks to save grinding.

BOULE—A whole portion of synthetic gem, usually shaped like a small carrot.

KARAT—A measure of *fineness* for precious metals.

CARAT—A measure of *weight* for gems. There are 5 carats in a gram or 200 milligrams to a carat.

CHATOYANT MATERIAL—Will cut gems that display a light band when turned. Light does not have to pass through them as with iris agate.

BANDED AGATE—Varicolored bands of agate in a rock.

CARNELIAN—A loosely used term for any red rock. Too often used for orange-brown rock.

XLS—Crystals.

FLUORESCENT—A rock that will exhibit color changes when viewed with ultra-violet light that are not visible to the naked eye.

CUSTOM—Custom cut gems are cut to your order by others from your material or theirs. Custom made jewelry is fash-

(Continued on Page 194)



UTILITY SAW

Uses 8-inch diamond blade . . . For trimming, blanking, and slabbing stones up to 2-inch diameter. Our new utility vise, converts this machine into an ideal slabbing saw, adjustable for any thickness slab. All cast iron construction . . . Fully precision machined, non oil throwing.

Table top has two machined grooves for accurate slabbing and trimming.

Machine comes complete with protractor (not illustrated), motor, pulley and V belt.

Machine can be driven from any direction.

Price \$50 (without stand or motor) 8" diamond blade \$9.00. Utility vise (for slabbing) \$18.75.

Prices on request for illustrated stand

We manufacture a complete line of precision gem cutting equipment . . . See your local dealer for our equipment, or write direct to factory.

NELSON MACHINE WORKS

2527 N.E. Alberta Street

Portland 11, Oregon

IF YOU COLLECT FACETED GEMS DON'T PASS THIS "BUY"

6 crystal quartz family gems, a piece of rough and a faceted stone of each (12 pieces)
AMETHYST — SMOKEY QUARTZ — CITRINE — CLEAR QUARTZ — ROSE QUARTZ
AND GREEN QUARTZ
\$9.75 FOR THE SET

A Collection of 54 Different Faceted Gems (No Synthetics)
\$165 FOR THE SET

A collection of 9 fine rough specimens of crystal gems—Aquamarine, golden beryl, pink tourmaline, green tourmaline, kunzite, garnet, citrine, amethyst and green beryl.
Price \$2.00 for the set

All of the above sets are set in SNOWFOAM plastic Mounts
All sets include tax and are sent postpaid for check with order.

★ ★ ★ ★

MINERAL COLLECTIONS FOR COLLECTORS

We have individual specimens, reasonably priced, and complete mineral collections from 50 boxed ores at \$4.00 to museum collections of 550 3x4" superb specimens for \$2,000. If you are looking for any mineral to complete a set or a series consult us. We have many scarce items.

We specialize in mineral sets for gift shops and mineral supply stores.

Dealers' Inquiries Invited

Send for large FREE price sheets listing hundreds of items.

ECKERT MINERAL RESEARCH

110 E. MAIN ST.

FLORENCE, COLO.

Why Cut Bottle Glass ???

When you can get some of our deepest blue topaz from Brazil for only 50c per gram or some of our lighter blue for 35c per gram.

OR—Colorless terminated topaz crystals from Nigeria that weigh up to 10 grams at only 15c per gram. These are nice crystals, but you guys have to cut something!

IF you still insist on cutting glass, try some of our volcanic glass; Apache Tears, that is. These will make nice smoky faceted stones and you can get a whole pound of them for only 60c.

For you thunderegg hatchers, how about some Priday Ranch material at 65c per pound? We are not foolish enough to guarantee this stuff when it's in the rough.

43 Page Catalog FREE

Burminco

(Burnham Mineral Co.)

C. Wayne Burnham

128 S. Encinitas
Monrovia, Calif.

George Burnham

Open Every Day but Tuesday 9 A.M. to 9 P.M.
(Close at 6 P.M. during August)

DESERT SCENIC STONE

That is the name of the new gem and decorative material selected by the judges at the Sacramento convention in a contest sponsored by NEW MEXICO MINERALS. The \$50 merchandise prize was won by Mamie Cavin, 1768 Valley Ave., Baker, Oregon.

This was the most popular material at Sacramento

It is ideal for novelties such as book ends, pen stands, paper weights, spheres, lamp bases, urns, ash trays, buttons, etc.

It is a highly interesting, varied and colorful cabochon material. Sold in the rough at \$1 to \$2.50 a pound according to configurations and hardness.

Sold by the slab at 25c and 35c a square inch according to quality.

Add Postage — Excess Will Be Returned

WE BUY — SELL — TRADE

NEW MEXICO MINERALS

Guy M. Shockley

Edwin K. Kraul

5934 Pauline Road Albuquerque, N.M.
Yep! In the good old U.S.A.

Lapidary Equipment
Lapidary Supplies
Silver Mountings
Sawing

MAIL ORDERS HANDLED PROMPTLY
If it's found in New Mexico and we don't have it
WE'LL GET IT FOR YOU

Geiger Counters
Cutting & Polishing
Mineralights
Specimens

◆ *Shop Helps*

If you have found a useful short-cut in your shop send it in. We will give you credit. The most skilled craftsmen, as well as beginners, find this department useful.

Contributed by Walter A. Anderson, Phoenix, Arizona

Polishing buffs and laps used with fine grain or diamond powder too often become contaminated accidentally by coming in contact with a different polishing powder or a coarser grain. These laps and buffs can be protected from contamination to a large degree by enclosing them in aluminum cans such as are used by amateur movie makers for their reels of film. The cans that I use are 7" inside diameter and approximately $\frac{7}{8}$ " deep with the cover telescoping about half way of the depth.

* * * *

The Journal is continually getting rocks for identification. We can offer no advice about rocks. If you think you have gem material send it to your state Bureau of Mines or your state university for examination. They'll be just as glad as you are if you find something of value in your state. Most of the rocks sent us are green and people think they have found jade. Therefore we pass along a test that will give a lot of false hopes. In addition to the standard tests for jade (rings like a bell, is cold, is waxy feeling) test it in bromoform, procurable from your druggist. It will come in an alcohol solution so fill a quart milk bottle half full of water and pour in the bromoform (slowly). After a while the bromoform will separate from the alcohol and rise to the top. Syphon this off into a shallow dish for a greater spread and remove the rest of the water with an eye dropper. After emptying the bottle pour the bromoform into it and drop a chunk of your "jade" into it. If it floats it will be some variety of quartz but if it sinks it may or may not be jade. At least you've ruled out quartz, which is what it usually is.

DEAR FRIENDS:

We sure do appreciate your letters and your patronage.

I do believe if it wasn't that we have to meet expenses, we would appreciate your letters more than your patronage. The money goes but your letters stay in the files and when we get in the dumps (as we do occasionally) we just read a couple of your letters and go whistling back to gem cutting and jewelry making. Please keep up the writing. You are swell people and I will answer each letter even if my fingers wear down to nubbins trying to use the typewriter.

We have some fine Australian Fire Opal now as well as a good supply of Mexican Cherry Opal. Haven't got much of it cut yet. Guess we like to write letters too well. But we can cut any amount you want. The Cherry Opal Cabochons (mixed sizes from 6x8 to 12x14 m.m.) \$18.00 per dozen. The Australian Fire Opal at 1.00 per carat and up. Tell us your preference in colors and sizes.

Have Jet Black Wood that takes a perfect polish. Slab material at 25c per square inch. mixed size cabochons—sizes 8x16 to 10x24 m.m. at \$10.00 per dozen. 14x24 to 19x25 m.m. at \$15.00 per dozen.

Light Green Wyoming Jade Cabochons (mixed sizes) 8x16 to 9x18 m.m. at \$12.00 per dozen; 13x18 to 8x22 m.m., \$14.00 per dozen. Single Gems, \$2.00 each. Slab material, 50c per square inch.

If you have lost gems from a mounting and want them replaced or matched we keep every type of rough gem material in stock for replacement service. We will cut and reset gems in any jewelry you send at reasonable cost to you.

If you have gems that are chipped or broken we will recut them. We also repolish scratched or worn gems. Just send the mounting and gem to us. We will return it like new.

We repair all types of jewelry also. Can't tell you the cost until we see the material to be worked on. If our quotation does not suit you we will promptly return your material.

We have all types of faceted gems and cabochons in stock. Price lists sent on request. Also lists on facet cutting and cabochon cutting of your material.

Prices quoted do not include Federal Tax or Sales Taxes, where they apply, or postage.

Your Friends,

WHOLESALE

THE STETSONS

RETAIL

Gem Cutting and Jewelry Manufacturing

2550 Ridgeway Dr.

Phone G7-5371

National City, California

WARD'S Fine Specimens for Cutting

For your cutting pleasure, Ward's offers the following carefully selected materials.

TOURMALINATED QUARTZ

Clear rock crystal enclosing abundant blue capillary tourmaline crystals. This material may be worked into interesting carvings, small spheres or large cabochons. Priced at only \$1.50 per pound.*

"CALIFORNITE"

Compact attractive green vesuvianite (Idocrase), often called "California Jade," \$1.25 per pound.* Ten pounds and over at \$1.00 per pound.* Large pieces are available. Write for particulars.

AQUAMARINE

Pale blue pieces, somewhat flawed but excellent for practice work and inexpensive. Pieces average $\frac{1}{2}$ to 1" and are priced at \$.50 per ounce.*

* All prices plus 20% Federal Excise Tax; prices F.O.B. Rochester, N.Y. Write for free price list S-6, "Ward's Minerals for Cutting and Polishing." Also, price list U-4, "Radium and Thorium Minerals."

WARD'S Natural Science Establishment, Inc

3000 RIDGE ROAD EAST

ROCHESTER 9, NEW YORK

Serving Natural Science Since 1862

SILICON CARBIDE GRINDING WHEELS

We do not stock wheels. To do so would require that we carry a tremendous inventory. We offer over three hundred sizes and types of wheels, and make up each wheel as ordered. Our customers appreciate our ability to make up exactly the wheel for their particular needs. Let us solve your grinding wheel problems. We ship about ten days after receipt of order. Following are listed most popular sizes and types. Write for price on any wheel not listed.

Grit sizes are in four price groups, specified as "A" coarse-60-80-100-120 or 180. "B" medium-220-240 or 280. "C" fine 320 or 400. "D" 500 or 600.

Thickness in inches	Diameter in inches				
	6	7	8	10	12
$\frac{1}{2}$	A	\$2.91	\$3.20	\$3.85	
	B	3.08	3.45	4.18	Illinois purchasers add 2% sales tax
	C	3.25	3.73	4.52	
	D	3.41	3.87	4.68	
$\frac{3}{4}$	A	3.10	3.80	4.57	
	B	3.37	4.14	4.96	Prices F.O.B. Franklin Park, Ill.
	C	3.65	4.48	5.35	
	D	3.80	4.63	5.55	
1	A	3.54	4.35	5.30	\$ 7.48
	B	3.85	4.51	5.78	8.14
	C	4.15	4.90	6.24	8.80
	D	4.31	5.28	6.47	9.10
$1\frac{1}{2}$	A	4.70	5.81	7.08	\$ 9.55
	B	5.00	6.31	7.70	10.38
	C	5.50	6.82	8.32	11.22
	D	5.70	7.06	8.62	11.63

ARBOR HOLE furnished in size desired. PLEASE SPECIFY.

2753 HAWTHORNE STREET

"Build"

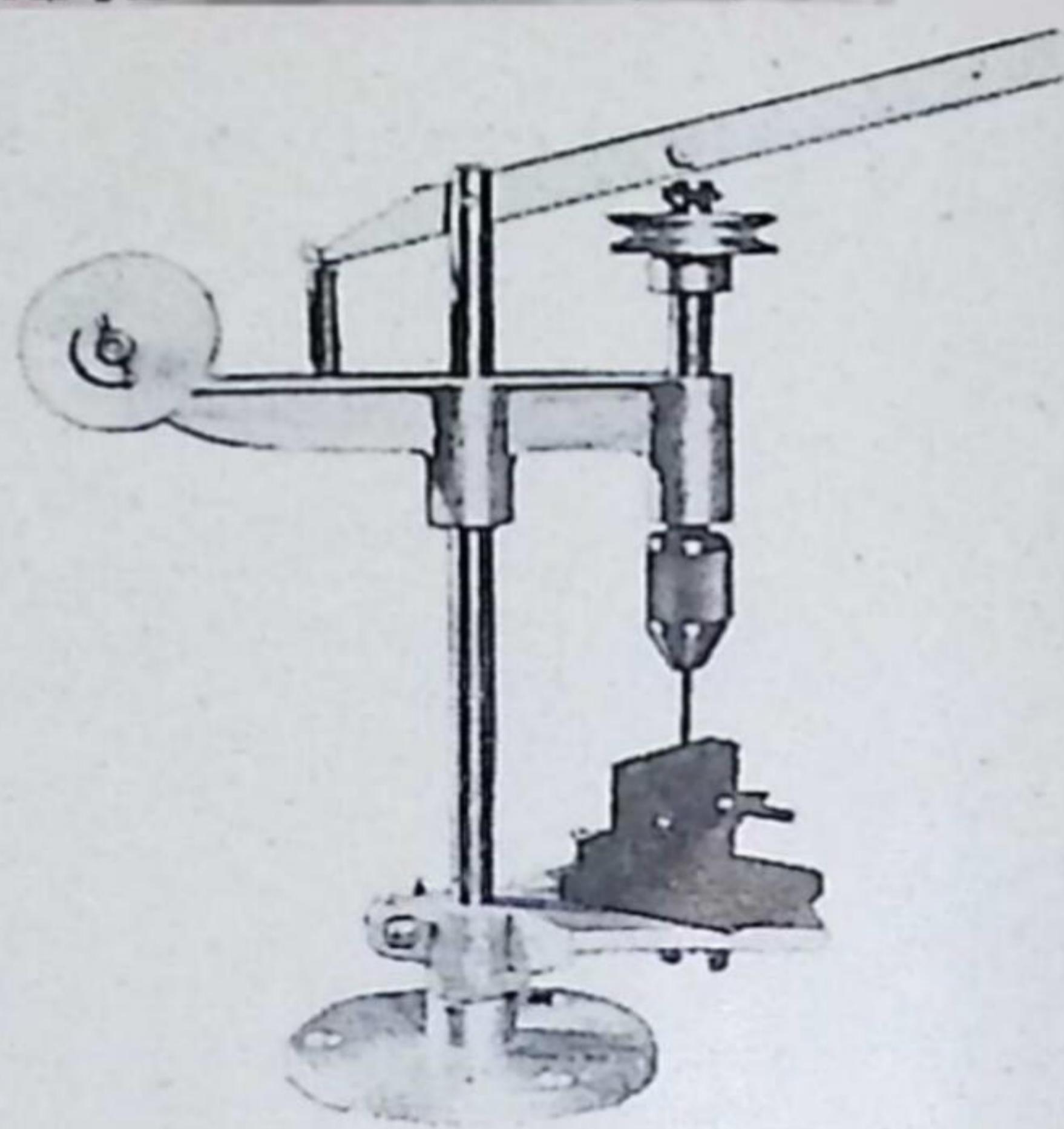
FRANKLIN PARK, ILLINOIS

The Mathieu SPHERE MACHINE

"The Easy Way To Make Spheres"

Equipped with ball bearings throughout. Will make spheres from 1 1/2" to 5". Comes with three sets of cups. Shipped complete with 1/4 H.P. motor and full instructions.

Price \$179.00 F.O.B. Factory



DANA'S

"Minerals and How To Study Them"

A new book for beginners in mineralogy.

1949 Edition \$3.90

POPULAR

By RICHARD

Popular Gemology presented in language the most recent gems.

Price .

A-No. 1 Sterling Silver Neckchains

18" Soldered links \$4.50 per doz.
Less than 1 dozen 75c ea.
Add 20% Excise Tax.

Durite Discs For Sanders

6"	12c ea.	10 for \$1.00
8"	15c ea.	7 for 1.00
10"	30c ea.	4 for 1.00
12"	40c ea.	3 for 1.00

WYOMING JADE

Choice Green Colors

No. 1 \$2.00 per sq. in.
No. 2 1.50 per sq. in.
No. 3 1.00 per sq. in.

2 1/2 m.m. Round Brilliant ZIRCONs

for decorating 75c ea.
\$6.00 per dozen
Add 20% Excise Tax.

STANOXITE

Fast Polishing Compound. Used by Lapidaries all over the world.

\$1.25 per lb.

FAST-MARK TEMPLATE

32 of the most popular shapes
\$1.00

RHODONITE

Good Pink Color
25c per sq. in.

MEET US AT OUR BOOTH AT THE GLASS EXHIBITION

Send 3c stamp
for price list of
equipment and
Supplies.



Open Every Day but Sunday

9 A.M. to 5 P.M.

Lowell R. and Florence Gordon

Go

GEM AND MINERAL SHOW

Dependable Lapidary Supplies

WELL "JUNIOR" GEM DRILL

Light weight drill press for Gems, Wood, Plastic. Has a $\frac{1}{4}$ " chuck. Will drill using tubes and Carborundum, Norbide and grits.

complete with instructions, Drill Tubes
s.

Price Only \$16.50 F.O.B.

Shipping Weight 6 lbs.



AGATIZED CORAL

This is one of the most interesting materials available to the cutter.
Price \$1.00 per lb.

Send postage for two lbs.

GEMOLOGY

D M. PEARL

ents in understandable
t accurate knowledge of

.. \$4.00

THE FINAL AUTHORITY

Dana's "Textbook Of Mineralogy"

By W. E. FORD — Fourth Edition

This book is invaluable to the mineralogist and
rock collector. It is the textbook used in most
universities.

Price \$6.00

ALCOHOL LAMPS For Dopping

Size No. 1 85c

Size No. 2 98c

DUPLEX TRACER

Metal point on one end and plastic on
the other.

Complete with 5" Straightedge.

Price 85c

Tie Chain Mountings

White Metal—Takes 7x25 m.m. stone
Packed in Gift Box \$1.25 ea.

Xmas is coming Fast

Add 20% Excise Tax.

Leather Polishing Disc

8" Surface

Price \$7.50

Arbor sizes $\frac{1}{2}$ "— $\frac{5}{8}$ "— $\frac{3}{4}$ " & 1"

MODEL H MINERALIGHT

\$12.50

WANZER GEIGER COUNTER

\$150.00

Send for circular

CALIFORNIA Residents

Add 3% Sales Tax to orders.

NDALE SHOW AUGUST 20th AND 21st

ON'S
ERAL SUPPLIES
pidary Equipment

1850 E. Pacific Coast Highway

Long Beach 6, California

Phone 7-3856



Green Gripper
Dopping Wax
\$1.25 per lb.

◆ Who Said It's Junk?

By EDWIN S. KIRKLAND

Red Mountain, Calif.

Through the years we have had a lot of interesting helpful correspondence with the author. He wrote this article at our invitation because he has a knack of presenting his side of the discussion aptly and entertainingly. He doesn't convince us however and we think that present commercial equipment gets better and better and that the days of the uniformed dealer have narrowed greatly. After all, it is the present manufacturers of lapidary equipment (who borrowed their ideas from the home experimenters) who have made possible the enormous growth of America's third largest "doing hobby" by bringing gem cutting equipment to the man who doesn't know a right-handed monkey wrench from a left-handed one. And that's most of us. The Editor.

I noticed in the December 1948 issue of your most excellent publication that a reader suggested you might not agree with everything you publish and you admitted you didn't. I have suspected that of all editors at times but I'll be damned if this isn't the first time I ever heard of one honest enough to admit it.

I like to try the various kinks published in your magazine and others. Sometimes they work nicely and sometimes they don't. Some kinks are merely a tough way to do an easy job. Take that one of getting a stone off the dopstick by putting it in a pan of cracked ice for instance. I tried it—the ice melted but the stones didn't come loose. Then I mixed some ice and salt and put the pan outside the house overnight. One half of one stone came loose, another split, both pieces stayed stuck. I took the other stones off by warming over an alcohol lamp as I usually do. The dopsticks were water-soaked and warped into corkscrews as they dried.

The idea might work for some folks but it didn't for me. And why anyone should want to go to all that trouble and muss and wait from two to ten hours to get a stone loose when a little gentle warming and a slow steady twist will take them off in seconds, is more than I can understand. Also too much cold will break a stone as easily as too much heat.

And now let's look at that idea that home made equipment is junk and no one wants it when you try to sell it. I'll admit a lot of it is junk but it *works*. And did you ever hear of anyone trying or *wanting* to sell it? While we're on the subject

of junk — how about some of the expensive stuff being sold to an eager and gullible public by our various supply houses? Machinery evidently designed by men who have never cut stones in their lives and who therefore know just what a fast selling lapidary outfit should look like. Too much machinery is being built and sold today with the sole idea in mind of providing a handsome profit for the manufacturer and dealer. It is good looking expensive stuff, good equipment for showing off when the Jones' call and an expert lapidary could turn out good work on most of it. But it is not always suitable for the beginner.

I am afraid you have misinterpreted the meaning of the word junk. It is a flexible term. It means "any article which is of no value to the owner." Home made equipment which works may be *priceless* to the owner while manufactured stuff costing hundreds of dollars may be so much worthless junk. There is, however, one vast difference, home experimenters don't pay advertising fees. This being the case I can understand an editor's opinions being slightly influenced at times. Don't lose sight of the fact that all the present stuff that is of value, high priced or otherwise, was originally worked out by men like Howard, Covington, Eyles and a few others in a back yard work shop. I know what they were up against, I first started trying to find out how it was done back around 1924.

Let us consider a few examples of Home Made Junk, cost, results attained, and resale value. In 1940 I examined a home made lapping outfit in Trona. It

DIAMOND SAW BLADES—

Carborundum Company blades for maximum efficiency and long life. Most sizes now in stock.

PERRY TRIM SAWS—

A well made unit with ball bearings and all metal construction. Price only \$25.50. Blades extra—6" at \$7.70 or 8" at \$9.90.

POLY ARBORS—

The unit with $\frac{3}{4}$ " shaft, ball bearings and grit slingers at \$19.50 is the most popular model. We have found this arbor superior to some others at much higher prices. We have grinding wheels, drum sanders, disc sanders and polishing buffs to fit these arbors. This makes a highly efficient lapidary outfit.

CABOCHONS—

Jade, tigereye, lapis, agates, etc. in expertly cut and finely polished cabochons at very reasonable prices. Approval selections sent collectors against deposit or suitable reference.

TITANIA GEMS—

(Synthetic rutile)—Now in stock. Expertly cut stones of outstanding brilliance and color. Call and see these. Will send on approval. Very reasonable prices.

Kane Lapidary & Supply

W. J. KANE

1651 Waller St., SKyline 2-0500

San Francisco 17, California

SPECIAL FOR AUGUST AND SEPTEMBER

Slabbing with our new Nelson 24" slabbing saw 5c a square inch

NEW CUTTING MATERIALS

Pudding Agate Rock

Quartz Agate Rock from South Dakota

Rose Quartz from South Dakota

Hill's Canyon Agate from South Dakota

ALL
75 CENTS
A
POUND

8 pounds of any of the above for \$5.00

All Prices F.O.B. Portland, Oregon (excess postage returned)

AUGUST BONUS

Free (during August only) 1 pound of Priday Ranch nodules with every \$5.00 rock order

Complete Line of Lapidary Supplies

We Specialize in Oregon Rough Cutting Material

Free Catalog on Request.

FRANCES E. AMES

3638 S. E. Olsen (Ardenwald district)

Portland 22, Oregon

Phone TABor 3093

Covington

DIAMOND BLADES
"Treat yourself to the best"

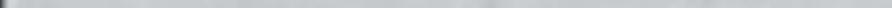


Allow for Postage and Insurance.

COVINGTON
Grinding Heads
and Shields are
furnished in 4
sizes and price
ranges.



COVINGTON 8" Trim
Saw and Motor are
compact and do not
splash Koolerant.



BUILD YOUR OWN LAP
with a
COVINGTON
12" or 16" Lap Kit.



Send 3c Stamp
for Catalog

COVINGTON LAPIDARY ENG.
2nd & Highway 99, Redlands, Cal.

Learn gem cutting

Approved under G.I. Bill
Non-veteran students accepted

Cutting of Gem Stones
Emerald - Ruby - Sapphire
and all types of genuine material
Inquire for prices

STEWART LAPIDARY
INSTITUTE

565 Main Ave.

Passaic, N. J.

was made of a model T Ford rear end, buried in the ground endwise to the gear housing. A steel barrel head wedged into the upper wheel formed the lap plate. It was driven from the same gasoline engine which pulled the gang mud saw by a home made wooden pulley on the end of the drive shafts. Two posts, one on either side, supported a 1x6" board across the top as a stop against which the rocks rested while being lapped. The rear end came from a wrecked and abandoned automobile. The barrel head from the city dump. The total cost was perhaps 50c for bolts. The owner used it perhaps two or three years. The rest of his equipment was on the same order, but he polished dozens of sets of very nice book ends and many smaller pieces also. His greatest operating cost consisted of carbo grains for the mud saw; 100 to 150 lbs. per year.

Some two or three years ago my friend Frank Clark built himself a diamond saw at his place in Last Chance Canyon. The main bearing was a broken and discarded centrifugal pump casting and the shaft was an automobile drive shaft. An automobile gas tank, with the top cut out, formed the oil sump. Two long 5/8" stay bolts from an abandoned mine shaft made the guides. A couple of pieces of 2" plank and a bolt made the vise. A brake cable, a broken hay rope pulley and a discarded oil bucket fixed the feed problem. The top of the gas tank bent over the blade formed the splash guard. The first cost of this outfit (less the blade) was nothing at all. The resale value was 100% of the cost. The operating cost consisted of blades worn out and gasoline for the 1 1/2 H.P. engine. Lube used for cutting was crankcase drainings secured free of charge at a gas station. The saw threw oil but as it was set up in an old chicken house that didn't matter. A year later, after he had worn out two or three blades and sawed and sold about a ton of rock, Frank bought a new and well advertised 16" saw. It also threw oil but he put it in the same chicken house. It had three advantages over his former outfit. (1) It looked more prosperous to the customers — (2) It sawed bigger rocks — (3) As it stood on its own legs he didn't have to bend over so far to put a rock into it..

Then there's the 24 or 30" saw in use at the rock shop between Barstow and

Yermo. The mandrel came from an abandoned cordwood saw. The 1½ H.P. electric motor from "Uncle Ikey's." The very sturdy framework necessary for supporting rocks weighing from 50 to 500 lbs. is probably a combination of used railroad ties and old mine timbers. The carriage rides on wheels which might have come from an old hay carrier. As the blade rotates backwards (that is from the bottom forwards) oil is thrown directly into the cut; no splash guard is used. The first cost, outside of the blade, was probably about \$15.00. Resale value at present time would be around 200% of first cost. Most of the other equipment, and he has a lot of it, is more or less home-made. Anyone who has visited the place can testify as to the very excellent results attained.

Now let us look at the outfit belonging to my friend Charles Greenfield of Randsburg. Built during the war, when parts were almost unobtainable and while he was working at a war plant and had no place to use it excepting on the kitchen table, it consists mostly of a panel on which is mounted a used washing-machine motor, a length of ½" shafting and two or three Sears and Roebuck polishing heads. I don't suppose it cost him over \$25.00 in cash and as none of the heads are worn out yet I really don't know just what the resale value would be. In fact as Charlie is a lean and wiry miner and I'm a little fat around the middle I don't think I could run fast enough to make it safe to ask him. Perhaps if you were to look at the collection of very beautiful stones he has polished with it you would understand the reason.

And now just one example on the other side of the question. About a year and a half ago a retired business man friend, finding time a little heavy on his hands, got the idea he would like to polish a few rocks. He visited a self-recommended supply house and told the salesman that he didn't know a thing about polishing rocks and wanted to buy a complete outfit to do it with. It is turned out the salesman didn't know anything about polishing rocks either but he did know how to sell a bill of goods. My friend came home with a load of equipment — \$400.00 worth to be exact. Three or four days later he hunted me up saying that everything didn't seem to be working

Dr. Willems

SAYS—

*a hobby is like a horse with an easy gait
—you can ride it with zeal to regions of
pure delight.*

GREETINGS

In this space I will appear regularly with information, ideas, and some of the things about Lapidary that interest me most: a book I have written, a faceting device I have invented, a set of slides in color which I have photographed, volumes of my library, possibly some high grade cutting material, cut stones, etc. I shall be glad to receive your inquiries, suggestions, and orders, and promise to answer letters which contain a stamped, self-addressed envelope.

Let's Get Acquainted.

J. DANIEL WILLEMS
LOCK BOX 1968
CHICAGO 90, ILLINOIS

California Gem Trails

A NEW BOOK for the gem hunter, gem cutter, mineral collector, and those who love to visit the wide open spaces. By Darold J. Henry of Brea, California, well known author, gem hunter, and educator. Not a compilation of the other man's work. **The author has been there**, and writes in a readable style from first hand experiences, most of them recent.

16 accurate and reliable maps by the author. Photos and valuable text. Little known localities are described by one who is perhaps as familiar with these gem producing regions as anyone. Book is 68 pages, bound in heavy flexible cover for field use. Not just a "bird's eye" view but an on the ground description.

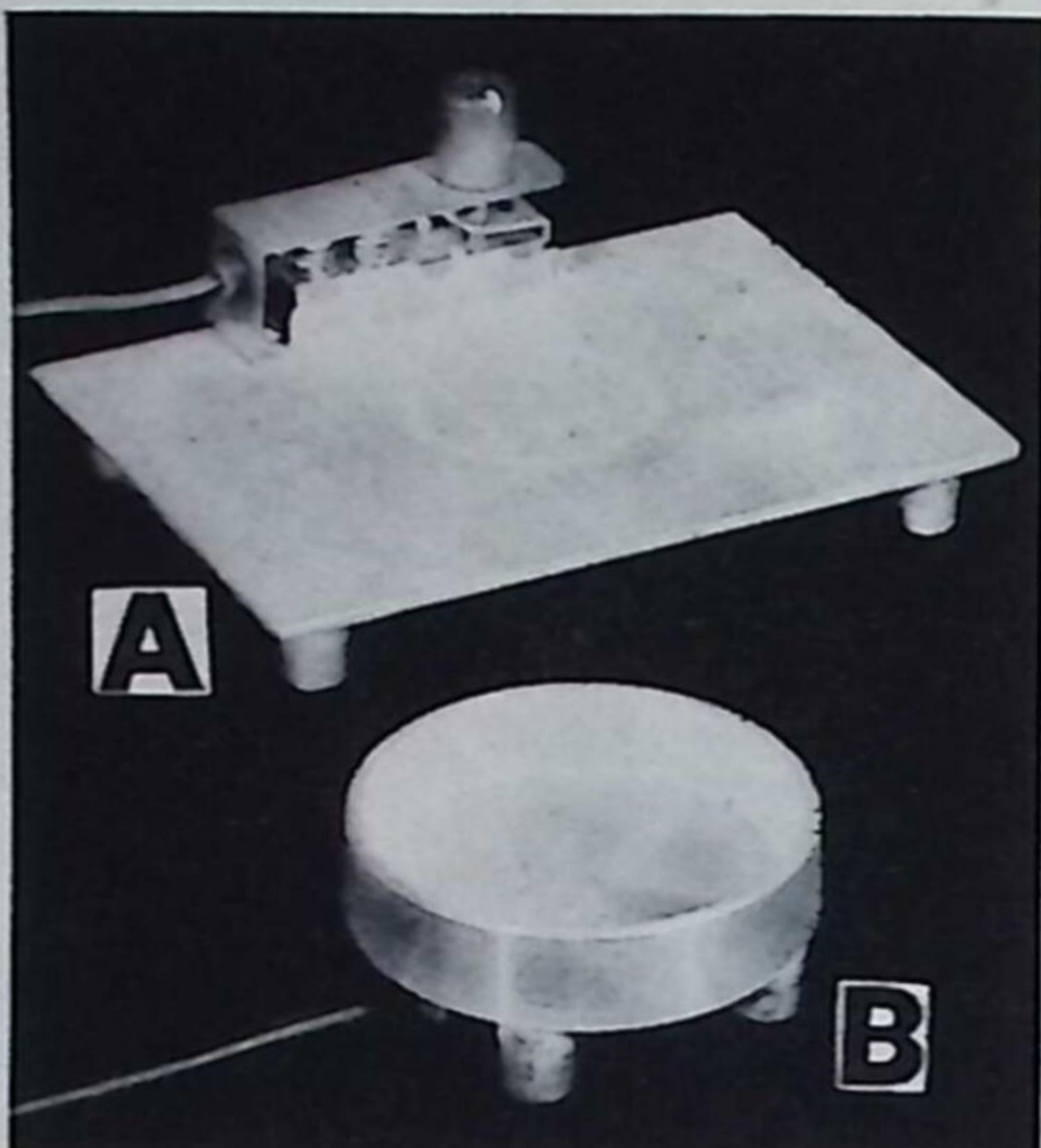
PRICE ONLY \$1.50 POSTPAID

ASK FOR OUR FREE BOOK LIST

LAPIDARY JOURNAL

Box 1228

Hollywood 28, Calif.



A—CABOCHON HOT PLATE. Variable temperature to keep stone just right for dopping. Price, postpaid, \$10.00 each.

B—DOP WAX POT. Keeps your wax always ready for instant use, using only 30 watt current. Price, postpaid, \$5.00 each.

These new items are solid aluminum, expertly machined and will last a lifetime. Indispensable in any lapidary shop.

Our complete catalog free if you mention *Lapidary Journal*.

THE GEM EXCHANGE
(Gem Village) Bayfield, Colo.

Semi-Precious GEM STONE BUTTONS

Chrysocolla, Chrysoprase, Petrified Woods, Agates, Jaspers, Banded Onyx, African Tiger-eye, Petrified Dinosaur Bone, Pink Carnelian. MOUNTED: Sterling silver, solid backs with bezel, loop shank. Blouse buttons, \$1.50; Dress buttons, \$2.50; Coat buttons, \$3.00 to \$3.50. Other sizes, various materials, state your needs.

RICOLITE BUTTONS: Self shanks. Greens, Grays, yellows; with or without patterns. $\frac{1}{2}$ ", 25c; $\frac{3}{4}$ ", 50c; 1", 65c; $1\frac{1}{4}$ ", 75c; $1\frac{3}{4}$ ", \$1.50. Sewing lug back of button. *All buttons: in sets or singles.* Approvals on request. Buttons made to order.

RICOLITE: The all-purpose gem material. 50c lb; sawed chunks, \$1.00 lb. Include postage on rough materials.

SATISFACTION GUARANTEED

SHIPLEY'S MINERAL HOUSE
Gem Village Bayfield, Colorado

just right and he would like a few pointers. He had the outfit set up in the back of an old one-room adobe store building about 20 by 40 feet, the front end of which was in use as a two-car garage. He said the saw, a well known 16" model, was the only thing he could get to work right. I could see it had been working. A streak of oil running across the floor, up one wall and part way across the ceiling proved it. There was also a fine misty spray of oil on the windshield and hood of his car and the new car of a visiting friend. The distaff side of his family was most unhappy about that oil. The cure for the oil throwing was easy. The saw in question was not properly shielded and had a rather clumsy adjustable oil sump which didn't hold enough oil; needed filling too often. My friend had been adding too much to be sure he had enough. Tacking a piece of canvas to one of the splash guards helped. He moved the saw outdoors anyway — *by request*. The 16" lap plate was set up in a niche in the wall that had once been a window, and was built into a framework of 4x4 timbers. When we turned it on the $\frac{1}{4}$ H.P. motor barely had power to start it. We tuned it off again before it had quite reached top speed as it was trying to jump out of the framework. The salesman had sold him a 6" pulley for the mandrel and a 2" motor pulley and had insisted those were the correct ones. Just why that lap plate didn't blow up from centrifugal force while running at the resulting speed of 600 RPM, I don't know. The grinding arbor was a good arbor if you wanted to run 2x10x12 grit stones for grinding plow points on the farm but even then it would have to run true. This one was out of balance and still is. Thinking perhaps the stone was at fault, though I've never seen a faulty grinding wheel, I asked for his stone dresser and he handed me one of those $1\frac{1}{2} \times 1\frac{1}{2}$ " carborundum sticks. The man who thought that one up should be awarded a barbed wire medal. The reason for dressing a grinding wheel is to remove glaze and excess material on the high side, if out of balance. In other words some of the carbo must be cut away. Trying to do that with another carbo stone is like trying to saw the end off a board with a saw made from another board. It can be done but not very efficiently.

The rest of the stuff was about the

same. There was one drum sander with two different grits of cloth to use on it, one flat plate sander with one grit to fit. It makes no difference whether a man uses drums or flats but he should have at least one for each size grit. Also there was a 1x8" white felt buff with a $\frac{7}{8}$ " hole to be used on a $\frac{3}{4}$ " shaft. That odd size hole identified it as war surplus, but it wasn't sold at a war surplus price. I don't know how much it cost my friend before he finally got the proper size pulleys, additional sanding plates, bushings etc., but I imagine \$40.00 would be about right. After using the outfit about two months (without much success) he became disgusted with it, offered it for sale and accepted the best offer received which was \$200.00. In other words a depreciation of about 55% in two months.

I don't know just how you would figure that as good resale value but personally I can't seem to get enthusiastic about it. Perhaps it ties in with the theory that the reason we're all broke is that there's too much money in the country. In which case he should have made a larger profit by selling for less. But that doesn't seem right either. At any rate the man who bought the equipment has used it for over a year now. He has worn out several saw blades, spent many hours at the polishing bench and has never succeeded in putting a polish on anything. He gets a shoe shine and that's about all. I understand the outfit is up for sale again.

Now Mr. Quick I think this is one article you will not publish. At least not without cutting it to pieces. It would make your advertisers most unhappy. As you say, it is not necessary to spend a lot of money to start polishing stones, but you will also have to admit it is possible to spend a lot of money and still not be able to polish stones. You will also have to agree, unofficially of course, that all persons do not have the ability to polish stones. For the same reason that while one man might preach a better sermon, he could not necessarily write a better book and he might not be able to build a mouse trap at all.

I contend that any person who has the ability and understanding necessary for the proper polishing of stones, also has the ability to assemble a cheap outfit and learn to use it. There are now many very excellent books available on the sub-

DEALERS ATTENTION!!
Sole Distributor of
NEW PROCESS
FUSED STAR QUARTZ



14 x 12 oval 12 x 10 oval

8-9-10-11 m. m. rounds

PRICES LOW — PROFITS BIG

Write for prices on your letterhead.

SOLD TO DEALERS ONLY

Full line of heavy cast sterling silver and
Gold mountings.

Myco Precision
CASTING CO.

1113 Meadowbrook Ave.
Los Angeles 35, Calif.

New Book
**EARLY CALIFORNIA
GOLD RUSH DAYS**

Authentic stories and experiences of a 49'er as told by his daughter,

Annie Keeler Williams

See an abstract of this interesting book in the June, 1949 issue of this magazine.

Price — \$1.50

★ ★ ★

NEW EQUIPMENT

HIGHLAND PARK

COMBINATION UNIT — Model E-3

Cabochon machine, consisting of 8" saw with stone guide and lucite shield. Arbor with hooded grinding wheels and splash pan. End of the arbor covered for sanding and polishing buffs. Includes 8" diamond blade, 2 - 8x1" grinding wheels, 1 - 8" leather buff and 1 - 8" snap rim sanding disc. Mounted on metal base 13" x 24".

Complete (less motor) — \$89.50

We Will Be Closed During August

S-T Gem & Mineral Shop

6924 Foothill Blvd. Tujunga, Calif.
Jean and Bill Kuhn SUNland 9358

FIRE OPAL - MEXICO

10 small pieces—average	
1/2"-3/4"	\$1.00
5 larger—average 3/4"-1"	1.00
6 still larger—1"-2" or over ..	2.00
1 small vial clear fire opal....	1.50
50 rough mixed Mexican Opals, including honey, cherry, etc., average 1"	1.50

ALL 5 LOTS POSTPAID—\$6.00

Although these are sold chiefly as cabinet specimens and have plenty of fire, many of them will work up into nice cabochons.

Money Cheerfully Refunded if Not
Entirely Satisfactory

Polished Mexican Opals and other
gem stone cabochons on approval to
responsible persons.

DR. RALPH E. MUELLER

3701 Valentine Road Kansas City 2, Mo.

NOW!

MODERN TIFFANY
MOUNTINGS

in

14 KARAT GOLD

for

TITANIA, ZIRCON
or other BRILLIANTS

5 m.m. — 7.00
6 m.m. — 7.50
7 m.m. — 8.00
8 to 10 m.m. — 10.00
plus taxes

Send for Literature

THEODORE'S

Jewelers to the Craftsman

P.O. BOX 292 GLENDALE, CALIF.

ject. Having once learned part of what it is all about and how it is done and which type of equipment best suits his or her fancy, the cheap junk having worn out in about five years, it is time to buy expensive equipment which will last longer.

Remember, most of us had to learn to walk before we could fight or run a foot race — but don't let your advertisers find that out.

ABOUT OUR COVER

The agate of the sea scene pictured on our cover was cut by J. D. Churchill, 1007 Ft. Worth Ave., Dallas, Texas. It came from Reaves County, Texas in 1943. "No indication of any pattern was on the outside and," says Mr. Churchill, "I was in a quandary as to how it should be cut. However the size of my equipment decided that I should cut it across the narrow way rather than lengthwise. I cut several slices and the pattern was practically the same. My cousin, who was a teacher of agriculture in Reaves County, told me that a friend of his had some nice looking rocks in her flower bed. I asked him to see if she would let me have some and then he sent me the agate from which the sea scene was cut." Subscribers can get a picture in blue of this agate on Mr. Churchill's personal card if they write and ask for it and enclose a stamp. It is one of the finest agates we have ever seen and looks exactly like the ocean at Huntington Beach, Calif. or Far Rockaway, N.Y.

Largest Petrified Tree Log Found

A petrified log, nine feet in diameter and with 85 feet of its length exposed above the ground, has been discovered near Cash, S. D. Dr. W. H. Over, curator of the University of South Dakota Museum, said it is the largest petrified log ever found in the world.

GORDON'S

See the middle spread of

This ad is upside down. Just wanted to be
sure you'd know we're going to be at the
Glendale Show.
THAT'S RIGHT!

SUSSBACH'S QUALITY "TITANGEM"

SYNTHETIC RUTILE

(Registration of trade name pending)

PRECISION DIAMOND CUT

CORRECTLY ORIENTED ON C AXIS

OPTICALLY HIGH POLISHED

The latest and most modern jewel in the crown of science and nature. A genuine crystal gem produced in the dazzling heat of over 3000° F. TITANGEM is actually more brilliant than diamond, as hard as amethyst and many other semi-precious stones, less brittle and better to handle than zircon. TITANGEM boules often occur in slight variations of whiteness and the nearest to white stones are in big demand. Because of this fact we offer a variation in prices as follows:

TITANGEMS

Round Brilliant Cut Gemstone

1 to 3 carat sizes: \$7.50 to \$10.00 per carat
3 to 5 carat sizes: \$6.00 to \$ 8.50 per carat
Over 5 carat sizes: \$4.50 to \$ 7.50 per carat

Rough TITANGEM

(Synthetic Rutile)

Full boules over 100 carats .65 per carat
Sections over 20 carats .75 per carat
Sections under 20 carats .95 per carat

Small consignment of rough or cut stones available for deposit of \$10.00.
Cutting instructions furnished with all rough materials.

HERBERT SUSSBACH

15 MAIDEN LANE

(CO 7-8997)

NEW YORK 7, N.Y.

Petrified Bananas

Banana Fruit in slabs only..... 50c sq. in.
Banana Limb and Trunk Sections in slabs only..... 35c sq. in.

This material comes in beautiful pastel colors and should make an unusual, interesting and attention getting addition to any collection. Cut some for your next show. See article on this material in the February, 1949 issue of **LAPIDARY JOURNAL**.

Petrified Palm Root..... 20c sq. in.
Rare Osage Orange Wood..... 50c sq. in.
Turquoise from Old Mexico..... \$5.00 lb.
Red and Green Jasper..... 25c sq. in.
Amethyst Agate..... 15c sq. in.

My supply of the banana material is almost gone so don't delay ordering if you are really interested.

All Orders Postpaid. California Purchasers Add Sales Tax When Ordering.

ERWIN TONNE

517 BALBOA STREET

COSTA MESA, CALIF.



◆ Personal Facets

By LELANDE QUICK

We write this page within an hour after the final dimming of the lights of a gem and mineral convention. This time it was a *great* convention. I believe it was the consensus (except for the dealers) that it was the *greatest* convention so far.

It had its little inconveniences. Some things didn't suit some people but on the whole it was the best conducted convention we have yet witnessed. If a dog didn't have a few fleas to bother him he'd forget he was a dog. The people who complained about the dirt and gravel floor of the convention and the attendant dust on their mineral cases forgot that the minerals were buried in that same dust eons before they came from the dust themselves and they forgot all about the bed rolls on the desert floor or the pine needles of the forest.

G. R. MacClanahan, Chairman of the joint convention of the American and California Federations of Mineralogical Societies at Sacramento, and his very able and friendly assistants in the Sacramento Mineral Society, succeeded admirably in accomplishing what they set out to do. They brought together the finest and largest collection of gems and minerals ever gathered under one roof. One is so apt to forget the many headaches, the sleepless nights of many people planning, the endless discussion followed by hard, hard work that comes before the first truck unloads at the door. We can't think of one *important* mistake this committee made. They are due the ungrudging gratitude of gem and mineral people everywhere.

The attendance was not as great as the Long Beach convention last year, but it was six times the attendance at Denver. 7,400 against 36,000 almost looks like failure until you analyze it. These 7,400 persons *paid admission*. They weren't counted every time they came back from a sandwich. There were no week-end beach crowds as at Long Beach to enter free and be counted etc. etc. These folks all went with one idea in mind — to pay money to see gems and minerals because they were interested in them. And

they all spent more money before they left the hall.

We know one dealer who did \$15.00 in business in three days; another who did \$56. *They had nothing at all to interest the gem cutter.* But it isn't the business that anyone does that measures the success of a convention. It is the business that follows and the renewed conviction that the mineral and gem fraternity is probably the best of any hobby group.

Aside from the way the judges voted these are a few of the exhibits that impressed us most: The relief map of Kern County with mineral locations, included in the wonderful display of the Kern County Mineral Society; the hundreds of faceted gems of the Gem Cutters Guild of Los Angeles; the 20 cases of lapidary work of the San Jose Lapidary Society, which included the finest display of transparencies ever exhibited anywhere and Raymond Addison's unmatched cameos; the best fluorescent exhibits ever seen which included Jessie Hirsch' fine collection — an annex to her mineral cabinets which were the best in the show; the more than a hundred pieces of sterling dinner ware set with gem handles brought by J. Wesley Anderson from Baltimore; and pictured on page 169; the table top and hearth inlays of Major Kennedy; the magnificent crystal collection of C. J. Hansen; Lee Unruh's unbelievably accurate agate miniatures and another viewing of O. C. Barnes' dinner set and lamps of onyx; the display of flower and plume agate cabochons of A. P. Gibson; the excellent and varied cabochon display of R. W. Carpenter; the cases of the San Pedro Lapidary Society and the Monterey Bay Mineral Society; the map of the United States, with each state made from a gem material of that state, by Genevieve Colony; the agate furniture of W. G. Yongue; the crystal display of Dorothy Craig; the book ends and ash trays of R. F. Henley; the 5" jade sphere of Ralph Dietz; the fossils in the making of J. R. Mathieu; the opal display of W. H. Russell; the jewelry of Lula and Lloyd Roberson; and the thing that de-

lighted us indeed — the excellent motion picture on gem cutting made by the N. O. T. S. Rockhounds which was shown once every hour to capacity audiences.

The best collections were, as always, the many hundreds of bragging pieces hauled out of pockets and purses for our inspection. We have a standard formula that makes every one happy. We always say, with indisputable truth, "well, look at that! Now that really IS a rock." But then no one ever shows us a dud so we are always sincere.

This was to be the last annual National Federation show but it was wisely decided to hold them annually, instead of every two years as planned, and the next one will be in Chicago. Smart! Smart! We would like to see, sometime in 1950, a lapidary fair in that Long Beach Auditorium with no Federation connection. It would not conflict at all with a national show. Several have suggested it to us but who has the broad shoulders for it?

A side issue of the convention, but full of importance, was the organization of the American Gem and Mineral Suppliers Association of which Thomas Warren of Ultra Violet Products Co. was elected

President and we were made a director. If the dealers are going to play Santa Claus to the conventions and make them possible they deserve the right to at least say "giddap" to the reindeer.

The dealers plan a code of ethics to which members will subscribe. Gem and mineral dealing has now become "big business" but few dealers have become big business men. Most of them have come from hobbyist ranks and turned an avocation into a vocation. Instead of being amateur gem cutters they are now amateur business men. They need the counsel and guidance that only a cooperative association can bring and the new organization can benefit the buyers in many directions by keeping the business clean, reliable and efficient and advertising honest.

Thank you, ALL members of the Sacramento Mineral Society for your fine work. The gold panning contests, the old costuming and dances, the soft organ music all gave a flavor to the convention that may never be duplicated. If anyone thinks it was not the best possible convention the majority is in agreement that it was the best so far.

CALENDAR OF EVENTS

August 20-21—GLENDALE LAPIDARY AND GEM SOCIETY—Gem and Jewelry Show. Basement of Glendale Civic Auditorium, Glendale, Calif. See ad on Page 187.

August 25-26-27—ROCKY MOUNTAIN FEDERATION OF MINERAL SOCIETIES—Convention. Knights of Columbus Hall, Albuquerque, N. M.

August 26-27-28—MIDWEST FEDERATION OF GEOLOGICAL SOCIETIES—Convention. Public Museum, Davenport, Iowa.

Sept. 2-3-4—NORTHWEST FEDERATION OF MINERALOGICAL SOCIETIES—Convention. McArthur Court, University of Oregon campus, Eugene, Oregon

September 24-25—LOS ANGELES LAPIDARY SOCIETY—Gem and Jewelry Show and Picnic. Montebello Stadium, Montebello, Calif. (adjoining Los Angeles on the East.) See item on Page 216.

October 15-16—HOLLYWOOD LAPIDARY SOCIETY—Gem and Jewelry Show. Details to be announced in next issue.

November 11-12—CLARK COUNTY GEM COLLECTORS—Gem and Mineral Show. United States Naval Reserve Armory, Las Vegas, Nevada. See item on Page 218.

November 19-20—ORANGE BELT MINERALOGICAL SOCIETY—Gem and Mineral Show. National Orange Show Buildings, San Bernardino, Calif.

EARLY CALIFORNIA GOLD RUSH DAYS By Annie Keeler Williams — \$1.50 postpaid

One of the most entertaining books on the early California gold rush scene we have ever read. It is written by the daughter of Col. George Keeler who prepared the book from her father's diary and correspondence. The book contains many facets of the gold rush not revealed in other accounts of the time.

California purchasers add sales tax.

THE LAPIDARY JOURNAL

HOLLYWOOD 28, CALIFORNIA

P.O. Box 1228

◆ *Answers to Inquiries*

NOTE—This department is one of the most important sections of the LAPIDARY JOURNAL. If you have problems write us about them. We will get the answer somewhere. And if you don't agree with an answer, give us your idea. A lively and useful Q and A department should become an encyclopedia of gem information through the years. Will you help?

Inquiry of Russell R. Norton, Seward, Alaska.

Can you tell me the best way to clean gold nuggets?

Answer:

Richard M. Pearl in his *Mineral Collector's Handbook* offers the following advice: For removing mud and soil adhering to gold nuggets the following method was published by Ned J. Burns (*Field Manual For Museums*). Generate a small jet of steam with a bunsen burner under a well-stoppered bottle and deliver it through a small rubber tube having a fine tapered glass nozzle. To prevent an explosion of the apparatus a separate glass tube should run down through the rubber stopper almost to the bottom so that it is always under the water. The upper end should extend well above the tip of the bottle. A small wooden pick will remove the adhering impurities as they are loosened by the jet of steam.

"Soap is the best cleaning agent for native gold, even better than acid," states Mary A. Piper of the Colorado State Bureau of Mines Museum. Gold seldom needs cleaning as it is one of the few metals that does not corrode although alloys are susceptible to discoloration.

* * * *

Inquiry of Joseph D. Houston, Omaha, Nebraska.

Why is beaded sterling silver wire so brittle and is there anything one can do to keep it from breaking when working with it?

Answer:

It is not more brittle but where the beads join the tensile strength is very weak because the beads barely touch. It would be far different if the strength could be measured at the *outside*, or top and bottom, of the beads. Experienced silversmiths usually anneal beaded wire before working with it and then carefully coil it about a ring mandrel before attempting to work it into a bezel, etc. (Answer supplied by R. & B. Art-Craft Co.)

* * * *

Inquiry of A. D. Malet, La Conner, Wash.

I would like to know what to use to remove polishing powder from holes, crevices, etc., in some stones such as moss agates, after polishing.

Answer:

If it has hardened the best removing agent is acetone. While it is fresh it can be removed with a stiff brush and soap and water but when it hardens it is a problem. Tooth brushes with plastic handles will dissolve in acetone so don't use plastic handled brushes. It is wise to keep an old saucer handy; one that has chipped and is ready for the ash can. Let the stones soak for a bit in the dish of acetone and then after brushing them return the acetone to a glass stoppered bottle for re-use. It will evaporate fast if left in the dish and it is highly inflammable so watch the butts. You can get acetone at any chemical house or paint store. A pint should last a lifetime.

* * * *

Inquiry of Vernon J. Larsen, Fort Belknap Agency, Harlem, Montana.

Please run an article about synthetics. Can cabochons be cut from synthetics? If so how can I order them? How much waste? Should I order 100 or 1000 carats for a 16x12 m.m. stone? How long and wide are boules made? Are split boules preferable to whole boules? I have often wished I could try some synthetic material but I do not have the slightest idea how to order it.

IDAHO Gem Materials

Approval Idaho Gem Slabs, plus many other localities sent for \$1.00 deposit. We can now include with our assortments Brazil Gem Slabs, natural colors . . . We were months getting this fine material.

Having trouble getting your dollar's worth in diamond saw blades? We told you 3 years ago the best value on the market. We urge you again to switch to Felker Rimlock blades. They are tops, sizes 6 to 24 inches in stock. And for saw units, Highland Park has the cleanest, the smoothest running, and simplest in factory built machines developed to date. We will match price, quality, and results with a better value.

★

STEWART'S GEM SHOP
2620 IDAHO ST. BOISE, IDAHO

JADE
A
D
E

NEPHRITE
From the Famous
MONTEREY DEPOSIT
Selected
Rough — \$3.00 per lb.
Slices — \$1.00 per inch

S. N. PARMELEE
1850 BAY ROAD
EAST PALO ALTO, CALIF.
Visitors Welcome

Flexible Mold Material AM70

Make your own duplicating molds easily. Unsurpassed for fine reproductions of details and undercuts encountered when casting jewelry by the "lost wax method." A liquid when heated but rubber-like and flexible when cold. Can be remelted and used over again many times. No special vulcanizing equipment required. One pound pkg. with instructions, \$4.25 postpaid.

SPECIAL EQUIPMENT CO.
2900 El Roble Dr. Los Angeles 41, Calif.

NEW BOOK FLUORESCENT-GEMS AND MINERALS

A COMPLETELY NEW WORK
JUST OFF THE PRESS

FLUORESCENT GEMS—all known varieties are listed, and described in detail, along with their localities.

FLUORESCENT MINERALS—many are described which have not been previously mentioned in the literature. Luminescent properties are given in detail, along with locality for each mineral. Written by Jack DeMent . . . specialist in this field since 1937.

COMPLETE DATA—is included. Descriptions of various types of ultra-violet light units, filters, technic, localities, and all other pertinent data, is brought under a single volume. Written in a non-technical style, intended for the collector, gem cutter, student, and all who are interested in the fluorescence of gems and minerals.

The Only Work of Its Kind

Price \$1.50 postpaid

LAPIDARY JOURNAL

Box 1228 Hollywood 28, Calif.

ONYX BLANKS

not polished

Mail Orders Handled Promptly

BLACK . . . 25c each or \$2.50 dozen.

GREEN } . . . 35c each or \$3.80 dozen.

RED } . . . 35c each or \$3.80 dozen.
SPECIAL ORDER CUTTING AT
REASONABLE PRICES

JUCHEM BROTHERS

315 West 5th Street
Los Angeles 13 California

Desert Rose Carnelian Agate

Guaranteed to make fine gems,
no sawing necessary. 12 pcs. for
\$1.00 or 30, for \$2.00 plus postage.

Also Ruby jasper now sold in chunks at
\$1.00 per pound

FRED STEIN

Rt. 3, Box 240 Glendale, Ariz.

Answer:

We have an article on Page 184 of this issue about how synthetic boules are made. Cabochons can be made from the material but it is expensive for cabochon material. It is intended for faceted material because it is clear crystalline and is far more beautiful when faceted than when cut *en cabochon*. Boules usually weigh between 100 and 200 carats and they are about the shape of a radish or small carrot. Split boules would be better for cabochons for then you would have less waste. A 16x12 m.m. stone would be about 7 carats and you should buy from 15 to 20 carats of material if you are going to facet it; less if you are going to make a cabochon. There is about 50% waste in faceting; more if you are not skilled.

* * * *

Inquiry of Richard Felsch, Bell Gardens.

I bought several garnets and am having trouble. How do you sand and polish them?

If you're faceting use Linde A on a typemetal lap and if you're making cabochons use cerium oxide on a felt buff.

* * * *

Inquiry of Mrs. Marjorie Newhall, Santa Cruz, Calif.

My 8 year old son has asked me to procure some *real agate* marbles for him. I have written to several lapidary supply companies and they have none. Where may I purchase some?

Answer:

The so-called "agates" that boys play marbles with are made of glass and come from Clarksburg, W. Va. The real agates used to come from Germany but we haven't seen any for sale for many years; not since they began making such good glass marbles when we were a boy. We expect to carry ads on real agate marbles in our next issue as they are "on order" by several firms. Watch the ads.

TWO LOCATIONS

You have seen my fluorescent mineral displays at Mineralogical Conventions at Denver, Boise, Bozeman, Seattle and at other cities.

Now I have two permanent locations where you and your friends may see these same beautiful display specimens

**One is Smith's Fluorescents, Room 311,
220 S. W. Alder St., Portland 4, Oregon.**

The other is at the Crystal Museum, Depoe Bay, Oregon, on the Coast Route 101, 15 miles north of Newport.

Both places can also supply you with Mineralights, Geiger Counters (4 different makes) Glo Craft Products, and R-V lamps and paints.

Write today for free literature.

Sincerely yours,

ARCHIE H. SMITH

THE UNUSUAL IN:
Agates, etc. Custom Jewelry Work.

BEFORE YOU BUY ANY LAPIDARY
EQUIPMENT - Send for our
BIG, FREE
CATALOG

32 Pages packed full of helpful Lapidary Instructions...Should be in every rock nut's library. Plus complete information on the famous Hillquist line of Lapidary Equipment including Hillquist Compact Lap Unit, Hillquist 16" Rock Saw, Hillquist Trim Saw, Hillquist Auto Feed, Hillquist Gem Drill & Hole Saw, Hillquist Facetor, Hillquist Drum Sanders & Hillquist Diamond Saws

Send NOW to
Lapidary EQUIPMENT CO.
1545 W. 49 ST. • SEATTLE 7, WASH.
NATION'S LARGEST MFGRS OF FINE LAPIDARY EQUIPMENT

Si, Señor. ¡Por Cinco Pesos!

Yes, mister. Any **ROCK ASSORTMENT** for \$5, postpaid

- 8 lbs. Priday scenic thunder eggs
- 5 lbs. Selected Franklin, N.J. fluorescents
- 8 lbs. Texas fluorescent-phosphorescent calcite
- 3 lbs. Texas red-black combination plume
- 5 lbs. Gem Maker agates 1" plus
- 5 lbs. Agates from iris, plume & picture beds
- 6 lbs. Assortment highly colored jaspers
- 6 lbs. Selected Texas mosses
- 4 lbs. Assortment iris agate
- 5 lbs. Virgin nodules from iris beds
- 3 lbs. False "topaz" — (smoky obsidian bombs)
- 5 lbs. Geodes selected for beauty
- 8 lbs. Texas black plume — undercuts
- 2 lbs. slabs iris, plume, color & picture

Sales-Service — Highland Park, Felker Di-Met, RX, Gem Makers, Miner-alights, Bay State. All supplies for the lapidary. Visit. Free information. 20 tons agates and jaspers to pick from at 25c lb.

DAVE & LUCILLE HARRIS

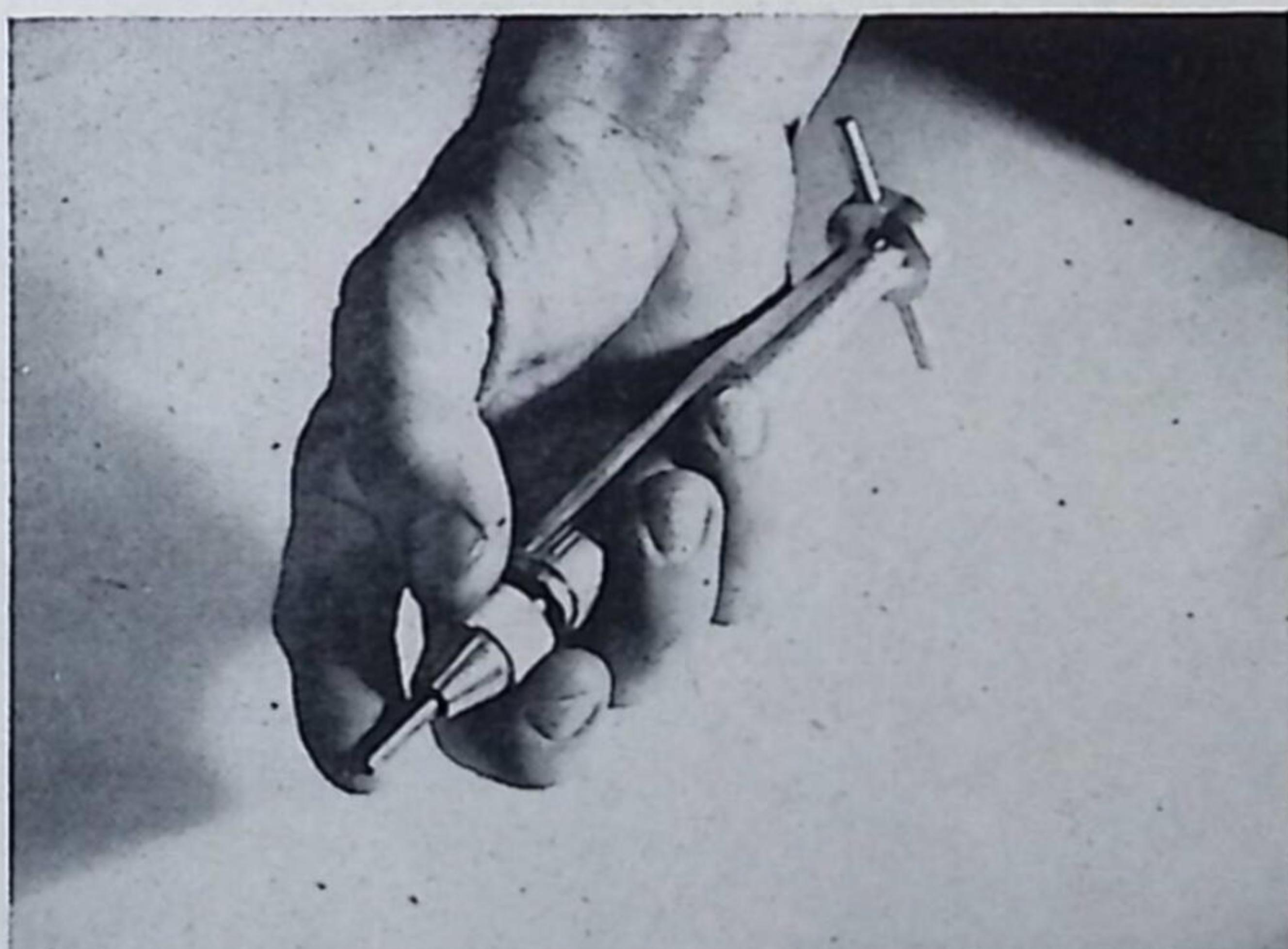
EL PASO ROCK & LAPIDARY SUPPLY

2401 Pittsburg Street

Phone 5-8721

El Paso, Texas

"EXPERT FACET CUTTING" *The Goal of All Lapidaries*



All styles of facet cutting from the simplest to the most complex, can be finished with the Sperisen professional type faceting unit. A completely universal precision tool.
(Patent Applied For)

No dops required — no stones to change — So simple a child can operate it.
(No. 7 of a series)

Illustrated circular and price list available.

FRANCIS J. SPERISEN
LAPIDARY

166 GEARY STREET

SAN FRANCISCO 8, CALIFORNIA

◆ *Rockhounds Are Human*

By GOLDIE MONTAITH

Box 685, San Bernardino, Calif.

Now, you take rock hounds. Yes, go ahead and take them. I mean part of them, anyway. The rest of them I will take. I like them. 'Specially rock hounds that are human. There is a variety of people in the rock hound category that I find most interesting and inspiring. This interest is apart from that of rocks alone.

Take "Pop." A seventy three year old, retired well-driller. There is a rock hound for you. He has an inborn kindness that is most admirable. And his inherent politeness could win the approval of Post. There aren't many humans like "Pop." He always mixes goodness and generosity with his rocks. When pop comes in from a trip to some remote part of Death Valley with a load of blood-stone, does he sell it? Sometimes — but more often he gives it away. Piece by piece — for pleasure — for the joy of being able to visit and tell about his trip into the desert — for the comradeship of sharing a strong cup of coffee with friends. Pop has a religion which is not confined to the interior of his church. He applies it when alone atop the roughest mountain — when stranded on a cold night on the desert, with only his car for protection against the elements. "God answers my prayers" Pop says. He applies it when dealing with people. This faith and goodness of Pop's is contagious too. Somehow, after having Pop give me a bit of agate which *I* think is pretty, I have the feeling that it was a bit of friendship instead. Keep a strong eye out for a rockhound like Pop.

Then there is Bill. A young ex-Air Force Sergeant (of five years service) — winner of the Purple Heart, Silver Star etc. All of which he discusses only upon questioning. When Bill arrives en route to the desert is he in a hurry? No, but smiling and unhurried, he has time for a visit. He brings a feeling of restful relaxation. An air of gayety prevails in the house — with much banter back and forth as to where he should go and what he should look for on this trip. Reflecting

military training, Bill has his car packed compactly and neatly. He brings a roast chicken, complete with dressing, which we warm in the oven, as we all talk at the same time. There is much laughter as we tell our various experiences since our last meeting. Our decrepit cars and their many break-downs are a continual source of merriment. His dog, Ginger, is fed in the kitchen. As time is of no importance we sit and talk until after midnight.

On the trip back from the hills Bill stops again. His rocks must all be hauled out for inspection. What is it this time? Jet. But does Bill commercialize on it? No, with the grandiloquence of a prince he gives it to us. "After all," he says, "I had only to swim a flooded Utah river for it, carrying the dog on my back, sleep in the truck all night while waiting for the flood to go down and walk 710 long miles, looking for it." We wanted jet so Bill brought us some.

Bill belongs to no church. He's tough (on the outside) but I would gamble that he will squeeze through the pearly gates somehow. He got out of the English Channel, parachute and all. He lived through thirty (some odd) bombing missions, as a tail gunner over Berlin. As a rock hound he lends an air of care-free adventure to the search for gems which is catching. Perhaps you too know a Bill.

Take Doc. Guiltily he locks the door of his dental office (on Sunday) hurriedly snatches his hat and a cigar box of agate slabs, and drives 25 miles to our shack. On the way he buys two watermelons and some cokes. He also brings a new book on gem cutting for us to look over. We are glad when he arrives. We all retire to the "rock shop" for a complete day of cutting just what we want to. A feeling of keen enjoyment of our work invades the whole house and shop. No meals are cooked that day but sandwiches are made and eaten outside where we can hear the saw. This all seems such fun but, before we realize it, the sun is setting

and Doc must leave for home. The whole day of playing hookey has ended. For one day, at least, Doc was not a dentist, but a most enjoyable friend. We were in perfect accord in our interests, regardless of age, education or occupation. As Doc locks his office door, he as blithely leaves behind the dullness of his every day work, and brings with him a vivid new interest. We are not immune from the keenness of his interest. Anybody know a Doc?

There's John. Another 70 (some odd) year old rockhound. Quietly he enters. John is a gentleman of the old school. He listens with a lively glow in his eyes as we relate the latest news of rocks and things. There is no virtue so laudable as that of quiet attentive listening. Finally we ask, "well, John, what have you cut lately?" Then he digs into his vest pocket and comes out with his cabochons. We all look in mutual admiration at the "lovely color" of the "good cut" of this or that stone. After we have decided how they should be mounted we have a cup of coffee. John is always the perfect companion for rock trips. We take sandwiches and make coffee over a wood fire. Sometimes we may travel 75 miles over a dirt road into the desert. John is always cheerful and agreeable. We ask, "how are you doing, John?" the answer is always "fine." We find that the difference in years is not prohibitive of enjoyment of mutual interests. John knows where some placer gold is and we are planning a placer-mining week-end with him. A true *compadre* (friend). Don't think that Johns grow on bushes.

Adding variety to the rockhounds, Bill Bragshaw arrives in a Cadillac. But does he brag? Not a bit. Wearing old boots and a well worn western hat, he is as unassuming as Pop. And as welcome. He enters with the announcement that he has just been victimized by nature. He has drilled a well (he thought) but has only a dry hole. He goes on to enumerate the many times he was compelled to pursue an errant cow and forcefully return her to the right side of his pasture fence. In his unique style he relates the day's events on his ranch and most amusingly. So he finishes with "to heck with it." From his pocket he produces his latest cabochon (labradorite) and when he looks at it he has a gleam in his eyes that is unequalled by the flash of any gem that he could buy

in Tiffany's.

When Christmas week arrives so does Bragshaw. He casually presents to us a gift of a large smoked turkey. Once, when we needed flux (for silver soldering) he brought us a jar, but he forgot to remember the price—So we gracefully forgot to pay him. When he hears of the misfortune of a gem prospector he is the unheralded donor of the first \$20.00. This man Bragshaw can find amusement in his own adversity but never in the distress of others. You don't meet many Bragshaws.

Varied though the virtues and the occupations of these friends, they are all human (rock hounds)—and that's just the way we like them. You too have met these people regardless of their names.

Goldie the Grinder

SLEEP IN YOUR CAR



IN LUXURIOUS COMFORT

—on those field trips—or cross country tours. More and more Rock-hounds are finding our Car Beds the finest and most practical solution for sleeping accommodations on their trips. No bulky equipment to carry—a truly comfortable bed in a car—for the first time in history! Years ahead of any standard automobile equipment you have seen. Two types to choose from.

I THE CALIFORNIA CAR BED

- ★ STURDY replacement front seat unit converts to LEVEL AIRFOAM innerspring bed in 30 seconds.
- ★ NO CUTTING OF SEATS.
- ★ TRANSFERS to your NEXT CAR, TOO!
- ★ INSTALLED in 1 to 3 hours.
- ★ Economical. Pays for itself.

II THE CUSTOM CRUISING SEAT

- ★ THE ORIGINAL AUTOMOBILE TWIN BEDS.
- ★ Beautiful, luxurious, twin front seats form driving or reclining seats, single or double bed—Transferable car to car.
- ★ "WORLD'S BEST CAR BED"—most luxurious driving seat.—Satisfaction guaranteed. With either bed—we fit Fords to Cadillacs, 1936-1949.

Write for free brochure "J"
By mail order—or at

CALIFORNIA CAR BED CO.

2725 W. 54th St. Los Angeles 43, Calif.
Phone AX. 3-4700

MINERAL EXCHANGE BULLETIN

TRADE specimens with collectors throughout the U. S. List of minerals and collectors issued every 4 months. Revised each issue—\$1.00 per year. List 3 minerals you have to trade when subscribing.

1552 Steiner St. San Francisco 15, Calif.

◆ The Biggest Society Show

What will no doubt prove to be the largest show ever put on by an individual society will take place on Saturday and Sunday, September 24th and 25th at the Montebello Stadium, 1350 W. Washington Blvd., Montebello, Calif., which adjoins Los Angeles on the east and is the very center of Los Angeles County, the hotbed of amateur gem cutting and jewelry making in America.

This show will be a combination picnic and exhibition and will be sponsored by the Los Angeles Lapidary Society, oldest and largest lapidary society in the world and "Mother" of many other flourishing societies. There will be a building that will house the usual fine and impressive display of gems from all over the world and jewelry made by members. They will exhibit all manner of lapidary work in the same arrangement as the former five shows of the Society but in identical cases made and owned by the members.

It is a unique idea to combine a two-day picnic with a show but the annual picnic of the Society has assumed such importance that an experiment is being tried by Ted Bennett, Chairman, in trying to combine the two. All lapidary societies in Southern California usually combine in the picnic and this arrangement will give each of the Society's "children" an opportunity of bringing along a case of gems as a token exhibit. Therefore the gem show portion of the affair will no doubt be the largest collection of gems and jewelry ever gathered together for no society will want to be absent and each one will bring its best materials.

The faceters of the society have donated faceted stones which are being set in gold purchased by the society. Cabochons by the hundred are being made

into silver jewelry at "silver bees" being held in scattered sections of the county. With donated material and the jewelry there will be \$5000 worth of door prizes given to those who donate to the society even if they do not attend the show. Admission to the show will be free.

The Society will depart from its usual custom of "no commercialism" and most of the county's dealers and manufacturers of equipment will be represented in commercial space. Room does not permit the renting of space to commercial people outside of the county.

The picnic will highlight the two-day exhibit. While there will be a refreshment stand for those who do not care to bring food everyone is urged to "make a day of it" and bring the family and meals. There is adequate room for parking for the spot covers many acres of a private park. There will be games and contests of all kinds, plenty of shade, square dancing in the evening and plenty of room to rest the weary body for a renewed look at the displays, all of which no person could possibly have the stamina to see. There will be swap tables, plenty of rock piles, a section devoted to the demonstration of every type of equipment—and of course there will be many thousands of gem cutters there to talk rocks and discuss problems. The event will be open from 10 until 10 each day.

If any of our readers from the east will be in Los Angeles at the time and without transportation we will see that it is provided if you call the *Journal* office on GRanite 3478.

Of great interest to everyone will be the exhibition of a 227 carat black star sapphire from Australia by courtesy of Kazanjian Bros., prominent Los Angeles lapidaries.



"BEST THERE IS!" say all the rock hounds about the HILLQUIST DRUM SANDER and POLISHER. Patented locking method cinches abrasive cloth or polisher in a jiffy. Cast Aluminum. Cork cushion. Perfectly balanced. Works right into hose hard-to-finish corners. For arbor, drill press or lathe. 1/2", 5/8", or 3/4" arbor. Write for FREE catalog. LAPIDARY EQUIPMENT CO., INC., 1545 W. 49th Street, Seattle 7, Washington.

G _____ G

Texas Agates & Jaspers

5 Pounds Red Moss	\$5.50
5 Pounds Blue & Gray Banded	\$3.50
5 Pounds Desert Rose Coated Fine interior agate, some fractures	\$4.00
5 Pounds Bacon & Wing agate	\$3.00
5 Pounds black encrusted Gr. Agate, Sc. Band	\$5.00
5 Pounds assorted Jasper	\$3.00
5 Pounds Field Run Texas Agates	\$3.00

Highland Park Saws and Arbors
Bay State Grinding Wheels
Perry Trim Saws
The Gem Maker
Felker Blades

All materials postpaid,
 Satisfaction Guaranteed

"If we haven't got it, we'll get it"

G A U L T

Aqua Dulce

Texas

G _____ G

Ask Gem Arts for

AMATEUR LAPIDARY SUPPLIES

MINERAL SPECIMENS

CUTTING MATERIAL

SILVER AND SILVER-WORKING TOOLS

TITANIA (Synthetic Rutile) 75c a carat in
boules or half-boules
\$1.10 a Carat in pieces.

Gem Arts

4286 Marlborough Avenue
San Diego 5 California

JUST ARRIVED

Fire opals at 50c - 75c - \$1 and \$2 each
(rough). Blood stone (slabs only) 50c to 75c
per sq. in. Tiger-Eye - Red, Blue, Brown,
Blue-green, Golden - (slabs only) 50c and
75c sq. in.

Diamond cut Zircons - White or Blue \$2.50
each and up.

Belgian Malachite on the way. Slabs will be
50c to 75c per sq. in.

Stop in Medford and see our display or
write us for further information

**SOUTHERN OREGON
MINERAL EXCHANGE**

Santo's Agate Shop
411 East Main St. Medford, Oregon

SLAB DEALS

TEXAS AGATE. Only the finest colors
and patterns selected. No two slabs
alike and all are excellent gem quality.
1 lb. slabs only \$5.00 postpaid.

CANAL ZONE AGATE & JASPER. A
rainbow of colors and the only way we
know to give you most of them in a
single pound. Big slabs and small—all
finest gem quality. 1 lb. mixed slabs—
\$4.50 postpaid.

Keweenaw
AGATE SHOP
AHMEEK, MICH.

ONLY
THE
BEST

VIOLET L. LUOMA
Manager

**BRAZILIAN
AGATE** 75c
per pound

Half or Whole Nodules
3 to 18 pounds each

SLABS AVAILABLE

From 3 to 18 dollars
per slab

Give Him a Present

Prices Include Delivery

Correspondence Invited

NORTHWEST GEM IMPORTERS

J. F. BERRY

4628 Sunnyside Ave.
Seattle 3, Washington

We just looked down the road and saw
Santa Claus. See the tie chain he has
for Junior or SENIOR.

See the middle spread of
GORDON'S

RING MOUNTINGS

MEN'S Sterling.....\$8.65 per dz. & up
LADIES' Sterling.....\$5.65 per dz. & up
LADIES' 10K Gold.....\$3.00 & \$4.00 each

FINDINGS

NECK CHAINS—SS....\$3.50 dz., GF \$4.50 dz.
CLEVICES—SS or GF Pendant size....\$1.25 dz.
GF Ear Ring size.....\$1.20 dz.
TIE CHAINS, (12x16 m.m. Stone)....\$6.00 dz.
BEZEL—Sterling, \$2 per oz., GF, \$2.90 oz.
10K Gold, \$1.35 Dwt.

Many other items in stock. Ask for price list #2 for complete information.

— Agate Jewelry Wholesale —

O. R. JUNKINS & SON

C. FREDERICK

Loch

2 WEST 46TH STREET
NEW YORK 19, N. Y.

GENUINE
CATSEYES
(*Chrysoberyl*)

from inexpensive to finest

List upon Request

"THE LOCHS IN ROCKS" SINCE 1620

Gem News

Tacoma Agate Shop of Tacoma, Wash., has been sold by Howard Bryant to L. A. Shaw.

* * *

An essay contest has been announced by the American Federation of Mineralogical Societies. Essays may be written on any original subject pertaining to the earth sciences. Any youngster in the United States or Canada under 20 years of age who has not enrolled in a college at the time of submitting the article is eligible for a \$25 savings bond prize and other prizes. Essays should be submitted to Dr. Richard M. Pearl, Colorado College, Colorado Springs, Colo.

* * *

He'd been out on the mountain collecting;
There wasn't a road and he hiked it.

He was tired and unfed
And he asked me for bread.

So I gave him a STONE—and he liked it!
From the REAR TRUNK of
Nebraska Mineral & Gem Club

* * *

The Annual Report of the Chicago Natural History Museum includes among last year's donors of \$1000 or more the name of Dr. J. Daniel Willems, author of *Gem Cutting* and frequent contributor to these pages. This is because of Dr. Willems' contribution of a golden beryl from Brazil which the museum authorities evidently regard as worth more than the qualifying thousand dollars. This beautiful gem is the one Dr. Willems cut while making the motion picture and slides on gem cutting which have been shown to many society gatherings during the past year. The gem is step cut and weighs 34.4 carats.

告 告 七

Gem and Mineral Show At Las Vegas

The CLARK COUNTY GEM COLLECTORS have announced plans for a Gem and Mineral Show to be held at the United States Naval Reserve Armory, Las Vegas, Nevada, on November 11th, 12th and 13th.

This first show of the Southern Nevada group will be dedicated to the memory of Dr. William S. Park, nationally known amateur geologist and mineralogist, who was a good friend of and an inspiration to members of the club. Mrs.

Mary Belle Park, widow of the late Dr. Park, has graciously offered to exhibit some of the Doctor's work, and it is expected that this may contain some of the local Indian artifacts obtained in conjunction with the Southwest Museum's expedition to excavate the "Lost City" which was buried under the waters of Lake Mead, as well as examples of his gem cutting.

Members have secured for exhibit a specimen of selenite which weighs approximately one-half ton. It is a fine example of this mineral in clear crystal form and was obtained from the vein on the shore of Lake Mead. It is reported to weigh about 350 lbs. per cubic foot, and this specimen is about four cubic feet.

The Clark County Gem Collectors have elected Paul Mercer, P. O. Box 925, Boulder City, Nevada, Director of activities for the Show, and any communications relative to it should be addressed to him.

* * *

Gem Cutter's Guild Awarded First Prize at Sacramento

The Gem Cutter's Guild of Los Angeles are the proud possessors of the first lapidary plaque to be awarded by the California Federation of Mineralogical Societies. The presentation was made by Jack Streeter at the Sacramento National Convention on June 25.

This is the first year the Guild has displayed their lapidary art in competition, having been accepted to membership in the Federation only this year. Mr. C. A. Terry was the display chairman, and with his committees in charge, is to be congratulated and thanked for the many hours spent in preparing for the show.

Anyone who is interested in the lapidary art or gem cutting as a hobby is welcome to attend the guild meetings which are held on the fourth Monday at the Manchester Playground in Los Angeles at 7:30 p.m.

AGATE MINE FOR SALE

In operation for several years. Grosses \$15,000 yearly income. 5 claims, house, roads, water system, cut stock, finished stock, some mounted mountings, complete set good lapidary equipment. Owner single. Will sacrifice property for quick sale.

224 E. Taylor F. L. SHAHAN Phoenix, Ariz

MONTANA AGATE

No trees — but colors, bands, some spots and speckles

NO BLANKS

5 lbs.	\$ 2.50
25 lbs.	8.00
100 lbs.	25.00
1000 lbs.	200.00

Fine for specimen work and for the hobbyist who spends time on each set.

FOB Lemmon, S.D.

WHEELER'S NATIVE STONE JEWELRY

Box 629, Lemmon, South Dakota

MAGNI-FOCUSER BINOCULAR EYE LOUPE



Here is the ideal loupe for that gem cutter member of the family. Needed by every one doing any precision work which needs watchful care.

Model No.	Focal Length	Actual Power	Price
# 5*	10"	5D	\$ 8.50
7	8"	7D	8.50
#10	4"	10D	10.50

*Popular model

MINERAL SPECIMENS CUTTING MATERIAL NOVELTIES & GIFTS

The Sterling Shop

8679 Castro Valley Blvd.
(Calif.-U.S. Highway 50)
P.O. Hayward, Calif.

ANOTHER BUY!

Californite Sagenite
Paisley Agate Fern Agate
Tiger Eye Lapis Lazuli
New Mexico Agate

All for \$2.50, Postage and Tax Paid
Cab size blanks (13 x 8 m.m.)

Satisfaction Guaranteed

Stop By for a Visit — Compare Prices
(Between Long Beach and San Diego on
Coast Highway in Corona Del Mar)

See our complete line of COVINGTON
lapidary equipment, GREAT WESTERN
slabbing saws, M.D.R. faceting equipment,
mineralights.

We supply silversmiths with tools,
silver, chain and findings.

STORE HOURS
Sunday through Wednesday—9:30 A.M. to 6:00 P.M.
Thursday through Saturday—9:30 A.M. to 9 P.M.

INQUIRIES INVITED

Orange Coast Gem Crafts

1106 Coast Highway
Corona del Mar, California

DON'T WASTE YOUR PRECIOUS MATERIAL!

Use the New

Streamliner

SLITTING SAW

\$2950

F.O.B. SAN DIEGO

Including Blade

3% Sales Tax in California

Write for Information

HYATT LAPIDARY EQUIPMENT CO.

Box 366, Dept. J

San Diego 5, California

Diamond Prices Predicted to Rise

Jewelry Industry Council's executive director, Albert E. Haase, has predicted that the retail prices of diamond jewelry will rise during the summer. Limited supplies of rough diamonds, low inventories of retail jewelers, and rising prices in the Antwerp diamond market are the primary reasons attributed to rising prices in this country.

The prices in Antwerp, supplier of 60 per cent of the world market for polished diamonds, have risen 15 per cent since March, Haase stated. Greatest part of the rise occurred in May, following the leveling off of the world price the last week in April after a steady decline. Countries who had not been buying since prewar days and who have actively entered the market again as well as pre-Christmas buying by United States importers, Haase said, is responsible for this price reversal in the world market.

An interesting fact which Haase pointed out was that in 1946 only 20 per cent of the world supply of polished diamonds was taken by countries other than the United States as compared with a 50 per cent take of other countries today.

Wholesalers who met in Chicago also emphasized that while prices had declined in the diamond market from September, 1948 through April, the past few weeks had shown a definite steady-ing in the market.

* * *

New Agate Beds Prove Popular

Operation of Central Oregon's agate beds and deposits of fossilized woods, formerly of major proportions on the Priday ranch near Cross Keys in Jefferson county, has largely been centered the past season in Crook County. Elton Carey, whose ranch is in Owl Hollow, just off the Crooked river canyon about 25 miles southeast of Prineville, has sold several thousand dollars' worth of stones from deposits on his place this year.

The deposits, which are now creating more interest than east Jefferson county's gold mines, notably the Oregon King, former producer of substantial wealth, have become internationally known. Adrain Smith, mayor of Madras, recently

received a letter from a collector in The Hague, the Netherlands, asking his aid in securing specimens from the Priday agate beds.

Carey uncovered a 1200 pound agate mass in May which he recently sold to William Montgomery of the Oregon Agate Center at Madras, Ore. This is believed to be the largest plume agate ever found.

* * *

\$100,000 Diamond Ring Flown Secretly to Paris

A \$100,000 diamond ring, cradled in an old cigar box and surrounded with the greatest secrecy, left Los Angeles aboard an air liner recently to be returned to its original owner.

The owner, Countess Marie Angela Matarazzo, now touring Europe, took possession of the 22.98 carat bauble at Orly Field, Trans World Airline terminal in the French capital, it was learned.

The emerald-cut stone, about the size of a postage stamp, is a portion of the famed President Vargas diamond, discovered in Brazil in 1938. The Vargas, noted for its clarity and purity, was the third largest authenticated diamond in history.

The gem turned up in Los Angeles last spring, three months after it had been stolen. Two Brazilians had attempted to sell it to a Los Angeles jeweler. It lay in a bank vault for more than a year while attorneys for the Countess fought to establish rightful

ownership of the diamond.

The smugglers, meanwhile were fined \$10,000 each and deported.

Does Everything...



*without motor.

COMPARE!

Put the Hillquist Gemmaster beside any lapidary machine — cheaper, flimsy "gadgets" or units that sell at twice the price. Compare construction! Compare ease of operation! Compare how much you get for your money and you'll say, "I'll take the Gemmaster!"

Here is a worthy companion for our larger and more expensive Hillquist Compact Lapidary Unit. Tho smaller in size, the Hillquist Gemmaster has many of the same features. It's all-metal with spun aluminum tub. You get a rugged, double-action rock clamp, not a puny little pebble pincher. You get a full 3" babbitt sleeve bearing and ball thrust bearing. You get a big 7" Super Speed diamond saw and all the equipment you need to go right to work.

USES ALL ACCESSORIES

You can use all the regular Hillquist accessories with the Gemmaster: The Hillquist Facetor, Sphere Cutters, Laps, Drum and Disc Sanders, etc.

WRITE FOR FREE CATALOG

COMPLETE, READY TO USE! YOU GET ALL THIS—



BUILT FOR LONG SERVICE!
No other low-cost lap unit gives you full 3" sleeve bearing, ball thrust bearing and pressure lubrication.

Lapidary EQUIPMENT CO. INC

1545 WEST 49TH ST., SEATTLE 7, WASHINGTON

DEALERSHIPS OPEN
IN SOME AREAS FOR THE NEW
Hillquist "Gemmaster"

WRITE FOR INFORMATION

LAPIDARY EQUIPMENT CO., Inc.
1545 W. 49TH ST. SEATTLE 7, WASH.

♦ News of the Societies



LOS ANGELES LAPIDARY SOCIETY is in the midst of plans for their combination gem show and picnic, full details of which are announced in news item on Page 216. The society displayed 10 cases of lapidary and jewelry work at the California Hobby Show in May which was the big hit of the highly successful show attended by more than 50,000 people. This show ran six days at an 80c admission charge. The Editor spent three afternoons facetting a 21 carat amethyst for the spectators and the interest in the facetting equipment was almost as great as in the toy trains.

* * *

ALBUQUERQUE GEM AND MINERAL CLUB (N.M.) will be host to the Rocky Mountain Federation of Mineral Societies convention at Albuquerque on August 25, 26 and 27. The convention will be held at the Knights of Columbus Club at 14th Street and Coal Avenue from 10 to 10 each day.

* * *

FUGENE MINERAL ASSOCIATION (Ore.) will be host to the Northwest Federation of Mineralogical Societies convention at Eugene on September 2, 3 and 4 to be held in McArthur Court on the University of Oregon campus. The host club was started only three years ago with seven members and it has grown to a membership of 85. Those interested in commercial space should communicate with R. C. Bole, 2099 Riverside St., Eugene.

* * *

SEQUOIA MINERAL SOCIETY (Fresno, Calif.) attended a swap party recently in Modesto at which 12 societies swapped rocks.

* * *

MIAMI MINERAL AND GEM SOCIETY (Fla.) recently heard L. H. Collar in a talk on facetting. Members followed the points of the lecture by facetting potatoes *a la Willems*.

* * *

WISCONSIN GEOLOGICAL SOCIETY (Milwaukee) recently netted more than \$250 at a mineral sale.

* * *

ORANGE BELT MINERALOGICAL SOCIETY (San Bernardino, Calif.) has instituted a fine and interesting bi-monthly bulletin called the STAUROLITE. Societies desiring to exchange bulletins should write to Vivienne M. Dosse, Editor, Route 2, Box 66, Fontana, Calif. E. C. Cline, a charter member and one of the society's earliest and foremost lapidaries, died on April 22. He held subscription No. 14 to the *Lapidary Journal*. The society will hold its annual gem and mineral show on Nov. 19th and 20th at the National Orange Show building in San Bernardino.

* * *

SAN JOSE LAPIDARY SOCIETY (Calif.) heard Charles Hansen give a talk at its July meeting on "Gem Materials and Their Locations Throughout the World." The society had a most

impressive display of 20 cases of lapidary art at the big Sacramento convention. The attendance at their outstanding gem show in May exceeded 8,000.

* * *

DONA ANA COUNTY ROCKHOUND CLUB (Las Cruces, N.M.) heard Clyde Tombaugh, discoverer of the planet Pluto, give a lecture on "Rocks from the Sky" at its July meeting. The June meeting was actually held in a mine by lamplight.

* * *

SAN DIEGO MINERAL AND GEM SOCIETY (Calif.) had 258 paid-up members according to a recent communication from President Ralph Salsbury. The society is now meeting at the Museum of Natural History in Balboa Park and will hold its annual show in October. At the County Fair at Del Mar in June society members were awarded in excess of \$800 in cash prizes by the Fair authorities for lapidary displays.

* * *

OREGON AGATE AND MINERAL SOCIETY (Portland) reports that commercial agate has been found in every county in the state and opal of good quality has been found in two counties.

* * *

HOLLYWOOD LAPIDARY SOCIETY (Calif.) recently heard James Underwood, president of Pacific Mineral Society and vice president of the Los Angeles Lapidary Society, in a lecture on "Minerals and Gems of Montana." They will hold their annual gem show in October.

* * *

CLEVELAND LAPIDARY SOCIETY (Ohio) has made the Editor an honorary member for which we are indeed grateful for we regard this society as one of the best in the country and certainly the leader in the gem arts east of the Mississippi. They recently adopted a constitution which closely follows that of the Los Angeles Lapidary Society. Copies of the latter may be obtained from the *Journal* office.

* * *

IDAHO GEM CLUB (Boise) held field trips for folks "passing through" to and from the Sacramento convention. Roy Whipple is the new president.

* * *

OKLAHOMA MINERAL AND GEM SOCIETY (Oklahoma City) reports that a Texas rockhound accused Oklahoma of being an "outlying province of Texas." "But," says the society editor, "no place can outlie Texas." Their March bulletin "The Sooner Rockologist" cautioned people about the dangers inherent in the fumes from broken fluorescent lamps. A few days later Walter Winchell scared the daylights out of listeners with the same item on the radio.

POMONA VALLEY MINERAL CLUB (Calif.) recently heard member Fred Kroger in a lecture on "Gold." Gold has been found in every county in California, in 30 states and in nearly every country of the world, he claimed.

* * * *

EVERGREEN ROCK CLUB (Seattle) will have a gem and mineral display at the Western Washington State Fair at Puyallup in the Fall.

* * * *

EAST BAY MINERAL SOCIETY (Oakland, Calif.) followed its usual custom of holding a member display of collections at the annual banquet and installation of officers on June 4th.

* * * *

FEATHER RIVER GEM AND MINERAL SOCIETY (Oroville, Calif.) can't miss having successful social evenings. Alma Hogge furnishes refreshments and Elmer Gay the entertainment. Their bulletin recently included a fine biography of Paul VanderEike, Editor of *Mineral Notes & News* and a history of that publication. Mr. VanderEike, who almost had to abandon his editorship in June because of severe illness, has nearly recovered and will henceforth devote all of his time to the publication, having retired from the teaching profession. The society held a non-competitive gem and mineral picnic and show on June 19. We were happy to meet their wheelhorses, the Rankins, at Sacramento.

* * * *

PASADENA LAPIDARY SOCIETY (Calif.) held a very successful display in the Pasadena Library in July. This was the same building where the Editor organized the society last year. They have also organized a faceting group headed by Dr. Fred Burky who advised that we are now a "lapidary grandpa." The society displayed an excellent case of lapidary and jewelry work at the California Hobby Show in Los Angeles in May.

* * * *

SOUTHWEST MINERALOGISTS (Los Angeles) had many outstanding lapidary items at their recent show which included a horse carved from Death Valley "onyx" by Charles Cook, and a coffee table made of mineral transparencies by Frank Trombatore which required 472 hours of labor. Florence Ingledue displayed gold specimens panned by herself in Alaska. Approximately 1500 people attended the show.

* * * *



SAN FERNANDO VALLEY MINERAL AND GEM SOCIETY (North Hollywood, Calif.) held another very successful show on June 11 and 12.

Their group has grown to the point where it is one of the most important in the country and they have given six annual shows.

* * * *

NEBRASKA MINERAL AND GEM CLUB (Omaha) is the new name of the former Nebraska Mineralogy and Gem Club. It has developed in seven years from a small group meeting twice a year to a group of 70 holding seven indoor meetings and three field meetings a year.

* * * *

JUNIOR ROCKHOUNDS OF PRESCOTT (Ariz.) recently held a meeting at which Tommy Ryan gave a talk on the fossils of Death Val-

Montana Agate No Sawing

Finding choice Montana agate is getting tougher each year as the picture changes.

I now offer 15 slices cut from agates gathered near Glendive, Mont. Each slice is a *beautiful over-sized gem* with gorgeous colorings and typical markings. NO DUDS!

15 slices for \$5.00

30 slices for \$8.50

Please include 15c postage

EXTRA SPECIAL—Choice SELECTED small agates. Each contains beautiful DENDRITES, bands or scenes. No duds. Will make dozens of fine cabochons.

1 pound for \$5.00

2 pounds for \$8.50

Please include 25c postage

FREE WITH EACH ORDER!! My own famous super agate polishing method that produces that MIRROR FINISH.

ERNEST S. BATEMAN

5108 W. Olga St.—A—Seattle 6, Wash.

Lifetime

Jewelry Mountings

NOW AVAILABLE TO
HOBBYISTS AND ASSEMBLERS

over

Conley's Gold laid (10k 1/20GF) Quality mountings designed for Western Gems. 3-color Gold Appliques—Heavy engraved outer frames.—Bezel stone seat.

Beauty and Wearing Qualities of karat gold. Prices within the reach of everyone.

Many appealing designs to enhance your choicest Gems. PENDANTS — BRACELETS — EARRINGS — BROOCHES — LOCKETS — TIE CHAINS. RINGS 10k and SS Attractive satin lined boxes, if desired.

AT YOUR LOCAL DEALER--OR WRITE

THE CONLEY CO.

Manufacturers & Distributors

Dept. LJ8, 715 W. Riverside, Spokane, Wash.
Inquiries solicited from wholesale dealers
and manufacturers

Send for Free Illustrated Catalog

Synthetic Boules (Swiss)

Single boules—7c per carat
5c per carat in 3 boule lots of 500
carats or more.

Alexandrites

(*Synthetic*) for mounting
All sizes and cuts \$1.00 per carat
plus tax
Exceptionally fine color

Beautiful Amethyst

ready for mounting
All sizes and cuts—\$1.00 to \$2.00 per
carat—plus tax
Light to deep purple. State preference
when ordering.

Citrine Quartz

Faceted stones 75c per carat

Opals

Ready to mount. Best collection in the
West.
\$3.00 to \$6.00 per carat plus tax.
From 1 to 50 carats each.

HY HAYDIS

2720 Derby St. Berkeley 5, Calif.

CALIFORNIA JADE (Nephrite)	
Cabochons	\$2.50 each
Wyoming Jade (Nephrite)	
Cabochons	
Green	\$2.50 each
Black	\$2.50 each
Burma Jade (Jadeite)	
Cabochons	
White	\$3.00 each
Light Green	\$3.50 each
Five different shades of rough jade blanks	\$2.50
GEMLAP	
Cabochon outfit	\$32.50
Faceting head	\$32.50
Trim saw	\$32.50

*

ROBERT TESMER
4400 Pearl Rd. Cleveland 9, Ohio

ley. A club emblem was selected. It consists of a black and brown dog with a pyrite cube in his mouth. The club is also going to have pins saying, "Junior Rockhounds of Prescott, Member." The Junior Rockhounds is the only rock club run by juniors for juniors, and not run by adults for juniors.

* * *

YUMA GEM AND MINERAL SOCIETY
(Ariz.) organized on Dec. 2nd last year with
eight members, now has 60. They organized a
Junior Section on June 14th.

* * *

SHAWNEE GEOLOGY AND ROCKHOUND CLUB (Topeka, Kansas) recently heard Rudolph Fahl of Colorado Springs give a lecture on Fairburn agate. (See his article on Page 174 of this issue.) T. W. Maury, President, discussed general gemology. This was the fourth meeting of the group which was organized on January 14, 1949 with only eight members and more than a hundred attended.

* * *

COACHELLA VALLEY MINERAL SOC.
(Indio, Calif.) recently heard Robert Moehle speak on "Jade." He displayed his jade figurine of the Goddess of Mercy while member O. A. Rush displayed his collection of jade pocket pieces and hand carved specimens.

* * *

NORTH LINCOLN AGATE SOC. (Nelscott, Ore.) held its 7th Annual Agate Show on July 16-17 in the Post Office building in Delake, Ore. at which there were lapidary demonstrations.

* * *

NEW SOCIETIES

SAN MATEO COUNTY GEM & MINERAL SOC. (Calif.) was organized in May with about 50 members. Interested persons in that vicinity should write to Wm. M. Greb, 1238 Capuchino Ave., Burlingame, Calif.

* * *

An attempt is being made to organize a lapidary society in metropolitan Washington D.C. Interested persons should file their names immediately by postal with Dr. V. A. Brown, 4418 Ambler Dr., Kensington, Md.

THE BMC ROCK CRUSHER

For removing surplus material from slabs.
Remove more material in an hour than can
be ground off in two!!
Save wear and tear on valuable wheels.
Pays for itself in a short while.
Used by many outstanding lapidaries.

How can you afford to be without one?

Two sizes—7 1/8 and 8 1/2" at \$2.70 and \$3.00
Top grade Tigereye—\$2.25 a pound—35c a
sq. in. Virginia Unakite and Pennsylvania
Cuprite \$1.25 a pound—25c a sq. in.

MITCHELL'S

Apt. A 121
Hunting Terrace Alexandria, Va.

Round brilliant Zircons for decorating
hand made jewelry — Only 75c each!!

See the middle spread of
GORDON'S

Rutile (TITANIA)

The New Synthetic Gem, In Clear, Amber and Blue

FINISHED STONES

1 carat or less	\$10.00	each
Over 1 to 2 carat	9.00	per carat
Over 2 to 3 carat	8.00	per carat
Over 3 to 5 carat	7.00	per carat
Over 5 carat	6.00	per carat
Blue and Amber Plus 30%		
20% tax unless you state your		
Dealer's License		

SYNTHETIC GEM MATERIAL

(Rough) No Tax

CORUNDUM

Minimum 1/2 Boule (About 70 Carat)		
Alexandrite	6c	per carat
Blue Sapphire	6c	"
Garnet	6c	"
Golden Sapphire	5c	"
Green Sapphire	6c	"
Kunzite	5c	"
Rose Sapphire	4c	"
Ruby	4c	"
White Sapphire	4c	"
Paparadscha (Orange)	5c	"

ROUGH RUTILE

(No Tax)

20 TO 70 CARAT

Clear	\$.95	per carat
Amber	1.50	per carat
Blue	1.50	per carat

OVER 70 CARAT

Clear	\$.75	per carat
Amber	1.10	per carat
Blue	1.10	per carat

SPINEL

Minimum 1/2 Boule (About 70 Carat)

Aquamarine	5c	per carat
Blue Spinel	5c	"
Green Spinel	5c	"
Zircon	5c	"
Peridot	5c	"
Tourmaline	5c	"

Terms:

Net cash with

Order

Free Delivery



Special Prices

For 1000

Carat Rough

Per Color

ANNOUNCING THE RE-OPENING DEMING AGATE SHOP

Ed and Bill Lindberg and James T. Lawyer have joined forces in a new venture.

We have a fine new location one half mile east of Deming, N. M. on highway 70-80. We own and operate our own agate mines in the now famous Deming area.

DEMING — WHERE ROCKHOUNDS GROW Madder

We have variety, quantity, color, size and **QUALITY**

So — name your poison Bub!!

Give us a chance to supply your needs

WHOLESALE — RETAIL — TRADE

Specialized jewelry made to order.

Digging privileges on twelve claims granted for a nominal fee.

See us at the Albuquerque Gem Show. We will have lots of finished and rough material from our mines.

Write for details

DEMING AGATE SHOP
DEMING, N. M.

Gems From The Mail Bag

It has been interesting to watch the material published in the *Lapidary Journal* from the first issue to the latest one. I have been especially interested in watching the variety of subjects handled and pleased to see that you step across the boundary of what may be called lapidary subjects. To me this is not only good business on your part but it will finally bring people into lapidary work who may now be interested in other subjects which may just touch the fringe of that in which we are most interested. An article of this kind was published in the June issue—"The Campfire and the Question". To me this is exceptionally well written and is the kind of writing I enjoy reading. Eldon Soper, Glendale, Calif.

* * * * *

I should like to tell you that your *Journal* is growing in value and interest all the time. When you first started it seemed a little visionary to me that a journal devoted to lapidary alone could be produced over a period of years without exhausting the interesting parts of the subject. However I begin to see that there is no end to it and that your vision has been much farther and broader than I at first expected and that you are rolling right along this highway in glorious fashion. I wouldn't miss a single number for anything. Dr. J. Daniel Willems, Chicago (Author of *Gem Cutting*).

* * * * *

That June issue of yours is a whang-dinger. Randall Henderson, Editor of *Desert Magazine*.

* * * * *

I enjoy every single issue immensely, and don't want to miss one. I can't say enough about your advertisers. Whenever I order through them they seem to take a personal interest in

each shipment. I'm made to feel they are friends who want to help me make up a good collection although my orders are very small and unimportant. Mrs. Isaac Hire, Winona Lake, Ind.

* * * * *

We have read a great many articles and several books on lapidary work but your Journals prove most helpful of all. We read every issue from cover to cover and also find them very valuable as reference. They certainly are a back log of information. Mrs. Paul E. Satchfield, Coldwater, Mich.

* * * * *

I enjoy the *Lapidary Journal* very much as it has more information on things I am interested in than all the other magazines put together. F. H. Fischer, Cincinnati, O.

* * * * *

After two years I still say the *Journal* is the best magazine published. I have never received an issue that didn't have more than the price of the magazine worth of good solid information in it. Robert B. Fulton, Bridger, Mont.

* * * * *

I am extremely well pleased with the *Lapidary Journal* and believe it to be the best investment I ever made. I have been a printer for 30 years and I will say that you are getting a very fine printing job. I read the *Journal* from cover to cover—ads and all! E. M. Welch, Belton, Mo.

* * * * *

Am enjoying each issue of your magazine. It is full of interesting worthwhile information: Even the ads tempt you to buy more rocks. Vernie L. Greenwell, San Luis Obispo, Calif.

"FAST MOUNT"

Your Gemstones in
Genuine Solid Sterling Silver

EASY—Just cut stone to fit cup and crimp in edge of bezel. No knowledge of silversmithing necessary.

Make Your Favorite Stones Into—
SCATTER PINS—Today's Newest and
Smartest Fashion
EARRINGS, EARSTUDS and HOOPS
CUFF-LINKS and BUTTONS

SPECIAL INTRODUCTORY OFFER
for \$5.00 (plus tax)

Assortment of "Fast-Mounts" in various
items and sizes.

"FAST-MARK" GEM TEMPLATE \$1.00

New Improved shapes, fabricated from white, moisture resistant plastic. Ideal for laying out and cutting your Gemstones to accepted sizes and shapes. At Your Dealer's or, if he cannot supply, send \$1.00 and we will send postpaid.

BITNER'S
P.O. Box 1191 Santa Monica, California

IT HAS EVERYTHING!

- Intensity Meter
- Count Indicator
- Head Phone
- Low Cost Batteries
- Light Weight
- LOW PRICE

★ ★ ★

THE DETECTRON DG-2

GEIGER COUNTER

Send for FREE Folder

Dealerships open. Write for details

THE DETECTRON COMPANY

5637 N. Cahuenga Blvd.
North Hollywood, Calif.



That's Me on the Right

ROSE QUARTZ STAR STONES ROSE OR BLUE

Not mirror backed — New process
Beautiful gems approximately 12 x 14 mm
Only \$10.20 each
Brilliant cut faceted hematite
5 mm stones — \$3.60 each
Brilliant cut synthetic Alexandrites
5 x 6 mm (dark) \$4.80 each
Wyoming jade crosses cut in China. Set with
a bail — Approximately 1 1/2" long \$12.00 ea.
Fine quartz with rutile inclusions
6 carats and more — \$5.00 each
Emerald green cabochon tourmaline
\$1.00 per piece and up
Good sterling silver mountings
If you come to Los Angeles on your vacation
trip stop and see us. We are located in one of
the show places of the city and there is much
to see all around us.
Prices include excise tax. California residents
add sales tax.
Write for list.

CHUCK JORDAN'S
(TOWN AND COUNTRY MARKET)
350 South Fairfax Avenue (Stall 811)
Los Angeles 36

YORK 0923

GORGEOUS FLOWERING AGATE BLUE TURQUOISE from Colorado

A new and unusual type of flowering agate
that closely resembles large bouquets and
rose beds in various stages of bloom, red,
pink and orange flowers in milky blue and
greenish chalcedony.

We offer this material for cabochon cutting
for the utmost in color and beauty.

Assorted slabs—35c per square inch. \$1.00
bill will bring you samples prepaid.

ATTENTION! Flowering agate in the rough
will be available in the near future at \$2.00
per pound.

Selected turquoise, fine blue—\$1.20 per
ounce.

Terms: Cash with order. Postage prepaid.
Write for quantity prices.

W. S. KETTERING
1901 Lake Ave. Pueblo, Colo.

MOTHER LODE PICTURE AGATE

GOOD NEWS!!!

We have at last opened up a
new lens of our Mother Lode
PICTURE AGATE and it's as good
as the first lot, with two-color den-
drites, trees, bushes, and scenes.

As we don't have time to saw up
this material, have decided to offer
it IN THE ROUGH, unpicked mine
run material, at \$1.00 per pound.
25 pound lots for \$20.00 or 100
pound lots for \$75.00.

All prices f.o.b. Please add postage for
parcel post shipments.

Satisfaction Guaranteed

ROBERT O. BUCK

P.O. Box 218 Valley Springs, Calif.

GUIDE STONE GAUGES

In standard millimeter sizes

FOR FACETED STONES AND CABOCHONS

Standard Oval Guide \$2.50

Standard Brooch and Ring Form
Oval Guide 2.50

Standard Square Guide 3.00

Standard Cross and Heart Guide.. 2.00

Standard Brilliant Guide
for faceters 3.50

*See them with the better dealers
everywhere or write to*

GEORGE T. DAVEY

9246 Tobias Avenue Van Nuys, California

TIGER EYE

Slabs or Chunks
GREEN, BLUE AND GOLD
ROBERT S. BURTON
200 E. 6TH ST. LEADVILLE, COLO.

RARE SPECIMENS

and cutting materials from
BRAZIL—SOUTH AFRICA—AUSTRALIA
Visitors Welcome
KILIAN E. BENSUSAN
8615 Columbus Avenue
Sepulveda, California Phone EMpire 2-1942

CUT OPALS \$1 per carat

Money Back If Not Satisfactory

Emerald Micro-mounts
\$1 per crystal

45 YEARS A CUTTER

ROBERT W. BICKFORD

Norway

Maine

Cabochons

Expertly cut stones for jewelry makers or collectors
RING SIZE STONES \$0.75 each
BROOCH SIZE STONES \$1.00 each
LARGE BROOCH SIZE \$1.25 each

Approval lots sent to responsible persons

12 YEARS' EXPERIENCE

GRAHAME HORTON

Box 266

Depoe Bay, Ore.

ONLY \$1.00 POSTPAID

10 Square Inches

SAWED cabochon slabs of petrified woods, fossil bone, scenic obsidian, jaspers, agates, and other cutting material.

H. F. OHLSEN
618 West "M" St. Wilmington, Calif.

MID-SUMMER BARGAINS

Selected Obsidian Bombs—Californite (Kraft "Jade")
Oregon Fortification Agate
Mojave Desert Petrified Palm Wood
Opalized Wood from Northern California
ANY OF THESE AT 50c A POUND plus postage
5 pounds for \$2.00 (will mix)
California Purchasers please add sales tax
JAKE'S ROCK SHOP
218 University J. R. Banninger Davis, Calif.

Genuine Australia Opal Doublets

Red, Green, and Blue Beauties, Backed with onyx to intensify their depth of color. Exquisitely fashioned cabochons ready for mounting in sizes from 5 to 35 carats (including the onyx) at \$3.50 to \$12.00 per stone.

LAPIDARY SUPPLY
Box 152 Floral Park, N.Y.

MAIL ORDER SUPPLIERS OF CHOICE SPECIMEN MINERALS ALL TYPES OF CUTTING MATERIAL

Letters answered and orders shipped same day received. You will like our "Memo Selection" plan. Lowest prices, deal direct.

Send postcard for new FREE LIST.

PLUMMER'S
2177F Bacon Street San Diego 7, Calif.

Make your own POLARISCOPE
War surplus polaroid variable density
lens.....\$3.00 postpaid
Limited Supply

MORRIS PLOTNIK

Box 387 El Monte, Calif.

We thank everyone who visited our booth at Sacramento
Watch Next Issue for Our Ad
Gems, Equipment and Jewelry Repair
B. M. BREHM
990 Dana, N.E. Warren, O.
Send Postal for Illustrated Circular on the Brehm Saw

CURVED AND TWISTED SELENITE CRYSTALS

Terlingua calcites and Cinnabar
Fine Agates and Woods.
Red Roses of Selenite

V. C. TANKERSLEY
Box 414, Miles, Texas
18 mi. east of San Angelo on U.S. Highway 67

Home Display Cases

New Line of Cases Introduced at the Sacramento Show. \$15 to \$30.
CUSTOM CASES MADE TO ORDER
Send for Free Literature

Dean Arts
20730 Lake Chabot Rd. Hayward, Calif.

INTRODUCTORY SLAB OFFER

Will mail you, postpaid, 1 1/2 lbs. (about 70 sq. in.) of assorted sawed slabs for only \$2.50. All good gem and specimen material. If you are not perfectly satisfied return for refund.

GENOWAY LAPIDARY SHOP
Route 5, Box 300 Wenatchee, Wash.

AGATES

Custom cutting and mounting. Finished Gems.

Write for prices

NORTH WEST GEM SHOP
Box 305 Tacoma, Wash.

Now there's a sphere machine. Make perfect spheres the easy way.

See the middle spread of
GORDON'S

Gem Cutting Materials, Lapidary Equipment, Tools, Blank Mountings, S. S. and G. F. Bezel Wires, Trims, Sheet S. S. etc. Minerals, Fluorescent Minerals, Fossils, Books, Mineralights, etc. Open Evenings, Sat. and Sun.

Send Postal for Free Price List
ALESSI
Phone Lombard 1035
430 So. Highland Ave. Lombard, Ill.

GOOD OREGON MATERIAL

Colorful beach jaspers, 25c lb., 8 lbs. minimum. Grossularite garnet (limited amount), 50c to \$1.00 per piece (mostly white). Moss agate thunder-egg slabs, 50c to \$2.00 each. We try to specialize in unusual material. A visit to our shop is worth while. It is cheaper to buy your material but more fun to collect it yourself and we will be happy to give you all the dope available on beach collecting spots.

Gold Beach Mineral Shop
GOLD BEACH OREGON

NO GAMBLE WITH THIS OFFER

MONEY BACK IF NOT SATISFIED

AT LEAST 10 SQUARE INCHES
FOR \$2.25 POSTPAID

Assortment will contain California JADE, (Monterey), MONTEREY RHODONITE, MARCASITE IN AGATE

PORTER'S LAPIDARY

365 MARSH ST.
SAN LUIS OBISPO, CALIF.

ROSE QUARTZ

Finest Quality Asteriated
Few Fractures \$2.50 per lb.

ALSO
Banded Agate
Dyeing Agate
Carnelian
Clear and Smoky Quartz Crystals
Citrine — Amethyst — Aventurine
Bloodstone

And many other cutting materials and beautiful specimens from Brazil and India. Send for our lists.

MURRAY AMERICAN CORPORATION
95 Summit Avenue Summit, New Jersey

AGATES

Escadillo*, Cameo, Golden, Red and Golden, all outstanding and scarce. Palm; highly colored Arizona wood. All 15c inch, \$1.00 pound. Send for list of other materials. Postage, please.

*Escadillo Agate is the Agate that Mr. Anderson says is best for handles on silverware in the article on page 166, line 22 in this issue.

SEQUOIA GEM AND MINERAL SHOP
321 W. Tulare Ave., Visalia, Calif.

AGATES — WOODS

Nevada: Greenlace Agate
Black in white, red in white,
some pictures.

Montana Agate

Arizona Wood

Horse Canyon Palm Root and Fiber

Nevada Green and Brown Wood

Any of the above 15c sq. in.

Slices sent on approval

WHEN TRAVELING 395
STOP AND SEE US.

R. O. HOUGHTALING

2 Miles West on Line St.
Route 1, Bishop, Calif.

LIGHT AUSTRALIAN OPALS, ROUGH

Blue green } Quality A \$12.00 per oz.
and red } " B 6.00 " "

Milky with } " A 18.00 " "
fire } " B 6.00 " "
" C 3.00 " "

Higher } \$24.00 per oz. up to
Qualities } \$150.00 per oz.

Post free, all parcels insured. Send check
or money order. Minimum order \$3.00.

SPECIMENS — FINISHED OPAL GEMS
SEND FOR FREE CATALOG

OPAL SPECIMENS, INC.

22 West West 48th Street New York 19, N.Y.

Get Yourself A Hobby!

Nelson Manufacturing Co. Slabbing Saws
and Equipment

RX Complete Lapidary Machine

B & I Gemmaker — Felker Saws

Poly Arbors

Grinding, Sanding and Polishing Supplies
Mineralights and Glo Craft
Fluorescent Lamps

★ ★ ★

TACOMA LAPIDARY SUPPLY CO.
631 St. Helens Ave. Tacoma 2, Wash.

TEXAS THUNDER EGGS

From the only known thunder egg beds in Texas. Production is low and supply is limited. Specimens at \$1.50 per pound. Slabs at 25c per square inch.

Full Line of Lapidary
Supplies and Equipment

Large Stock of the Best
Texas Agate

ODOM'S

Star Route A, Box 32 C Austin, Texas

If You Are a Jade Lover You Should Have This Book . . .

JADE by Berthold Laufer — \$12.50

A reprinting of the world's best book on jade. Lavishly illustrated, it is the authority on the subject. 370 large pages. No one interested in jade should be without this book. Expensive but worth it! Naturally you may not want to spend \$12.50 for a book unless you see it. If you wish we will send it on a money back guarantee if you do not like the book or think that it is overpriced.

★ ★ ★

IF YOU ARE AN EXPERIENCED FACETER, OR JUST CONSIDERING FACETING, YOU SHOULD HAVE THIS BOOK

THE BOOK OF GEM CUTS — \$2.50

This brand new book is at press and will be published on or about August 10th. It contains large, clear and easily understood cuts of 16 gem styles. These cuts will all be printed in the *Lapidary Journal* during the next three years. The first one on the Standard Brilliant appears on Page 191 of this issue. (Smaller than in the book.)

This book costs less than a gram of wasted material. It will save you many hours of blundering, many dollars worth of good material and it will save your patience. Tells what angles to set (on 64 index equipment) and which lap and polishing agent to use for all popular gems.

★ ★ ★

IF YOU ARE INTERESTED IN SILVERSMITHING YOU SHOULD HAVE THESE BOOKS

JEWELRY, GEM CUTTING AND METALCRAFT

by William T. Baxter — \$3.00

A modern craft book that has run through several editions. Complete information for the beginner and advanced craftsman on jewelry making, metal working and gem cutting. 278 pages with 170 illustrations.

SMALL JEWELRY by F. R. Smith — \$1.50

A smaller but very useful book of especial value to the beginner. Contains 32 plates with 282 small sketches of technique and design.

HAND MADE JEWELRY by Louis Weiner — \$2.75

The outstanding feature of this book is the thoroughness with which it covers the field of hand-made jewelry. It is a complete source book, fully illustrated, of all the basic facts necessary to know in order to make a wide variety of ornamental and professionally-finished pieces of jewelry by hand. Careful and thorough instructions guide the amateur craftsman from the beginning of any number of projects, through the intricate processes of using the jeweler's saw, transferring designs on metal, soldering, pickling and annealing. Several techniques are offered for each job, providing a choice from which the technique best suited to the individual can be made.

The art of modeling in metal, along with the technique of bringing a design out of a metal surface into low or bas-relief, is covered in full. The use of all tools is explained in great detail to assure the making of skillfully-finished projects.

Complete directions are given for stone setting and for making a variety of silver wire chain bracelets, pins and necklaces. Full information on etching and enameling is also included.

JEWELRY AND ENAMELING by Greta Pack — \$3.50

A "working" book on the subject. Divided between basic principles and technical data. All of the steps are well illustrated by drawings and photos. Floor plan for setting up a shop. The tables alone are worth the price of the book.

FUNDAMENTALS OF SOFT SOLDERING by Charles Yerkow — \$2.25

The most complete information on soldering ever offered. Combines the best features of school and trade practice. Step by step procedures illustrated with large pictures.

All books sent postpaid—California residents please add 3% sales tax

Lapidary Journal

P.O. Box 1228

Send a postal for our free booklet

Hollywood 28, Calif.

Unusual Spheres for the Collector

RUTILATED QUARTZ
BERYL
CITRINE
TOURMALINE
ROSE QUARTZ
TOPAZ
SMOKY QUARTZ

*Descriptions and Prices
Sent on Request*

Headquarters for Brazilian rough materials. Inquiries invited.

EDWARD R. SWOBODA

448 S. Hill St., Rm. 909
Los Angeles 13, California

STAR QUARTZ

(Fused backs)

8 m.m. round	1.50
9 m.m. round	1.75
10 m.m. round	2.00
11 m.m. round	2.50
10x12 m.m. oval	3.00
12x14 m.m. oval	5.00

Please add 20% Federal Excise Tax. Also Postage.
California Residents add 3% Sales Tax.

Prices in past 6 advertisements in *Lapidary Journal* still in effect.

Lots of Mineral Specimens. State your Wants.

Valley Art Shoppe

21108 Devonshire Boulevard
Chatsworth, California

COLORFUL AGATES AND WOODS

Arizona - Utah - New Mexico Black wood - colored wood - picture wood.
Utah pigeon blood agate Golden Moss and Red Moss
Banded agate in many colors
Jet back agate
Gem grade dinosaur bone
Best gem grade chrysocolla and solid malachite
Ricolite from New Mexico—
Fine material for book ends and carving

Make your next rock hunting trip in our yard. Tons of material to select from as low as 25c a pound.

NO MAIL ORDERS PLEASE
UNTIL NOVEMBER

GEORGE C. CURTIS

"The Agate Man"
645 First Street
HERMOSA BEACH. CALIFORNIA

PENDANT MOUNTINGS

Modern and Antique Styles. 14 New styles and sizes in silver. 20 in triple 24 K gold plate.

These Mountings were designed for the present day needs. Complete with chains, sterling and G. F.

Ring Mountings

Many styles and sizes in sterling and sterling gold trimmed. Ladies' and men's. Standard weights, and heavy cast finished.

Brooch, bracelet, earring, and tie chain mounts in several styles and sizes.

Sold in any quantity, one or a dozen.

Approval selections of mountings sent on receipt of 3 references. Price list and description of Mountings sent on request.

JAMES J. KEHOE

BIG FORK MONTANA

RATE — 5c PER WORD PER INSERTION

MINIMUM SPACE \$2.00. ADS UNDER THIS CLASSIFICATION ARE PAYABLE IN ADVANCE. CLOSING DATE AT HOLLYWOOD, CALIF., 1ST OF JAN.—MAR.—MAY—JULY—SEPT.—NOV. FOR FOLLOWING ISSUE. NO CHECKING COPIES FURNISHED CLASSIFIED ADVERTISERS.

Cutting Materials

VERMONT RED JASPER—A satisfied customer is one who re-orders your product. We have had many re-orders since our first ad appeared in this magazine 6 months ago. Rough cutting gem material \$1.00 per lb. plus postage. 10 k. gold heavy men's rings with 14x12 m.m. stone \$30. Same, with initial or fraternal emblem in 10 k. gold, \$35. 14x12 m.m. or 12x10 m.m. stone in sterling silver mounting \$12. Wholesalers' inquiries invited. Am particularly interested in finding jobbers on West Coast and Central States. BURLINGTON GEM CO., 272 North St., Burlington, Vt.

AUSTRALIAN OPALS. Fine Cabinet Specimens, or Cutting Opal. Good trial assortment, \$15.00. LISTS FREE. Correspondence Invited. NORMAN L. SEWARD "HIGH-LANDS," 2 Studley Ave., KEW, Melbourne, Australia.

AGATES—Plume types from famous Central Oregon vein. Slabs; rough. Vug and vein moss agate in reds, canary and green shades. OBSIDIAN—LIMITLESS VARIETY. Nothing more beautiful for gems, spheres, masks, etc. HAMPTON WOOD in greens, reds. Becoming scarce. Sole possessor of other fine agate types. Write for price list. C. G. SPRINGER, 862 Roosevelt Ave., Bend, Ore.

CHRYSOCOLLA WITH MALACHITE (3/16" slabs)—.45c per sq. inch, Chrysocolla (gem) slabs—.90c per sq. inch, Chrysocolla specimens about \$1.00 per pound. We cast jewelry mountings. Watch for our next ad. Send check or money order with order. Satisfaction guaranteed or money back. ARMSTRONG JEWELRY & CASTING COMPANY, Box 1355, Miami, Arizona.

THUNDER EGGS—Filled with blue agate. Size of oranges. 25 lbs., \$8. 100 lbs., \$27. CUTTING MATERIAL in the rough. Assorted mosses, jaspers, woods. Gem quality, 10 lbs., \$5. MELVIN L. KATHAN, 11 S. E. 78th Ave., Portland 16, Oregon.

BIG SHELLS FOR CAMEO CARVING. \$1.50 each postpaid. Each shell contains enough good material, after sawing, for at least a dozen cameos the size of a quarter. DR. RALPH E. MUELLER, 3701 Valentine Rd., Kansas City 2, Mo.

I HAVE MANY VARIETIES OF AGATES and other sorts of rocks including THUNDER EGGS IN POLISHED HALVES AT \$1.00 to \$3.00 each. Montana agates in polished slabs. Many varieties of agatized and opalized woods and seven different sorts of OBSIDIAN POLISHED SLABS. Send \$2.00 to \$10.00 for a choice assortment of the above mentioned Varieties. Postage paid to any part of the U. S. SATISFACTION GUARANTEED OR MONEY REFUNDED. ALEX BEST, 504 2nd Ave., East, Kennewick, Wash.

MONTANA AGATE—Selected stones of gem quality. Assorted colored agate and small moss spots. Six pounds for \$7.85 postpaid. Also jasper and petrified wood—\$1.00 pound postpaid. B. M. WARD, 702 Woodbury, Miles City, Mont.

BEAUTIFUL ARIZONA VARIEGATED AGATE. Large slice \$1.50, or 3 for \$4.00. Satisfaction guaranteed! Charles E. Hill, Cave Creek, Arizona.

NEW MEXICO—Petrified Wood, profusion of Red and Yellow, good compact cutting; 35c sq. in. in slabs, small pieces \$2.00 lb. The small pieces have blues and touches of white. Agates Slabs with bands, colors, and inclusion in one piece, sizes average 4-5 sq. in. 45c sq. in. Also variety of moss Agates with red, yellow, white, green inclusions 35c sq. in. Postpaid. NORTHERN NEW MEXICO GEM CO., Box 361, Raton, New Mexico.

Miscellaneous

"SATCH"—THE NEW PICK HAMMER SHEATH! CONVENIENCE AND SAFETY FOR YOUR NEXT FIELD TRIP! Made of finest cowhide for all standard mineral pick hammers. Designed for use with a belt or a shoulder strap. \$1.00 postpaid in U.S.A. FITZMALDRED, P.O. Box 494, Wilmington, Del.

LARGE AZURITE NODULES with beautifully crystallized vug. These are exceptionally large nodules averaging about 8 to the pound and are approximately 1 1/2" in diameter. \$1 each. Small azurite nodules. Same as large ones but run about 50 to the pound. 10c each. Minimum order \$2.00. Satisfaction or money back. ARMSTRONG JEWELRY & CASTING CO., Box 1355, Miami, Arizona.

ANYONE CAN ASSEMBLE professional looking jewelry using our Findings, Mountings, Chains, etc. Illustrated catalog 10c. GEORGE SASSEN, 154 Nassau St., New York.

(Continued on next page)

CLASSIFIED ADS

(Continued from Previous Page)

CUTTING MATERIAL WANTED, mineral specimens, Indian jewelry, turquoise, scenic wood, opal, lapidary equipment, etc. IN EX-CHANGE for the following: Highly bred cocker spaniels (all colors, including silver and platinum); peonies, perennials, ornamental evergreens. Also a few well located 5-acre tracts, close to and between lakes and adjacent to U.S. highway and outdoor theatre in the heart of Minnesota's lake region and the Paul Bunyan Play Ground. Write for descriptive photo leaflet. SKY BLUE WA-TER KENNELS, Brainerd, Minn.

PEARLS WANTED—LARGE BAROQUES, WINGS, KNUCKLES AND IRREGULAR SHAPES IN WHITE AND ALL SHADES INCLUDING BROWN AND BLACK. SMALL OR ARGE LOTS. B. D. NUITS, 329 N. CHARLES ST., BALTIMORE, MD.

FLUORESCENT TURITELLA and other type paper weights—\$2.50 each. Exclusive pattern. Letter openers \$1.50 to \$3.00. 3x3x $\frac{3}{4}$ " slab fluorescent turitella \$1.00. *Satisfaction guaranteed or money refunded.* CLAY LEDBETTER—*Stonecraft*, 2126 McKenzie, Waco, Texas.

COLOR SLIDES OF FLOURESCENT MIN-ERALS for your collection, study and identification. A complete set of 30 Kodachrome slides glowing with fiery brilliance including explanatory text, \$15.00 postpaid. FRANK KNAUS, 2113 Parkside Ave., Los Angeles 31, Calif.

I have found a beautiful piece of GEM QUALITY WYOMING JADE weighing over 400 pounds. Nothing of this quality being found today. For sale in one piece to a responsible party for \$10 per pound F.O.B. Lander. Correspondence invited. MRS. C. F. COUNTRYMAN, Lander, Wyoming.

OPALS WANTED—MEXICAN OPALS IN THE ROUGH OR POLISHED IN COM-BINATIONS WITH MATRIX OR WITH-OUT. LARGE OR SMALL LOTS. ALSO, PIECES OF CARVED CORAL. SAMUEL H. GROSSMAN & CO. 329 N. CHARLES ST., BALTIMORE 1, MD.

WANTED: We are looking for a young couple with approximately 4 or 5 years experience in lapidary work who is interested in buying into and building up the lapidary part of our corporation. For someone interested in working it and who is not easily discouraged, it would be a great opportunity. We have a complete set-up of lapidary machinery. We also do jewelry manufacturing and have a retail store. Our location is approximately 90 miles south-east from Chicago. Full information will be furnished upon request. CON-TINENTAL LAPIDARIES, INC., 811 S. Main St., Elkhart, Ind.

SPARKL-SPARKL—Is how your genuine jewelry & stones will look after using SPARKL—that sensational jewelry cleaner. It's harmless—it's odorless—it's inexpensive—it's EASY to use, AND it's guaranteed to give complete satisfaction, or your money back. SPARKL not only revives genuine jewelry, BUT, Notice how sharp, clean, and brilliant it leaves the stones, free of all dust—dirt—

grease—or film, SPARKL leaves your stones dazzling. SPARKL is sold in powder form, put up in two generous packages, 25c or 50c size. Send *Coin* please. One teaspoonful makes one pint of SPARKL Jewelry Cleaner. Also in give-away containers with your ad, for your customers. Write for prices, etc. STAF-FORD'S DISTRIBUTORS, 215 Thompson Bldg., Hot Springs, Ark.

AGENTS WANTED—Sell Nationally Known Appliances, Refrigerators, Freezers, Washers, Ironers, Television Sets, Radios, Typewriters, Silverware, Diamonds, Watches, etc. Earn up to \$5000 per year. No investment or stock necessary. Write for free details or send \$1.00 for illustrated catalog of over 1800 items and wholesale prices. Write L. J. Rondon's, 1820 Holmes Ave. Dept. LJ, Racine, Wis.

CABOCHON SLABS

Oregon, Idaho, Utah, 25 brooch size, all different, superb, \$5.00—20 good ones \$2.00—or send \$5.00 deposit for wide selection on approval. Postpaid. *Satisfaction guaranteed.*

THOMAS J. BONES
2713 Rossiter Lane, Vancouver, Washington

- New beauty in collections
- Instant identification
- Faster analysis
- Uncover new wealth

SEND FOR
BULLETIN
LJ 200

MINERALIGHT does all this with such ores as Scheelite, Uranium, Mercury, Zircon, Hydrozincite, Willemite, and many other minerals and materials. See these completely portable lamps at your MINERALIGHT DEALER. 12 models from \$12.50 up.

UltraViolet PRODUCTS, Inc.

5205 Santa Monica Blvd., Los Angeles 27, Calif

When in Oregon Visit the Hodge Podge Shop

Bitner & Davey Stone Gauges
Mineralights

Lapidary Equipment & Supplies
Fishing Tackle Myrtlewood

Agate Jewelry

Ask about the Conley Line

Sold Wholesale and Retail

Now in stock; famous Felker Di-Met Saw
Blades.

THE HODGE PODE SHOP

GRANTS PASS, OREGON

Route 4 — Box 284

4½ Miles South on Highway 99

ADVERTISERS' INDEX

Display advertisers only. See pages 233, 234 for Classified Advertising

IMPORTANT NOTE—If the Page Number is followed by a C (thus — 2C) it means that the advertiser offers a catalog on that page. If the page number is followed by PL it indicates a price list is offered and if it is followed by L it means that literature or a circular is available.

MENTION THE LAPIDARY JOURNAL WHEN YOU WRITE OR ORDER ANYTHING.
Thank You.

ADVERTISER	PAGE	ADVERTISER	PAGE
Ace Lapidary Company	194	M. D. R. Mfg. Co. Inside Front Cover &	188
Achat-Verlag (Agate publication)	231L	Michigan Lapidary Supply &	
Alaska Lapidary Service	231	Research Co. Inside Back Cover—C	
Allen Lapidary Equipment Co.	162C	Mineral Exchange Bulletin	215
Alessi	228PL	Mineral Notes & News	231
Alta Industries	183L	Minerals Unlimited	189
Ames, Frances E.	201C	Mitchell's	224
Anderson, Purl A.	189	Mueller, Dr. Ralph E.	206-231
Arizona Agate Mines	188PL	Mueller, J. Heinrich A.	161
Bateman, Ernest S.	223	Murray American Corp.	229
Bensusan, Kilian E.	228	Myco Precision Casting Co.	205
Bickford, Robert W.	228	Nelson Machine Works	193
Bitner's	226	New England Diamond Corp.	181
Bones, Thomas J.	234	New Mexico Minerals	195
Bowser's	231	Nonneman's	185
Brehm, B. M.	228L	Northwest Gem Importers	217
Buck, Robert O.	227	Northwest Gem Shop	228
Burgard, A. J.	177	O'Brien Lapidary Equip. Co.	168L
Burminco	195C	Odom's	229
Burton, Robert S.	228	Ohlsen, H. F.	228
California Car Bed Co.	215L	Opal Specimens, Inc.	229C
Conley Co.	223C	Orange Coast Gem Crafts	220
Covington Lapidary Engineers	202C	Parmelee, S. N.	211
Curtis, George C.	232	Parser, A. G., Inc.	188
Davey, George T.	227	Plotnik, Morris	228
Dean Arts	228L	Plummer's	228PL
Deming Agate Shop	225	Porter's Lapidary	229
Detectron Co.	226L	R & B Art-Craft Co.	Back Cover—PL
Eckert Mineral Research	193PL	Regent Lapidary Co.	187PL
El Paso Rock & Lapidary Supply	213	Rockologist	231
Fulmer's Agate Shop	183	RX Laboratory	173L
Gault	217	Schwab, Henry, Lapidary, Inc.	225
Gem Arts	217	Sequoia Gem & Mineral Shop	229
Gem Exchange	204C	Seward, N. L.	176PL
Geminlap Mart	171C	Shahan, F. L.	219
Gem Specialties	194	Shipley's Mineral House	204
Genoway Lapidary Shop	228	Smith, Archie H.	212
Glendale Lapidary & Gem Society	187	Southern Oregon Mineral Exchange	217
Gold Beach Mineral Shop	229	Special Equipment Co.	211
Gordon's	198-9PL	Sperisen, Francis J.	213L
Great Western Lap. Equip. Co.	187	Stein, Fred	211
Grieger's	167C	S-T Gem & Mineral Shop	205
Guild	197	Sterling Shop	219
Haydis, Hy	224	Stetson's	196
Highland Park Lapidary Supply Co.	231C	Stewart's Gem Shop	211
Hodge Podge Shop	234	Stewart Lapidary Institute	202
Horton, Grahame	228	Sussbach, Herbert	207
Houghtaling, R. O.	229	Swoboda, Edward R.	232
Howard, J. H.	176	Tacoma Lapidary Supply Co.	229
Hyatt Lapidary Equip. Co.	220	Tankersley, V. C.	228
Jake's Rock Shop	228	Taylor, M. D.	172
J. J. Jewelcraft	236C	Technicraft Lapidaries Corp.	185C
Joachim, E. E.	221	Tesmer, Robert	224
Jordan's, Chuck	227PL	Theodore's	206L
Juchem Bros	211	Tonne, Erwin	207
Junkins, O. R. & Son	218PL	Treasure Trove	212
Kane Lapidary & Supply	201	Ultra Violet Products, Inc.	234L
Kehoe, James J.	232PL	Valley Art Shoppe	232
Kettering, W. S.	227	Ward's Natural Science	
Keweenaw Agate Shop	217	Establishment, Inc.	197PL
Lapidary Equip. Co., Inc.	194-212C-216-221	Wheeler's	219
Lapidary Supply	228	Whetsel, Gertrude P.	211
Loch, C. Frederick	218L	Wildberg Bros. Smelting & Refining Co.	181
Manual Arts Press	172	Willems, J. Daniel	203
Mariett & Co.	231	Whittemore, W. N.	231
		Woodward, J. Frank	231

TITANIA

(Synthetic Rutile)

FROM the dawn of time, at the court of Belshazzar, through the reign of the Pharaohs, amidst the wealth of Cathay and India, in early Mayan and Aztec civilization and down to the Diamond Horseshoe of our Metropolitan Opera, brilliance and luster have ever been sought as the quality most desired in gems.

Now brilliance magnified many-fold scintillates with purest rays from the facets of Titania, the new wonder gem, a product of modern scientific genius.

THE twinkle of countless stars, the shimmer of the sea in brightest sunlight are imprisoned in the brilliant depths of Titania, this newly created jewel of unbelievable beauty. More brilliant than any other gem in the world, Titania is created to graciously adorn the most discriminating wearer with a brilliance never before imagined in wildest dreams.

LOOK! Our TITANIA Prices Are Only

Under .75 Carats ..	\$12.50 Per Stone	1.5 to 3.00 Carats ...	\$12.50 Per Carat
.75 to 1.5 Carats	\$15.00 Per Carat	3 Carats or Over	\$10.00 Per Carat

Mounted Titania Prices

Approximate 2 ct. Stone Mounted in Men's Attractive 10 Kt. Gold Ring.....	\$47.00
Approximate 1 ct. Stone Mounted in Ladies' 10 Kt. Bow Knot Design Ring.....	\$35.00
Approximate 1 ct. Stone Mounted in Ladies' 10 Kt. Prong Setting.....	\$25.00

These prices subject to 20% Federal Excise Tax.

Inquiry invited for special order settings of all types.

Hot Weather Specials

A Red Hot Special: 8"x3" Sponge Rubber Covered Aluminum Drum Sander, complete with sanding cloth. This is an \$8.00 Value, Hot Weather Special.....	\$6.20
State arbor size.	

Desk Pen

Fine quality Fountain Pen, with famous Hooded Section Point, complete with swivel and humidor. These fine writing pens are ready to mount on your polished slabs. A dandy gift idea. Desk Pen, complete with swivel and humidor.....	\$ 3.50 each
Special Quantity Price.....	\$30.00 per doz.

Initial Letters

Heavy (10 Ga.) Sterling Silver Block Initial Letters $\frac{3}{8}$ ". Just what you have wanted to make individualized jewelry. Any letter of the alphabet.....	\$.50 each
---	-------------

NEW CATALOG

Lapidary and Jewelers' Supplies — Our new 1949 catalog is now ready for distribution.

60 Pages FULLY ILLUSTRATED

Send 25c for your copy today

★ ★ ★

Our new 1949 catalog sent free with orders for any of the above

J. J. JEWELCRAFT

915 East Washington Street

SYcamore 7-0316

Pasadena 6, California

Open every day but Sunday, 9 A.M. to 5:30 P.M.

VISITORS WELCOME

MICHIGAN LAPIDARY SUPPLY & RESEARCH CO.

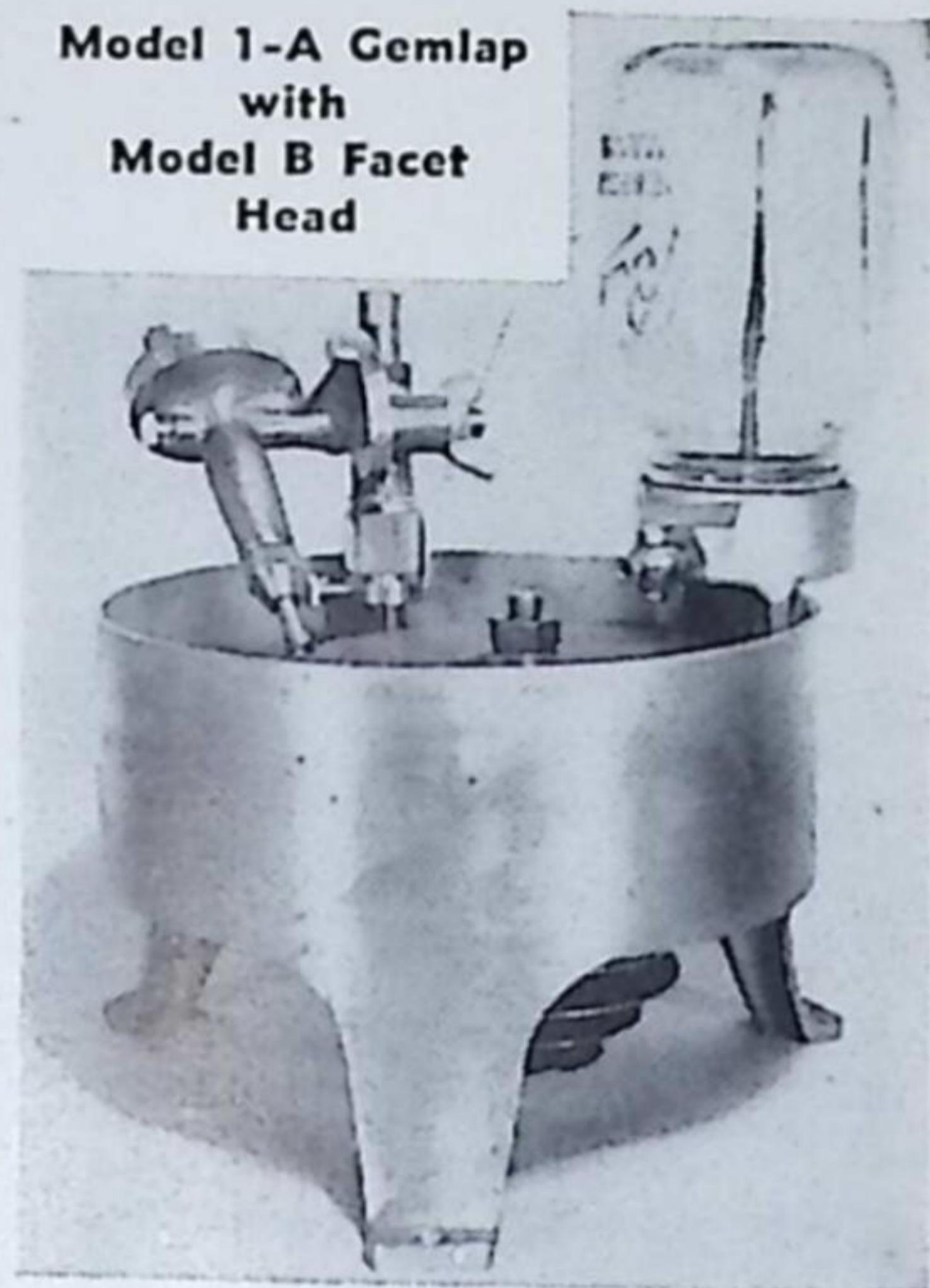
332 Hamilton St.

Birmingham, Mich.

"GEMPLAP"

PRECISION BUILT
LAPIDARY EQUIPMENT

Model 1-A Gemlap
with
Model B Facet
Head



A RARE COLLECTORS' ITEM

From Isle Royal Michigan. Collected forty years ago and sent to Antwerp for cutting and polishing. These rare Zeolites are a distinct addition to both specimen and gem stone collectors.

Chlorastrolites—
Perfectly cut and polished on both sides.
Priced at \$1—\$2—\$3—\$4 and \$5.00.

Thompsonites—
Perfectly cut and polished on both sides.
Priced at \$1—\$2—\$3—and \$5. (Federal tax included)

If you attended the SACRAMENTO EXHIBIT you saw the GEMPLAP EQUIPMENT in action.

NEW LOW PRICES

GEMPLAP MODEL 1-A	\$32.50
GEMPLAP VERNIER FACET HEAD	\$32.50
GEMPLAP TRIM SAW	\$32.50

The GEMPLAP EQUIPMENT was the "Hit" of the show.
WRITE FOR LITERATURE.

—FACET CUTTERS' ACCESSORIES—

DIAMOND GRINDING WHEELS

5" Diameter—1—1 16" wide rim
#150 Grit—(For Cabochon Grinding)
#500 " —(For Facet Grinding)

— \$88.80 —

DIAMOND CHARGED LAPS. 6"

600/1200 grit	\$13.75
600/3200 "	\$16.50
1200/3200 "	\$16.50

SPECIAL — LUCITE LAPS

Surface Ground on Both Sides

A \$3.20 value for only \$2.00

Hurry! Our supply is limited

TIN LAPS — 7" DIAMETER

Solid construction — Not a shell

— \$7.95 —

Send For Catalogs — Lapidary or Silver
There Is No Charge

NOTICE

To Our Catalog Subscribers. Please refer
to Price Change Supplement when ordering.

STERLING SILVER

Sheet	Wire	Chain	Findings
Jewelers' Tools		Lapidary Supplies	

GEM REFRACTOMETER

Save a lot of argument—check your gems accurately. Index is read directly on a calibrated scale. Range is from 1.35 to 1.80 and up to 1.87 with special liquids. All polished gems will give readings. Entire unit, in a box with a jar of liquid is only slightly larger than a pack of cigarettes.

\$29.00

NUCLEAR "SNIFFER"
for checking uranium ores
\$54.50

SPECIAL
3"x8" aluminum DRUM SANDER
\$6.00 each

BRAZILIAN AGATE, chunks from 20 to 35 lbs.	\$.60 lb.
Light SMOKY QUARTZ—Brazil	1.20 lb.
Dark SMOKY QUARTZ—Brazil	3.00 lb.
	<i>tax included</i>
Collins Jewelers' Bench Anvil, hardened	\$2.50 ea.
Dapping and Ring Bending Block	6.50 ea.
Ring Mandrel, hardened, graduated	3.65 ea.
Tapered Spindles, $\frac{1}{4}$, $\frac{1}{2}$, $\frac{3}{8}$, $\frac{5}{8}$.95 ea.

ELGIN DIAMOND COMPOUND, for ease and speed in polishing sapphire—25 carat cartridge in handy applicator gun.

GOLD RINGS

Ladies' ring mountings, 14K—palladium top, $\frac{1}{2}$ carat size	\$ 7.50
Ladies' ring mountings, 14K—palladium top, 1 carat size	8.00
Ladies' ring mountings, 14K—1 carat size	7.50
Ladies' ring mountings, 10K—12x14 m. m. octagon	8.00
Men's ring mountings, 10K—10x12 m. m. cushion	12.00

Add 20% Excise Tax

Other styles and sizes in stock

California Residents Add 3% Sales Tax

For Price List Write Dept. L

All Prices F.O.B. Los Angeles

R and B ART-CRAFT CO.

11021 South Vermont Avenue

PLeasant 1-1326

Los Angeles 44