

# BC ROCKS and GEMSTONES

THE FASTEST GROWING hobby in British Columbia right now is "rockhounding". With an estimated 2000 enthusiasts (nearly 1000 are registered in 19 clubs forming the Lapidary Rock and Mineral Society of B.C. and there are several clubs which do not belong to this society as well as a number of hobbyists who do not belong to any club) rockhounding is probably the biggest organized hobby in the province already, and there is no sign of any decline in its phenomenal growth over the past few years. Indeed, a record crowd of 8000 visitors is expected at this year's bigger-than-ever Rock & Gem Show to be held at the PNE grounds on October 7-9.

It is doubtful if any other hobby embraces such a wide range of activities in the pursuit of a single objective, the collecting of attractive natural rock materials and gemstones. Rockhounding may range from strenuous cliff-hanging exploration to the peaceful sifting of beach and river stones.

Rockhounds with a collector's urge may concentrate on obtaining fine samples of as many different types of rock as possible (there are thousands) or perhaps building a complete collection of one particular type. Like other fields of rockhounding, this leads inevitably to a thorough study of geology, mineralogy and geography, a pursuit which can become a hobby in itself.

## Workshop Hobby

An entirely different type of activity is provided by the work of cutting, shaping and polishing the choice pieces of collected stone. This is a workshop project with the skills, pleasures and exciting rewards of a challenging

craft. It is here that the rockhound discovers a rare beauty that lies hidden in the rough stones and reveals it in polished, flat specimens, bookends, paperweights or delicate and beautiful gemstone shapes for jewelry mounting.

Unexpectedly, women are just as enthusiastic about this workshop phase of lapidary work. Frequently it is a family interest, with father, mother, boys and girls taking turns at producing the polished gemstones.

## Jewelry-Making

Most rockhounds mount the gemstones in manufactured settings which are available through any of the lapidary stores now catering to this hobby. A growing number, however, are learning to fashion their own gold and silver jewelry. Classes in this art-craft are given by the UBC Extension Department, city night schools and at least two commercial jewelers.

Yet another phase of the lapidary hobby is *faceting*, the cutting of crystal gemstones from such material as quartz, zircon, amethyst, etc. Not many rockhounds have taken up this work, but actually it is not as difficult as it might seem and the equipment required is neither expensive nor complicated.

Like most hobbies, you can spend as much on lapidary work as your budget will bear, for there is virtually no limit to the amount of equipment and accessories you can buy. The basic equipment is not expensive, however, and experienced rockhounds agree that you can set up a satisfactory workshop for around \$250.

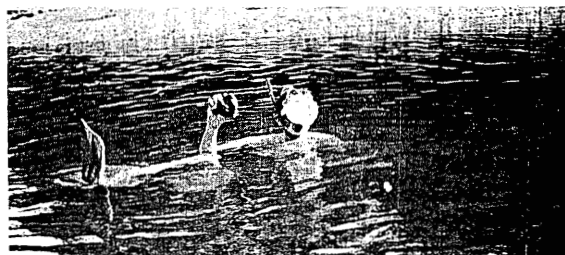
Actually you can buy compact table-top lapidary units for as little as \$50 or so, but they are



Shown above are just a few of the many objects which can be made from stones in a lapidary workshop. Items range in size from petrified wood bookends to tiny earrings of polished gemstone. Bracelet in foreground is mounted with small tumble-polished stones like the two larger ones to the right above it. A variety of standard jewelry mounts are available for cufflinks, bola ties, pendants, etc. Fish in right center is an example of stone carving.

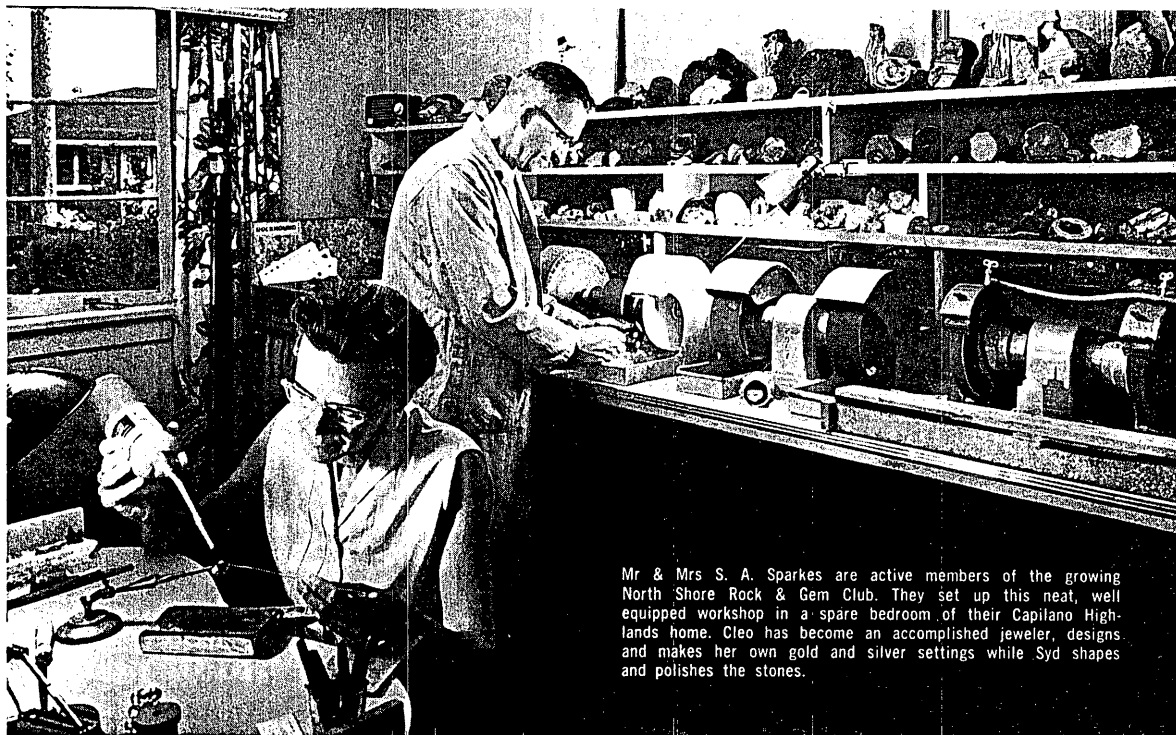
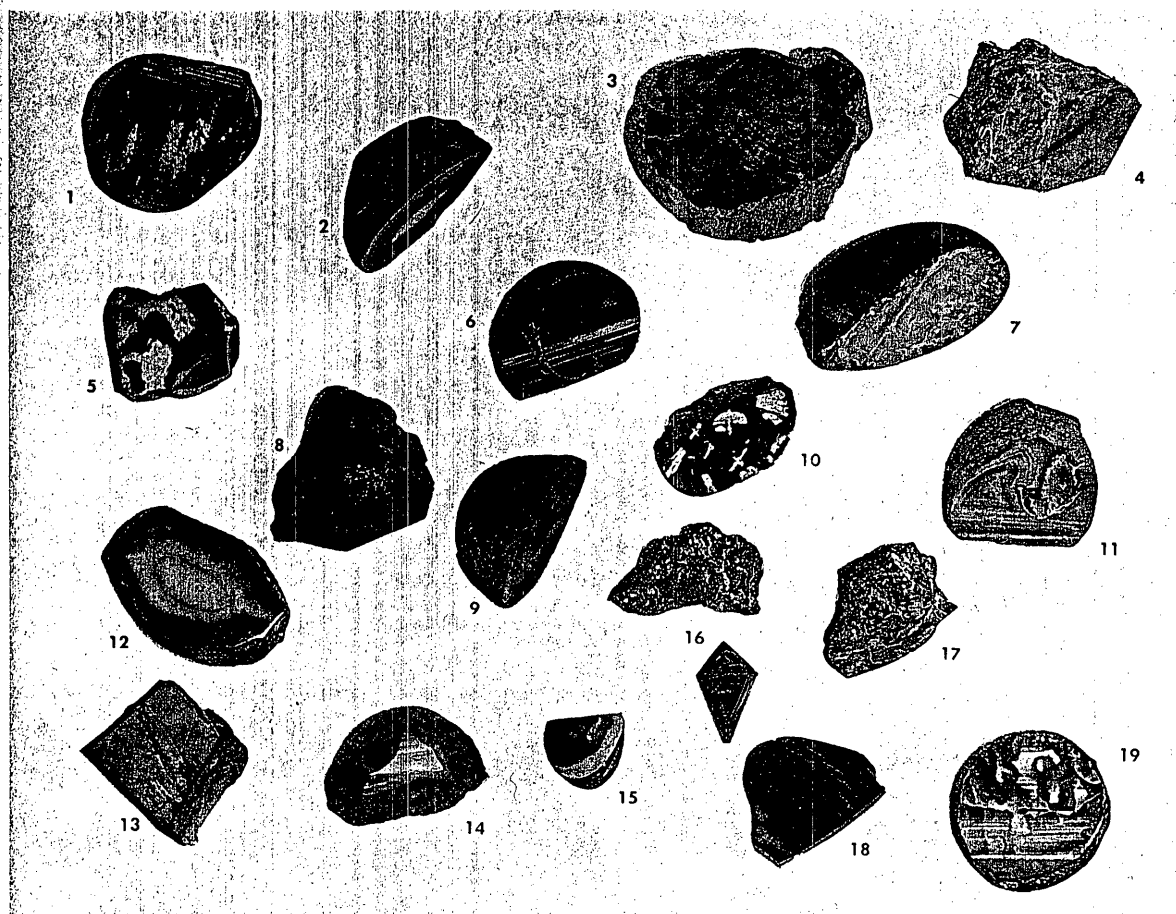
Color photograph on the right shows the principal gemstones found in British Columbia. Agate in various forms is the most common, but jade is the most valuable even though it is not the same material as oriental jade.

- |                                  |                                       |
|----------------------------------|---------------------------------------|
| 1) Plume agate from Shaw Springs | 11) Plume agate, Turtle Valley        |
| 2) Omineca agate, Francois Lake  | 12) Fortification agate, Shaw Springs |
| 3) Agatized wood, Princeton      | 13) Rhodonite, Salt Spring Island     |
| 4) Green garnet, Lillooet        | 14) Honey agate, White Rock           |
| 5) Agatized wood, Princeton      | 15) Hyalite, Shaw Springs             |
| 6) Picture agate, Shaw Springs   | 16) Sodalite, Golden                  |
| 7) Plume agate, Shaw Springs     | 17) Nickel silicate, Williams Lake    |
| 8) Jasper, Keremeos              | 18) Nephrite jade, Fraser River       |
| 9) Shuswap agate, Shuswap Lake   | 19) Plume agate, Shaw Springs         |
| 10) Porphyry, Fraser River       |                                       |



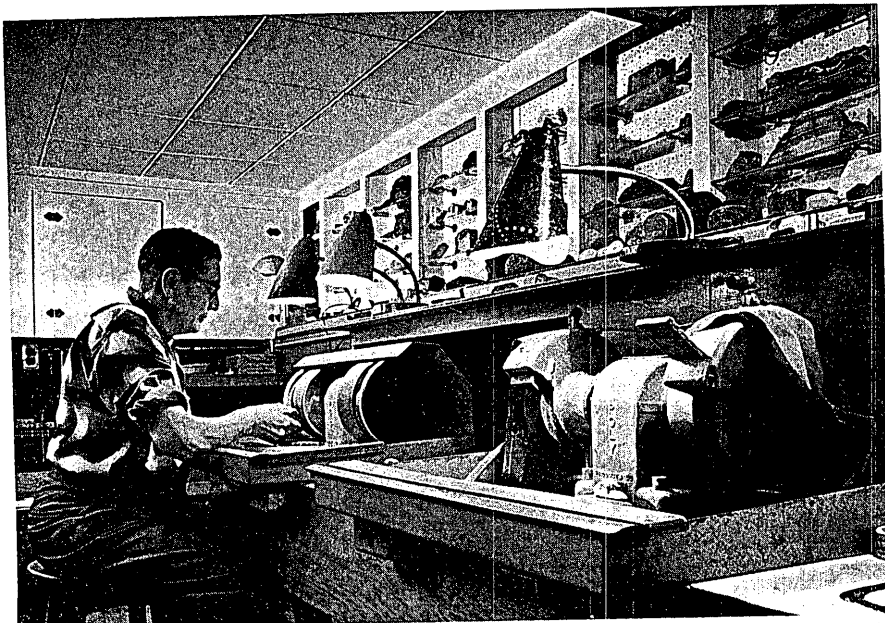
A good part of the pleasure of rockhounding is hunting for artistically valuable specimens. This is the outdoor, or summer holiday phase of the hobby. Above, Herb Buckingham uses skin-diving equipment to hunt for agate in Francois Lake, just south of Burns Lake. Below, Don Wells digs sand concretions out of the clay in a pipeline trench at Hixon near Quesnel.



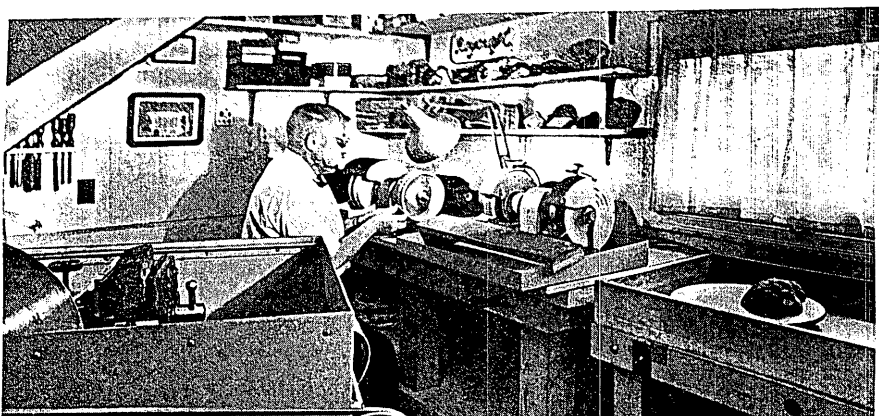


Mr & Mrs S. A. Sparkes are active members of the growing North Shore Rock & Gem Club. They set up this neat, well equipped workshop in a spare bedroom of their Capilano Highlands home. Cleo has become an accomplished jeweler, designs and makes her own gold and silver settings while Syd shapes and polishes the stones.

(Continued from Page 18)



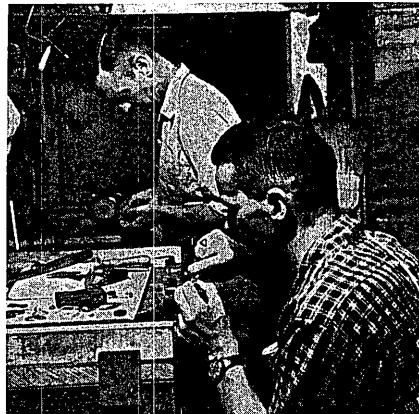
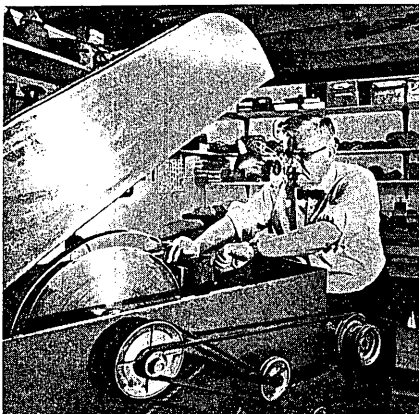
Vic Price's basement workshop is one of the most complete lapidary layouts in the province. Here he works at the polishing bench, holding a stone against a leather-covered wheel coated with polishing compound. In the foreground are coarse and fine grit grindstones for preliminary shaping. These are fitted with water drip taps to keep the grindstones wet and cool the rock as it is being ground, otherwise it would fracture with the heat. Drip pan is fitted with comfortable armrest, for work must be held steady and firm while it is shaped.



Dr Roy Shortreed, Vancouver dentist and president of The Lapidary Club of Vancouver, is an enthusiastic hobbyist with many interests. Part of his well-equipped basement workshop is set up for lapidary work. Dr Shortreed built some of the equipment himself, including the lap unit for flat polishing on the right, above. Below is a 16" diamond impregnated slab saw. Rock is locked in

vice which feeds it into the saw automatically to slice off 1/4" slabs. Saw runs in light oil.

BELOW—Charlie Purdom and Harold Prenter operate a joint jewelry and lapidary workshop in the basement of Purdom's Burnaby home. Combination of these two related hobbies gives creative control over the entire artwork. Photo by Fredl Stewart.



very limited in their capacity, cannot be expanded and are generally not recommended.

The basic equipment consists of a diamond-impregnated saw (10" diameter is ideal for most work) which is used to slice off thin rock slabs and trim them roughly to the shape required; two grinding wheels (8" diameter) in coarse and fine grits for rough and finish shaping of the stone; a sanding drum with various grades of paper to remove the bumps and scratches left by the grinding wheels and buffing attachments to apply the high polish which completes the stone. To prevent the stones from shattering from the heat, cutting is done in oil, grinding is done in water and so the saws and wheels are equipped with reservoirs and drip taps. Sanding is done both wet and dry.

### Simple Equipment

The total time required to produce a typical cabochon stone from the rough-cut slab is about 1-1 1/2 hours, but more elaborate stones, special carving, large book-ends and desk sets, spheres, rings and many other items are also made by the rockhound with simple equipment. To avoid the trouble of changing grinding wheels, sanding discs, buffers, etc. through all the stages from rough grinding to polishing, separate arbors are added for the different operations, but even the most elaborate workshop has essentially the same equipment as a small one.

A basement workshop corner is an ideal location for a lapidary bench, but it is a clean and tidy hobby which can conveniently be located in a spare bedroom or kitchen corner if no other space is available. Ball-bearing arbor units, saws and motor are surprisingly quiet in operation.

Although most of the rockhound's work is done at the lapidary bench in his basement or back room, it is far from being a solitary hobby. Next to working with stones, the rockhound's greatest pleasure is talking about them to other enthusiasts. The many local club groups which have been formed throughout the province hold frequent meetings and social gatherings, arrange prospecting expeditions, put on shows, prepare and exchange news letters with other rock clubs throughout the world, arrange illustrated lectures by rock and gem

(Please turn to Page 25)



## WHERE YOU CAN FIND BC ROCKS AND GEMSTONES

The accompanying map shows 40 of the better known rock-hunting locations in the main gemstone area of BC which runs from the lower Fraser Valley to the Okanagan. There are many other gemstone locations in the province — Prince George and Francois Lake in the northern section, and the Gulf Islands in the west being notable cases—and new discoveries are being made all the time.

The Fraser River is a rich source of gemstone material which may be found on any of hundreds of river bars from Agassiz to the Chilcotin, although they can only be hunted when the water is low. That is from October to April. The principal materials are agate, jasper, jade, nickel-chrome silicate, grossularite, rhodonite, garnet, serpentine, and porphyry. A few of the better known and more easily accessible Fraser River gemstone locations are shown here.

- 1) WALEACH/SEABIRD ISLAND — Agate, jasper.
- 2) FLOOD — Agate, jasper, nickel silicate, muttonfat jade.
- 3) HOPE/GREENWOOD — Rhodonite, jade, agate, jasper.
- 4) SPUZZUM — Jade, agate, jasper.
- 5) BOSTON BAR/NORTH BEND — Rhodonite, jade, agate, jasper, garnet.
- 6) ANDERSON CREEK — Jade, agate, jasper, garnet.
- 7) GOLD NUGGET BAR—Jade, agate, jasper, garnet.
- 8) LYTTON — Jade, agate, jasper, garnet.
- 9) SHAW SPRINGS—Banded agate, nodules, many with plume. Located 9 miles south of Spences Bridge on the Trans-Canada Highway. These occur in Drynack slide just north of Shaw Springs resort. First make enquiries at the cafe. Other locations not too far from here include Soap Lake and the Nicomeen Plateau.
- 10) LILLOOET—Jade, agate and jasper. The placer tailings on each side of the Lillooet bridge and the bar downstream are good hunting. This bar extends south to the Seton River.

- 11) UPPER HAT CREEK—Jasp-agate, Petrified Wood. Approximately 7 miles north of Cache Creek turn left on Pavilion Lake Road, drive 6 miles and turn left on Upper Hat Creek Road to the Lehman Ranch about 2 miles south. Get permission from Mr. Lehman before hunting. The material occurs on the ridge about a half-mile east of the ranch buildings.

- 12) EMPIRE VALLEY—Agate and thundereggs. Twelve miles north of Clinton turn west onto the Meadow Lake Road and cross the Fraser River at Dog Creek about 90 miles away. Turn left after crossing Dog Creek bridge and go to the Empire Valley Ranch where enquiries should be made. These are dry weather roads only and it is imperative that enough gas be taken for the return trip.

- 13) SCOTTY CREEK—Agate and amethyst. Exactly 19.2 miles north of Cache Creek turn right off the highway by a farmhouse and drive for about 4 miles. A mine dump is clearly visible from the road to your left. A short distance past here on a turn to the right, just as you cross the creek, you will see where the amethyst occurs in the cliff on your right. Heavy equipment is required to get this material.

- 14) CACHE CREEK—Agate, quartz crystals, and petrified wood. Six miles south of Cache Creek you will see a white seam of quartz crystals in the rock on the left hand side. Just over the hill on your left petrified wood can be found. Take drinking water and wear boots as the cactus is big and the rattlesnakes are plentiful in this area.

- 15) WALACHIN—Green jasper. About 15 miles east of Cache Creek turn south towards the Thompson River and stop at McAbee Station on the CNR. Green jasper occurs in the cliff facing the river behind the station. Indian artifacts are also found in this area.

- 16) SAVONA — Green opal, moss agate. Savona Mountain south of Savona has yielded some very fine green opal and moss agate. Take the road through the Indian Gardens Ranch to where it crosses the pipeline. Agate nodules are found about a mile east of this point. Enquire at Savona Lodge for more explicit directions.

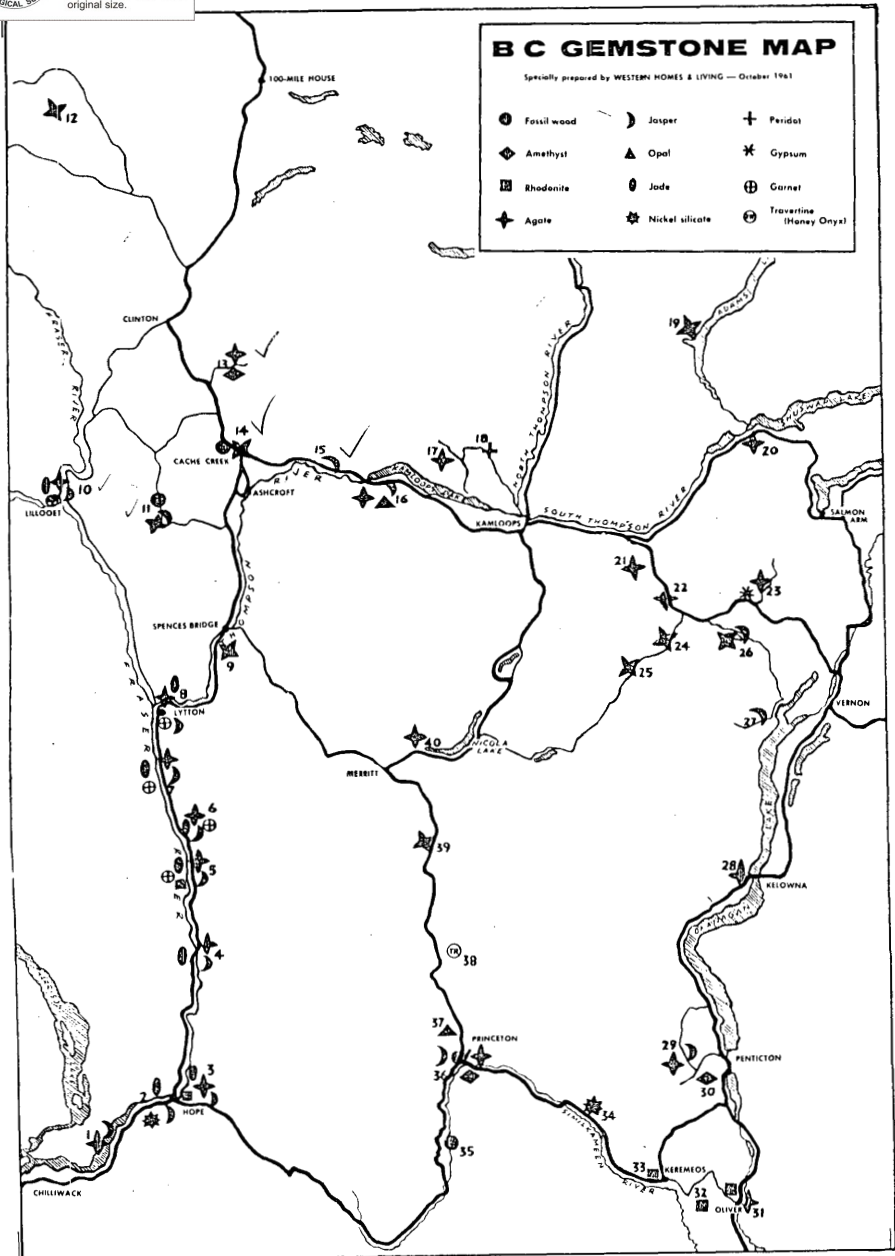
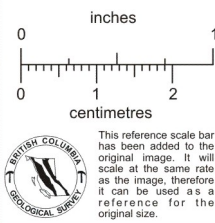
- 17) TRANQUILLE RIVER — Agates. About one mile east of the Tranquille Sanatorium turn north across

the railroad tracks, through a garbage dump and proceed to bridge over the creek. Agate occurs upstream in the banks and stream bed.

- 18) TRANQUILLE RIVER — Peridot. At the junction of the Tranquille and North Thompson roads in North Kamloops, take the turn-off to Lac du Bois which is about 5 miles to the northwest. North of Lac du Bois in the region of Opax Hill, peridot crystals have been found.

- 19) ADAMS LAKE—Agate occurs on the west shore of Adams Lake between Agate Bay and Squam Bay.

- 20) SQUILAX—Blue agate. This is a whistle stop five miles east of the town of Chase on the CPR. A fine quality of blue agate. The slide in which it is found meets the high-



Something  
New

and  
wonderful  
has  
happened  
to  
rum  
drinks  
!



# MARACA RUM is here!

One taste will tell you why MARACA is the news of the year in lighter, smoother rum! Sun-mellow and distinctively dry—MARACA RUM adds a touch of tropical magic to every rum drink. If you enjoy really fine rums you'll say... "nothing tastes quite like MARACA RUM but MARACA RUM itself!" Try the two delicious varieties—MARACA White Label and MARACA Black Label.

Try these  
wonderful new Maraca  
Rum Drinks



Maraca  
Collins



Maraca  
Swizzle

The FINER Rum in the exotic Caribbean netting

This advertisement is not published or displayed by the Liquor Control Board or by the Government of British Columbia.

## GEMSTONE LOCATIONS

CONTINUED

way at the Little River fishing camp, beside Little Shuswap Lake. The Little River itself contains some carnelian agate of good quality. Also the road from Squilax station through Turtle Valley leads to

several locations on the south slope of Squilax mountain.

21) ROBBINS CREEK—Massive agate nodules. Five miles north of Monte Lake on Highway 97 turn left on Barnhardvale Road then right on Robbins Creek Road for one mile. A basalt cliff on your right contains agate as does the surrounding area. Enquire at Monte Lake Shop for more explicit directions.

22) MONTE LAKE—Mass agate. Situated 30 miles from Kamloops on Highway 97 between Kamloops and Vernon, the diggings are located directly on the east side of highway at the south end of the lake. As this location is right on the road it is absolutely necessary to keep the road clear of debris.

23) FALKLAND — Gypsum. 25 miles west of Vernon on Highway 97.

The gypsum mine is located on the outskirts of the town of Falkland on the north-east side and is readily accessible by road, as the mine is not operating, gypsum specimens are available for the taking.

- 24) DOUGLAS LAKE ROAD — Agate nodules. Turn south on Douglas Lake Road one mile west of Westfold and drive 6.9 miles. Agate nodules are found in the rocky bluffs on the right side of the road.
- 26) PINAUS LAKE — Jasper, agate. Six miles west of Falkland on Highway 97 turn south. The road is steep and should be used only in dry weather. Pinaus Lake Lodge is six miles from the highway and enquiries should be made here. Material is located in the bluffs south of the lodge.
- 27) WHITEMAN CREEK — Red jasper. About 5 miles north of Vernon turn left on the road which goes along the west bank of Okanagan Lake. The second creek you cross is Whiteman, about 7 miles in. Fine red jasper is found in the banks upstream from the road.
- 28) WESTBANK — Agate nodules. Westbank is across Okanagan Lake from Kelowna. Just north of the old ferry landing there is a bluff facing the lake which contains fine agate nodules.
- 29) ALLEN GROVE — Jasper, agate. Take the Green Mountain Road out of Penticton, 14 miles to Allen's Ranch; one mile past here turn right onto logging road approximately 6 miles and park car. This area has produced some very fine red jasper and geodes.
- 30) GREEN MOUNTAIN ROAD—Potash crystals. The potash dykes occur about 4 miles from the Penticton turn off.
- 31) OLIVER—Agate. Very fine agates have been found in the gravel pit behind the high school in Oliver.
- 32) CAWSTON — Rhodonite. Good quality rhodonite is reputed to have been found in the Cawston area.
- 33) KEREMEOS — Rhodonite. On the western outskirts of KeremEOS you will see a very steep slide on the north side of the highway. This is rattlesnake area so wear boots.
- 34) HEDLEY—Nickel silicate. Make enquiries in Hedley for directions to the mine site which is clearly visible from the highway.
- 35) SUNDAY SUMMIT — Agatized wood. 300 yards west of Sunday Summit on the Hope-Princeton Highway. Starting at two culverts that run under the road, there is a path that leads up a bluff to the south. At the top you will see the petrified wood diggings.
- 36-37) PRINCETON — Petrified wood, amethyst, massive agate, opal, jasper. The Princeton area has several locations, Agate Bluffs, McCormack Flats, Vermillion Bluffs. Enquire at the Pines Motel for directions.
- 38) SKY BLUE LAKE—Travertine "Honey Onyx". About one mile north of Sky Blue Lodge there can be found a deposit of Travertine one mile east of the highway.
- 39) ASPEN GROVE — Agate. Between Merritt and Princeton is the lower Nicola volcanic belt which has produced some fine banded and colored agates. Two miles from Aspen Grove, towards Merritt, turn up a logging road for about one and a half miles where a massive agate deposit is located.
- 40) NICOLA — Shadow agate. Numerous occurrences of agate have been found on the Nicola Plateau between Spences Bridge and Merritt.

## Rock Shops and Lapidary Supplies

### HECEL'S JEWELLERY LTD.

2978 W. Broadway, Vancouver 8, B.C.  
RE 1-5448  
Original settings created—precious and  
semi-precious stones and rocks  
hand carved.  
Artistic redesigning of out-of-date  
jewellery.

### CAPILANO ROCK AND GEM SHOP

1629 Marine Drive  
North Vancouver Yukon 7-5311  
DOLL GERMAIN - JOHN SUTHERLAND

Learn to cut and polish stones  
Classes — 35c per hour  
complete lapidary equipment  
jewellery findings  
custom made jewellery - gifts

### EXCALIBUR SHOP

4047 CAMBIE  
VANCOUVER 9, B.C.  
TR 9-4422

Authorized dealers  
Covington Lapidary Equipment  
Custom Slabbing  
Gifts - China - Hobby Supplies  
Unusual assortment imported English  
Christmas cards and gift cards  
now available

### PARKER'S ROCK SHOP

7247 KINGSWAY, BURNABY 1, B.C.  
LA 1-6557  
Open — Tues. Wed. Thurs. Fri. 11-5:30, 7-9  
Sat. 11-5:30 only. Closed Mondays.  
Custom Made Jewellery  
Materials and Equipment

### MARSHALL'S LAPIDARY

All supplies for

THE LAPIDARY AND  
SILVERSMITH

SCHOOL AND WORKSHOP



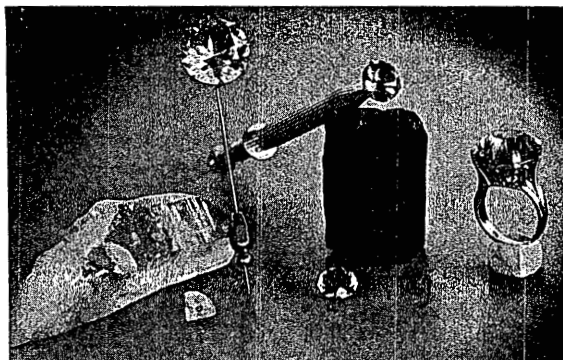
5379 WEST BOULEVARD  
VANCOUVER 13, B.C.  
PHONE: AM 6-4949

### Academy of Creative Interpretation

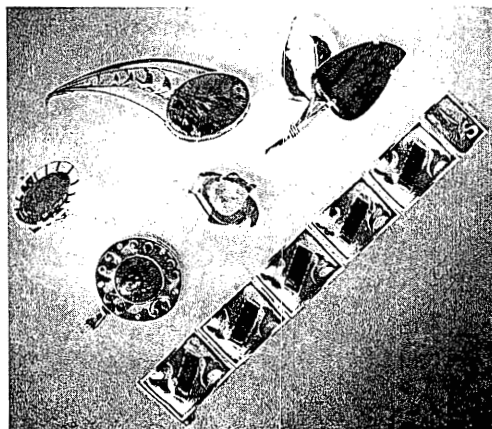
2978 W. Broadway Vancouver 8, B.C.  
RE 1-5448  
JEWELLERY MAKING AND DESIGN  
CLASSES OR PRIVATE LESSONS



Wayne Boyd, a machinist by trade and a rockhound by avocation, has taken up the art of gem cutting. Once considered a sacred and very difficult craft, it is not only well within the grasp of amateurs. Wayne built his own faceting equipment.



Here are some of the faceted gemstones which have been cut by Wayne Boyd. "Daddy Warbucks" tie pin and small stone on the left are cut from clear quartz crystal lying behind them. Ring and two smaller stones on the right have a brilliant topaz yellow color, were cut from the surprisingly dark and lifeless looking piece of smoky quartz shown with them. Faceting reveals the optical brilliance and true color hidden in the natural crystal. Ring and tie pin settings were made by Joe Threl.



Jewelry made as a hobby artcraft compares favorably with a lot of professional work. All the pieces shown here were designed and made by Mary Sutherland, using only gold or silver wire and sheet. Even the hinges and pins are entirely handmade.

Photos by Selwyn Pullan

John and Mary Sutherland have a workshop and display collection in a spare bedroom of their Vancouver home. John does much of the lapidary work while Mary specializes in making jewelry. She is working here on a tiny silver Haida whale pin inlaid with a mosaic of colored stone.





authorities and generally lead a very lively and convivial life.

You can learn more about this hobby by visiting the Rock & Gem Show at the PNE on October 7-9. There are several lapidary shops throughout the province now and any of these will be delighted to give you information about the hobby or put you in touch with club groups in your area. If this is not convenient, drop a letter to The Lapidary Rock & Mineral Society of British Columbia, PO Box 194, Station "A", Vancouver, which will be happy to get you started.

Night school courses in lapidary work are being given in several metropolitan centres and most rock shops conduct classes and provide workshop facilities for a nominal fee. It's an easy hobby to get into but a hard one to give up.



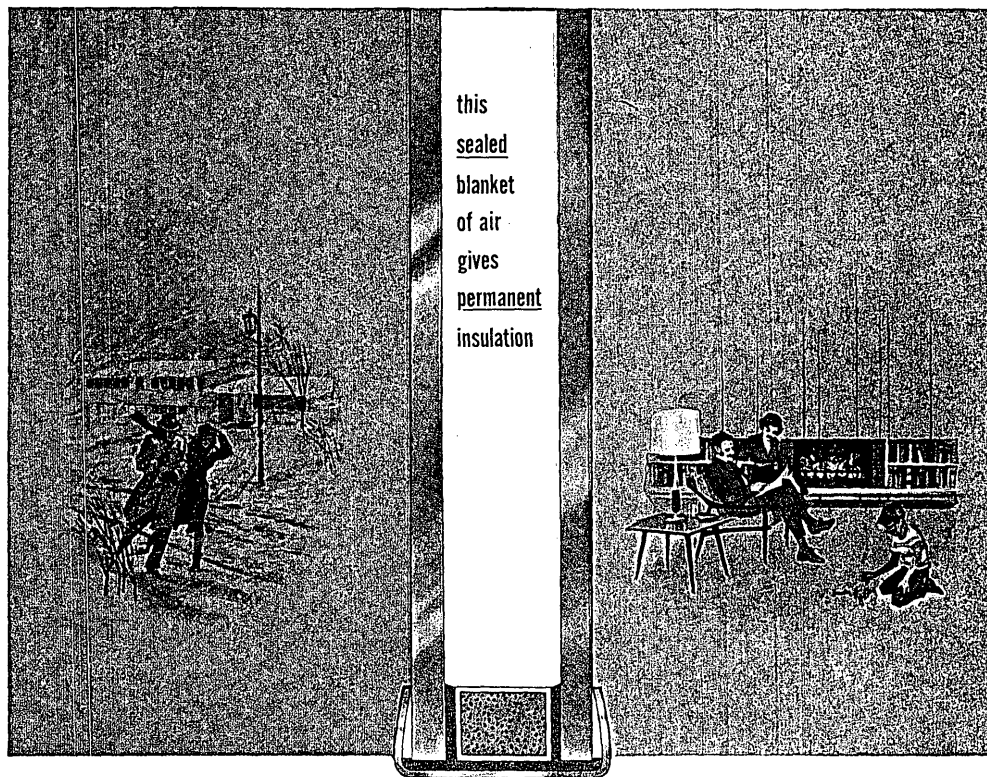
Most rockhounds soon face the problem of where to keep their constantly growing collection of stones. Lynne Sparkes here displays one neat solution: the dead end of a clothes closet is fitted with a stack of 2-foot-deep trays. The twenty trays are interchangeable.

## YOU WANTED TO KNOW

I have just bought a lovely old marble-topped table, but it is quite dirty. How should I clean it?

A.W.B.  
Victoria

Hard and durable as it is, marble still absorbs many stains and collects dirt in minor fissures, veins, and lines of separation. It should never be allowed to get really dirty or soiled. If it does, wet the surface with hot (not boiling) water, then scrub with a mild non-abrasive detergent and a soft fiber brush. Rinse several times and dry quickly with a clean, lint-free cloth. A coat of colorless paste wax is recommended to restore the luster and protect the surface.



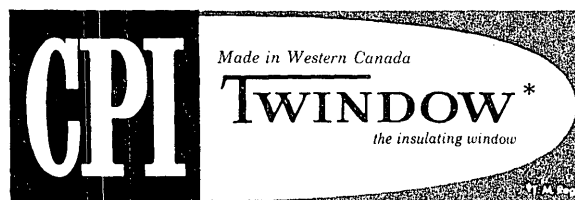
## Canadian-made TWINDOW is the most sensible way to keep the outside outside

C.P.I. Twindow keeps your home cool in summer, warm in winter. Twindow is the world's finest insulating window. It's two panes of top quality glass with a layer of air sealed in between. This layer of air acts as an insulator to hold in heat in winter . . . and hold out heat in summer. Heating and cooling bills go way down. Condensation, fogging and frosting are virtually eliminated.

Your home stays more comfortable, more liveable all year round . . . and no worries about putting up and taking down storm windows. Twindow is a permanent storm window. Whether you're building or renovating, Twindow makes sense.



Many years of intensive research have developed Twindow's exclusive, trouble-free Hermetic Seal—the seal that sets genuine Twindow apart from all look-alike substitutes. It's this seal that positively prevents dirt and dust from penetrating between the two layers of glass. The Twindow signature in the corner of every unit is your assurance that you're getting the genuine product, backed by Twindow's 5 year guarantee.



CANADIAN PITTSBURGH INDUSTRIES LIMITED

CANADIAN PITTSBURGH INDUSTRIES LIMITED  
48 St. Clair Ave. West, Toronto, Ontario

Please send me free literature and details on the economy and good sense of Twindow, the insulating window.

NAME.....

STREET.....

CITY.....ZONE.....PROV.....

TW-161R WHL 10

I remodelled a large oak dining table and tried to give it an oiled finish like Danish furniture. I sanded it down to the raw wood, then applied four coats of raw linseed oil mixed with turpentine for penetration. I thought this would be enough but when I accidentally splashed some water on the table the wood came up rough. Have I done something wrong or should I just apply more coats?

L.P., Campbell River

Basically there seems to be nothing wrong in what you have done. Boiled linseed oil is usually preferred to raw oil for this purpose because it dries faster, but either is satisfactory. We suspect your trouble lies in one of two places: either the oil is of poor quality and is not drying properly, or you have thinned it with too much turpentine. Actually it is not necessary to thin the oil at all for such a finish, and certainly only

the first coat should be thinned, and then very slightly. Two coats are usually sufficient.

We happen to know of a remodelled oak dining table that was treated in exactly this way and has given excellent service for five years. A new coat of linseed oil every couple of years renews the finish. Rubbing with the heel of the hand or a hard cloth brings up the gloss.