THE CMLC NEWS

The Canterbury Mineral & Lapidary Club Inc.
Newsletter for May 2023

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Club Mailing Address: 1 Arlington Street, Burnside, Christchurch 8053 **Email**: cmlclub@chch.planet.org.nz
Website: www.cmlclub.org.nz
Facebook: Canterbury Mineral and Lapidary Club
Meeting Venue & Clubrooms: 110 Waltham Road, Waltham, Christchurch 7:30 pm on the second Thursday of the month [Feb. to Nov.]

General Meeting (7.30pm): May 11, June 8
Committee Meeting (7pm): May 18, June 15
Micro Mineral Meeting: Tuesday evenings (7 pm)
Workshops: Every Tuesday evenings, 6.30 p.m.
Geobusters: Sunday afternoons every second month.
www.geobusters.co.nz; Facebook.

The May Meeting: .There will be a talk by Christopher Thian and me about our rockhounding trip to Australia, finishing with the Gemboree at Dayboro.

Kitchen Duty for the May Meeting: Christopher Thian, Julian Twiss, Nathaniel Van Holt, Peter Valance, Joanne Walton, Trevor White, Drew Whittle, Morne Wium, Chris Wright. Do dishes and tidy up the kitchen after the meeting.

Auction for the May Meeting: This will be a collection of polished slabs from the Brian Jone collection. Some very high quality material.

Field Trip: 13 May to the John Dugmore collection. Further details will be announced at the club May meeting.

Club Annual Subscription: This is now due, and every club member has received the subscription notice. It would be most appreciated if you get this paid before 31 May to receive the $5 rebate.

The Monthly Competitions Results for April
Lapidary: Polished lapidary work containing the colour black
1st Zena, 2nd Craig McGregor, 3rd J. Taylor 4th equal Nate Van Holt and Ava.
Fossil Fossil fern: 1st Craig McGregor, 2nd J. Taylor
Mineral: Mineral black in colour: 1st D .Macdonald 2nd Zena 3rd equal C. McGregor and J .Taylor 4th Ava
Alphabet Cup: HRJ
1st C. McGregor, 2nd Zena, 3rd equal Ava and Nate van Holt.
Novice Section Any rock you wish to enter
1st Zena, 2nd Nate Van Holt.
Bring and Brag
1st Paul B- Citrine hand crafted ring.
2nd Chris T- Vertebrae agates
3rd Craig M- Dom Pentoxylon - fossilised gymnosperm
4th John T- Patu

The May Monthly Competition
Lapidary: Polished lapidary work containing the colour yellow (Own work)
Fossil: A fossil from over seas
Mineral: Mineral yellow in colour
Alphabet Cup: A specimen from a country or state starting with I or S
Novice Section: Any rock you wish to enter
Bring and Brag: Be prepared to talk about it.

Annual General Meeting and Elections and club meeting Please use the form included with this newsletter to nominate club members for positions on the club committee. All nominations must be with the club secretary at least 2 weeks before the AGM in June.

As part of this there will be a buy sell and exchange event. You can have a 1.5m table space to bring material to buy, sell or exchange. The cost is $5. Please email Tessa at cmlclub@chch.planet.org.nz if you wish to have a table.

New Members: Please make welcome Sara Willette, Graham and Lynn Barr, Peter and Fay Cook, Kent Deverson and Jess Banfield

Club Annual Show: 30 September/1 October. It is not too early to start thinking about how you can contribute to this. There will be lots of areas in which you can contribute: Personnel at the door, sales tables, Advertising, Children's competitions, workshop demonstrations, displays, Fossicking trailer, security etc.

The New Zealand National Gem and Mineral Show
This year it will be in Blenheim, at Marlborough Boys High School on 6 to 8 October. The traders application form, competition schedule and entry form, and the 1st newsletter have all been emailed out to all our club members. If you have missed them, you can download them at www.nanzrmc.org.nz

Another big auction: Saturday 27 May. 259 Centaurus Road.
This will be material and machinery from Lindsay Day. Keep a watch on your emails for further details.

Many Thanks: To Pete Vallance who has donated a very comprehensive first aid kit to the club. Very Much appreciated, Pete.

The Brian Jones Auction: A big thank you to all those who attended the Brian Jones auction. A good time was had by all with some very spirited bidding. Your auctioneer was left totally exhausted at the end of over 130 lots. It was very strange to see those shelves so bare after so many years. The family wish to express their thanks to everyone who came.

HOME WORKSHOP SERIES

CONSTRUCTING A LAPPING MACHINE

by Spence Holdaway

New Zealand Lapidary : March 1969.

SHORTLY after a rockhound finds his first polishable stones he or she is faced with the problem of what to do with them, and the larger and better looking the finds the greater the problem seems to be. The writer, in common with others, had to face this same situation at the beginning and solved the problem by building a dual purpose, lap-buff machine. The method, as you will find in the following account, is both simple and efficient and whether you slab or cab this machine will prove an asset to your lapidary workshop in the long run.

Firstly arrange for a plumbing firm to make up a l6-gaugz, flat galvanized iron box open at both ends. Most good plumbers these days have equipment suitable for spot-welding the joint, which is handy to have done and quite satisfactory for this join. At the same time have the plumber bend up a 16- gauge tray to neatly lit inside the tin box. This should have a 1" turn up all around. The box should be 18" wide by 22" long and about 20" high.

The length and width of the tray should be slightly less than for the box. When fitted it should be 5', down f rom the top with the 1" turn up facing upwards (see diagram). The tray is best riveted in place with No. 10 tinsmith rivets, about 11/2'" to 2" apart and as it is to hold or carry away water and sludge, a 1" fall to one end is desirable. After riveting make watertight with a good sweating of 50-50 solder, a job easily within the capabilities of most constructors.

Now obtain and solder in place a suitable drainpipe. A 9" length of plated towel rail is ideal, ' cut to lit the bottom of the tray and protrude out through the side of the box as shown. This allows the operator to slip a bucket under the spout so formed to catch the sludge and water waste.

The next requirement is the drive shaft and bearings. Both of these are the self-centering, ball race type. The top one is a

flange type housing so that it can be bolted flat on the drain tray. The bottom one is a "P" or plumber block type housing which is bolted to a 11/2" x 11/2" angle iron bracket that is mounted across the inside of the box. The angle iron bracket, with stop- ends welded on, is bolted onto the outside casing with four 5/16" bolts. This keeps the bottom bearing firm which is very necessary as it does most of the work. The shaft should be 12" long and stepped (refer to diagram), to a depth of 1" so as to permit interchange of lapping or buffing heads. A sludge flinger, such as a 3" disc soldered or welded to the shaft just clear of the flange bearing, is needed to prevent grit and water getting into the bearing. By the way, it's as well to fit a gasket of some water repelling substance under the flange bearing. This will prevent water in the bottom of the tray from seeping through to the other bearing.

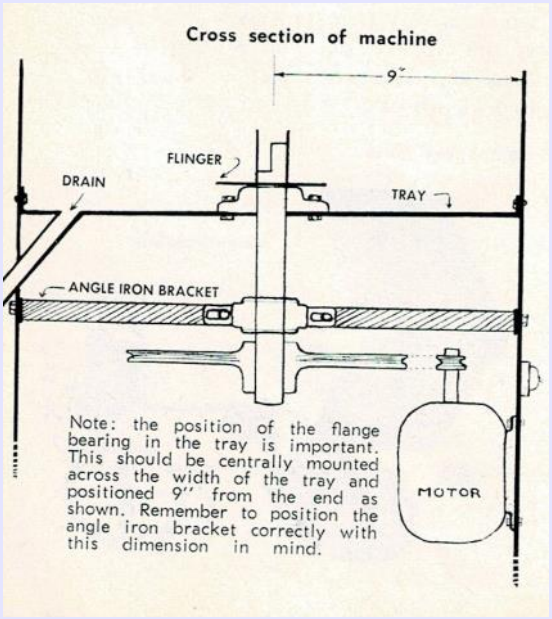
The final thing to do to the top of the shaft is to fix a 2" long, tight fitting sleeve to this to provide a guide for the various attachments you will later be using.

Turning the machine upside down you can now start assembling the driving units. On the bottom end of the shaft, the portion protruding below the lower bearing, firmly fix a 12" diameter V pulley. Any sound old washing machine 1/4 h.p. single phase motor, is powerful enough to drive the lap. Note that the angle iron bracket is attached to the 18" walls of the box and the motor to either of the 22" walls (in error the angle iron bracket is shown attached to the 22" walls—Ed.). This is to allow room in the box for shifting the motor when belt tightening.

When drilling the holes for the motor make them oversize and then slot all four about an inch or so to facilitate belt tightening. Fit rubber or plastic grommets in the slots and provide fibre washers both under the bolt heads and motor base as an added precaution against current leak.

It is advisable to mount a switch on the side of the box and this wants to be safely mounted also. Cut a 3" square

out of the casing where it has been decided to mount the switch. With the aid of gutter bolts place a piece of switch-board material or other non- conductor over this square hole and you have a perfect base for mounting the switch.

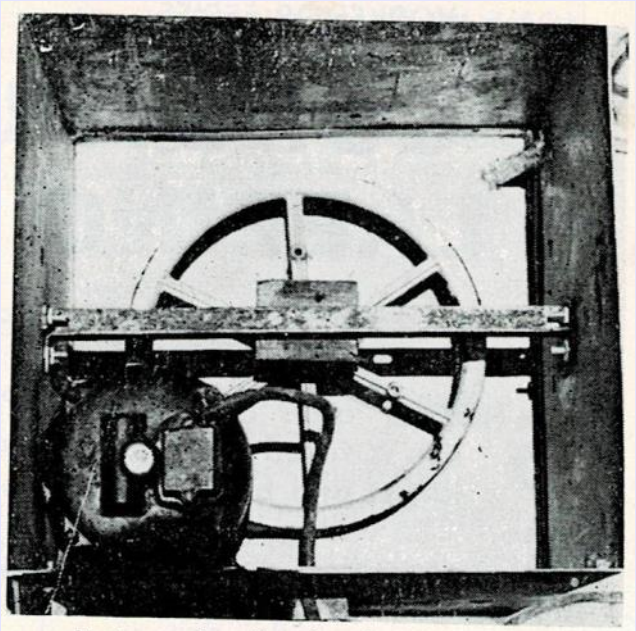


Having got the machine operating smoothly now return to the interesting end, for it is time to make a lap plate. For this you will need a 16- or 18- gauge 3/8" thick disc. Have welded to it 2-1" of shafting of the same size as the main shaft. Step it exactly as you did for the latter and fit it into the sleeve, making sure it slides easily in and out. If it doesn't it will be easy to remove some metal off the step, just a little at a time, until it slides in easily. Your machine is then ready to use.

The measurements given allow for a 1" gap between the edge of the lap wheel and the outside casing. This is quite important as it will be found desirable to put newspaper under and around the disc when using it. When changing grit size also change the paper and so avoid contamination.

Remember also that box length and width is for the 16" lap only and for wider laps a box 2" wider than the width chosen will be required. The length is not so important on bigger wheels because here there is plenty of living space underneath the motor.

The writer believes there is a future in this machine for faceting. Polishing heads, sphere cutters and other techniques are



Motor and pulley in place in the prototype machine

quite within the scope of this machine. Additions can be thought up from time to time and added to your repertoire of lapping tools. In fact, with this machine you can indulge in one of the most relaxing and satisfactory lapidary occupations—the height is worked out so you can sit on a chair to use it.

Sender CMLC, 1 Arlington Street, Burnside, Christchurch 8053.

COMING EVENTS:

NorthShore Rockhound Club Inc Annual Mini show in 2023 at the Milford Senior Citizen's Hall (13th 14th May 2023) with setup date being Friday the 12th May (from 4.00pm)
North Otago Gem and Craft Show: Scottish Hall, Oamaru, 8, 9 July (date to be confirmed)
Canterbury Mineral and Lapidary Club Gem Show: 110 Waltham Rd, 30 September/1 October
National Show 2023 Marlborough Rock & Mineral Club: Marlborough Boys High School. 6 to 8 October.
National Show 2024: Mineral Club of Hutt Valley Wellington
Australia
Gemboree 2023 Australia: Dayboro, Queensland: April 7-10
Gemboree 2024: South Australia: Willunga.