

JEWELLERY – 3

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JEWELLERY – 2

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1. JEWELLER'S DRAW PLATES

2. TWISTING DECORATIVE WIRE

3. FORMING RINGS AND MAKING A SIMPLE CHAIN

4. USING A FORMER TO PRODUCE CHAIN LINKS

5. CLEANING AND POLISHING JEWELLERY COMPONENTS / PARTS

JEWELLER'S DRAW PLATES

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Draw plates are made from high quality hardened steel. They are used to reduce the thickness of 'wire' or to change its cross-sectional shape. The wire is annealed so that it is soft and malleable. It may be necessary to feed it through the grooves of a rolling mill first, to draw it down to a reasonable size.

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ONE END OF THE WIRE
REDUCED IN SIZE WITH A HAMMER
(ALTERNATIVELY - FILE TO SHAPE / REDUCE)



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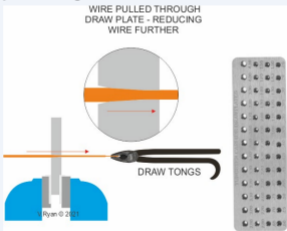


JEWELLER'S DRAW PLATES

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The wire is 'pulled through' a series of holes in the draw plate, each one smaller than the previous hole, until the desired diameter is reached. Draw tongs grip the wire and the user uses his /her weight to even apply force, pulling the wire through the hole.. The 'curl' of the draw tongs, prevent hands slipping during the drawing procedure.

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TWISTING DECORATIVE WIRE - 1

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18 gauge / 1.02mm diameter wire, is ideal for decorative twisting. Twisting wire is often used in the manufacture of bracelets. Strands of wire can be 'twisted', by trapping one pair of ends in a vice and the other pair in the chuck of a hand drill / cordless drill. Simply rotating the handle of the hand drill, twists the wire.

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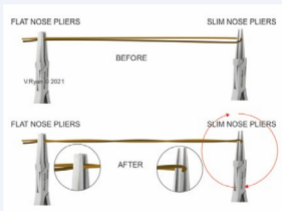


TWISTING DECORATIVE WIRE - 2

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A pair of flat nose pliers and round / slim nose pliers, can be used together, to produce a decorative twisted wire. One length of wire is looped around the jaws of the slim nose pliers. The two ends are held securely in the jaws of the flat nose pliers. The slim nose pliers are rotated, producing the twist. The more rotations, the tighter the twist.

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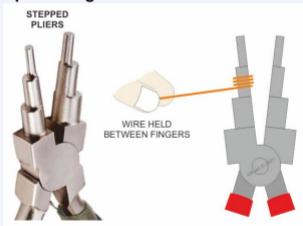


FORMING RINGS AND MAKING A SIMPLE CHAIN - 1

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Stepped pliers are very useful when forming annealed wire, into rings or eyelets. The wire is first trapped between the round jaws and then twisted by hand, until a 'circle' is formed. This is repeated, depending on the number of rings required. Diagonal cutting pliers are used to cut / separate each ring.

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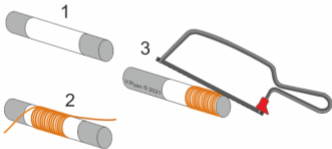


FORMING RINGS AND MAKING A SIMPLE CHAIN - 2

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1. Wrap paper around a steel round section
2. Wind the annealed wire tightly around the round section
3. Move the paper to the end of the round section and cut each ring with a junior hacksaw.

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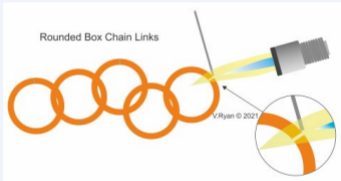


SOLDERING THE RINGS / LINKS

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Each ring is individually soldered, one ring at a time, until a chain is formed. Care must be taken to avoid de-soldering previous 'joins' accidentally. The chain below has 'Round Box Chain Links'.

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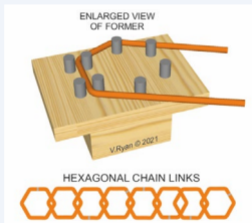


USING A FORMER TO PRODUCE CHAIN LINKS

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The former shown below, is made from pine and a number of steel pegs. The pegs could be round section nails or even pins. The former is secured in a vice and annealed wire is 'bent' around the pegs, producing individual hexagonal links.

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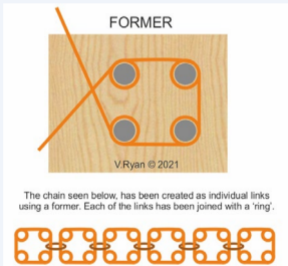


USING A FORMER TO PRODUCE CHAIN LINKS

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The chain seen below, has been created as individual links using a former. Each of the links has been joined with a 'ring'.

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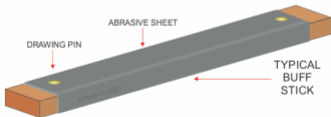
BUFF STICKS

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Buff sticks are very useful abrasive sticks and they are easy to make. They are usually round or square / rectangular in section. Experienced jewellers make a variety of buff sticks, to suit the jewellery they are making. Buff sticks allow a jeweller to work in small corners / areas.

Made by wrapping fine grade abrasive sheet, round a piece of wood, several times. A drawing pin is pushed in each end, holding the abrasive tightly in position.

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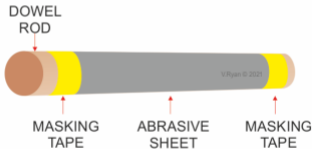


BUFF STICKS

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For a round section buff stick, a piece of dowel rod is suitable. Wrap the abrasive sheet around it. Use masking tape or a drawing pin at either end, to hold the abrasive sheet in position.

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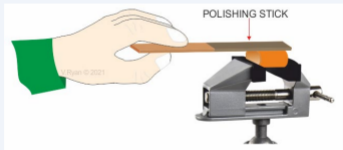
POLISHING BY HAND

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Polishing a material by hand is sometimes the only option. Suede / leather fabric is glued to a piece of wood (see below) with contact adhesive, forming a polishing stick. Liquid polish is applied to the stick.

Jewellers tend to have a range of different shapes and sizes, to suit the jewellery they are making.

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PENDANT DRILLS / MULTI-TOOLS AND POLISHING

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Polishing 'mops' are designed to fit a pendant drill or similar hand-held power tool / multi-tool. Polish is applied to a mop and this provides the abrasive, which polishes the metal surface.



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an exercise

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POLISHING / BUFFING MACHINE

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A Buffing / polishing machine is very useful, when polishing larger pieces of jewellery / silversmith work.

This is an example of a table top buffing machine. The 'mops' on either side of the machine, are soft and rotate quickly, polishing any metal surface pushed gently against them.

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