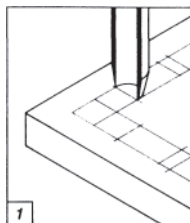


USING YOUR ROBERT SORBY WOODCARVING TOOLS

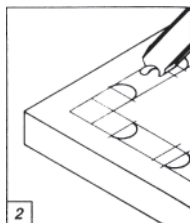
Before commencing any cuts REMEMBER these tools are razor sharp

ALWAYS KEEP BOTH HANDS BEHIND THE CUTTING EDGE AND CLAMP THE WORKPIECE SECURELY!!

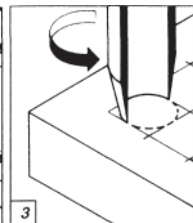
STRAIGHT GOUGES - These are the most frequently used tools by the carver. The 12 Straight Gouges in Roberts Sorby's range conform to the 'Sheffield List' and offer an excellent variety of curves from the very shallow #4 through to the deep sweep of the #8. The cutting edges of these gouges are based on an arc of a circle. For example, the #6 - 3/8" gouge will produce a 1/2" diameter circle. *Figs 1 to 5* illustrate how cuts with gouges can be used for low relief decoration.



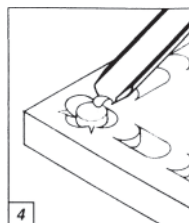
1
VERTICAL GOUGE CUT DETERMINES LENGTH AND DEPTH



2
CUTTING FLUTE TO LENGTH AND DEPTH

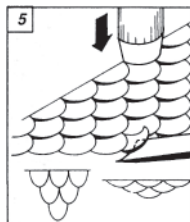


3
ARC OF GOUGES (#4 to #8) WILL PRODUCE A FULL CIRCLE

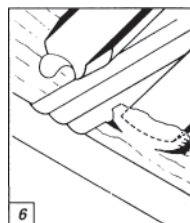


4
FINAL CORNER DECORATION WITH GOUGE

Textures such as feathers and scales can also be achieved with a series of cuts as *fig 5*. When roughing down groundwork, cut ACROSS the grain and select a deep gouge. A shallow sweep, used for deep cuts, will tear the grain - *fig 6*. A gouge is easier to control if used across the grain. When working ALONG the grain more care is necessary since the gouge may suddenly respond to a downward movement of the grain and may cause a 'thicker than intended' cut - *fig 7*. When working along a raised area - watch the grain direction. Be sure to cut in the directions shown in *fig 8*.



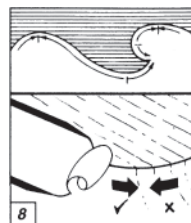
5
VERTICAL CUTS WITH GOUGES OR VEINERS. CHIP REMOVED WITH SHALLOW GOUGE



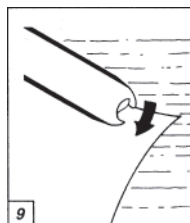
6
ROUGH OUT ACROSS THE GRAIN WITH A DEEP GOUGE. THE CORNERS OF A SHALLOW GOUGE WILL TEAR THE FIBRES.



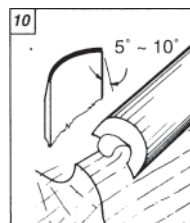
7
WHEN WORKING ALONG THE GRAIN BE AWARE OF SUDDEN DOWNWARD GRAIN DIRECTION



8
AVOID WORKING AGAINST THE GRAIN WHEREVER POSSIBLE



9
ROLLING THE GOUGE PRODUCES A SLICING CUT. THIS HELPS TO REDUCE TEARING WHEN HAVING TO WORK AGAINST THE GRAIN

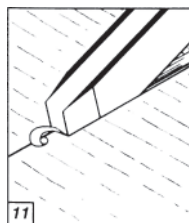


10
A SMALL INSIDE BEVEL GIVES EXTRA LIFT TO HANDLE WHEN USING A GOUGE UPSIDE DOWN

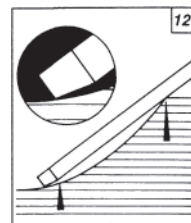
In certain instances it is impossible to avoid working against the grain. In which case, slight rotation, as indicated (*fig 9*), will reduce tearing. Also remember - TWO THIN SHAVINGS ARE BETTER THAN ONE THICK ONE!! It is often desirable to use a gouge upside down when working convex areas. A small inside bevel, produced with a suitable slip-stone, gives extra lift to the handle and reduces the tendency for the gouge to dig in. This is particularly helpful when working on low relief panels - *fig 10*.

VEINERS - These small, deep U section gouges are ideal for texturing and fine, deep detailing. Veiners can also be used as an alternative to the V Tools for lining-in a design - *fig 11*.

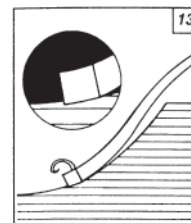
BENT GOUGES - The long 'S' bent blades make them suitable for hollowing deep areas and such items as dishes and bowls - *figs 12 & 13*. The #16 - 3/8 is suitable for thick, roughing cuts, whilst the shallower but wider #14 - 3/4" can be used for both roughing and finishing cuts. When hollowing, work downwards into the centre and avoid cutting 'uphill' (against the grain). A pilot hole, bored almost to the finished depth, will help to indicate the remaining waste and also release the shavings at the centre - *fig 14*.



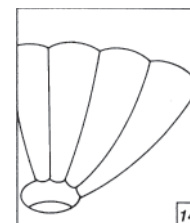
11
LINING-IN A DESIGN WITH A VEINER



12
THE BEVEL IS UNABLE TO MAKE CONTACT - THE CUT IS UNCONTROLLED



13
THE BEVEL MAINTAINS CONTACT - THE CUT IS CONTROLLED

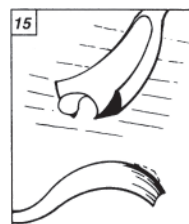


14
A CENTRE PILOT HOLE HELPS TO RELEASE SHAVINGS AND INDICATES REMAINING DEPTH

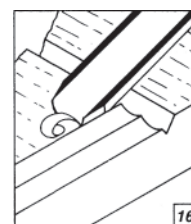
SPOON-BIT GOUGES - These 'short-bent' gouges are suitable for very deep hollowing. The narrow body allows them easier access to areas which might otherwise be difficult or impossible to work with Straight or Long-Bent Gouges. For very deep work, the action of the Spoon-Bit Gouge can be improved by removing the heel of the bevel. This prevents the back of the bevel acting as a fulcrum - *fig 15*.

SQUARE & SKEW CHISELS - Unlike carpenters' chisels which are bevel ground on one side only, the #1 Square and #2 Skew Chisels have two bevels at an included angle of about 20 degrees. This allows the Skew, in particular, to utilise the acute point when working in either direction.

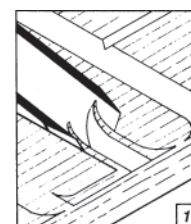
V TOOLS - These cut like a two-sided chisel or straight sided gouge. The constant 60 degree angle controls the depth of cut in relation to its width. This is a useful tool for lining-in a design. The initial V cut provides positive support for the bevel of the gouge when roughing down to a lower area - *fig 16*. The V Tool is an alternative to using chisels and gouges for incised lettering. Cuts can be made towards top and bottom lines, widening and deepening with successive cuts - *fig 17*. When cutting curves always work from THIN to THICK areas. Serifs are best cut with the Square Chisel - working from the sloping side of the V cut into the corner - *fig 18*.



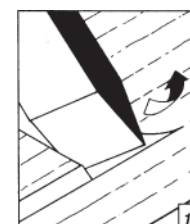
15
ROLLING THE HEEL OF THE BEVEL REMOVES THE FULCRUM



16
GOUGING AWAY FROM THE POSITIVE V CUT



17
INCISED LETTERING WITH THE V TOOL



18
FINISHING THE SERIF WITH A SQUARE CHISEL

HINTS ON RE-SHARPENING

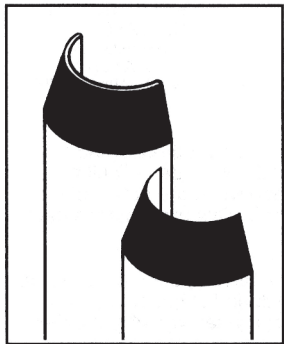
Robert Sorby woodcarving tools are SHARPENED READY FOR USE.

Woodcarving, of all woodworking activities, demands the very sharpest tools. Before leaving the factory, each tool is ground, honed and polished to produce the ultimate cutting edge. Unless a tool is accidentally damaged, regular stropping will maintain the cutting edge in pristine condition. Traditionally, carving tools have been sharpened with Arkansas or Washita stones. These very fine natural stones are both slow and very expensive.

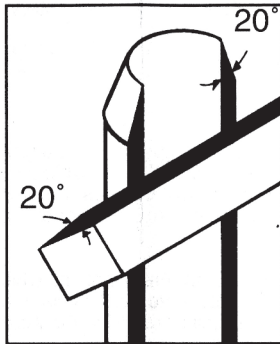
Japanese Waterstones, which have become the vogue during recent years, are available in a wide range of grades. A version which combines both 1000 & 6000 grit, provides a rapid and relatively inexpensive means of sharpening and polishing cutting edges to the highest standard. Today, there are also numerous mechanical devices offering - rubber bonded wheels, fine abrasive belts and leather discs as an alternative to the time-honoured leather strop and crocus powder for final finishing. Similar facilities can be created by utilising existing workshop equipment (such as electric drill, lathe, spare motor, etc.) to drive mounted discs to which aluminium oxide or silicon carbide (wet & dry) abrasive sheets can be attached. A small leather disc, dressed with a polishing paste - chrome cleaner (or even toothpaste!) will achieve the same results as a manual leather strop but in a fraction of the time.

SHARPENING TECHNIQUES

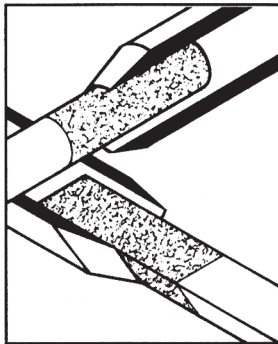
- CARVING TOOLS ARE GROUND TO MORE ACUTE ANGLES THAN CARPENTERS' CHISELS AND PLANE IRONS.
- SHARPENING SHOULD TAKE PLACE AT THE SAME ANGLE AS THE ORIGINAL 20° GRINDING.
- YOU WILL SOON APPRECIATE THE PERFORMANCE OF A REALLY SHARP TOOL - AN EDGE WHICH HAS BECOME DULLED TAKES MORE EFFORT TO CUT! LOOK AT THE CUTTING EDGE - A BLUNT EDGE REFLECTS LIGHT - A SHARP ONE DOES NOT.



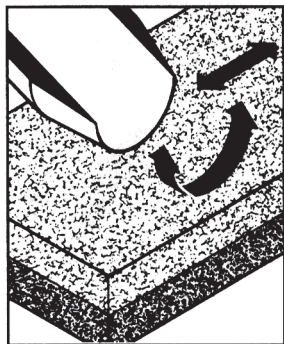
A BLUNT EDGE REFLECTS LIGHT - A SHARP ONE DOES NOT



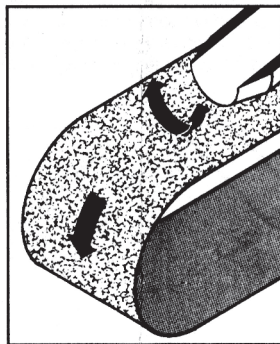
CARVING TOOLS HAVE ACUTE 20° BEVELS



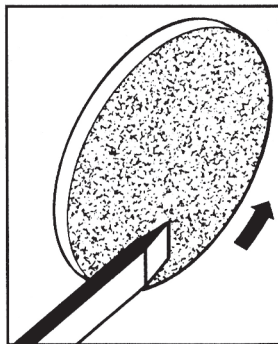
REMOVE INSIDE BURR WITH V FINE (600 grit) WET & DRY PAPER WRAPPED AROUND A SHAPED STICK



1000 GRIT - SHARPENING
6000 GRIT - POLISHING

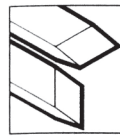


BELTS MUST ROTATE AWAY FROM CUTTING EDGE



VERY FINE ABRASIVE DISCS FOR SHARPENING. LEATHER DISCS FOR POLISHING

Robert Sorby WOODCARVING TOOLS



SQUARE CHISEL

● 6001

inch - mm

3/8 - 10

SKEW CHISELS

● 6002

1/8 - 3

■ 6002

3/8 - 10



STRAIGHT GOUGES

● 6004

1/4 - 6

■ 6004

1/2 - 13

● 6004

3/4 - 19

● 6005

1/8 - 3

■ 6005

1/4 - 6

6005

3/8 - 10

● 6005

1/2 - 13

6006

3/16 - 5

● 6006

3/8 - 10

■ 6007

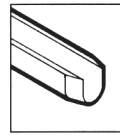
1/8 - 3

6007

3/8 - 10

● 6008

3/4 - 19



VEINERS

6010

1/8 - 3

● 6011

1/16 - 1.5

6011

1/4 - 6



BENT GOUGES

● 6014

3/4 - 19

■ 6016

3/8 - 10



SPOON-BIT GOUGES

6025

3/8 - 10

● 6027

3/8 - 10



V TOOLS

■ 6039

1/8 - 3

● 6039

1/4 - 6

Cutting edge line drawings are FULL SIZE

- BOXED SET OF 6 - No 606
- BOXED SET OF 12 - No 612A

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USE & CARE OF YOUR Robert Sorby WOODCARVING TOOLS

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