File Facts

SIMONDS
SAW AND STEEL CO

FILE Facts

and

HINTS

on the care and Use of Files . . .

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FITCHBURG, MASS.

File Facts

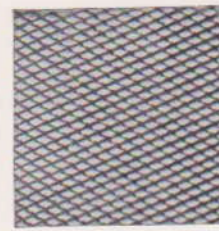
New methods of manufacture have improved all modern tools but none have benefited more than the File.

Simonds Files are the product of the most efficient production machinery plus the skill of men long associated with the file-making trade. The modern File is an efficient cutting tool when properly used and handled. They are used in practically every industry but few people understand their correct application. The small cutting teeth are razor sharp and can easily be destroyed by careless handling. The purpose of this booklet is to explain the care and use of files, one of the basic tools of all trades.

There are hundreds of shapes and sizes of files used today. However, the most common are known as American Pattern Files, which include those used in machine shops and for sharpening saws. These are furnished in a wide variety of shapes and cuts to fit the needs of the exacting jobs they must do.

The two main classifications of American Pattern Files which are discussed in this book are the single cut and the double cut varieties. Single Cut Files have a series of parallel, con-

Single Cut



Double Cut

tinuous teeth running diagonally across the width of the surface. The group of Single Cut Files includes Mill, Saw, and Lathe Files. These Files are used when a smooth surface is desired or where hard materials are to be finished. As the teeth become clogged quite easily they should not be used for removing a large amount of stock from soft materials. For this purpose a Double Cut File should be used.

Double Cut Files have two rows of teeth. The first row is usually the coarser, and is called the "over-cut." The other row crosses the "over-cut" and is called the "up-cut." These two cutting operations produce hundreds of sharp cutting teeth which make for fast removal of stock and easy clearing of chips.

Some Single Cut Files and all Double Cut Files have three different degrees of coarseness.

Bastard *Second Cut* *Smooth*

10-INCH FLAT FILE, DOUBLE CUT

8-INCH MILL FILE, SINGLE CUT

The three, Bastard, Second Cut and Smooth, are used to designate the relative size and spacing of the teeth. Bastard Files are the coarsest, Second Cut are intermediate, and Smooth have the finest tooth space.

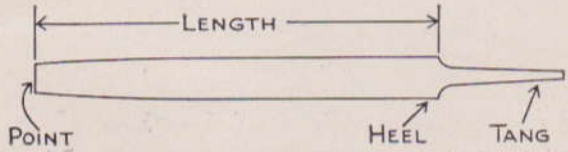
As the length of the File increases, the number of teeth decrease so that a Bastard Cut on a small file would be similar to a Second Cut or a Smooth Cut on a larger file. Saw Files usually have but one degree of coarseness for each length of file.

File Definitions

The following are the descriptive terms which are most commonly used:

LENGTH. The length of a file is the distance between the point and the heel. The tang is not included in the length.

POINT. The point is the end of the file opposite the tang.

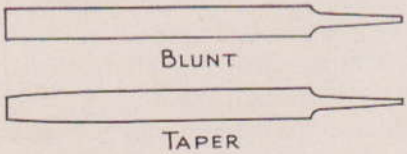


HEEL. The heel is that part of the file that comes next to the tang.

TANG. The tang is the pointed part that is inserted into the wooden file handle.

BACK. The rounded side of the Half Round, Pit Saw, and similar shaped files is known as the back.

SAFE means that the side, back, or edge, to whichever it refers, is smooth with no teeth.



BLUNT FILE. A file that has the same width and thickness from heel to point.

TAPER. This term is applied to a file having tapering sides, to distinguish it from the blunt file.

SET. Blunting the sharp edges or corners of file blanks before and after the over-cut to prevent weakness of the teeth.

DRAW FILING. Filing smooth surfaces by holding file at right angle to work and moving sidewise.

PACKING. All Simonds Files 10 inches in length and under are wrapped and packed one dozen in a box.

All over 10 inches are packed one-half dozen in a box.

Exceptions: 10-inch Flat, Hand, and Half Round Files are packed one-half dozen in a box.

Care of Files

The fact that a File is one of the sharpest and hardest of all hand tools makes it easy to damage if not properly used. Files should not be allowed to rub against each other. A file rack saves Files much abuse which occurs when files are kept loose in a drawer. Also, a File should not

be used as a pry or hammer. When file teeth become clogged with chips, use a file card. Do not knock files on a vise or other hard object as this is apt to break teeth. Hard spots and corners on iron castings dull new file teeth quickly. On such work first go over it a few times with an old file before putting a new file to work.

Hints on File Use

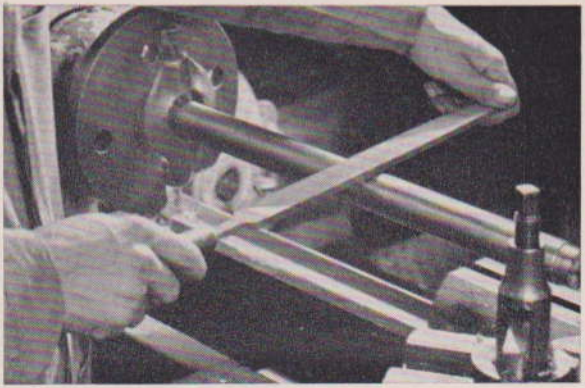
The proper use of files requires considerable skill on the part of the operator. But a few suggestions will help the beginner to get the most from his file.

Be sure that enough pressure is exerted on the File to make the teeth cut. Teeth that slide over the work without cutting are very quickly ruined. In order to file a flat surface it is often very helpful to change the direction of the stroke so that the operator can see where the teeth are cutting. Care should be taken to see that no pressure is applied to the File on the return stroke as this dulls the teeth very rapidly. File teeth are so constructed that they will only cut on the forward stroke.

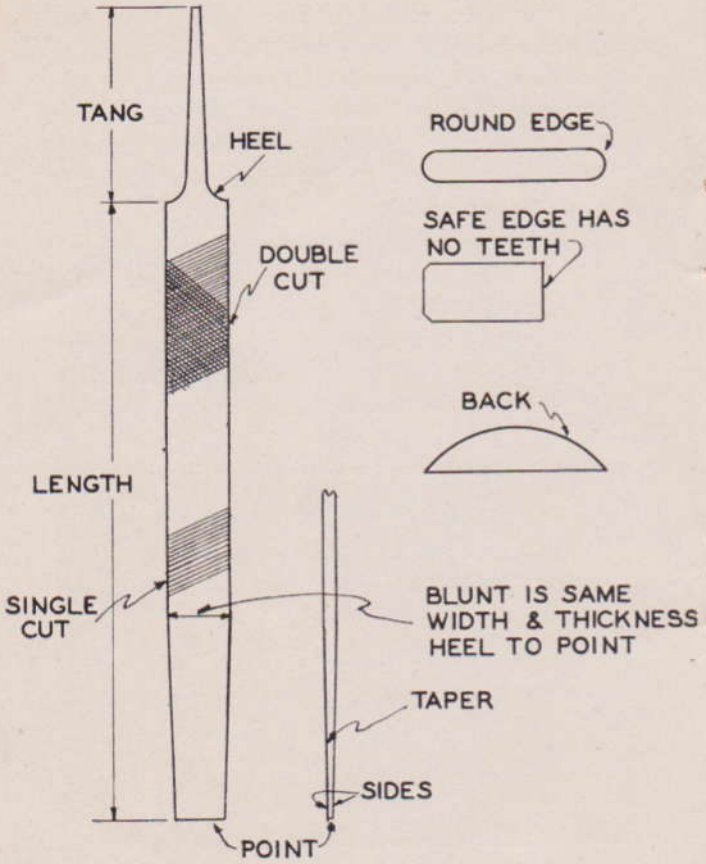
Stripped teeth are often caused by using a coarse tooth file on thin material and by filing

work which is insecurely held. Always use a coarse tooth file on soft materials; fine teeth become clogged and will scratch the work. Simonds makes special files for such soft materials as brass, aluminum and babbitt metal. The teeth on new files are razor sharp and if too much pressure is applied at first, their teeth are liable to break off. It pays to break in a new file carefully.

Draw filing is a convenient means of bringing small surfaces to a smooth, square edge. The method consists of holding the file at right angles to the work and drawing the file back and forth parallel to surface to be finished. The hands are spaced on either side of the work.

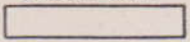


File Terminology

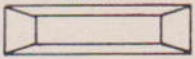


Standard File Shapes

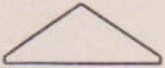
CROSS CUT



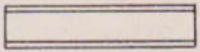
FLAT



CANT SAW

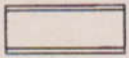


HAND

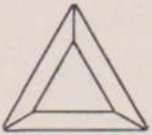


GREAT AMER.

PILLAR



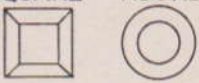
TAPER SAW



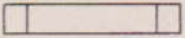
HALF ROUND

BLUNT BAND

SQUARE ROUND

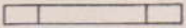


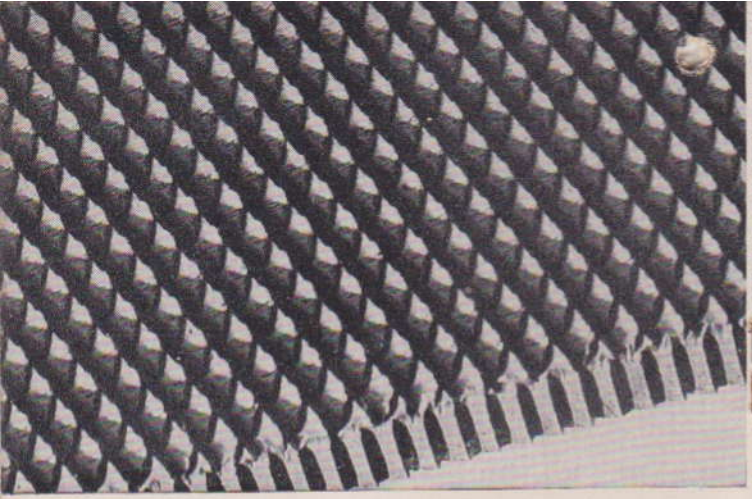
MILL



KNIFE

WARDING





Enlarged section of **RED TANG** File showing metal saw teeth.

Enlarged photograph of the chips cut with a **RED TANG** File. Chips roll off in coils as they do from a cutting tool on a lathe.

For Best Results... use

SIMONDS

RED TANG

FILES

Designed, cut, hardened, and factory tested to give the best service, Simonds Saw Tooth Files remove more metal with less effort, do not scrape, fill up, or clog.

Look for the File with the Bright RED TANG

Simonds famous Red Tang Files cut fast and free.... stay sharp longer than ordinary files.... are available in sizes, kinds and cuts for every purpose.

"RED TANG" FILES

MILL FILE—Single Cut

MILL Files—are used for sharpening Mill Saws and Planer Knives. They are also widely used for lathe work and draw-filing in machine shops. Mill Files with two round edges are popular for filing saw gullets. Made in the following sizes.

Length, Inches	4	6	7	8	10	12	14	16
Width and Thickness, Inches	$\frac{7}{16} \times \frac{5}{64}$	$\frac{5}{8} \times \frac{1}{8}$	$\frac{41}{64} \times \frac{1}{8}$	$\frac{13}{16} \times \frac{5}{32}$	$1 \times \frac{3}{16}$	$1\frac{3}{16} \times \frac{7}{32}$	$1\frac{7}{16} \times \frac{1}{4}$	$1\frac{11}{32} \times \frac{9}{32}$

TAPER FILE—Single Cut

Taper Files are three-cornered similar to Three Square Files except edges are cut so as to avoid sharp angles in the saw gullets. Used mainly in filing Band and Circular Saws.

Length, Inches	6	7	8	10
Side, Inches	$\frac{1}{2}$	$\frac{9}{16}$	$\frac{5}{8}$	$\frac{3}{4}$

SLIM TAPER—Single Cut

Like all Taper Files, corners are cut with one row of teeth to eliminate corners or angles in the gullets of Saws, as their greatest use is for sharpening Hand and Buck Saws.

Length, Inches	4	4½	5	6	7	8	10
Side, Inches	$\frac{1}{4}$	$\frac{1}{4}$	$\frac{5}{16}$	$\frac{3}{8}$	$\frac{13}{32}$	$\frac{1}{2}$	$\frac{13}{32}$

EXTRA SLIM TAPER—Single Cut

Same as Slim Taper except that they are made of narrower stock. Used for filing fine tooth Hand Saws.

Length, Inches	4	4½	5	5½	6	7	8
Side, Inches	3/16	7/32	7/32	1/4	9/32	11/32	13/32

DOUBLE EXTRA SLIM TAPER—Single Cut

Used on fine tooth Hand Saws.

Length, Inches	4	4½	5	6	7	8
Side, Inches	3/32	11/64	3/16	7/32	1/4	5/16

BAND SAW BLUNT—Single Cut

For those filers who prefer a blunt file for sharpening Band Saws. Like the Band Saw Taper, these files are three-cornered, the corners being cut with two parallel rows of teeth.

	Regular		Slim	
Length, Inches	6	8	6	8
Side, Inches	1/2	5/8	3/8	1/2

SPECIAL NARROW BAND SAW FILE

Especially made with well rounded corners to keep bottom of gullets round in Narrow Band Saw Blades. Made in three cross sections: No. 2 for 2-tooth saws; No. 3 for 3-tooth saws; No. 456 for 4-, 5-, or 6-tooth saws.

	No. 2 For 2-tooth Saws	No. 3 For 3-tooth Saws		No. 456 For 4-, 5-, or 6-tooth Saws	
Length, Inches	8	6	7	6	7
Side, Inches	5/8	1/2	1/2	3/8	3/8

SPECIAL HAND SAW—Single Cut

Similar to the Extra Slim Taper but made of narrower stock. Especially adapted for Hand Saw filing. These files are made blunt only.

Length, Inches	5½	6	7
Side, Inches	¼	$\frac{9}{32}$	$\frac{11}{32}$

SPECIAL CROSS-CUT FILE—Single Cut

By using Simonds Special Cross-cut Saw File, because it is uniform in width, the same amount of perfect work is secured from each half of each side; an amount that will average considerably more than can be secured with a regular Mill File.

Length, Inches	6	7	8	10
Width, and Thickness, Inches	$\frac{5}{8}$ x $\frac{1}{8}$	$\frac{41}{64}$ x $\frac{1}{8}$	$\frac{13}{16}$ x $\frac{5}{32}$	1 x $\frac{3}{16}$

GREAT AMERICAN CROSS-CUT FILE

A wedge-shaped single cut file with a rounded back. Used for filing Great American type Cross-cut Saws.

Length, Inches	8	10
Width and Thickness, Inches	$\frac{13}{16}$ x $\frac{9}{32}$	$\frac{13}{16}$ x $\frac{23}{64}$

CANT SAW FILE—Single Cut

The Cant Saw or Lightning File is used for filing "M" tooth Cross-cut Saws, Buck Saw Blades and Simonds Planer Saws. Also extremely useful on various styles of Circular Saws.

Length, Inches	6	8	10
Width and Thickness, Inches	$\frac{17}{32} \times \frac{13}{64}$	$\frac{11}{16} \times \frac{17}{64}$	$\frac{13}{16} \times \frac{5}{16}$

FLAT FILE—Double Cut

One of the most generally used files. Mechanics use Flat Files extensively on many kinds of work.

Length, Inches	4	6	8	10	12	14	16	18
Width and Thickness, Inches	$\frac{7}{16} \times \frac{3}{64}$	$\frac{5}{8} \times \frac{5}{32}$	$\frac{13}{16} \times \frac{7}{32}$	$1 \times \frac{1}{4}$	$1\frac{3}{16} \times \frac{17}{64}$	$1\frac{3}{8} \times \frac{13}{64}$	$1\frac{11}{32} \times \frac{11}{32}$	$1\frac{23}{32} \times \frac{23}{64}$

HAND FILE—Double Cut

Hand Files are made with one "safe" edge (uncut). Used mainly on flat surfaces. Because of shape and "safe" edge are used for certain types of work on which Flat File is not suitable.

Length, Inches	6	8	10	12	14	16
Width and Thickness, Inches	$\frac{5}{8} \times \frac{5}{32}$	$\frac{13}{16} \times \frac{7}{32}$	$1 \times \frac{1}{4}$	$1\frac{3}{16} \times \frac{17}{64}$	$1\frac{3}{8} \times \frac{13}{64}$	$1\frac{11}{32} \times \frac{11}{32}$

PILLAR FILE—Double Cut

Pillar Files are made with one "safe" (uncut) edge. Used on narrow work such as slots and keyways.

Length, Inches	6	8	10	12
Width and Thickness, Inches	$\frac{1}{16} \times \frac{7}{32}$	$\frac{9}{16} \times \frac{9}{32}$	$\frac{11}{16} \times \frac{11}{32}$	$\frac{13}{16} \times \frac{13}{32}$

HALF ROUND FILE

Used mostly in the 8-, 10- and 12-inch lengths on concaved surfaces.

Length, Inches	4	6	8	10	12	14	16
Width and Thickness, Inches	$\frac{7}{16} \times \frac{1}{8}$	$\frac{5}{8} \times \frac{5}{32}$	$\frac{3}{4} \times \frac{7}{32}$	$\frac{13}{16} \times \frac{9}{32}$	$1\frac{1}{8} \times \frac{11}{32}$	$1\frac{5}{16} \times \frac{13}{32}$	$1\frac{1}{2} \times \frac{33}{64}$

ROUND FILE

The Round File is used on curved surfaces and for enlarging round holes. It is sometimes called a rat-tail file

Length, Inches	4	6	7	8	10	12	14	16
Diameter, Inches	$\frac{5}{16}$	$\frac{1}{4}$	$\frac{11}{64}$	$\frac{3}{16}$	$\frac{3}{8}$	$\frac{1}{2}$	$\frac{5}{8}$	$\frac{3}{4}$

SQUARE FILE—Double Cut

Mechanics use Square Files mainly for enlarging rectangular holes.

Length, Inches	4	6	8	10	12	14	16	18
Side, Inches	$\frac{5}{16}$	$\frac{1}{4}$	$\frac{5}{16}$	$\frac{3}{8}$	$\frac{1}{2}$	$\frac{5}{8}$	$\frac{3}{4}$	$\frac{7}{8}$

THREE SQUARE FILE—Double Cut

Used by mechanics for cleaning out corners and angles. Unfit for saw filing because of sharp edges.

Length, Inches	6	8	10	12
Side, Inches	1/2	5/8	3/4	7/8

WARDING FILE—Double Cut

Used mostly by locksmiths for filing notches in keys. It is very thin, extreme taper to point, uniform thickness.

Length, Inches	4	6	8	10
Width and Thickness, Inches	7/16 x 1/16	5/8 x 5/64	11/32 x 3/32	13/16 x 1/8

KNIFE FILE—Double Cut

Knife Files get their name from their shape which is like a pocket-knife blade. They are double cut on sides, "safe" or uncut on back. Used by mechanics on die and other work having acute angles.

Length, Inches	4	6	8	10
Width and Thickness, Inches	13/32 x 3/64	11/16 x 5/32	7/8 x 3/16	1 1/16 x 1/4

LEAD FLOAT OR BABBITT FILES

Made both flat and half round and are used on soft metals such as lead and babbitt.

	Flat			Half Round		
Length, Inches	8	10	12	8	10	12
Width and Thickness, Inches	11/16 x 7/32	1 x 1/4	1 3/16 x 11/64	3/4 x 7/32	11/16 x 9/32	1 1/8 x 11/32

ALUMINUM FILE—Double Cut

A free, easy cutting file, which, on aluminum and aluminum alloy, does excellent cutting without clogging. Made both flat and half-round.

	Flat					Half Round				
Length, Inches	6	8	10	12	14	6	8	10	12	14
Width and Thickness, Inches	5/8 x 9/32	11/16 x 7/32	1 x 1/4	1 3/16 x 11/64	1 3/16 x 11/64	5/8 x 9/32	3/4 x 7/32	11/16 x 9/32	1 1/8 x 11/32	1 1/16 x 11/32

BRASS FILE—Double Cut

Smooth, fast cutting files on this type of material. Teeth do not fill up with chips or scratch the work. Made both flat and half-round.

	Flat			Half Round		
Length, Inches	8	10	12	8	10	12
Width and Thickness, Inches	11/16 x 7/32	1 x 1/4	1 3/16 x 11/64	3/4 x 7/32	11/16 x 9/32	1 1/8 x 11/32

FOUNDRY FILE—Double Cut

Similar to Flat File. Teeth are stronger and sturdier to stand up and cut fast on castings. Made in flat and half round shape.

	Flat				Half Round			
Length, Inches	8	10	12	14	8	10	12	14
Width and Thickness, Inches	$\frac{13}{16} \times \frac{7}{32}$	$1 \times \frac{1}{4}$	$1\frac{3}{16} \times \frac{37}{64}$	$1\frac{3}{8} \times \frac{19}{64}$	$\frac{3}{4} \times \frac{7}{32}$	$\frac{13}{16} \times \frac{9}{32}$	$1\frac{1}{16} \times \frac{11}{32}$	$1\frac{5}{16} \times \frac{13}{32}$

LONG ANGLE LATHE FILE

As name indicates, this file is mostly used for lathe work. The angle and shape of teeth give smooth, shear cut without clogging.

Length, Inches	10	12	14
Width and Thickness, Inches	$1 \times \frac{1}{4}$	$1\frac{3}{16} \times \frac{11}{64}$	$1\frac{33}{64} \times \frac{19}{64}$

SIMONDS RED TANG FILES

List Price per Dozen — Effective Sept. 15, 1947

KIND		LENGTH — Inches								
		Packed one dozen in box					Packed one-half dozen in box			
		4	6	7	8	10	12	14	16	18
MILL	Bastard	3.00	3.50	3.90	4.30	5.60	7.50	10.70	14.70	....
	2nd Cut	....	4.00	....	4.90	6.40	8.60	12.20	....	....
	Smooth	....	4.50	....	5.40	7.00	9.40	13.10	....	....
ONE ROUND EDGE	Bastard	....	3.90	....	4.80	6.30	8.40	....	....	....
TWO ROUND EDGE	Bastard	....	4.40	....	5.40	7.00	....	....	....	....
BLUNT	Bastard	....	3.90	4.30	4.90	6.70	....	....	....	....
FLAT	Bastard	3.70	4.30	....	5.30	7.00	9.70	13.30	17.80	23.90
	2nd Cut	4.30	4.80	....	6.10	8.10	11.00	15.30	20.10	....
	Smooth	4.70	5.30	....	6.60	8.70	12.10	16.70	22.30	....
ROUND	Bastard	3.00	3.50	3.90	4.30	5.60	7.50	10.70	14.70	....
	2nd Cut	3.50	4.00	....	4.90	6.40	8.60	12.20	....	....
	Smooth	3.90	4.50	....	5.40	7.00	9.40	13.10	....	....
SQUARE	Bastard	3.80	4.60	....	5.50	7.40	10.20	13.90	18.70	25.10
	2nd Cut	4.60	5.10	....	6.30	8.50	11.50	16.10	....	....
	Smooth	4.90	5.50	....	7.00	9.10	12.80	17.50	....	....
BLUNT	Bastard	....	....	....	7.40	10.20	13.90	18.70	....	....
HALF ROUND	Bastard	4.80	6.10	....	7.50	9.10	11.80	15.50	20.60	....
	2nd Cut	5.60	6.70	....	8.30	10.10	13.00	17.00	22.50	....
	Smooth	6.10	7.10	....	8.90	10.70	13.90	18.30	24.20	....
HAND	Bastard	....	4.30	....	5.40	7.50	10.70	15.00	20.10	....
	2nd Cut	....	5.10	....	6.30	8.70	12.30	17.00	....	....
	Smooth	....	5.60	....	6.70	9.40	13.50	18.20	....	....
FINISHING	Smooth	....	....	....	....	....	16.20	21.70	....	....
THREE SQUARE	Bastard	....	6.10	....	7.50	9.10	11.80	....	....	....
	2nd Cut	....	6.70	....	8.30	10.10	13.00	....	....	....
	Smooth	....	7.10	....	8.90	10.70	13.90			
PILLAR	Bastard	....	4.30	....	5.40	7.50	10.70			
	2nd Cut	....	5.10	....	6.30	8.70	....			
	Smooth	....	5.60	....	6.70	9.40	....			
WARDING	Bastard	4.00	4.90	....	6.40	8.70	....			
	2nd Cut	4.80	5.90	....	7.50	10.10	....			
	Smooth	5.40	6.40	....	8.20	11.00	....			
KNIFE	Bastard	5.40	6.90	....	8.50	10.10	....			
	2nd Cut	6.10	7.50	....	9.10	11.50	....			
	Smooth	6.40	7.90	....	9.50	12.30	....			
LEAD FLOAT	Flat	....	....	....	6.30	8.60	11.80			
	½ Round	....	....	....	8.50	10.70	14.10			

Files for Stainless Steel are made in all shapes and sizes as regular purpose files, and are sold at regular list prices. To order, specify kind, shape and cut, and add that files are for use on Stainless Steel.

These lists comprise all of the kinds, sizes, and cuts of files that will be regularly carried in stock. Anything differing from these files will be considered as special and will not be manufactured except in cases of urgent neeessity; and when manufactured, price will be based strictly upon cost of material and cost of manufacture at time goods are made.

Write for Discounts

SIMONDS RED TANG FILES

List Price per Dozen — Effective Sept. 15, 1947

KIND	LENGTH — Inches Packed one dozen in box								
	4	4½	5	5½	6	7	8	9	10
Taper Single Cut	....	....	....	....	3.40	4.30	5.40	....	8.10
Slim Taper	2.20	2.30	2.50	....	3.10	3.80	4.50	....	6.40
Extra Slim Taper	2.20	2.30	2.50	2.90	3.10	3.80	4.50	....	....
Double Extra Slim	2.20	2.30	2.50	....	3.10	3.80	4.50	....	....
Band Saw Blunt									
Regular	....	....	....	....	4.70	....	6.70	....	....
Slim	....	....	....	....	3.90	....	5.30	....	....
Hand Saw Blunt Slim	....	....	....	....	3.80	....	....	....	....
Hand Saw Special	....	....	....	3.80	4.50	5.40	....	....	....
Special Cross-cut	....	....	....	....	3.90	4.30	4.90	....	6.70
Great Am. Cross-cut	....	....	....	....	....	....	7.50	....	9.10
Pit Saw	....	....	....	....	6.10	....	7.50	....	....
Cant Saw	....	....	....	....	5.40	....	6.40	....	8.70
Double Ender	....	....	....	....	....	3.50	3.90	4.40	4.90

SPECIAL PURPOSE	LENGTH — Inches					
	Packed one dozen in box			Packed one-half dozen in box		
	6	7	8	10	12	14
Aluminum Flat	5.30	....	7.00	8.50	11.00	14.50
Aluminum Half Round	10.50	....	12.00	13.50	16.00	20.00
Brass Flat	....	....	7.00	8.50	11.00	....
Brass Half Round	....	....	12.00	13.50	16.00	....
Foundry Flat	....	....	5.30	7.00	9.70	13.30
Foundry Half Round	....	....	7.50	9.10	11.80	15.50
Long Angle Lathe	....	....	....	8.60	11.80	16.00

RASPS	LENGTH — Inches						
	Packed one doz. in box		Packed one-half dozen in box				
	6	8	10	12	14	16	18
Flat Wood Bastard	....	9.40	12.80	17.50	23.20	30.80	....
Flat Wood Smooth	....	12.80	17.50	23.20	30.80	40.90	....
Half Round Wood Bastard	8.10	10.10	13.70	18.70	24.80	32.90	....
Half Round Wood Smooth	10.10	13.70	18.70	24.80	32.90	43.60	....
Cabinet 2nd Cut	10.10	12.80	17.50	22.80	29.60	....	....
Cabinet Smooth	11.70	15.50	20.70	26.80	33.90	....	....
Shoe Horse Half Round	....	10.10	13.70	....	....	....	....
Plain Half File, Regular	....	....	....	12.80	17.80	24.40	....
Plain Half File, Slim	....	....	....	....	....	....	25.90
Tanged, Regular	....	....	....	16.80	23.10	....	....

Write for Discounts

SIMONDS
SAW AND STEEL CO.
FITCHBURG, MASS.

Simonds products play a vital part in so great a number of different industries that it is impossible to give a specialized "Industry List." Here you will find lists of typical Simonds products which are used in four basic industries:

Lumber and Woodworking

- Band Saws—Wide and Narrow
- Circular Saws
  - Solid Tooth (all types for sawmills and remanufacturing plants)
  - Inserted Tooth Rip (Head Saws—Edger Saws—Wing Saws)
  - Inserted Tooth Cut-off
- Cross-cut Saws—Handles—Tools
- Drag Saws
- Files—Saw Sharpening and Machine Shop
- Gang Saws
- Grinding Wheels
- Hack Saw Blades
- Machine Knives—All types for woodworking
- Metal Cutting Saws
- Saw Bits
- Shanks

Steel and Metal Working

- Band Saws—Hard Edge and Spring Temper
- Circular Saws
  - Solid Tooth for Wood
  - Solid Tooth for Steel, Brass, Copper, Aluminum
  - Inserted Tooth for Metal
  - Tungsten Carbide Tipped
- Discs
- Files
- Flat Ground Stock
- Grinding Wheels
- Hack Saw Blades
- Screw Slotters
- Shear Blades, "Tungsweld"
- Shears—Rotary
- Slitting Saws

Pulp, Paper and Printing

- Band Saws—Metal and Wood
- Circular Slitting Cutters and Segments
- Doctor Blades
- Electrotype Saws
- Files
- Grinding Wheels
- Hack Saw Blades
- Knives
  - All Types, for Pulp Mills, Paper Mills, Printing and Publishing Plants
- Saws, Metal—Band and Electrotype
- Saws, Wood
  - Band
  - Circular, Solid Tooth
  - Cross-cut
  - Inserted Tooth Cut-off
- Saws—Paper Core
- Stop Cutters—Rotary

Plastics and Rubber

Band Saws—Hard Edge and Spring Temper
Circular Saws
Solid Tooth and Tungsten Carbide Tipped
Circular Cutter Blades
Files
Flat Ground Stock
Grinding Wheels
Hack Saw Blades
Machine Knives—Granulating, Celluloid, Sheeter and Band Knives
Steel Rule

SIMONDS
STEEL MILLS
SIMONDS SAW AND STEEL CO.
LOCKPORT, N.Y.

High Grade Electric Furnace, Tool and Special Steels
High Nickel Alloy and Permanent Magnet Steels
Cold Rolled Strip

SIMONDS
ABRASIVE CO.
PHILADELPHIA, PA.

Electric Furnace Plant
SIMONDS CANADA ABRASIVE CO. LTD., Arvida, P.Q.
Grinding Wheels and Grains

SIMONDS
CANADA SAW CO. LTD.
MONTREAL TORONTO VANCOUVER
SAINT JOHN, N.B.

Simonds Famous Family of Fine Quality Products is Easily Recognized by the Distinctive Ribbon Trade-mark

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