

ATKINS

ATKINS



THE
SAW WITH
THE
BLUE
STICK



E. C. ATKINS AND COMPANY

"The Silver Steel Saw People"

Home Office and Factory: 402 So. Illinois St., Indianapolis, Indiana
Machine Knife Factory, Lancaster, N. Y.

Branches in the following cities:

New York, N. Y.	Atlanta, Ga.	Paris, France
Chicago, Ill.	New Orleans, La.	San Francisco, Calif.
Memphis, Tenn.	Seattle, Wash.	Portland, Ore.

In Canada

Shurly-Dietrich-Atkins Company, Ltd., Galt, Ontario
Factory—Galt, Ont. Branch—Vancouver, B. C.

C. E. C.—3-36—10M

SILVER STEEL
SEGMENT GROUND

CROSSCUT SAWS

"The Finest on Earth"

PACIFIC COAST PATTERNS

DOUGLAS FIR REGION
INLAND EMPIRE · REDWOOD DISTRICT

NOTE THE FOLLOWING

ATKINS SILVER STEEL SEGMENT GROUND CROSS CUT SAWS are made with the definite object in view of supplying the every-day user of Cross Cut Saws with saws which are so eminently superior to any other that their merits will be immediately appreciated. They *must* be so much better in every particular that any fair trial will at once demonstrate their superiority.

We claim that our SILVER STEEL CROSS CUT SAWS are superior to those of any other manufacturer in *Material, Temper, Grinding and Finish*, and that they will *run easier*, and will *hold their cutting edge longer* than any saw that has ever been made.

As a user of Cross Cut Saws you owe it to yourself to investigate the truthfulness of these statements, and in order to do so we want you to give ATKINS CROSS CUT SAWS a practical test. Put them into operation and keep a careful record of the results as compared with any other saw you have been using. Compare, First, the *ease* with which they run; Second, their *speed*; Third, the *amount of timber* they will cut, and lastly, the *length of time* they will run without refiling.

We are satisfied to place ATKINS SILVER STEEL SEGMENT GROUND CROSS CUT SAWS entirely on their merits, knowing full well that if you subject them to a fair, conscientious test you will find them to be as we have claimed for over seventy-eight years, "The Finest on Earth."

The *easy running* quality found in ATKINS SILVER STEEL SEGMENT GROUND CROSS CUT SAWS is secured through the scientific principle with which the cutting teeth are constructed.

E. C. ATKINS AND COMPANY,

E. C. Atkins

President.

ASK FOR THE SAW WITH THE BLUE STICK

ATKINS SILVER STEEL SAWS

Our Cross Cut Saw Department

The Cross Cut Saw Department located at our great factories in Indianapolis is maintained year in and year out by experts in their line, each man having devoted his life study to his particular duty. It is your department where you can secure scientific information in regard to the different operations as well as how to save money and what saws to buy to increase production.

It is the hope of E. C. Atkins and Company that when you have a problem to solve you will not hesitate to call upon us for we earnestly believe we can help you.

Our Demonstrators

The nation-wide force of saw demonstrators employed by E. C. Atkins and Company plays an important part in the service to the saw user. It is his duty to visit the lumber camps, demonstrate the improved features of Atkins SILVER STEEL Saws; to give 100% service and satisfaction. Each of the demonstrators is thoroughly versed in Cross Cut Saw work and can be of real help to you.

ABOUT SILVER STEEL

THE STEEL used in ATKINS SILVER STEEL SEGMENT GROUND CROSS CUT SAWS is made under *our own secret* formula. It is the finest steel that has ever been put into Saw Blades.

There is no Steel as good as SILVER STEEL. Others have tried to imitate it and may tell you that their steel "is just as good as SILVER STEEL." But it isn't, and a trial will convince you of this fact.

SILVER STEEL receives our special process of Gas Tempering, which gives it a marvelous edge-holding quality. This is the reason why ATKINS SILVER STEEL SEGMENT GROUND CROSS CUT SAWS will hold their edge longer and cut faster.

No one can sell you Saws that will stand up to their work as long as ours, as the formula for SILVER STEEL and our process of Gas Tempering are OUR secrets. Others do not "know how."

ATKINS GUARANTEE

We guarantee Atkins SILVER STEEL Cross Cut Saws as to quality and workmanship. Atkins SILVER STEEL Cross Cut Saws are SEGMENT GROUND; that is, they have a true and even taper from the back to the cutting edge. The cutting edge is the same gauge throughout.

Every Atkins SEGMENT GROUND Saw is guaranteed for proper hardness and against any visible flaws in workmanship or material.

We will appreciate any one calling our attention to any defect in an Atkins SILVER STEEL Cross Cut Saw. In such a case we will promptly make complete and satisfactory adjustment to the customer.

HOWEVER

Atkins SILVER STEEL SEGMENT GROUND Cross Cut Saws are not guaranteed against improper usage, such as breakage caused by a wedge being driven against the saw, or a tree falling on the saw by accident.

We do not replace saws which are worn down more than $\frac{1}{4}$ inch unless the customer can justly show there is a natural defect in the steel or in the workmanship. All replacements should be made before saw has been in use over thirty days.

In order to make the best Cross Cut Saw, it must have a very hard temper. A Cross Cut cannot stand much abuse. Special care should be used in setting the teeth.

Atkins Pacific Coast Pattern Cross Cut Saws

Damaskeen Finish

Damaskeen patented polish, Atkins exclusive process of polishing, is now put on our Nos. 51 and 52 and other Pacific Coast patterns. This not only makes the saws more beautiful and attractive but assures easier operation. Damaskeen polish gives the saw a very smooth surface.

Filing

Another important feature of Atkins Silver Steel Saws is the filing. Great care is taken to see that each saw is filed properly. All teeth are uniform. The rakers are left the same length as cutting teeth so the woods-filer may adjust them to suit his own preference. The teeth of our Pacific Coast Saws are given a long bevel which has been found to meet the demand of the majority of filers. The teeth and raker gullets are polished smooth to discharge the cuttings more rapidly. When the new saw reaches the filing cabin there is little or no work to be done on it to make it ready for use.

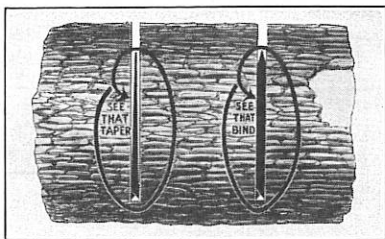
Design

Atkins Pacific Coast Saws are designed with the aid of experienced saw users. Each saw is a marvel in cutting of western woods. They are noted for their rapid cutting and free running qualities.

ATKINS SILVER STEEL SAWS

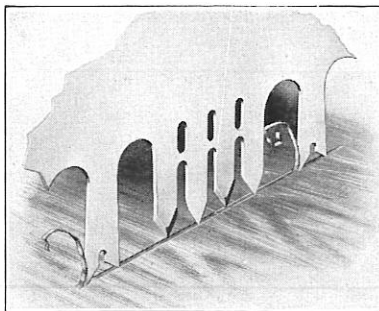
What Is Segment Grinding?

Our process of Segment Grinding is patented. No Saw But An Atkins Saw Is Segment Ground. Now, Remember That! Segment Grinding gives our Cross Cut Saws Clearance, with very little set. Atkins SILVER STEEL, Segment Ground Cross Cut Saws can be ordered from your jobber, from us at Indianapolis, or at any of our branches.



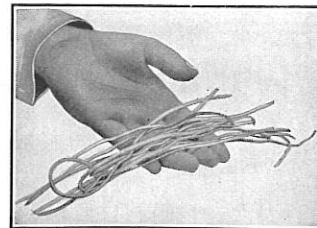
This picture illustrates plainly the difference between Atkins process of Segment Grinding and the imitation. Note carefully how the Atkins blade tapers from tooth edge to back, and then look at the so-called taper on the other saw. They may gauge the same on the extreme back, but down in the center of the blade, where clearance is needed the other saws have no taper at all while Atkins Segment Ground Saws run free and easy.

Imitators of our Segment Ground Saws simply "dub" them off for an inch or so on the back edge and call them patent ground. Don't Be Deceived. Insist on having Atkins.



By referring to above illustration you will see how perfectly the alternating cutting teeth cut the sides of the kerf, clean and smooth, leaving the rakers to clear the bottom. The principle is just the same as that of cutting the sides of a groove with an ordinary saw and clearing the center with a chisel.

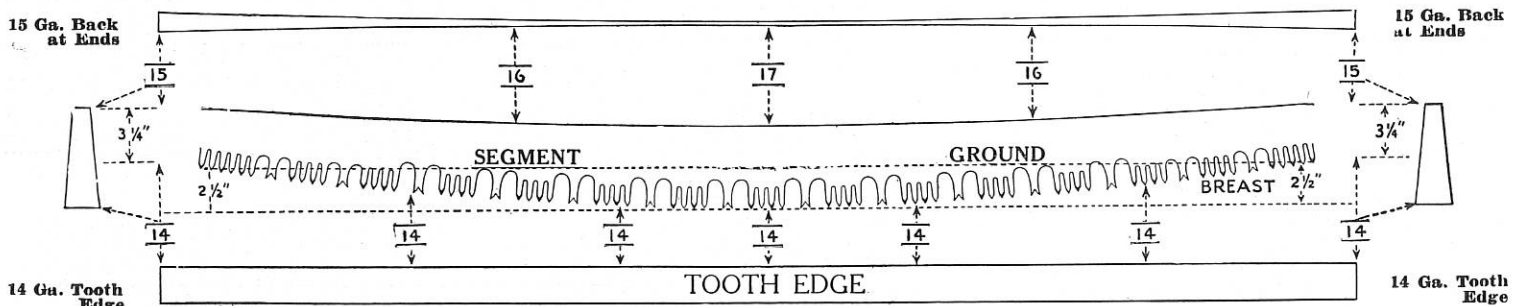
Every tooth and point has its purpose, and is so constructed that it performs its work with ease and precision.



Notice this illustration and see how Atkins SILVER STEEL Saws cut. We call your attention especially to the fact that Atkins SILVER STEEL, Segment Ground Cross Cut Saws cut Shavings—not saw dust. If you will study these illustrations carefully, you will see why Atkins SILVER STEEL Cross Cut Saws operate easier, cut faster and hold their edge longer than any ordinary saw.

ATKINS SILVER STEEL SAWS

EXAGGERATED FOR THE SAKE OF CLEARNESS



The figures indicate gauges; the higher the figure, the thinner the saw

SEGMENT GRINDING consists of finishing the blade to an absolutely even gauge along the tooth edge; and from the toothed edge to the back at ends it is *segment ground* or tapered to a thinner gauge; and from the toothed edge to the center of the back it is ground on the segment of a circle to an even thinner gauge than the ends at back. This gives the saw a two way taper.

Atkins Segment Ground Cross Cut saws, being thicker at the ends are stiff and do not buckle, and as they are thinner at the center of the back they have ample clearance, enabling them to be operated easily without binding and with very little set.

The illustration above shows clearly the results of segment grinding and why we make the claim that *Segment Ground* saws will run easier, cut faster, and last longer.

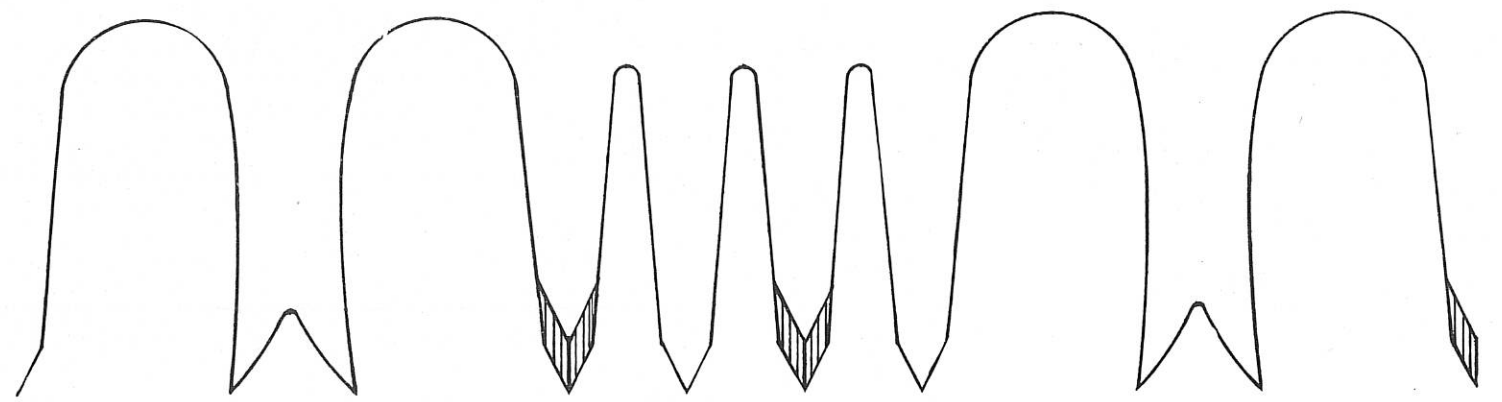
ATKINS No. 51 PACIFIC COAST PATTERN CROSS CUT SAW



ATKINS No. 51 Bucking Saw is used exclusively on the Pacific Coast. Built for speed, ease in running and long life. The blade is made of genuine SILVER STEEL; the finest steel ever used in saw blades, equal in quality, yet tougher than steel found in extra fine razors. Accurately tempered by Atkins exclusive process, whereby the steel is uniformly hard, stiff and tough, but not brittle. Teeth take extra sharp keen edge and stay sharp an exceedingly long time. Segment grinding, the two-way taper grind, gives ample clearance in the cut without use of excessive set. 13 x 17 x 15 gauge. Blade has four lance shaped cutting teeth to a section with extra large deep tooth and raker gullets; polished to prevent sawdust clogging in the cut. Back of blade is rounded to prevent dragging. Blade is four inches wide at ends; 7 3/8" wide at center on 7 foot lengths. Other lengths in proportion. Blade is stiff and will not whip in hillside cut. Particularly recommended for use in cutting Fir, Western Pine, and similar woods. This saw is guaranteed and etched with the maker's name, and Atkins SILVER STEEL, for your protection. Actual size section of teeth shown on page No. 7, illustrating bevel as manufactured, and rakers not swaged.

Made in lengths, feet.....5, 5 1/2, 6, 6 1/2, 7, 7 1/2, 8, 8 1/2, 9

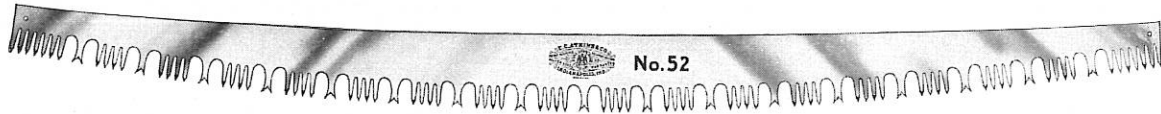
The Handles recommended for use on the No. 51 Cross Cut Saw are shown on page No. 17. These Handles are of extra high quality and the best on the market. Designed to fit the hand perfectly.



Actual size section of Atkins SILVER STEEL Cross Cut Saw No. 51. Note the extra long lance shaped teeth. Four cutting teeth to the section with wide deep gullets. The extra wide deep raker gullets are polished to prevent clogging in the cut. Teeth and rakers are large and strong for hard usage.

Thirteen gauge on tooth edge; 17 gauge on back at center; 15 gauge on back at ends.

ATKINS No. 52 PACIFIC COAST PATTERN CROSS CUT SAW

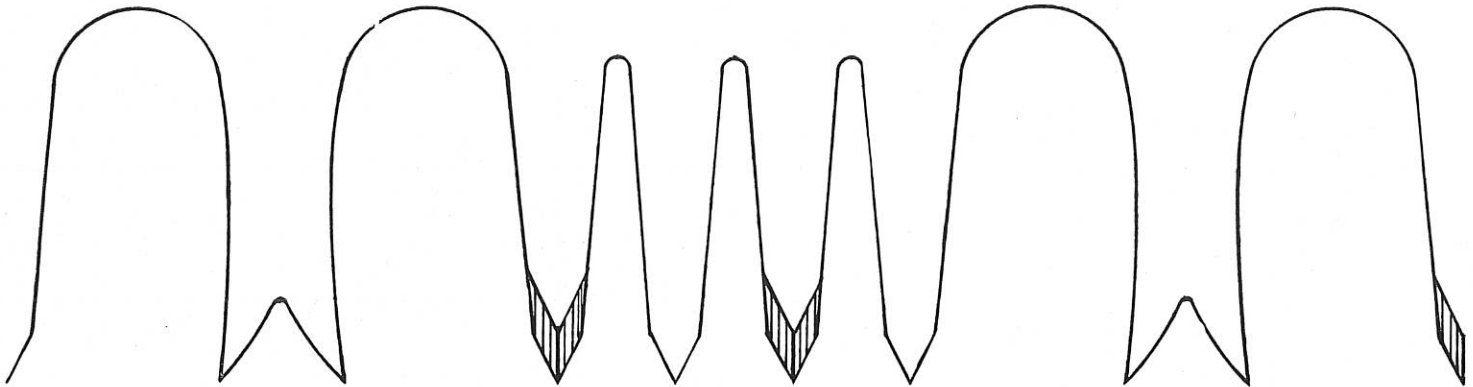


ATKINS No. 52 Falling Saw, like its running mate, No. 51, has the world beat for holding keener cutting teeth and staying sharp longer in cutting burned stumps, knots and other case-hardened forms of wood. Blade is made of genuine SILVER STEEL, the best steel ever used in Cross Cut Saws. Accurately hardened and tempered, giving maximum toughness and durability. Segment Ground; the Atkins exclusive grind. Segment Grinding assures the user of a fast running, easy cutting saw without binding in the cut. 13 x 17 x 15 gauge. Has four cutting teeth to a section with large, deep roomy teeth and raker gullets. Raker gullets are wide for rapidly clearing the kerf of sawdust. This saw is similar to the No. 51 except more breast and narrower, and used for falling. Blade is $3\frac{1}{4}$ " wide at ends; $5\frac{1}{4}$ " wide at center on 7 foot lengths. Other lengths in proportion.

This saw is guaranteed . . . Do not accept a substitute . . . Demand Atkins. Actual size section of No. 52 saw teeth shown on page No. 9 showing bevel as manufactured and rakers not swaged.

Made in lengths, feet.....5, $5\frac{1}{2}$, 6, $6\frac{1}{2}$, 7, $7\frac{1}{2}$, 8, $8\frac{1}{2}$, 9, $9\frac{1}{2}$, 10

The handles recommended for Atkins No. 52 saw are shown on page No. 17. Quality . . . Material . . . Workmanship and Appearance constitute the superiority of Atkins products.



Actual size section of Atkins SILVER STEEL Cross Cut Saw No. 52. Four cutting teeth to a section. Note the long lance shaped teeth with deep gullets. The extra large deep polished raker gullets eliminate clogging of sawdust in the kerf. Thirteen gauge on tooth edge; 17 gauge on back at center; 15 gauge on back at ends.

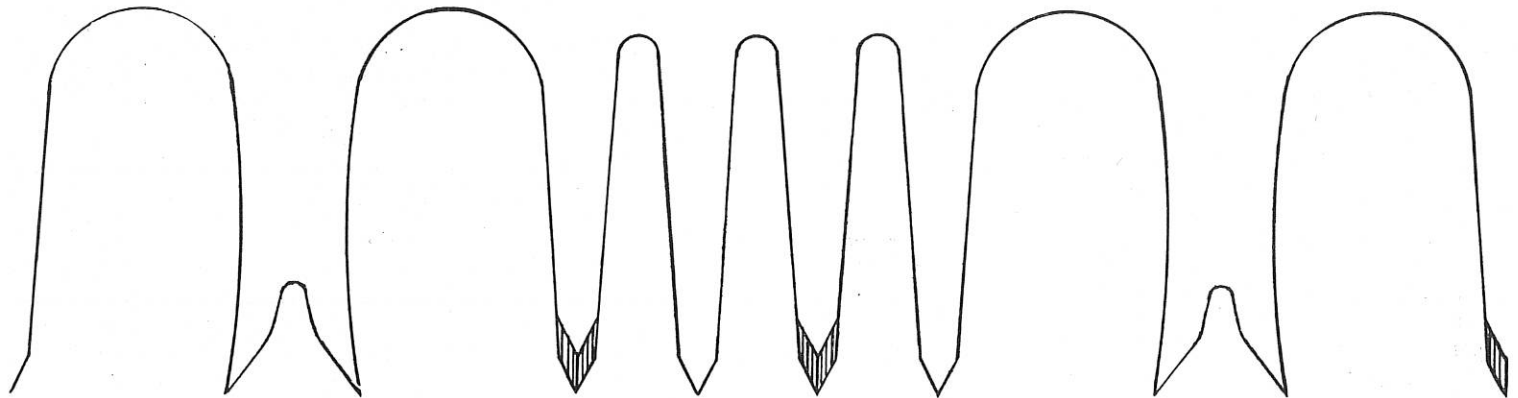
ATKINS PACIFIC COAST PATTERN CROSS CUT SAW No. 68



ATKINS SILVER STEEL Cross Cut Saw No. 68 is especially recommended for cutting California Redwood. The blade is made of genuine SILVER STEEL, (Atkins exclusive formula). SILVER STEEL will take an exceptionally sharp keen cutting edge and will hold it a remarkable length of time. Uniformly hardened and tempered by Atkins exclusive heat-treating process resulting in a very hard, tough temper, but not brittle. The easy running qualities found in this saw are like all other Atkins SILVER STEEL Segment Ground Saws, procured through scientific design and modern manufacturing methods. The blade is straight back segment ground. 11 x 16 x 15 gauge. The Segment Grinding process gives the blade an even thickness along the entire tooth edge and tapering from the tooth edge to the back at center and from ends at back to center. This eliminates the possibilities of the saw binding in the cut. Blade is extra heavy with long lance shaped teeth. The four cutting teeth to a section are extra wide with deep tooth gullets. The raker gullets are extra large and deep and highly polished for clearing the kerf of sawdust. This saw is highly recommended for bucking purposes; the blade being $4\frac{1}{2}$ " wide at end; $7\frac{5}{8}$ " wide at center on 7 foot lengths. Other lengths have widths in proportion. This saw is backed by Atkins guarantee and etched with the maker's name. An actual size section of No. 68 saw teeth is shown on page No. 11 illustrating bevel as manufactured, and the raker not swaged.

Made in lengths, feet..... $6\frac{1}{2}$, 7, $7\frac{1}{2}$, 8

The handles most generally used on this saw are found on page No. 17. The process used in the manufacturing of Atkins Cross Cut Handles, plus material, skill, and workmanship makes them the best for the money.



Above is actual size section of Atkins SILVER STEEL, Segment Ground Cross Cut Saw No. 68. Note the style of the four cutting teeth with the extra deep gullets. The wide raker teeth and deep roomy and highly polished gullets keep the sawdust cleared from the kerf and eliminate binding in the cut. The blade is 11 gauge on entire tooth edge; 16 gauge on back at center and 15 gauge on back at end. A fast cutting, easy running Cross Cut Saw.

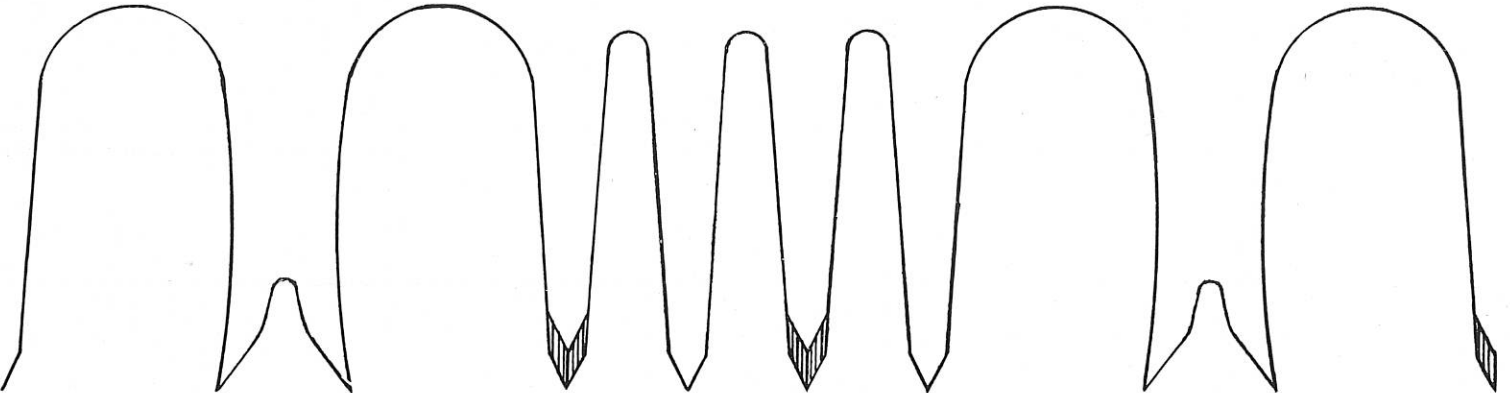
ATKINS PACIFIC COAST PATTERN SILVER STEEL CROSS CUT SAW No. 69



THIS Saw is similar to the No. 68, except narrower and has more breast. Highly recommended for falling purposes and cutting Redwood timber, found on the Pacific Coast. Blade is made of genuine SILVER STEEL accurately tempered giving it maximum toughness and edge holding qualities. Blade is uniformly hard, stiff and tough, but not brittle. Segment Ground, being thinnest at the center of back and of equal thickness along the entire tooth edge. This enables the saw to run free and easy, has ample clearance with very little set. 12 x 17 x 15 gauge. Has four cutting teeth and raker with extra large, deep and roomy tooth and raker gullets. Raker gullets are wide for rapidly clearing sawdust from the cut. Teeth are lance shaped and take an exceptionally keen cutting edge and hold it a remarkably long time. The blade is $3\frac{1}{4}$ " wide at end; $5\frac{3}{4}$ " wide at center on 7 foot saws; other lengths have widths in proportion. This saw carries Atkins guarantee. On page No. 13 is an actual size section of the No. 69 Saw. Teeth shown as manufactured and rakers not swaged.

Made in lengths, feet..... $6\frac{1}{2}$, 7, $7\frac{1}{2}$, 8, $8\frac{1}{2}$, 9, $9\frac{1}{2}$, 10, $10\frac{1}{2}$, 11, $11\frac{1}{2}$, 12

The handles most generally recommended for use on the No. 69 saw are found on page No. 17. The style and shape of these handles fit the curve of the hand perfectly and make sawing easier. Quality, Material, Workmanship and Appearance constitute the superiority of Atkins.



Above is an actual size section of teeth on Atkins No. 69 Segment Ground SILVER STEEL Cross Cut Saw. The teeth are the same style as shown on page No. 11 on the No. 68 Cross Cut Saw. Four extra long cutting teeth to a section with deep tooth gullets and extra large roomy raker gullets that are highly polished. Twelve gauge along the entire tooth edge; 17 gauge on back at center; 15 gauge on back at end. Accurately constructed for fast, easy running and long life.

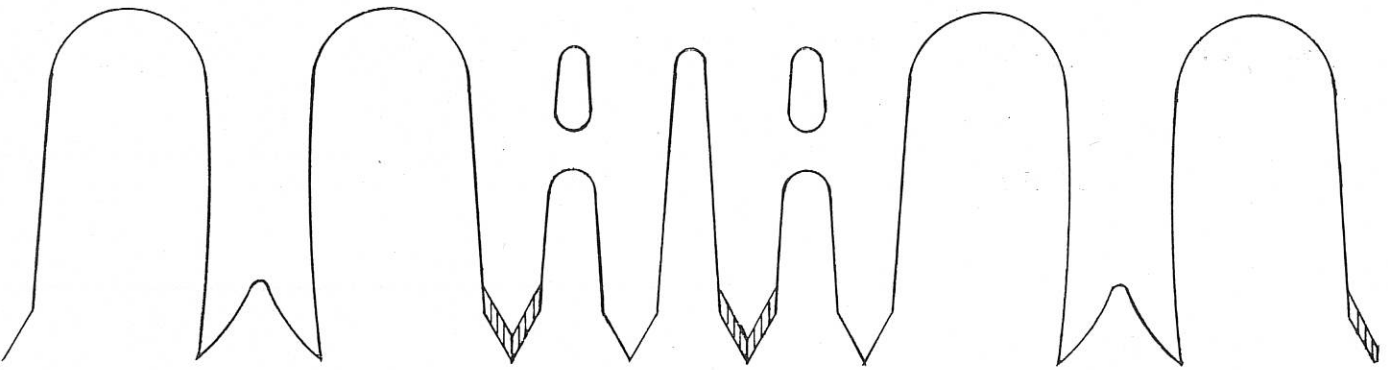
ATKINS No. 556 PACIFIC COAST PATTERN CROSS CUT SAW



ATKINS No. 556 Cross Cut Saw is a favorite among expert timber cutters in the Inland Empire who prefer a high-grade saw at less cost in upkeep. For Bucking purposes, like all other ATKINS SILVER STEEL Cross Cut Saws, is unsurpassed for speed and light running, due to the Segment Grinding process (exclusively Atkins). Blade made of genuine SILVER STEEL, accurately tempered by Atkins exclusive process in special furnaces. The blade is uniformly hard, stiff and tough, but not brittle. The teeth will take an exceptionally sharp, keen cutting edge and retain it for an unusually long time. Four cutting teeth and raker to a section with extra large polished raker gullets and extra deep center tooth gullet. The cutting teeth have two braces to the section forming two pairs of teeth making them exceptionally strong and free from springing. Segment Grinding makes the saw run fast, free and easy with less set and eliminates binding. Fourteen gauge on tooth edge; 16 gauge on back at ends; 18 gauge on back at center. The blade is $3\frac{1}{8}$ " wide at end; and $6\frac{1}{4}$ " wide at center on 7 foot length. Other lengths have widths in proportion. This saw carries Atkins guarantee. Etched with the maker's name and "ATKINS SILVER STEEL" for your protection. Actual size section of No. 556 Saw shown on page No. 15 showing bevel as manufactured, and rakers not swaged.

Made in lengths, feet.....5, $5\frac{1}{2}$, 6, $6\frac{1}{2}$, 7

The Handles recommended for the No. 556 Cross Cut Saw are illustrated on page No. 17. The style of these handles fits the curve of the hand perfectly, making sawing easier.



Actual size section of ATKINS SILVER STEEL Segment Ground Cross Cut Saw No. 556. Teeth are wide and tapered. Four teeth to the section. Note the deep center tooth gullet. The braces forming two pairs of teeth in each section keep the teeth in line and free from springing. Extra large deep polished raker gullets. Blade 14 gauge on tooth edge; 18 gauge on back at center; 16 gauge on back at ends.

—ATKINS CROSS CUT SAWS—

ATKINS PACIFIC COAST PATTERN CROSS CUT SAWS Nos. 251 and 252
For Those Wanting a Medium Priced Cross Cut Saw



ATKINS No. 251 Cross Cut Saw is unequalled in medium priced bucking saws for Pacific Coast regions. It is made of extra high quality steel to stand up under the toughest cutting in fir, western pine and similar woods. It is built to the same specifications as the No. 51. The lance-shaped teeth are wide and strong, eliminating danger of breaking. Ground 13 x 17 x 15 gauge. Blade is 4½" wide at end and 7" wide at center on 6-foot lengths. Other lengths in proportion. Made in lengths of 5 to 8 feet in 6" steps.

Atkins No. 252 Falling Saw, a companion to No. 251, is especially adapted for cutting burned stumps, knots, and other case-hardened forms of wood. It is patterned after the No. 52 "SILVER STEEL." A medium priced saw of high grade steel. Ground 13 x 17 x 15 gauge. Blade is 3½" wide at end, 5½" wide at center on 7-foot lengths. Other lengths in proportion. Made 5 to 12 feet in steps of 6".

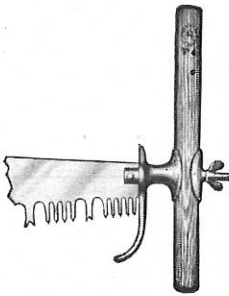
ATKINS PACIFIC COAST PATTERN CROSS CUT SAW No. 361



ATKINS No. 361 Pacific Coast "Lance Tooth" Cross Cut Saw is made of high grade special steel, accurately hardened and tempered throughout. Ground 14 x 17 x 15 gauge. Toothed to the end with 5 end teeth on each end. Blade is 3¾" wide at end, 7" wide at center on 6-foot lengths. Other lengths in proportion. Made 5 to 8 feet in 6" steps.

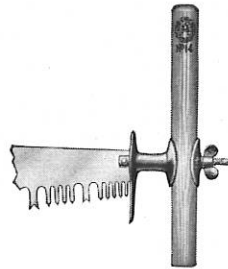
See page 17 for handles recommended to use on these saws.

—ATKINS CROSS CUT SAW HANDLES—



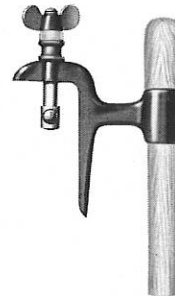
**ATKINS No. 4
CROSS CUT
HANDLE**

No. 4 is a popular style used on the Pacific Coast. Fourteen inches long. Made of thoroughly seasoned Beech stock, comfortable grip. Machine made, carefully threaded steel bolt. All other metal parts of malleable iron, trimmed yellow. Extra heavy malleable wing nut. The deep thread and heavy wing nut aid in attaching or removing quickly. This facilitates its use in either felled or standing timber. Weight per pair, 2½ pounds. Packed 10 pairs in a carton weighing 31 pounds.



**ATKINS
No. 14
CROSS CUT
HANDLE**

No. 14 is used extensively on the Pacific Coast. Fourteen inches in length. Made of thoroughly seasoned Beech, sanded smooth. Handle firmly attached to blade by rivet. Machine made steel bolt, malleable socket and washer. Socket red; washer black. Handle fits the working position of the hand perfectly with plenty of room. Weight per pair, 2⅞ pounds. Packed 10 pairs in a carton weighing 28 pounds.



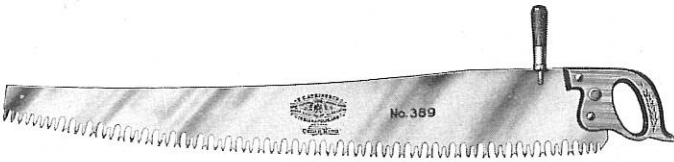
**ATKINS No. 52
FALLING
CROSSCUT
SAW HANDLE**

No. 52 Falling Pattern handle is 9½ inches long. Made of selected Beech, sanded and waxed. Malleable castings, lacquered yellow. Heavy steel bolt. Large wing nut holds saw tight to groove in casting. This is a high grade Pacific Coast pattern that will be readily appreciated. Weight per pair, 2½ pounds. Packed 10 pairs in a carton weighing 25 pounds.

No. 51 BUCKING PATTERN handle is of same design and materials as the No. 52 Falling except that the guard is larger and the stock is longer. Weight per pair, 3 pounds. Packed 10 pairs in a carton weighing 34 pounds.

ATKINS CEDAR KING ONE-MAN SAW No. 389

Atkins No. 389 Cedar King One-Man Cross Cut Saw is the finest that has ever been manufactured. The blade is of Atkins high-grade SILVER STEEL. Teeth are large and similar to two-man cross cuts. Has two cutting teeth and raker, deep gullets. Skew back taper ground. An easy grip handle, finely carved, varnished edges; is fastened to the blade by two nickel screws and a medallion. 15 x 19 x 17 gauge. Blade is 2½ inches wide at point; 7 inches wide at handle on 4 foot lengths. Other lengths have widths in proportion. Made in lengths of 2½ to 4 feet inclusive. Furnished complete with supplementary handle.



ATKINS LANCE TOOTH ONE-MAN SAW No. 761

No. 761 Lance Tooth is a very popular pattern with four long lance teeth and one raker to each section. SILVER STEEL, with exceptional edge holding qualities due to Atkins exclusive tempering process. Taper ground; does not bind. Sanded Beech handle, with large roomy grip is fastened tight to the blade with two brass screws and a medallion. 3 to 4½ foot saws are 16 x 18 gauge. 4½ and 5 foot saws are 15 x 17 gauge. Blade is 2¼ inches wide at point and 7¼ inches wide at handle on 4 foot lengths; other lengths have widths in proportion. Made in lengths of 3 to 5 feet inclusive. Filed and set ready for use.



—ATKINS ONE-MAN CROSS CUT SAW HANDLES—

ATKINS No. 389 ONE-MAN HANDLE



Made of air-dried selected hardwood, sanded. Has extra smooth edges. Large roomy grip. Handle carved, varnished on edge and polished. Screws not furnished with handle. Packed one dozen to a carton. Weight: per dozen, 6¾ pounds.

ATKINS No. 202 SUPPLEMENTARY ONE-MAN HANDLE



Thoroughly seasoned air-dried hardwood. Socket and washer of high-grade ferrule steel. New style steel bolt with rivet locking feature, preventing rivet from becoming detached. Used for converting one-man saw into a two-man cross cut saw, or enables the operator to saw with ease using both hands. Packed one dozen to a carton. Weight: per dozen, 3½ pounds.

ATKINS No. 741 ONE-MAN HANDLE

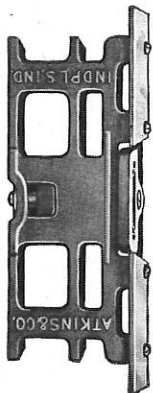


Made of thoroughly seasoned air-dried selected hardwood. Extra smooth varnished edges and carved grip. Handle is easy-grip pattern with plenty of hand room. This handle is highly recommended for use on Pacific Coast Pattern One-Man Saws. Screws not furnished with Handle. Packed one dozen to carton weighing 6½ pounds.

Atkins Saw Fitting Tools

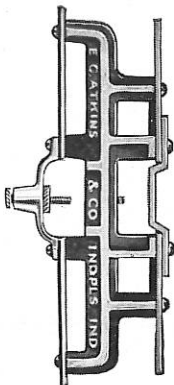
This briefly describes three of our most popular patterns of Saw Tools. For further information on Saw Tools make request for our catalog.

Atkins Patent Excelsior Saw Tool No. 5



It is used as a joiner, as a raker gauge and also as a slide file. An 8-inch file is fastened in the tool. The set screw slightly bends the file, giving it the proper curve. After jointing, the tool may also be used for gauging proper length of raker teeth, after which, by readjusting the file, it may be used for side filing. A tooth set gauge is also included. This is made with long and short ends, which by reversing, indicates a corresponding light or heavy set as desired.

Atkins "AAAA" Saw Tool No. 9



This is an exceptionally good tool used for fitting cross cut saws in order to get the best results from them. The tool is 6 1/2 inches long by 2 inches wide and made of good, substantial material throughout. All parts are carefully fitted. It will last for years.

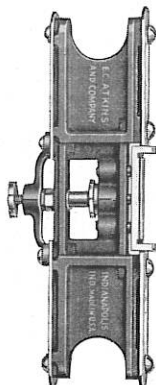
The Raker Gauge Plate is tempered file proof. The ends are beveled so that the depth of the gauge may be regulated by the use of the adjusting screws. This does away with paper packing, which has been used on all tools heretofore. For jointing, fasten a flat file by set screw, and pass same lightly over the points of the teeth until filed to a uniform height.

For jointing the rakers, place the tool over the raker teeth. Turn adjusting screws until the rakers protrude the desired distance through the gauge, then file them off to a level with top of gauge. This will render all raker teeth exactly the same length.

For gauging the rakers, reverse the tool and set gauge pin and tighten by use of thumbscrew, then pass the tool along toothed edge, thus measuring the proper length for each raker. This will be indicated when the point of the raker tooth touches the gauge pin.

The Bearing Plates are the only parts of the tool touching the teeth points and are made of SMOOTH, HARD TOOL STEEL, and will neither dull the points nor wear with use. Note the little cut-out on each end of the top bar of tool. This is to gauge the set of the cutting teeth and does away with the necessity of carrying an extra tooth gauge. The shallow gauge is for set of teeth in hard wood and the deep gauge is for set of teeth in soft wood. The tool being open in construction, it is possible to see all work clearly at all times.

No. 16 Micrometer



No. 16 Micrometer Saw Tool

No. 16 Micrometer saw tool is the most accurate made. A 3-in-one tool for jointing, joining rakers and gauging rakers. Adjustments are made by micrometer gauges and are perfect. Micrometer tooth set gauge completes the outfit. Made of the finest of material. This tool is recommended where accuracy is desired. Packed one in a wood box, instructions, any quantity ordered. Tooth set gauge packed one in a cardboard box when sold separate.

When the No. 16 Saw Tool leaves the factory both the Raker Joiner and testing Pin are set on the line which means the adjustments are set at zero (or no raker drop.) To adjust to desired raker drop, No. 1, loosen locking nuts (nuts with no lines marked on them) No. 2, turn hexagon head screw or nut the required amount as to the table below; No. 3, lock in position by turning locking nuts until clamped securely. Wrench is furnished for use on nuts and screw head.

Adjusting

1/6 Turn.....	.005" Raker drop
2/6 Turn.....	.010" Raker drop
3/6 Turn.....	.015" or $\frac{1}{16}$ " Raker drop
4/6 Turn.....	.020" Raker drop
5/6 Turn.....	.025" Raker drop
1 Turn.....	.031" or $\frac{1}{8}$ " Raker drop
1 1/6 Turns.....	.036" Raker drop
1 2/6 Turns.....	.041" Raker drop
1 3/6 Turns.....	.046" or $\frac{1}{4}$ " Raker drop
1 4/6 Turns.....	.051" Raker drop
1 5/6 Turns.....	.056" Raker drop
2 Turns.....	.062" or $\frac{1}{8}$ " Raker drop

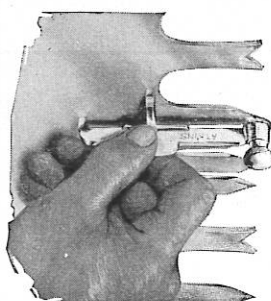
Atkins Micrometer Tooth Set Gauge

As Accurate as a Watch

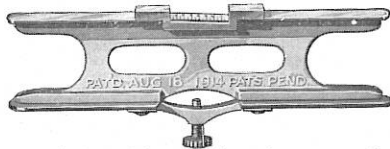
Atkins Micrometer Tooth Set Gauge should be used by all first-class saw mechanics. Made of a high grade steel, nickel-plated, equipped with a hardened steel Micrometer thumb screw with graduations on it measuring from naught (0) to twenty-five one-thousandths (.025) part of an inch.

DIRECTIONS FOR USE

When set at zero all four legs of tool are the same length and No. 0 on barrel of thumb screw is directly opposite, or in line, with No. 0 on body of tool as shown in drawing. If 1-64 part of an inch, or .015 set in teeth is desired, turn knurled head thumb screw to left to .015, then lock with small knurled nut and set teeth accordingly. The crowning feature of this tool is that you can get any amount of set with the one tool. Some filers carry several tooth set gauges ground differently, as they may want to cut several kinds of timber in the same day. After one becomes familiar with the required amount of set for each kind of wood it requires only a second to adjust the gauge from one extreme to the other. This tool can be used for gauging the set of cross cuts and



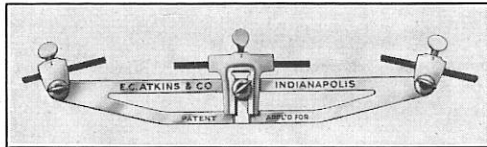
ATKINS ACCURATE ADJUSTMENT
RAKER GAUGE



A very practical tool for gauging the swage of raker teeth on Cross Cut Saws. The head of the screw which is used to gauge the rakers has a dial which is provided with figures. Each full turn of the screw lowers the pin 1-32 inch. Also has cut-off slot numbered according to the required amount to be taken off. Aluminum frame with hardened plates to prevent wear. Polished. Light weight.

Adapted to those who desire to do fast work, or those who are not experienced filers. Has no jointer attachment. Weight: each, 6 ounces.

ATKINS NO. 17 LONG JOINTER



Realizing the necessity of having a perfect curve on saws longer than 6½ feet we have invented and patented this new curve maker and jointer.

This jointer can be used for making a perfect circle or curve and at the same time jointing the saw down to make the teeth all the same length and ready to file. The frame of this jointer is made of the best grade of aluminum, which makes it light, and at the same time durable. All shoes are set at right angles with the frame so that when jointed all teeth will be square. Thumbscrews are used throughout, eliminating the necessity of using a wrench.

Directions for Jointing

Take three pieces of 8" or 10" wornout mill bastard files about 4" long, and smooth the teeth off one side with an emery wheel or grindstone. To make the curve insert, file cutting side down in holders No. 1 and No. 2 and file with smooth side down in holder No. 3. Find the highest point on cutting edge of saw and adjust center holder to it, now hold your right hand on holder No. 3 and push files along edges from right to left from one end to the other, repeat this until high spots are nearly all off, then reverse file in holder No. 1 smooth side down, put your right hand on holder No. 2, and repeat operations until files stop cutting, you will have a perfect curve and saw will be properly jointed ready for finishing.

ATKINS FRERE JOINTER

Realizing the necessity and need of an accurate jointer for jointing Cross Cut Saws of any length and radius, E. C. Atkins and Company manufactured a new Frere Jointer. This tool is the latest and most simple in construction, and regardless of how inexperienced the filer may be he can correctly joint Cross Cut Saws without difficulty. This tool is made of extra high quality cold rolled steel accurately hardened and tempered for stiffness and durability, and fitted with a section of jointer file and held firmly in place by a tension screw. This jointer can be adjusted to accurately fit any cross cut saw regardless of radius, the top of the jointer being flexible. This jointer has advantages over other jointers by always leaving the teeth and rakers jointed square regardless of the radius. This tool is light in weight and can be conveniently carried without difficulty. Atkins Frere Jointer is highly polished and accurately adjusted. The adjusting clamp is made of extra high grade brass heavy enough to stand undue strain. The jointer is 19¼" over all. Packed one in a box.

Atkins Horn Grip Saw Set No. 12



The amount of set required on a Cross Cut Saw depends on the material to be cut. Therefore, the cutter has to fit his saw on the job. This operation is easily accomplished by the use of Atkins Horn Grip Saw Set, 6¼" long, ¾" thick, anvil 1½" high. Very easy on the hand. Packed in individual folding carton. Weight: 20 ounces.

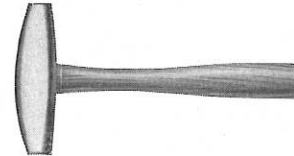
ATKINS CRITERION SAW SET



Atkins Criterion Saw Set is used for setting cross cut, hand, and wood saws. Particularly recommended for setting saws more uniform, and with less liability of breaking the teeth. Made of high-grade malleable iron with drop forged tool steel die and anvil, accurately hardened and tempered to give excellent results. This saw set has an adjusting screw for obtaining any desired amount of set. Pointed die enables its use on saws of various tooth sizes. The Criterion Saw Set has a die resting on the tooth of the saw which is struck with a hammer imparting the exact amount of set to the tooth. A necessity in saw fitting tools. Lacquered to prevent rusting.

Weight: One pound 2 ounces.

Atkins No. 4 Setting Hammer



Atkins No. 4 Setting Hammer is made of the finest grade tool steel and accurately tempered. Extra high-grade Setting Hammer. Solid peen. Perfectly shaped and balanced for setting cross cut, drag and circular saws. Polished head. The thoroughly seasoned hardwood handle, sanded smooth, is securely fastened to the head by means of a special wedge arrangement. Will not slip. Packed in individual boxes. Weight each, 14 ounces.

Atkins No. 3 Setting Hammer



Atkins No. 3 Setting Hammer is made of special grade tool steel, drop forged. A very high-grade setting Hammer. Has slotted peen. Highly polished and finished with selected air-dried Hardwood Handle, sanded smooth and fastened to the head by a special wedge arrangement which prevents it from coming loose. Well balanced and the correct weight for setting purposes. Packed half dozen to a box.

Atkins Special Cross Cut Saw File



Made of genuine SILVER STEEL, in lengths 6" to 10" inclusive, expressly for filing Cross Cut Saws. Are regularly made with two square edges. Also furnished with thumb grip when desired. The most popular file used in the logging camps for keeping Cross Cut Saws sharp and keen. The superior quality of Atkins SILVER STEEL Files makes them the "favorite" among filers.

Lengths, inches, 6, 7, 8, 9, 10.

Atkins Special Cross Cut Saw File No. 210

Atkins Special Cross Cut Saw File No. 210 is made expressly for the expert filer for filing Cross Cut Saws. Made of genuine SILVER STEEL, it will stand up better and file more material than any other file. Furnished with square edges, similar to our regular special Cross Cut Saw File except teeth are coarser. This file is highly recommended for use in logging camps on Pacific Coast and Northwest.

Made in lengths, inches, 6, 7, 8, 9, 10.

Saw Fitting

FOR BEST RESULTS

Instructions for Filing and Setting Cross Cut Saws

The best saw in the world, pulled by the best sawyer, cannot do efficient work unless the teeth are kept in proper shape to cut and rake out the sawdust. The best saw filer must have proper gauges and tools, or he cannot do his work accurately.

We must illustrate the fitting of saws by illustrating the use of proper saw-fitting tools. Fitting cross cut saws is based on a few well-known principles. With these principles in mind, slight variation must or can be made in the bevel of the teeth, shape of the teeth, angle of the cutting point, shape and length of the raking or clearing teeth to suit local requirements. These slight variations are made expedient by reason of the fact that it is necessary to adapt the saw for cutting in different kinds of wood; sometimes hardwood, sometimes soft or frozen logs, knotty logs, and logs that are full of pitch.

The principles involved in making the teeth of cross cut saws are as follows:

1. The cutting teeth constitute a series of knives adapted to sever all fibres of the wood. When these fibres are cut through they must be collected in the gullets of the teeth, or dust chambers, and carried out of the kerf, so as to enable the saw to freely start in on a new cut.

2. The clearing teeth constitute a series of rakers to free the kerf from the dust or shavings that are severed by the cutting teeth.

With these principles in mind we come to the preparation of the teeth for the work.

1. All cutting teeth must be the same length, so that each tooth will do its share of the cutting, and no more.

To make all teeth the same length place the saw in a vise, or, if the filing is to be done in the woods, where no vise is available, place the blade, teeth uppermost, in a notch in a convenient stump, pass a file carefully over the teeth, as shown in Figure 1, until all teeth touch the file. This can readily be determined by the bright, flat tops on the cutting teeth.

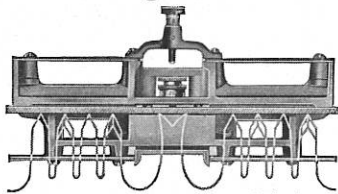


Figure 1—Showing Jointer

Care must be taken to hold the file squarely, so that the cutting on each side of the saw will be the same length. If the file is allowed to pass over the teeth at an angle, one side of the saw will be longer than the other, and this will invariably make a saw run to the side which has the longest teeth, as this side cuts faster.

2. When all of the cutting teeth are even on top, the next operation should be to regulate the length of the rakers or clearing teeth. We advocate regulating the length of the rakers at this point, because the rakers should be adjusted by gauge, and any tool which is used

for this purpose would have a tendency to dull the sharp points of the cutting teeth if it were used after they had been finally finished.

This operation is one which requires the same accuracy and attention to details. Experience is the best teacher in determining the proper length of rakers, as compared to the length of the cutting teeth. It is essential for good cutting that the rakers should be some shorter than the cutting teeth—not less than 1/100 part of an inch, nor more than 1/64 of an inch. If the rakers are to be swaged, it is proper to leave them the same length as the cutting teeth and allow the swaging to shorten them sufficiently for good work. Unswaged rakers should be cut off accurately to gauge, as shown in Figure 2.

The saw teeth will now look like Figure 3.

3. The next operation consists of filing up the rakers to a keen, sharp edge, using care that their tops shall be square with the side of the blade.

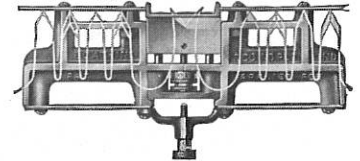


Figure 2—Cutting down rakers.

It is necessary to point up the rakers in this manner, whether they are to be swaged or not. (Figure 1.)

4. After determining the shape you desire in the cutting teeth, proceed to shape them to suit you before starting to bevel. It is much better to preserve a uniform tooth formation, and to use that which is best adapted to the various kinds of wood, as can be seen in the different styles of teeth shown at the end of these instructions. Shaping of the teeth should be done at right angles to the teeth, always making square lines, not attempting to do any beveling until all teeth are formed. Carry the square shape up to the point of the teeth. It is important to square up the cutting edge of a cross cut saw from the same side of the teeth that you intend to do the beveling. The reason for this is that it is very difficult to handle a file on a thin cross cut saw absolutely square across the saw, without having it chatter more or less. In the effort to keep the file from chattering you will naturally lean the file slightly toward you at the handle end, which will form a slight bevel on the teeth.

5. You now have your teeth the right length and the correct shape, and can proceed to bevel. The amount of bevel required can be determined by your own experience, and by reference to cuts of various bevels shown at the end of these instructions. Care must be taken not to cut off the points of the teeth in beveling.

To make a flat, straight bevel, a full, straight stroke of the file is necessary, but if a rounded bevel is wanted to follow a round-tooth formation (Figures 14 and 15, page 28), it is necessary to roll the file, following the contour of the saw teeth.

File all cutting teeth to a sharp point.

Your cutting teeth should now be finished, and if you are using unswaged rakers your rakers are finished and the saw is ready to set. If you are using swaged rakers, you are now ready for the swaging process.

6. Swage the rakers with light blows of a light hammer, using care not to spread the point of the raker to a thickness exceeding that of the saw plate. This can be

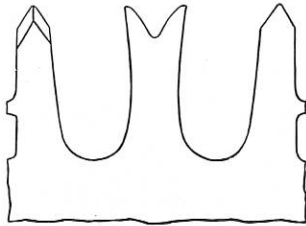


Figure 3

done by inclining your hammer slightly, as shown in Figure 4.

This will give your raker teeth a formation as shown in Figure 10, Page 28.

An unswaged raker breaks up the fibres which are severed by the cutting teeth into short pieces which are more apt to pass by the side of the saw and cause the

saw to bind. Whereas, swaged rakers act as a plane on the bottom of the cut, going under the severed fibres and planing out the V-shaped chip left in the bottom cut. See Figure 5.

Your saw is now ready to set.

7. The amount of set necessary is determined by the kind of material to be cut. Perfect alignment is absolutely necessary. Therefore, always use the set gauge. The use of a set gauge is shown in Figure 6, Page 27.

The operation of setting can be accomplished in several ways. If filing is done in the woods, the saw can be set as shown in Figure 7, Page 27.

The point of the tooth should project about $\frac{1}{4}$ inch over the apex of the setting block, and the setting should be done by means of a firm, sharp blow on the top, just at the place where it rests on the apex of the setting block. If too large set is imparted, reduce the set by hammering the tooth placed on the flat surface of the set-block. If too little set is imparted at the first blow, re-set the tooth as in the first operation, either using a little harder blow or allowing the tooth to project a little farther from the apex of the anvil. Each tooth, after setting, should be

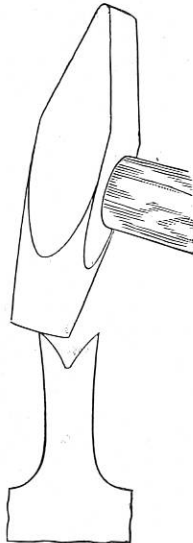


Figure 4

gauged for accuracy, as shown in the cut illustrating the use of a set gauge (Fig. 6). We submit on Page 28 a number of cuts for your consideration which show the principal forms of saw teeth, both cutting teeth and rakers, for different kinds of timber and different requirements.

You will note by carefully studying the different forms of teeth

and the different beveling, that the same principle is involved in each case, but different methods are employed to cover special requirements.

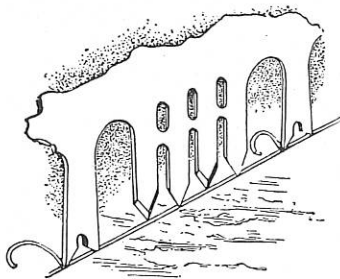


Figure 5

In frozen timber, exceedingly hard wood, or wood that has many hard knots (See Figures 13, 14 and 15, Page 28), you will find that it is always better not to make the bevel too flat. Yet by following out the lines laid down in rounded-point beveling (Figs. 14, 15), you are able to secure a fast-cutting saw with plenty of bevel, without the danger of leaving the extreme point of the tooth too weak. In other words, a rounded-point beveling will leave more backing to the point of the tooth than a flat bevel, and still leave the saw in shape to do fast cutting. It is considerably more work, however, to

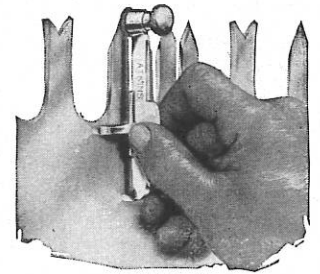


Figure 6

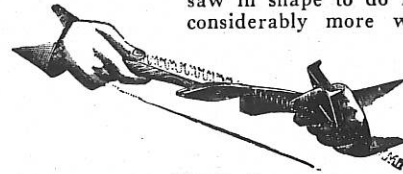


Figure 7

file a saw with a rounded point than a saw with a straight, flat bevel.

If your saw has a tendency to lose its points,

we would advocate reducing your bevel or perhaps increasing the angle of your cutting point. In hard hemlock knots the points have a tendency to bend. Very often with a little less bevel your saw will stay sharpened twice as long, and will cut just as fast, and preserve its points. We would always advocate filing the saw with as much bevel as possible consistent with leaving enough backing to the point of the teeth so that the point will neither bend nor break off in striking small knots in such timber as hemlock or hard woods.

There are many who advocate beveling the teeth clear down to the gullet, but such beveling necessitates extra filing, which is unnecessary, as the point of the teeth is the part of the saw which does the cutting. Each stroke of the saw only allows the point of the teeth to sink as far into the wood as the wedge-shaped point of the bevel will allow it. This is governed to a certain extent by the action of the rakers, which are clearing the cut ahead of the cutting teeth, but as a rule one stroke of the cutting tooth of a cross cut saw will carry each tooth only down to a point where the bevel causes the tooth to wedge into the cut.

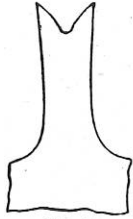
Always set your saw wide enough so that it cuts freely, but do not set it wide enough to chatter, as every 1/1000 part of an inch means an excess of power required to pull the saw, as the cut is just that much wider.

In frozen timber, properly ground saws ought to work with very little set. In hard woods they require very little; in pitchy pine woods the saws usually require a little more set, but if they are kept well cleaned, a saw set for hard wood ought to cut in yellow pine.

We sincerely hope that these instructions will be of service to you in carrying on your work, and if at any time we can be of assistance to you, we are at your service.

For Figures Nos. 9 to 19, inclusive, see Page 28.

ATKINS SILVER STEEL SAWS



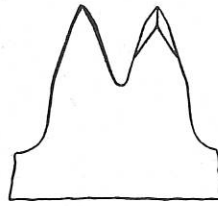
No. 9

Raker without Swage.



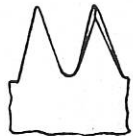
No. 10

Swaged Rakers.



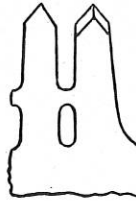
No. 11

Diamond Point Bevel, considered the best point holding method of filing and easy to maintain in good order.



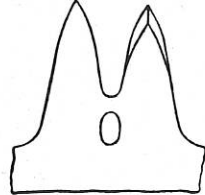
No. 12

Bevel for common tooth, where there are no Rakers, each tooth doing its share of the clearing.



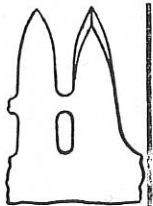
No. 13

Bevel suitable for knots and frozen timber, where extra strength is needed in the extreme point. Not adapted for fast sawing.



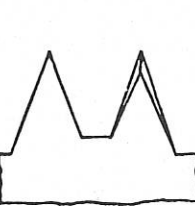
No. 14

Round point bevel, for fast, smooth sawing where strength of point must be considered as in the case of pine knots.



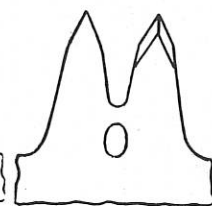
No. 15

Bevel for fast, smooth sawing and where strength in the teeth must be considered.



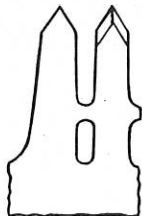
No. 16

Bevel for ordinary work, where skill is not essential. A poor method and a poor tooth. Point too delicate to stand hard usage.



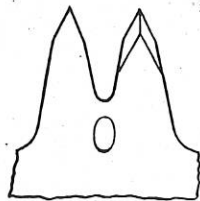
No. 17

Flat, thin bevel, for soft wood and fast sawing, where strength in points is not particularly essential.



No. 18

Bevel adapted for general work.



No. 19

Bevel suitable for general work.