

FIFTIETH
ANNIVERSARY CATALOGUE

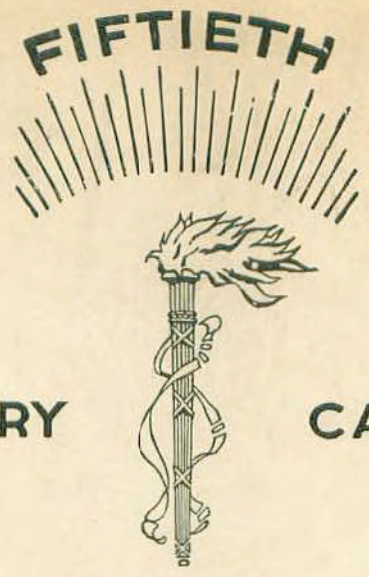


JOHN H. GRAHAM & CO.

ESTABLISHED
1870



50 26



ANNIVERSARY

CATALOGUE

1920 EDITION

JOHN H. GRAHAM & CO.

113 Chambers Street and 95 Reade Street
NEW YORK, U. S. A.

San Francisco—London—Copenhagen—Brussels—Sydney—Melbourne—Christchurch—
Rio de Janeiro—Buenos Aires—Havana—Cape Town



TO THE TRADE

We take pleasure in presenting to the Trade our "**Fiftieth Anniversary**" Catalogue, illustrating and describing the various lines made by the *Manufacturers* whom we represent.

We are the selling headquarters for the Manufacturers whose goods are shown in this book, and our prices for factory shipments are guaranteed to be factory prices.

All prices are subject to change without notice as necessity demands. All orders will be filled as promptly as possible, to the extent of stock on hand, and the balance will be shipped (unless countermanded) as soon thereafter as possible.

All goods are at the risk of purchaser after shipment.

All errors must be reported on receipt of goods.

Our customers will please take notice that we cannot assume any responsibility for goods "sent in" to be packed or delivered and we cannot allow claims for deficiencies on goods sent elsewhere to be packed. We will be pleased at all times to render them any service of this nature, to the extent of our ability, but at their risk.

We thank you for past favors, and assure you that we shall endeavor to merit their continuance.

Respectfully,

JOHN H. GRAHAM & CO.

Cable Address: "Grahainés, New York."

Codes: Western Union—5 Letter.

Western Union.

Bentley's.

A. B. C.—5th Edition.

Liebers.

P. O. Box, 1042.

Telephone Worth 2250

NEW YORK, AUGUST 1, 1920.

Loose Leaf Binder

In this Catalogue we have adopted a simple style of Loose Leaf Binding. By removing the one screw (just inside the front cover) old pages may be quickly removed or new pages added.

New leaves for this book will be mailed as occasion demands and can be inserted with very little trouble. **Keep the Book "up-to-date" by inserting new sheets immediately they are received.**

INDEX

IMPORTANT—The Pages in this Catalogue are not all numbered consecutively.

Allowance has been made for possible additions to any one of the various Manufacturers' Lines. Wherever a break appears in the consecutive numbering, you will understand that no Pages are actually missing from the Catalogue.

A		PAGE		PAGE		PAGE	
Academy Bells	711	Barbers' Clippers	401, 402	Bits, Auger Electricians'	7	in Rolls	9
African Cotton Cards	205	Barrel and Box Trucks	805	Ship	14	Bell Hangers' Gimlet	29
Air Augers	14	Swings	805	Car	10	Ship Auger	15, 16
Compressors	264, 265	Basement Elevators	734	Center	28	Clark Expansive	3
Alarm Door Bells	704	Bates Auger Bits	6, 9	Countersink	30	Countersink Gimlet	57
Tills	803, 804	Bearings, Post, Shafting	249	Dowel	28	Electricians'	7, 29
Alaska Sad Iron Handles	251	Beef Slicers	425	Expansive, Clark	3	Gimlet	29
Aluminum Bull Rings	205	Beet Topping Knives	447 to 449	Machine	17, 18, 19	Plug	28
AMERICAN GRINDER MFG. CO.	275 to 279	Bell Cord, Braided	811	Screw Driver, Snell	31	Ship Auger	14, 16
AMERICAN LAWN MOWER CO.	741 to 744	Crank	708	Car	15, 16	Tapping	27
American Tool Grinders	275, 279	Hangers' Gimlet Bits	29	Blabb's Calf Weaners	805	"Black Jack" Round Punches	31
Angular Boring Machines	20	Hangers' Gimlets	29	Blacksmiths' Hand Drills	262	Vises	246
Anvil and Vise, Combination	246	Pulls	708	Blades, Bracket Saw	216	Coping Saw	214
Anvil, Vise and Drill, Combination	246	Bells, Academy	711	Hack Saw	211 to 213	Bolts, Eye, Wrought Iron	565, 566
Anvils, Semi-Steel	262	Alarm Door	704	Swing, Wrought Iron	565	Boning Knives	429, 430
Asphalt Rakes	367	Auctioneers'	692	Boring Machine Augers	21	Machines	20
Assortments, Center Punches	182	Binnacle and Fog Signal	705 to 708	Parts	20	Boss Casters	798
Kitchen Knives	436	Cab	702	Boss Casters	798	Bottle and Can Openers, "Home"	830
Nail Sets	181	Call	694 to 697	Box and Barrel Trucks	805	Box Casters	796 to 799
Nail Sets & Punches	181	Electric Stroke	697	Boxes, Fire Proof	263	Flat, Shafting	249
Prick Punches	182	Carriage, for Foot Pressure	709	Tool, for Chisels	70A	Bracket Saw Blades	216
Spring Cotters	560	Cow	700, 701	Saws	216	Bell Cord	811
Attachments, Clamp	258	Door, Alarm	704	Sash Cord	811	Cotton Clothes Lines	811
Tool Grinder	277	Push Button Style	712	Brake Lining Shears	204	Brass Caps for Vise Jaws	248
Auctioneers' Bells	692	Rotary Style	712, 713	Bread Knives	426, 427	Slicers	805
Auger and Bit Head Types	2	Engine	711	Brick Trowels	716	Brisket Knives	431
Terms	1	Factory	711	Broom Corn Knives	440	Budding Knives	442
Auger Bit Sets	4 to 9	Fire Engine	710	Bull Rings	205	Bull Rings	205
Standard Lists	7	Fog Signal and Binnacle,	705 to 708	Butcher Knives	417 to 422, 427 to 431	Butt Chisels	56, 57
Auger Bits, Bates	6, 9	Gong, House	704	Button Cases for Door Bells	714	Butt Chisels	56, 57
in boxes	4 to 9	Locomotive	703	Cabinet Chisels	54, 55	Calf Weaners	805
Display Sets	8, 9	Trip	703	Call Bells	694 to 697	Electric Stroke	697
Electricians'	7	Hand	692	Calf Weaners	805	Call Bells	694 to 697
Extension Lip	4, 8, 9	Swiss	692	Electric Stroke	697	Calf Weaners	805
in Rolls	9	Hose Carriage	710, 711	Electric Stroke	697	Electric Stroke	697
Ship	14	Hotel Call	694	Electric Stroke	697	Electric Stroke	697
Snell Extra	4, 8, 9	House	699	Electric Stroke	697	Electric Stroke	697
Snell Special	6	Jingle	711	Electric Stroke	697	Electric Stroke	697
Solid Center	5, 8, 9	Lodge	693	Electric Stroke	697	Electric Stroke	697
Star	7, 8, 9	Lodge	693	Electric Stroke	697	Electric Stroke	697
Augers, Air	14	Milkmen's	692	Electric Stroke	697	Electric Stroke	697
Boring Machine	21	School, Call	694	Electric Stroke	697	Electric Stroke	697
Cuban Ring	24	Hand	692	Electric Stroke	697	Electric Stroke	697
Derrick	26	Sheep	701	Electric Stroke	697	Electric Stroke	697
Gas Fitters'	24	Ship	711	Electric Stroke	697	Electric Stroke	697
Ice	23	Sleigh	691	Electric Stroke	697	Electric Stroke	697
Millwright	25	Sportsmen's	702	Electric Stroke	697	Electric Stroke	697
Nut, Carpenters'	22	Tea	693	Electric Stroke	697	Electric Stroke	697
Pneumatic	14	Team	698 to 701	Electric Stroke	697	Electric Stroke	697
Rafting	26	Turkey	702	Electric Stroke	697	Electric Stroke	697
Ring	23 to 25	Belt Hooks, Hick's Pointed	563	Electric Stroke	697	Electric Stroke	697
Scotch Eye	23	Sewing Machine	563	Electric Stroke	697	Electric Stroke	697
Ship	11, 12, 13, 16	Bench Hooks, Carpenters'	204	Electric Stroke	697	Electric Stroke	697
Treenail	23	Screws, Iron	257	Electric Stroke	697	Electric Stroke	697
Automatic Swivel Vises	241	Stops	204	Electric Stroke	697	Electric Stroke	697
Automobile Brake Lining Shears	204	Tool Columns	248	Electric Stroke	697	Electric Stroke	697
Oilers	393	Vises, Rock Island	243 to 248	Electric Stroke	697	Electric Stroke	697
Spades	367	BEVIN BROS. MFG. CO.	691 to 716	Electric Stroke	697	Electric Stroke	697
Autovises, Combination	241	Bilge Pumps, Motor Boat	711	Electric Stroke	697	Electric Stroke	697
Awls, Scratch	63	Binnacle and Fog Signal Bells,	705 to 708	Electric Stroke	697	Electric Stroke	697
		Bit and Auger Head Types	2	Electric Stroke	697	Electric Stroke	697
		Terms	1	Electric Stroke	697	Electric Stroke	697
		Bits, Auger	4 to 9	Electric Stroke	697	Electric Stroke	697
		in Boxes	4 to 7	Electric Stroke	697	Electric Stroke	697
		Display Sets	8, 9	Electric Stroke	697	Electric Stroke	697

B

Ballast Forks	365
Banana Knives	440
Band Saws for Metal	216

C

Cab Bells	702
Cabinet Chisels	54, 55
Calf Weaners	805
Call Bells	694 to 697
Electric Stroke	697

JOHN H. GRAHAM & CO. DIRECT REPRESENTATIVES

	PAGE		PAGE		PAGE
Can and Bottle Openers, "Home".....	830	Clippers, Barbers'	401, 402	Dirt Tampers	255
Openers, "Delmonico".....	829	Dog	403	Dog Clippers	403
"Home"	830	Fetlock	403	Door Bells, Alarm	704
"Peerless"	829	Grape	203	Push Button Style.....	712
Canvas Roll Auger Bit Sets.....	9	Horse, Coates	404	Rotary Style	712, 713
Caps, Vise Jaw	248	Electric	402	Pulls.....	552
Car Bits	10	Sheep, Electric	402	Double End Screw Driver Bits.....	31
Ship Auger	15, 16	Toilet	401, 402	Dowel Bits	28
Cards, African	206	Clothes Line Reels	252	Drawer Pulls	552
Cotton	206	Lines, Cotton	811	Drawers, Money	803, 804
Curry	206	CLYDE CUTLERY CO.....	417 to 452	Drawing Knives	66
Horse	206	Coal Forks	366	Dressers, Emery Wheel.....	258, 278
Jim Crow	206	Scoop Forks	366	Drills, Blacksmiths' Hand	262
Mixing	206	Coat and Hat Hooks.....	551	Drivers, Screw, Torrington	182
Tow	206	Racks, Folding	805	Driving Mauls	258
Wool	206	COATES CLIPPER MFG. CO.	401 to 404	Drop Hangers, Shafting	249
Carpenters' Clamp Attachment.....	258	COES WRENCH CO.....	125 to 127	Dumbwaiters and Elevators..	731 to 736
Nut Augers	22	Coke Forks	365		
Slicks	61	Collars, Shafting	249	E	
Carriage Bells, for Foot Pressure.....	709	Columbia Box Auger Bit Sets.....	9	Economy Trowels	716
Cars, Dumbwaiter and Elevator.....	735	Columns, for Bench Tools.....	248	Edgers, Cement	254, 256
Carvers, Household	423 to 425	Combination Anvil and Vise.....	246	Electric Clippers, Horse and Sheep.....	402
Cases, Button, for Door Bells.....	714	Anvil, Vise and Drill.....	246	Dumbwaiters	736
Casters, Boss	798	Autovises	241	Sad Irons	271
Box	796 to 799	Bit Set	9	Stroke Call Bells.....	697
Furniture, Phoenix 795, 798, 799	799	Cement Tools	256	Door Bells.....	712, 713
Tucker's	808	Forge, Anvil, Vise,		Tailors' Irons	272
Martin's	795, 796, 797	Drill, Etc.....	257	Water Heater	272
Plate, Phoenix	795 to 799	Pipe Vise and Anvil.....	241	Electricians' Bits	7, 29
Tucker's	808	Pipe Vises	245	Gimlets	29
Stem, Phoenix	795, 798, 799	Sets, Chisels, Etc.....	70A	Elevators and Dumbwaiters ..	731 to 736
Tucker's	808	Compressors, Air	264, 265	Emery Wheel Dressers	258, 278
Stengel	799	Continuous Ring Door Bells.....	712	Engine Bells	711
Stove	258	Cooks' Knives, French.....	426	Engraving Tools	63
Truck	796 to 799	COOPER HOSE MENDER CO.....	811	Expansive Bits, Clark.....	3
Tucker's	808	Cooper Hose Menders.....	811	Eye Bolts, Wrought Iron.....	565, 566
Cattle Leaders	205	Coping Saw Blades.....	214	Eyes, Screw, Wire.....	553, 554
Ceiling Hooks	552	Saws	215		
Cellar Box Cotters	561	Copper Bull Rings.....	205	F	
Cement Tools	254 to 256	Cord, Bell, Braided	811	Factory Bells	711
Center Bits	28	Sash, Braided	811	Family Cleavers	438, 439
Punches, Torrington	182	Corn Hooks	362	Fetlock Clippers	403
Champion Tool Grinders	276	Knives	363	File Cleaners	206
Charcoal Irons	252	Shellers	260	Finishes for Door Bell Turns, Plates	
Chicken Killing Knives	441	Corner Chisels	62	and Button Cases.....	715
Chime Sleigh Bells	691	Tools, Cement	255	Fire Engine Bells	710
Chip Knives	442	Cornice Hooks and Eyes.....	561	Proof Boxes	263
Chisel Handles	64, 65	Cotters, Cellar Box	561	Firmer Chisels.....	53, 54, 59
Sets, in Boxes and Rolls,		Spring.....	559 to 561	Chisels, in Canvas Rolls.....	69
67 to 70A	67 to 70A	Cotton Braided Sash Cord.....	811	Chisels, in Display Boxes.....	67, 68
Chisels, Socket Butt	56	Cards	206	Gauges	60
Cabinet	54, 55	Clothes Lines	811	Fish Knives	444
Corner	62	Sampling Knives	445	Flat Boxes, Shafting	249
Deck	61	Seed Scoop Forks.....	365	Countersinks	30
Firmer	53, 54	Countersink Bits	30	Flexible Hack Saw Blades.....	211, 212
Socket Firmer, in Canvas		Gimlet Bits	27	Shafting	404
Rolls	69	Countersinks, Snell	17, 30	Floor Scrapers, "Rimco".....	262
Socket Firmer, in Display		Cow Bells	700, 701	Fog Signal & Binnacle Bells.....	705 to 708
Boxes	67, 68	Crank Handle Ice Augers.....	23	Folding Coat and Hat Racks.....	805
Socket Framing	58	Cranks, Bell	708	Drawing Knives	66
Pocket	55	Cuban Ring Augers.....	24	Foot Gongs, for Cars, Wagons,	
Pocket, in Display	70	Cup Hooks, Brass Wire.....	562	Trucks, Etc.....	709
Box	70	Curb Gutter Tools, Cement.....	255	Power Attachments for Tool	
Pocket, in Rolls.....	70	Curbing Edgers, Cement	254	Grinders	277
Tang Butt	57	Curry Cards	206	Power Grinders	253
Firmer	59	Cutters, Kraut	807	Forge, Anvil, Vise, Drill, Etc., Com-	
Turning	62	Slaw	805	bination	257
Cigar Makers' Knives	441	Vegetable	805	Forks, Ballast	365
Cimeter Steak Knives.....	430, 431	D		Coal	366
Clamp Attachment, Carpenters'	258	D & G DIAL & ENAMELING CO.....	812	Coal Scoop	366
Clamps, Saw	247	Daisy Call Bells.....	694 to 697	Coke	365
Clark Expansive Bits	3	Deck Chisels	61	Cotton Seed Scoop.....	365
Cleaners, File	206	Scrapers	364	Kitchen	437
Pavement	364	"Delmonico" Can Openers.....	829	Manure	366
Sidewalk	364	Derrick Augers	26	Mill	366
Cleavers, Family	438, 439	Dewey Stock Waterers.....	261	Stone	365
Clipper Parts for Coates Clippers.....	403			Street	366

JOHN H. GRAHAM & CO. DIRECT REPRESENTATIVES

	PAGE
Frames, Hack Saw	214
Framing Chisels	58
French Cooks' Knives.....	426
Fruit Presses	260
Slicers	806
Furnaces, Soldering, for Gas Con- nections	265
Furniture Casters, Phenix 795, 798, 799 Tucker's	808
Polish	393

G

Garage Air Compressors	264
Garden Plows, Leader	394
Trowels	716
Garment Hangers	564
Gas Fitters' Augers	24
Irons	252
Gate Hooks and Eyes.....	558
Geese, Tailors'	251
Gimlet Bits	27, 29
Bell Hangers'	29
Countersink	27
Electricians'	29
Gimlets, Bell Hangers'	29
Electricians'	29
Wood Handle	30
Glaziers' Knives	443
Glowing Radium Guides.....	812
Gong Bell Pulls	708
Bells, House	704
Locomotive	703
Trip	703
Repairs	704
Gongs, Foot, for Cars, Wagons, Trucks, Etc.	709
Gongs only, for Trip Gongs.....	704
Gouges, Firmer	60
Millwright	61
Turning	62
Grain Mills	255
Grape Clippers	203
Fruit Knives	437
Hooks	440
Knives	440
Shears	452
Grass Hooks	361
G. W. GRIFFIN CO.....	211 to 217
Grinders, Foot Power.....	253
Sickle, American	276
Rock Island	253
Tool, American	275 to 279
Rock Island	253
Grist Mills	259
Groovers, Cement	254
Guides, Light, Radium	812
Gutter Tools, Cement	255

H

Hack Saw Blades.....	211 to 213
Frames	214
Saws	217
Ham Slicers	425, 426
Hammock Hooks	565
Hand Bells	692
School	692
Swiss	692
Drills, Blacksmiths'	262
Elevators	732, 733
Handles, Chisel	64, 65
Sad Iron	251
Slick	65
Handy Oilers	393
Hangers, Drop, Shafting	249
Garment	564

	PAGE
Hangers, Shafting	249
Trouser	564
Hat and Coat Hooks.....	551
Racks	805
Hatter's Jacks	206
Hay Knives	363
Head Types of Bits and Augers.....	2
Heater, Water, Electric.....	272
Heath Pattern Hay Knives.....	363
Hick's Pointed Belt Hooks.....	563
Hitching Rings, Wrought Iron.....	564
Hoes, Mortar	367
Street	367
Holes, Well, Sizes for Dumbwaiters and Elevators	736
Hollow Rivet Riveters	262
"Home" Bottle and Can Openers..	830
Hooks and Eyes, Cornice	561
Gate	558
Belt, Hick's Pointed.....	563
Sewing Machine	563
Bench, Carpenters'	204
Ceiling	552
Coat and Hat.....	551
Corn	362
Cup, Brass Wire.....	562
Grape	440
Grass	361
Hammock	565
Hat and Coat.....	551
Screw, Wire,	555 to 557, 562
Wrought	566
Shoulder, Brass Wire.....	562
Horse Cards	206
Clippers, Coates	404
Electric	402
Hose Carriage Bells	710, 711
Menders, Cooper	811
Hospital Elevators	734
Hotel Call Bells.....	694
House Bells	699, 704
Household Carvers	423 to 425
Slicers	423 to 425
Humphrey Dumbwaiters and Eleva- tors	733, 734
Hunting Knives	442
Huntington Emery Wheel Dressers..	258

I

Ice Augers	23
Chisels	364
"Ideal Heat" Electric Irons.....	271, 272
Electric Water Heater	272
Immersion Heaters, Electric.....	272
Indentation Rollers	255
Invalid Elevators	734
Iron Bench Screws	257
Irons, Charcoal	252
Gas	252
Sad	250 to 252
Sad, Electric	271
Tailors'	251
Tailors', Electric	272

J

Jack Screws, Ratchet	258
Jacks, Hatters'	206
Jacobson Air Compressors.....	264
E. JENCKES MFG. CO.....	551 to 566
Jewelers' Saws	217
Jim Crow Cards.....	206
Jingle Bells	711
Jointers, Cement	254, 256

K

	PAGE
Key Model Wrenches.....	127
Kitchen Forks	437
Knives.....	432 to 436
Spatulas	437
Knife and Fork Trays.....	805
Handle Wrenches	126
Knives, Banana	440
Beet Topping.....	447 to 449
Boning	429, 430
Bread	426, 427
Brisket	431
Broom Corn	440
Budding	442
Butcher, 417 to 422, 427 to 431 Chicken Killing	441
Chip	442
Cigar Makers'	441
Corn	363
Cotton Sampling	445
Drawing	66
Fish	444
French Cook's	426
Glaziers'	443
Grape	440
Grape Fruit	437
Hay	363
Hunting	442
Kitchen.....	432 to 436
Manual Training School.....	442
Mincing	830
Oyster	444, 445
Paper Hangers'	441
Putty	443
Ribbing	431
Sailors'	442
Scraping	444
Shoe	442
Skinning	428, 429
Splitting	431
Steak.....	422, 430, 431
Sticking	427
Table	422
Tobacco	446, 447
Kraut Cutters	807

L

Lawn Mowers.....	741 to 744
Sprays	263
Sprinklers	263
Leader Garden Plows.....	394
LEADER PLOW COMPANY.....	394
Leaders, Cattle	205
Liberty Tool Grinders.....	277
Lifts, Invalid and Hospital.....	734
Window Screen	552
Light Guides, Radium.....	812
Lightning Pattern Hay Knives.....	363
Line Reels, Clothes	252
Lines, Clothes, Cotton.....	811
Locomotive Gong Bells.....	703
Lodge Bells	693
LOETSCHER-RYAN MFG. CO. 271, 272	
Long Ring Augers	24, 25
Lubricating Oil.....	393

M

Machine Bits	17, 18, 19
Countersinks	17
Machines, Boring	20
Machinists' Vises	241, 242
MALLISON BRAIDED CORD CO. 811	
Manual Training School Knives.....	442
Manure Forks	366
"Many-Use" Oil.....	393

JOHN H. GRAHAM & CO. DIRECT REPRESENTATIVES

	PAGE
MANY-USE OIL CO.....	393
Martin's Casters	795, 796, 797
Mauls, Post	258
Meat Slicers	805
Menders, Hose, Cooper.....	811
Metal Punches	31
Milk Testers	261
Milkmen's Bells	692
Mill Forks	366
Mills, Grain	259
Grist	259
Millwright Augers	25
Gouges	61
Mincing Knives	830
Mine Trip Gongs.....	703
Mixers, Mortar	367
Mixing Cards	206
Money Drawers	803, 804
Monkey Wrenches, Coes.....	125 to 127
Mortar Hoes	367
Mixers	367
Motor Boat Bilge Pumps	711
Mowers, Lawn	741 to 744

N

Nail Sets, Torrington	181
"National" Braided Cotton Sash Cord	811
National Dumbwaiters	731
New York Safety Dumbwaiters	731
Newark Dumbwaiters	731
Nichols' Patent Door Bells and Gongs	704
Nut Augers, Carpenters'	22

O

Oil, "Many-Use"	393
Oilers, Automobile	393
Handy	393
Typewriter	393
Openers, Bottle and Can.....	830
Can	829, 830
Oval Slide Vises.....	244
Oyster Knives	444, 445

P

Paper Hangers' Knives	441
Paragon Dumbwaiters and Eleva- tors	732
Parting Tools	63
Parts, Boring Machines	20
Coates Clippers	403
Pavement Cleaners	364
"Peerless" Can Openers	829
Pendants, Glowing Radium.....	812
PHOENIX CASTER CO.....	795 to 799
Pins, Glowing Radium	812
Pipe Vise and Anvil, Combination.....	241
Vises	241, 245
Vises, Combination	245
Plastering Trowels	716
Plate Casters, Phoenix	795 to 799
Tucker's	808
Plates and Turns for Door Bells.....	715
Plows, Garden, Leader	394
Plug Bits	28
Pneumatic Augers	14
Pocket Chisels	55
in Display Box.....	70
in Rolls	70
Pointers, Glowing Radium.....	812
Pointing Trowels	716
Polish, Furniture	393
Positive Saw Sets, Taintor.....	128

	PAGE
Post Bearings, Shafting	249
Mauls	258
Potts Pattern Sad Irons.....	250, 251
Power Grinders for Tools	279
Hack Saw Blades.....	212, 213
Machine Bits	17, 18, 19
Presses, Fruit	260
Prick Punches, Torrington.....	182
Pruners, Tree, Clyde	452
Seymour Smith.....	203
Pruning Shears, Clyde	449 to 451
Seymour Smith	201 to 203
Pulls, Bell	708
Door	552
Drawer	552
Pumps, Bilge, Motor Boat.....	711
Punches, Center, Torrington	182
Prick, Torrington	182
Roofing	31
Round	31
Push Button Cases for Door Bells.....	714
Door Bells.....	712
Putty Knives	443

Q

Quick Acting Vises	244
--------------------------	-----

R

Racks, Coat and Hat.....	805
Radium Light Guides.....	812
Radius Tools, Cement.....	255
Rafting Augers	26
Rakes, Asphalt	367
Road	367
Tar	367
Ratchet Jack Screws	258
Reels, Clothes Line	252
Repair Parts, Boring Machines	20
Gongs	704
Ribbing Knives	431
Rice Patent Boring Machines.....	20
Ring Augers	23, 24, 25
Rings, Bull	205
Hitching, Wrought Iron.....	564
Riveters for Hollow Rivets.....	262
Road Rakes	367
Roast Beef Slicers.....	425
ROCK ISLAND MFG. CO.	241 to 265
Rollers, Indentation	255
Towel	805
Rolls of Auger Bits.....	9
Roofing Punches	31
Rose Countersinks	30
Shears	202
Rotary Movement Door Bells.....	712, 713
Round Punches	31

S

Sad Iron Handles	251
Stands	251
Irons.....	250 to 252
Electric	271
Sailors' Knives	442
Sash Cord, Braided	811
Sausage Stuffers	260
Saw Clamps	247
Sets, Taintor Positive.....	128
Vises	247
Saws, Band, for Metal.....	216
Bracket	216
Coping	215
Hack	217
Jewelers'	217

	PAGE
SCHOFIELD MANUFACTURING CO.....	829, 830
School Bells, Call	694
Hand	692
Scimeter Steak Knives.....	430, 431
Scoop Forks, Coal	366
Cotton Seed.....	365
Scotch Eye Augers	23
Scrapers, Deck	364
Floor, "Rimco"	262
Scraping Knives	444
Scratch Awls	63
Screen Lifts, Window	552
Screw Driver Bits, Snell	31
Screw Drivers, Torrington	182
Screw Eyes, Wire	553, 554
Hooks, Wire	555 to 557, 562
Wrought	566
Screws, Bench, Iron	257
Jack, Ratchet	258
Scribers	63
Semi-Steel Anvils	262
Mauls	258
Sets, Auger Bits.....	4 to 9
Boring Machine Augers.....	21
Car Bits	10
Chisels, in Boxes and Rolls, 67 to 70A	9
Combination Bits	70A
Combination, Chisels, etc.....	181
Nail, Torrington	128
Saw, Taintor Positive.....	14
Ship Auger Bits.....	7
Standard Lists Auger Bits.....	563
Sewing Machine Belt Hooks.....	201 to 205
SEYMOUR SMITH & SON.....	249
Shafting Bearings	249
Boxes	249
Collars	249
Flexible	249
Hangers	204
Shaves, Spoke, Seymour Smith	204
Shears, Brake Lining	204
Grape, Clyde	452
Seymour Smith.....	203
Pruning, Clyde.....	449 to 451
Seymour Smith, 201 to 203	202
Rose	701
Sheep Bells	402
Clippers, Electric	260
Shellers, Corn	14, 16
Ship Auger Bits	21
Boring Machine Augers.....	15, 16
Car Bits	17
Machine Bits	11, 12, 13, 16
Augers.....	711
Bells	442
Shoe Knives	24, 25
Short Ring Augers.....	562
Shoulder Hooks, Brass Wire.....	276
Sickle Grinders, American	253
Rock Island.....	364
Sidewalk Cleaners	734
Elevators	428, 429
Skinning Knives.....	806
Slaw Cutters	691
Sleigh Bells	805
Slicers, Bread	806
Fruit	425, 426
Ham	423 to 425
Household.....	805
Meat	425
Roast Beef	806
Vegetable	65
Slick Handles	61
Slicks, Socket, Carpenters'.....	30
Snail Countersinks	30

SNELL MANUFACTURING COMPANY

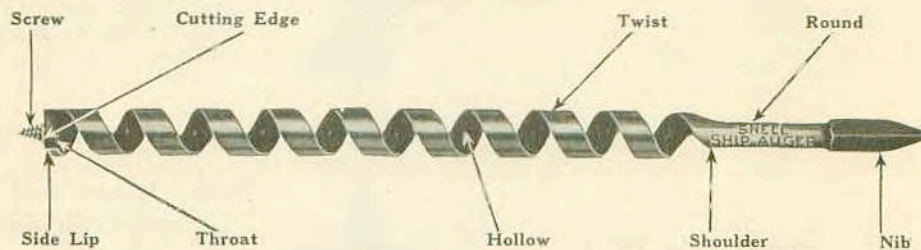
Manufacturers of

Augers and Bits, Ship Augers, Boring Machines,
Carpenters' Tools, Etc.

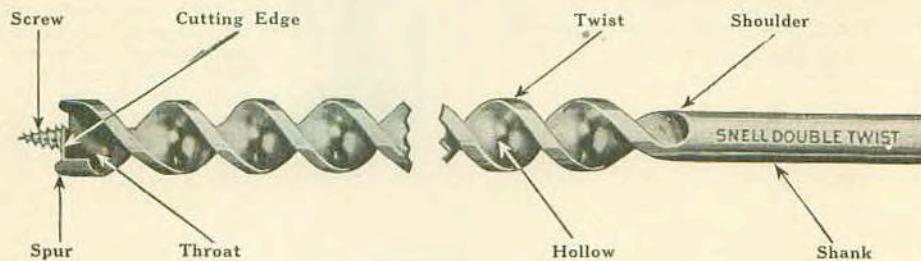
Established 1790

EXPLANATION OF BIT AND AUGER TERMS

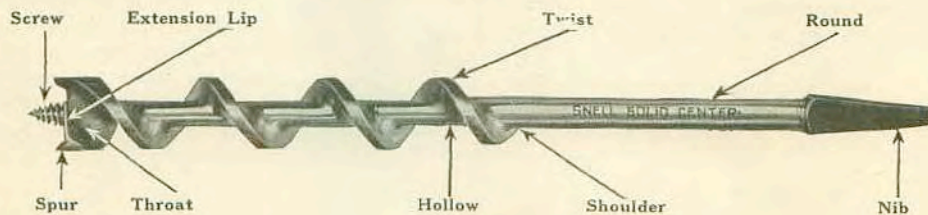
Ship Auger with Screw



Double Twist Machine Bit



Solid Center Auger Bit



The **Spur** is a sharp projection, which extends down from the cutting edge on some types of bits; its function is to outline the hole in advance of the cutting edge, preparing the chip so that it can be lifted by the cutting edge.

The **Side Lip** frees the outer edge, while the cutting edge cuts and lifts the chip, leaving the sides of hole perfectly smooth.

On flat head type of bits, the side lip and cutting edge act in unison to cut and lift the chip.

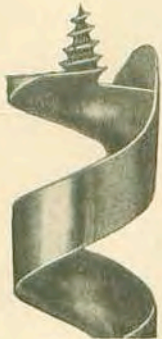
TYPES OF BIT AND AUGER HEADS

As the formation of head has much to do with adaptability for different kinds of boring, the following descriptions of the different heads should be of service in determining the style best suited for the various uses.

**Double Cutter, Double Twist**

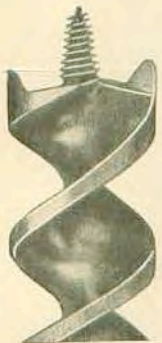
For general boring in all kinds of wood; bores easily, feeds rapidly, clears readily and cuts smoothly.

Has two cutting edges with double spurs and side lips; double thread screw; the best bit for carpenter and cabinet maker.

**Star, Single Twist**

Unequaled for rapid work and boring with the grain; cuts clean and frees chips easily; has single spur, single cutting edge and single thread screw.

For difficult boring in wet, green, very hard or knotty wood.

**Extension Lip, Double Twist**

Bores easily and cuts smooth hole; is adapted for general use and for those who desire particularly smooth, accurate boring as in furniture and cabinet work.

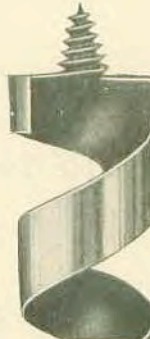
Has two cutting edges, extension lips and double thread screw.

**Solid Center, Extension Lip**

Combines the desirable qualities of strength, free, easy cutting and good chip clearance.

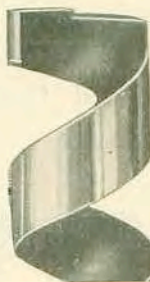
Has two cutting edges with spurs of the extension lip type; pitch of screw and size of spurs properly proportioned so that the bit can do smooth, accurate boring.

3/16 to 10/16 bits have double thread screws, larger sizes have single thread screws; recommended for electrical workers.

**Ship Auger and Bit with Screw, Single Twist**

Designed primarily for ship, car, trestle and heavy construction work and for boring to greater depths; recommended for strength, rigidity and free clearance.

Made with single cutting edge, one side lip and single thread screw. This permits easy cutting and also allows a good body of metal for sharpening and wear; best for use in pneumatic and electric boring machines.

**Ship Auger and Bit Without Screw, Single Twist**

Used largely in deep boring and where it is necessary that hole be perfectly straight; being without point or screw, have little or no tendency to drift with or follow the grain of the wood; unequaled for wet, pitchy woods; also used largely in power boring machines.

Rapidity of Boring

This depends upon pitch of screw and is measured by the number of turns required to bore through one inch of wood; every snell bit and auger is fitted with a pitch of screw that more than a century of experience has taught us is the best type of tool; illustrations above show both single and double thread screws; the single thread for rapid, positive work or when there is a tendency to fill up threads; the double thread for accurate and particularly fine work, as in furniture and cabinet making.

SNELL CLARK EXPANSIVE BITS

These expansive bits are made from special bit steel, the edged portions being carefully tempered and finished, while the screws are milled.

The tools throughout are designed to meet the demand for the highest grade expansive bits and to reflect credit on the brand "Snell," established in 1790, and each year meaning more to the mechanic.



Small Size

With two cutters; one boring from 1/2 to 7/8 inch, and the other from 7/8 to 1 1/2 inches.

No. 1	Small size; weight per dozen, 3 lbs.....	Per Dozen \$18.00
--------------	--	------------------------------------

One dozen in a box

Large Size

With two cutters; one boring from 7/8 to 1 3/4 inches, and the other from 1 3/4 to 3 inches.

No. 2	Large size; weight per dozen, 6 lbs.....	Per Dozen \$26.00
--------------	--	------------------------------------

One in a carton, six cartons in a box

EXTRA CUTTERS



No. 2



No. 4

		Per Dozen
No. 1	Boring from 1/2 to 7/8 inches; weight per dozen, 1 ounce	\$3.00
No. 2	Boring from 7/8 to 1 1/2 inches; weight per dozen, 2 ounces	3.75
No. 3	Boring from 7/8 to 1 3/4 inches; weight per dozen, 12 ounces	5.25
No. 4	Boring from 1 3/4 to 3 inches; weight per dozen, 1 lb.	6.00
No. 5	Boring from 3 to 4 inches; weight per dozen, 1 1/4 lbs.	9.00
No. 6	Boring from 4 to 5 inches; weight per dozen, 1 1/2 lbs.	12.00

EXTRA CAPS

		Per Dozen
	Small caps for No. 1 expansive bits; weight per dozen, 1 ounce	\$1.44
	Large caps for No. 2 expansive bits; weight per dozen, 9 ounces	1.80

EXTRA SCREWS

		Per Dozen
	Small size screws for No. 1 expansive bits; weight per dozen, 1 ounce	\$0.60
	Large size screws for No. 2 expansive bits; weight per dozen, 4 ounces .....	.70

SNELL EXTRA AUGER BITS
Double Cutter, Double Twist



No. 200

Forged from crucible steel; full polished, except nib. For general boring in all kinds of wood; bores easily, feeds rapidly, clears readily and cuts smoothly; has two cutting edges with double spurs and side lips; double thread screw; the best bit for carpenter and cabinet maker.

Size Inches, in 16ths.	3	4	5	6	7	8	9	10	11	12
Per Dozen	\$6.00	5.00	5.00	5.00	5.00	5.00	6.00	6.00	7.00	7.00
Length Over All, Inches	7½	7½	7¾	7¾	8	8½	8¾	8¾	8½	8¾
Weight Per Dozen, Lbs.	¾	1	1¼	1½	1¾	2	2¼	2½	2¾	3
Dozen in a Box.....	½	½	½	½	½	½	½	½	½	½

Size Inches, in 16ths.	13	14	15	16	17	18	20	22	24
Per Dozen	\$8.25	8.25	9.50	9.50	12.00	12.00	14.00	16.00	18.00
Length Over All, Inches	8¾	8¾	9	9	9½	9¼	9½	9½	9½
Weight Per Dozen, Lbs.	¾	¾	4¼	4½	4¾	5½	6	6½	8
Dozen in a Box.....	½	½	½	½	½	½	½	½	½

Sets in Paper Boxes

Set No.	Quarters	Number of Bits Per Set	Weight Per Set	Per Set
200 A	11¼	1 each, 4, 5, 6, 8, 10 and 12-16ths.....	1 lb.	\$3.00
200 B	14	1 each, 4, 6, 8, 10, 12 and 16-16ths.....	1¼ lbs.	3.35
200 C	18	1 each, 4, 5, 6, 7, 8, 9, 10, 11 and 12-16ths.....	1¼ lbs.	4.50
200 D	18¾	1 each, 4, 5, 6, 8, 10, 12, 14 and 16-16ths.....	1½ lbs.	4.50
200 E	21	2 each, 4 and 8-16ths and 1 each, 5, 6, 7, 9, 10, 11 and 12-16ths.....	2 lbs.	5.40
200 F	24	2 each, 6, 8 and 10-16ths and 1 each, 4, 5, 7, 9, 11 and 12-16ths.....	2¼ lbs.	5.90
200 G	32½	1 each, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15 and 16-16ths.....	3 lbs.	7.50

SNELL EXTENSION LIP AUGER BITS
Double Twist



No. 300

Forged from crucible steel; full polished, except nib. Bores easily and cuts smooth hole; is adapted for general use and for those who desire particularly smooth, accurate boring as in furniture and cabinet work; has two cutting edges, extension lips and double thread screw.

Size Inches, in 16ths.	3	4	5	6	7	8	9	10	11	12
Per Dozen	\$6.00	5.00	5.00	5.00	5.00	5.00	6.00	6.00	7.00	7.00
Length Over All, Inches	7½	7½	7¾	7¾	8	8½	8¾	8¾	8½	8¾
Weight Per Dozen, Lbs.	¾	1	1¼	1½	1¾	2	2¼	2½	2¾	3
Dozen in a Box.....	½	½	½	½	½	½	½	½	½	½

Size Inches, in 16ths.	13	14	15	16	17	18	20	22	24
Per Dozen	\$8.25	8.25	9.50	9.50	12.00	12.00	14.00	16.00	18.00
Length Over All, Inches	8¾	8¾	9	9	9½	9¼	9½	9½	9½
Weight Per Dozen, Lbs.	¾	¾	4¼	4½	4¾	5½	6	6½	8
Dozen in a Box.....	½	½	½	½	½	½	½	½	½

Sets in Paper Boxes

Set No.	Quarters	Number of Bits Per Set	Weight Per Set	Per Set
300 A	11¼	1 each, 4, 5, 6, 8, 10 and 12-16ths.....	1 lb.	\$3.00
300 B	14	1 each, 4, 6, 8, 10, 12 and 16-16ths.....	1¼ lbs.	3.35
300 C	18	1 each, 4, 5, 6, 7, 8, 9, 10, 11 and 12-16ths.....	1¼ lbs.	4.50
300 D	18¾	1 each, 4, 5, 6, 8, 10, 12, 14 and 16-16ths.....	1½ lbs.	4.50
300 E	21	2 each, 4 and 8-16ths and 1 each, 5, 6, 7, 9, 10, 11 and 12-16ths.....	2 lbs.	5.40
300 F	24	2 each, 6, 8 and 10-16ths and 1 each, 4, 5, 7, 9, 11 and 12-16ths.....	2¼ lbs.	5.90
300 G	32½	1 each, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15 and 16-16ths.....	3 lbs.	7.50

SNELL SOLID CENTER AUGER BITS



No. 800

Forged from crucible steel; full polished, except nib. Superior to any other bit of this type; combines the desirable qualities of strength, free, easy cutting and good chip clearance; has two cutting edges with spurs of the extension lip type.

Size Inches, in 16ths.	3	4	5	6	7	8	9	10	11	12
Per Dozen	\$6.00	5.00	5.00	5.00	5.00	5.00	6.00	6.00	7.00	7.00
Length Over All, Inches	7½	7⅝	7¾	7⅞	8	8⅛	8¼	8⅜	8½	8⅝
Weight Per Dozen, Lbs.	¾	1	1¼	1½	1¾	2	2¼	2½	2¾	3
Dozen in a Box.....	½	½	½	½	½	½	½	½	½	½

Size Inches, in 16ths.	13	14	15	16	17	18	20	22	24
Per Dozen	\$8.25	8.25	9.50	9.50	12.00	12.00	14.00	16.00	18.00
Length Over All, Inches	8¾	8⅞	9	9	9⅛	9¼	9½	9½	9½
Weight Per Dozen, Lbs.	3¼	3¾	4¼	4½	4¾	5½	6	6½	8
Dozen in a Box.....	½	½	½	½	½	½	½	½	½

SETS IN PAPER BOXES

Set No.	Quarters	Number of Bits Per Set	Weight Per Set	Per Set
800 A	11¼	1 each, 4, 5, 6, 8, 10 and 12-16ths.....	1 lb.	\$3.00
800 B	14	1 each, 4, 6, 8, 10, 12 and 16-16ths.....	1¼ lb.	3.35
800 C	18	1 each, 4, 5, 6, 7, 8, 9, 10, 11 and 12-16ths.....	1¾ lbs.	4.50
800 D	18¾	1 each, 4, 5, 6, 8, 10, 12, 14 and 16-16ths.....	1½ lbs.	4.50
800 E	21	2 each, 4 and 8-16ths and 1 each, 5, 6, 7, 9, 10, 11 and 12-16ths.....	2 lbs.	5.40
800 F	24	2 each, 6, 8 and 10-16ths and 1 each, 4, 5, 7, 9, 11 and 12-16ths.....	2¼ lbs.	5.90
800 G	32½	1 each, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15 and 16-16 ths.....	3 lbs.	7.50

SNELL SOLID CENTER AUGER BITS

For Boring Hard Wood



No. 801

Forged from crucible steel; full polished, except nib. Similar to the No. 800, but made with flat head type; this construction results in fast, positive boring in hard wood, either with or against the grain.

Size Inches, in 16ths.	4	5	6	7	8	9	10	11	12
Per Dozen	\$5.00	5.00	5.00	5.00	5.00	6.00	6.00	7.00	7.00
Length Over All, Inches	7⅝	7¾	7⅞	8	8⅛	8¼	8⅜	8½	8⅝
Weight Per Dozen, Lbs.	1	1¼	1½	1¾	2	2¼	2½	2¾	3
Dozen in a Box.....	½	½	½	½	½	½	½	½	½

Size Inches, in 16ths.	13	14	15	16	17	18	20	22	24
Per Dozen	\$8.25	8.25	9.50	9.50	12.00	12.00	14.00	16.00	18.00
Length Over All, Inches	8¾	8⅞	9	9	9⅛	9¼	9½	9½	9½
Weight Per Dozen, Lbs.	3¼	3¾	4¼	4½	4¾	5½	6	6½	8
Dozen in a Box.....	½	½	½	½	½	½	½	½	½

SNELL SPECIAL PATTERN AUGER BITS

For Boring Hard Wood



No. 201

Forged from crucible steel; full polished, except head and nib. Made with special screw point to bore easily in lignum-vitae or other hard woods, also for end boring; similar to the English Mathieson Bit, and has an extensive export sale; flat cut type and easily sharpened.

Size Inches, in 16ths.	4	5	6	7	8	9	10	11	12
Per Dozen	\$5.00	5.00	5.00	5.00	5.00	6.00	6.00	7.00	7.00
Length Over All, Inches	7 ⁵ / ₈	7 ³ / ₄	7 ⁷ / ₈	8	8 ¹ / ₈	8 ¹ / ₄	8 ⁵ / ₈	8 ¹ / ₂	8 ⁵ / ₈
Weight Per Dozen, Lbs.	1	1 ¹ / ₄	1 ¹ / ₂	1 ³ / ₄	2	2 ¹ / ₄	2 ¹ / ₂	2 ³ / ₄	3
Dozen in a Box	¹ / ₂	¹ / ₂	¹ / ₂	¹ / ₂	¹ / ₂	¹ / ₂	¹ / ₂	¹ / ₂	¹ / ₂
Size Inches, in 16ths.	13	14	15	16	17	18	20	22	24
Per Dozen	\$8.25	8.25	9.50	9.50	12.00	12.00	14.00	16.00	18.00
Length Over All, Inches	8 ³ / ₄	8 ⁷ / ₈	9	9	9 ⁵ / ₈	9 ¹ / ₄	9 ¹ / ₂	9 ¹ / ₂	9 ¹ / ₂
Weight Per Dozen, Lbs.	3 ¹ / ₄	3 ³ / ₄	4 ¹ / ₄	4 ¹ / ₂	4 ³ / ₄	5 ¹ / ₂	6	6 ¹ / ₂	8
Dozen in a Box	¹ / ₂	¹ / ₂	¹ / ₂	¹ / ₂	¹ / ₂	¹ / ₂	¹ / ₂	¹ / ₂	¹ / ₂

SETS IN PAPER BOXES

Set No.	Quarters	Number of Bits Per Set	Weight Per Set	Per Set
201 A	11 ¹ / ₄	1 each, 4, 5, 6, 8, 10 and 12-16ths.....	1 lb.	\$3.00
201 B	14	1 each, 4, 6, 8, 10, 12 and 16-16ths.....	1 ¹ / ₄ lbs.	3.35
201 C	18	1 each, 4, 5, 6, 7, 8, 9, 10, 11 and 12-16ths.....	1 ¹ / ₄ lbs.	4.50
201 D	18 ³ / ₄	1 each, 4, 5, 6, 8, 10, 12, 14 and 16-16ths.....	1 ¹ / ₂ lbs.	4.50
201 E	21	2 each, 4 and 8-16ths and 1 each, 5, 6, 7, 9, 10, 11 and 12-16ths.....	2 lbs.	5.40
201 F	24	2 each, 6, 8 and 10-16ths and 1 each, 4, 5, 7, 9, 11 and 12-16ths.....	2 ¹ / ₄ lbs.	5.90
201 G	32 ¹ / ₂	1 each, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15, and 16-16ths.....	3 lbs.	7.50

BATES AUGER BITS



No. 100

A good quality cast steel auger bit, well known as a dependable wood-boring tool. Approximate length of twist, 4¹/₂ inches; approximate length over all, 8 inches.

Sizes in Millimeters..	5	6, 7, 8	9, 10	11	12, 13	14	15, 16	17	18, 19
Size Inches, in 16ths...	3	4, 5	6	7	8	9	10	11	12
Per Dozen	\$6.00	5.00	5.00	5.00	5.00	6.00	6.00	7.00	7.00
Weight Per Dozen, Lbs.	³ / ₄	1, 1 ¹ / ₄	1 ¹ / ₂	1 ³ / ₄	2	2 ¹ / ₄	2 ¹ / ₂	2 ³ / ₄	3
Dozen in a Box	¹ / ₂	¹ / ₂	¹ / ₂	¹ / ₂	¹ / ₂	¹ / ₂	¹ / ₂	¹ / ₂	¹ / ₂
Sizes in Millimeters..	20, 21	22	23, 24	25	26, 27	28	30, 31, 32	35	38
Size Inches, in 16ths...	13	14	15	16	17	18	20	22	24
Per Dozen	\$8.25	8.25	9.50	9.50	12.00	12.00	14.00	16.00	18.00
Weight Per Dozen, Lbs.	3 ¹ / ₄	3 ³ / ₄	4 ¹ / ₄	4 ¹ / ₂	4 ³ / ₄	5 ¹ / ₂	6	6 ¹ / ₂	8
Dozen in a Box	¹ / ₂	¹ / ₂	¹ / ₂	¹ / ₂	¹ / ₂	¹ / ₂	¹ / ₂	¹ / ₂	¹ / ₂

SNELL STAR AUGER BITS



No. 600

Forged from crucible steel, full polished.
Easy running single twist bit for general work and for boring in hard wood, unequaled for end boring; has one cutting edge and one spur.

The Best All-Around Bit We Produce.

Size Inches, in 16ths.....	4	5	6	7	8	9	10	11
Per Dozen	\$5.00	5.00	5.00	5.00	5.00	6.00	6.00	7.00
Length Over All, Inches.....	7 ⁵ / ₈	7 ³ / ₄	7 ⁷ / ₈	8	8 ¹ / ₈	8 ³ / ₄	8 ⁵ / ₈	8 ⁷ / ₈
Weight Per Dozen, Lbs.....	1	1 ¹ / ₄	1 ¹ / ₂	1 ³ / ₄	2 ¹ / ₄	2 ³ / ₄	3 ¹ / ₄	3 ³ / ₄
Dozen in a Box.....	¹ / ₂	¹ / ₂	¹ / ₂	¹ / ₂	¹ / ₂	¹ / ₂	¹ / ₂	¹ / ₂
Size Inches, in 16ths.....	12	13	14	15	16	18	20	
Per Dozen	\$7.00	8.25	8.25	9.50	9.50	12.00	14.00	
Length Over All, Inches.....	8 ⁵ / ₈	8 ³ / ₄	8 ⁷ / ₈	9	9	9 ¹ / ₄	9 ¹ / ₂	
Weight Per Dozen, Lbs.....	4 ¹ / ₂	4 ³ / ₄	5 ¹ / ₂	6	7 ¹ / ₂	9	10	
Dozen in a Box.....	¹ / ₂	¹ / ₂	¹ / ₂	¹ / ₂	¹ / ₂	¹ / ₂	¹ / ₂	

SETS IN PAPER BOXES.

Set No.	Quarters	Number of Bits Per Set	Weight Per Set	Per Set
600 A	11 ¹ / ₄	1 each, 4, 5, 6, 8, 10 and 12-16ths.....	1 ³ / ₄ lbs.	\$3.00
600 B	14	1 each, 4, 6, 8, 10, 12 and 16-16ths.....	1 ¹ / ₂ lbs.	3.35
600 C	18	1 each, 4, 5, 6, 7, 8, 9, 10, 11 and 12-16ths.....	1 ³ / ₄ lbs.	4.50
600 D	18 ³ / ₄	1 each, 4, 5, 6, 8, 10, 12, 14 and 16-16ths.....	2 lbs.	4.50
600 E	21	2 each, 4 and 8-16ths and 1 each, 5, 6, 7, 9, 10, 11 and 12-16ths.....	2 ¹ / ₄ lbs.	5.40
600 F	24	2 each, 6, 8 and 10-16ths and 1 each, 4, 5, 7, 9, 11 and 12-16ths.....	2 ³ / ₄ lbs.	5.90
600 G	32 ¹ / ₂	1 each, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15 and 16-16ths.....	3 ¹ / ₂ lbs.	7.50

STANDARD LISTS FOR AUGER BITS IN SETS

Quarters	Paper Boxes Per Set	Fancy Boxes and Rolls Per Set	Assortments Contain the Following Bits
32 ¹ / ₂	\$7.50	\$8.50	One each, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15 and 16-16ths
25 ¹ / ₂	6.00	7.00	One each, 4, 5, 6, 7, 8, 9, 10, 11, 12, 14 and 16-16ths
24	5.90	6.90	One each, 4, 5, 7, 9, 11 and 12, and two each, 6, 8 and 10-16ths
22 ¹ / ₂	5.80	6.80	One each, 5, 7, 9, 10, 11 and 12, and two each, 4, 6 and 8-16ths
21	5.40	6.40	One each, 5, 6, 7, 9, 10, 11 and 12, and two each, 4 and 8-16ths
20 ¹ / ₂	4.90	5.90	One each, 4, 5, 6, 7, 8, 10, 12, 14 and 16-16ths
18 ³ / ₄	4.50	5.50	One each, 4, 5, 6, 8, 10, 12, 14 and 16-16ths
18	4.50	5.50	One each, 4, 5, 6, 7, 8, 9, 10, 11 and 12-16ths
17 ¹ / ₂	4.00	4.75	One each, 4, 6, 8, 10, 12, 14 and 16-16ths
15 ¹ / ₄	3.75	4.50	One each, 4, 5, 6, 8, 10, 12 and 16-16ths
14	3.35	4.10	One each, 4, 6, 8, 10, 12 and 16-16ths.
11 ¹ / ₄	3.00	3.75	One each, 4, 5, 6, 8, 10 and 12-16ths

NOTE.—The above List Prices apply to all types of small auger bits, except ship auger bits.

SNELL STAR ELECTRICIANS' BITS



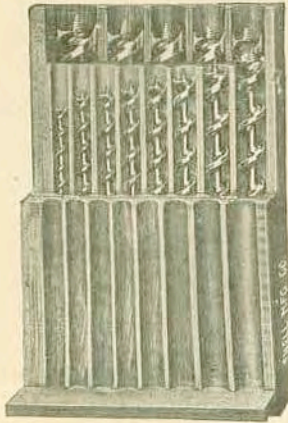
Nos. 654 and 655

Forged from crucible steel, full polished.
Has one cutting edge and one spur; long coarse screw.

Size	Description	Per Dozen
10-16ths	—6 Inch Twist, 12 Inch Shank; Length Over All, 18 Inches; Weight Per Dozen, 6 ⁵ / ₈ lbs.....	\$12.00
11-16ths	—6 Inch Twist, 12 Inch Shank; Length Over All, 18 Inches; Weight Per Dozen, 7 ⁵ / ₈ lbs.....	14.00
<i>Half dozen in a box</i>		

Size	Description	Per Dozen
10-16ths	—6 Inch Twist, 6 Inch Shank; Length Over All, 12 Inches; Weight Per Dozen, 4 ¹ / ₂ lbs.....	\$9.00
11-16ths	—6 Inch Twist, 6 Inch Shank; Length Over All, 12 Inches; Weight Per Dozen, 5 lbs.....	10.50
<i>Half dozen in a box</i>		

AUGER BIT SETS IN COLUMBIA BOXES



Set of 13 Bits

This style box is used for auger bits in sets as listed below; it can be stood on end or laid flat; made of hard wood, oiled finish, and displays the bits to the best advantage; it is more convenient than other bit boxes.

Stock Assortments

Are specified below, although special assortments will be made up if ordered in sufficient quantity.

SNELL EXTRA AUGER BITS

Set No.	Quarters	Number of Bits Per Set	Weight Per Set	Per Set
211 1/4	11 1/4	1 each, 4, 5, 6, 8, 10 and 12-16ths.....	2 1/2 lbs.	\$3.75
214	14	1 each, 4, 6, 8, 10, 12 and 16-16ths.....	3 lbs.	4.10
218	18	1 each, 4, 5, 6, 7, 8, 9, 10, 11 and 12-16ths	3 1/4 lbs.	5.50
218 3/4	18 3/4	1 each, 4, 5, 6, 8, 10, 12, 14 and 16-16ths	3 1/2 lbs.	5.50
232 1/2	32 1/2	1 each, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15 and 16-16ths.....	5 lbs.	8.50

SNELL EXTENSION LIP AUGER BITS

Set No.	Quarters	Number of Bits Per Set	Weight Per Set	Per Set
311 1/4	11 1/4	1 each, 4, 5, 6, 8, 10 and 12-16ths.....	2 1/2 lbs.	\$3.75
314	14	1 each, 4, 6, 8, 10, 12 and 16-16ths.....	3 lbs.	4.10
318	18	1 each, 4, 5, 6, 7, 8, 9, 10, 11 and 12-16ths	3 1/4 lbs.	5.50
318 3/4	18 3/4	1 each, 4, 5, 6, 8, 10, 12, 14 and 16-16ths	3 1/2 lbs.	5.50
332 1/2	32 1/2	1 each, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15 and 16-16ths.....	5 lbs.	8.50

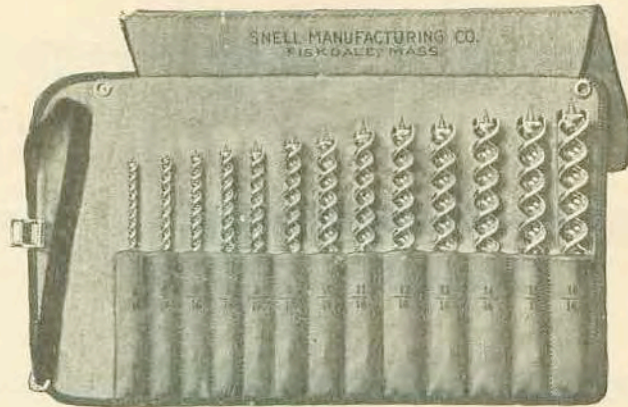
SNELL STAR AUGER BITS

Set No.	Quarters	Number of Bits Per Set	Weight Per Set	Per Set
611 1/4	11 1/4	1 each, 4, 5, 6, 8, 10 and 12-16ths.....	3 lbs.	\$3.75
614	14	1 each, 4, 6, 8, 10, 12 and 16-16ths.....	3 1/2 lbs.	4.10
618	18	1 each, 4, 5, 6, 7, 8, 9, 10, 11 and 12-16ths	3 3/4 lbs.	5.50
618 3/4	18 3/4	1 each, 4, 5, 6, 8, 10, 12, 14 and 16-16ths	4 lbs.	5.50
632 1/2	32 1/2	1 each, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15 and 16-16ths.....	6 lbs.	8.50

SNELL SOLID CENTER AUGER BITS

Set No.	Quarters	Number of Bits Per Set	Weight Per Set	Per Set
811 1/4	11 1/4	1 each, 4, 5, 6, 8, 10 and 12-16ths.....	2 1/2 lbs.	\$3.75
814	14	1 each, 4, 6, 8, 10, 12 and 16-16ths.....	3 lbs.	4.10
818	18	1 each, 4, 5, 6, 7, 8, 9, 10, 11 and 12-16ths	3 1/4 lbs.	5.50
818 3/4	18 3/4	1 each, 4, 5, 6, 8, 10, 12, 14 and 16-16ths	3 1/2 lbs.	5.50
832 1/2	32 1/2	1 each, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15 and 16-16ths.....	5 lbs.	8.50

SNELL AUGER BIT SETS IN CANVAS ROLLS

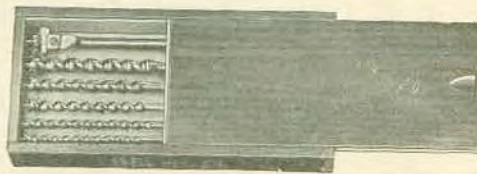


Made of heavy colored canvas with well-sewed, turned-in edges; lined with canton flannel and sewed to give a separate compartment for each bit, affording a simple and convenient means of protecting the bits from dampness and injury.

Set No.	Number of Bits Per Set	Weight Per Set	Per Set
232½ R	SNELL EXTRA BITS; 13 bits, one each, 4 to 16-16ths inclusive	3¾ lbs.	\$8.50
332½ R	SNELL EXTENSION LIP BITS; 13 bits, one each, 4 to 16-16ths, inclusive	3¾ lbs.	8.50
632½ R	STAR BITS; 13 bits, one each, 4 to 16-16ths, inclusive	4½ lbs.	8.50
832½ R	SOLID CENTER BITS; 13 bits, one each, 4 to 16-16ths, inclusive	3¾ lbs.	8.50
132½ R	BATES BITS; 13 bits, one each, 4 to 16-16ths, inclusive	3½ lbs.	8.50

NOTE.—Sets of 6, 8 and 9 bits in canvas rolls will be furnished in any of the above styles; numbers, sizes and list prices are as for sets on preceding page, except the letter R is added to the number.

SNELL COMBINATION BIT SET



No. 106

Containing one each, 4, 5, 6, 7 and 8/16ths Bates Auger Bits, and one Snell Clark Expansive Bit with two cutters, one boring from 8/16ths to 14/16ths and the other from 14/16ths to 24/16ths inch.

Set No.		Weight Per Set	Per Set
106	In a slide cover varnished wood box	1½ lbs.	\$8.00

BATES CAST STEEL AUGER BITS, IN FLAT BOXES

Set No.	Quarters	Number of Bits Per Set	Weight Per Set	Per Set
111¼ F	11¼	1 each, 4, 5, 6, 8, 10 and 12-16ths	1¾ lbs.	\$3.75
114 F	14	1 each, 4, 6, 8, 10, 12 and 16-16ths	2 lbs.	4.10
118¾ F	18¾	1 each, 4, 5, 6, 8, 10, 12, 14 and 16-16ths	2½ lbs.	5.50
132½ F	32½	1 each, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15 and 16-16ths	4 lbs.	8.50
Farmers				
11¼	11¼	1 each, 4, 5, 6, 8, 10 and 12-16ths	1¾ lbs.	3.75

SNELL CAR BITS



Snell Extra No. 206



Snell Extension Lip No. 306



Snell Star No. 606



Snell Solid Center No. 806

All the above are forged from crucible steel; full polished, except nib. Used by car builders because of their many excellent boring features and good chip clearance.

Price List—Nos. 206, 306, 606 and 806

Length of Twist, 12 Inches; Length Over All, 18 Inches

Size Inches, in 16ths.....	4	5	6	7	8	9	10	11	12
Per Dozen	\$11.25	11.25	11.25	11.25	11.25	12.50	13.75	15.00	16.25
Approx. Weight Per Doz., Lbs.	2¼	2¾	3½	3¾	4¾	5	5¾	5¾	6¾
Size Inches, in 16ths.....	13	14	15	16	17	18	20	22	24
Per Dozen	\$17.50	19.00	20.50	22.00	24.00	26.00	30.00	34.00	38.00
Approx. Weight Per Doz., Lbs.	7¾	8¾	9	9¾	9¾	10¾	12½	15¼	16

All the above, half dozen in a box

IN SETS, ASSORTED

Set of 21 Quarters, contains two bits each, 4 and 8-16ths, and one each, 5, 6, 7, 9, 10, 11 and 12-16ths; approximate weight per set, 4¾ lbs.....	Per Set \$11.00
Set of 24 Quarters, contains two bits each, 6, 8 and 10-16ths and one each, 4, 5, 7, 9, 11 and 12-16ths; approximate weight per set, 5 lbs.....	12.25
Set of 32½ Quarters, contains one bit each, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15 and 16-16ths; approximate weight per set, 6¾ lbs.....	16.25

JOHN H. GRAHAM & CO. DIRECT REPRESENTATIVES

SNELL IMPROVED SHIP AUGERS

Forged from crucible steel; lacquered hollow, polished edge. These augers have been standard with ship builders for nearly a century and are the best known and the most used by all ship, dock and heavy timber workers; have heavy, square nib for use with auger handles or for welding to extension stems or to single or double crank handles; No. 542 are preferred where very accurate boring is essential as in ship yards, as they do not drift off with the grain.



WITH SCREW, No. 541

Size Inches, in 8ths.....	2	2½, 3	3½, 4	4½, 5	5½, 6	6½, 7	7½, 8
Per Dozen	\$11.00	11.00	11.00	11.00	12.00	13.00	14.50
Length Twist, Inches.....	10	10	10	10	12	12	12
Total Length, Inches.....	14	14	14	14	16	16	16
Approx. Weight Per Doz., Lbs..	1¾	2	3½	6	8½	12	14½
Size Inches, in 8ths.....	8½, 9	9½, 10	10½, 11	11½, 12	12½, 13	13½, 14	
Per Dozen	\$16.00	18.00	20.00	23.00	27.00	32.00	
Length Twist, Inches.....	14	14	14	14	15	15	
Total Length, Inches.....	18	18	18	18	20	20	
Approx. Weight Per Doz., Lbs..	21	25	30	34	39	44	
Sizes Inches, in 8ths.....	14½, 15	15½, 16	16½, 17	17½, 18	18½, 19	19½, 20	
Per Dozen	\$38.00	45.00	57.00	72.00	86.00	101.00	
Length Twist, Inches.....	15	15	15	15	15	15	
Total Length, Inches.....	20	20	20	20	20	20	
Approx. Weight Per Doz., Lbs..	48	54	59	66	69	80	
Sizes Inches, in 8ths.....	20½, 21	21½, 22	22½, 23	23½, 24	24½, 25	25½, 26	
Per Dozen	\$115.00	130.00	144.00	158.00	173.00	187.00	
Length Twist, Inches.....	15	15	15	15	15	15	
Total Length, Inches.....	20	20	20	20	20	20	
Approx. Weight Per Doz., Lbs..	82	85	92	97	105	111	
Size Inches, in 8ths.....	26½, 27	27½, 28	28½, 29	29½, 30	30½, 31	31½, 32	
Per Dozen	\$201.00	216.00	231.00	245.00	260.00	274.00	
Length Twist, Inches.....	15	15	15	15	15	15	
Total Length, Inches.....	20	20	20	20	20	20	
Approx. Weight Per Doz., Lbs..	118	128	143	161	178	188	



WITHOUT SCREW, No. 542

Size Inches, in 8ths.....	2	2½, 3	3½, 4	4½, 5	5½, 6	6½, 7	7½, 8
Per Dozen	\$13.20	13.20	13.20	13.20	14.40	15.60	17.40
Length Twist, Inches.....	10	10	10	10	12	12	12
Total Length, Inches.....	14	14	14	14	16	16	16
Approx. Weight Per Doz., Lbs..	1¾	2	3½	6	8½	12	14½
Size Inches, in 8ths.....	8½, 9	9½, 10	10½, 11	11½, 12	12½, 13	13½, 14	
Per Dozen	\$19.20	21.60	24.00	27.60	32.40	38.40	
Length Twist, Inches.....	14	14	14	14	15	15	
Total Length, Inches.....	18	18	18	18	20	20	
Approx. Weight Per Doz., Lbs..	21	25	30	34	39	44	
Sizes Inches, in 8ths.....	14½, 15	15½, 16	16½, 17	17½, 18	18½, 19	19½, 20	
Per Dozen	\$45.60	54.00	68.40	86.40	103.20	121.20	
Length Twist, Inches.....	15	15	15	15	15	15	
Total Length, Inches.....	20	20	20	20	20	20	
Approx. Weight Per Doz., Lbs..	48	54	59	66	69	80	
Sizes Inches, in 8ths.....	20½, 21	21½, 22	22½, 23	23½, 24	24½, 25	25½, 26	
Per Dozen	\$138.00	156.00	172.80	189.60	207.60	224.40	
Length Twist, Inches.....	15	15	15	15	15	15	
Total Length, Inches.....	20	20	20	20	20	20	
Approx. Weight Per Doz., Lbs..	82	85	92	97	105	111	
Size Inches, in 8ths.....	26½, 27	27½, 28	28½, 29	29½, 30	30½, 31	31½, 32	
Per Dozen	\$241.20	259.20	277.20	294.00	312.00	328.80	
Length Twist, Inches.....	15	15	15	15	15	15	
Total Length, Inches.....	20	20	20	20	20	20	
Approx. Weight Per Doz., Lbs..	118	128	143	161	178	188	

2 to 8/8ths, half dozen in a box; 8½ to 16/8ths, quarter dozen in a box; larger sizes individually wrapped in heavy paper.

SNELL SHIP AUGERS WITH EXTRA LENGTH TWIST



WITH SCREW, No. 552

Length of Shank, 6 Inches; Prices with Screw

Sizes in 8ths of an Inch	Length of Twist, 18 In.	20 In.	22 In.	24 In.	30 In.	36 In.	Add for Each Additional 6-in. Twist
4 and Under	Per Dozen \$15.00	\$18.00	\$21.00	.....	.....	.....	.....
4½	Per Dozen 16.50	19.80	23.10	.....	.....	.....	.....
5	Per Dozen 18.00	21.30	24.60	\$27.90	.....	.....	.....
5½	Per Dozen 19.50	23.10	26.70	30.30	.....	.....	.....
6	Per Dozen 21.00	24.60	28.20	31.80	\$42.60	\$53.40	\$10.80
6½	Per Dozen 22.80	26.70	30.60	34.50	46.20	57.90	11.70
7	Per Dozen 24.60	28.50	32.40	36.30	48.00	59.70	11.70
7½	Per Dozen 26.40	30.60	34.80	39.00	51.60	64.20	12.60
8	Per Dozen 28.20	32.40	36.60	40.80	53.40	66.00	12.60
8½	Per Dozen 30.00	34.50	39.00	43.50	57.00	70.50	13.50
9	Per Dozen 31.80	36.30	40.80	45.30	58.88	72.30	13.50
9½	Per Dozen 33.60	38.40	43.20	48.00	62.40	76.80	14.40
10	Per Dozen 35.40	40.20	45.00	49.80	64.20	78.60	14.40
10½	Per Dozen 37.80	42.90	48.00	53.10	68.40	83.70	15.30
11	Per Dozen 40.20	45.30	50.40	55.50	70.80	86.10	15.30
11½	Per Dozen 42.60	48.00	53.40	58.80	75.00	91.20	16.20
12	Per Dozen 45.00	50.40	55.80	61.20	77.40	93.60	16.20
12½	Per Dozen 48.00	54.00	60.00	66.00	84.00	102.00	18.00
13	Per Dozen 51.00	57.00	63.00	69.00	87.00	105.00	18.00
13½	Per Dozen 54.00	60.60	67.20	73.80	93.60	113.40	19.80
14	Per Dozen 57.00	63.60	70.20	76.80	96.60	116.40	19.80
14½	Per Dozen 60.00	67.20	74.40	81.60	103.20	124.80	21.60
15	Per Dozen 63.00	70.20	77.40	84.60	106.20	127.80	21.60
15½	Per Dozen 66.00	73.80	81.60	89.40	112.80	136.20	23.40
16	Per Dozen 69.00	76.80	84.60	92.40	115.80	139.20	23.40
16½ and 17.	Per Dozen 84.00	92.40	100.80	109.20	134.40	159.60	25.20
17½	Per Dozen 93.00	102.30	111.60	120.90	148.80	176.70	27.90
18	Per Dozen 102.00	112.20	122.40	132.60	163.20	193.80	30.60

Augers of larger diameter than 18/8 inch, add \$9.00 per dozen to 18-inch twist list for each 1/16th inch extra, and if of longer twist than 18 inches, add 10 per cent. of the 18-in. twist list for each 2 inches of extra twist.

All ship augers with shanks longer than regular, but not exceeding 18 inches length of shank, add \$7.50 per dozen to list prices.

SNELL SHIP AUGERS WITH EXTRA LENGTH TWIST



WITHOUT SCREW, No. 553

For prices of No. 553, without screw, add 20 per cent to above lists.

NOTE—All the above are MADE TO ORDER ONLY.

JOHN H. GRAHAM & CO. DIRECT REPRESENTATIVES

SNELL SHIP AUGERS WITH RING

Forged from crucible steel; lacquered hollow, polished edge. The best ring auger of any type, made with forged rings; No. 545 is preferred where very accurate boring is essential; does not drift off with the grain.



WITH SCREW, No. 544

Size Inches, in 8ths.....	4	4½	5	5½	6	6½, 7	7½, 8
Per Dozen	\$15.10	15.10	15.10	16.20	16.20	17.30	18.95
Length Twist, Inches.....	10	12	12	12	12	12	12, 12
Length Shank, Inches.....	10	8	8	8	10	10	10, 12
Approx. Weight Per Doz., Lbs..	9¾	10	11	12¾	13	16	18
Size Inches, in 8ths.....	8½, 9	9½, 10	10½, 11	11½, 12	12½, 13	13½, 14	14½, 15
Per Dozen	\$20.60	22.80	25.00	28.30	32.70	38.20	44.80
Length Twist, Inches.....	14	14	14	14	15	15	15
Length Shank, Inches.....	12	12	12	12	12	12	12
Approx. Weight Per Doz., Lbs..	23	30	37	44	50	57	64
Size Inches, in 8ths.....	15½, 16	16½, 17	17½, 18	18½, 19	19½, 20	20½, 21	21½, 22
Per Dozen	\$52.50	62.70	79.20	94.60	111.10	126.50	143.00
Length Twist, Inches.....	15	15	15	15	15	15	15
Length Shank, Inches.....	12	12	12	12	12	12	12
Approx. Weight Per Doz., Lbs..	71	79	86	91	95	100	105
Size Inches, in 8ths.....	22½, 23	23½, 24	24½, 25	25½, 26	26½, 27	27½, 28	28½, 29
Per Dozen	\$158.40	173.80	189.75	205.70	221.65	237.60	253.55
Length Twist, Inches.....	15	15	15	15	15	15	15
Length Shank, Inches.....	12	12	12	12	12	12	12
Approx. Weight Per Doz., Lbs..	112	123	130	137	143	150	156
Size Inches, in 8ths.....	29½, 30	30½, 31	31½, 32	32½, 33	33½, 34	34½, 35	35½, 36
Per Dozen	\$269.50	285.10	300.65	316.25	331.85	347.45	363.00
Length Twist, Inches.....	15	15	15	15	15	15	15
Length Shank, Inches.....	12	12	12	12	12	12	12
Approx. Weight Per Doz., Lbs..	162	168	174	180	186	192	198

WITHOUT SCREW, No. 545

Size Inches, in 8ths.....	4	4½	5	5½	6	6½, 7	7½, 8
Per Dozen	\$18.12	18.12	18.12	19.44	19.44	20.76	22.74
Length Twist, Inches.....	10	12	12	12	12	12	12, 12
Length Shank, Inches.....	10	8	8	8	10	10	10, 12
Approx. Weight Per Doz., Lbs..	9¾	10	11	12¾	13	16	18
Size Inches, in 8ths.....	8½, 9	9½, 10	10½, 11	11½, 12	12½, 13	13½, 14	14½, 15
Per Dozen	\$24.72	27.36	30.00	33.96	39.24	45.84	53.76
Length Twist, Inches.....	14	14	14	14	15	15	15
Length Shank, Inches.....	12	12	12	12	12	12	12
Approx. Weight Per Doz., Lbs..	23	30	37	44	50	57	64
Size Inches, in 8ths.....	15½, 16	16½, 17	17½, 18	18½, 19	19½, 20	20½, 21	21½, 22
Per Dozen	\$63.00	75.24	95.04	113.52	133.32	151.80	171.60
Length Twist, Inches.....	15	15	15	15	15	15	15
Length Shank, Inches.....	12	12	12	12	12	12	12
Approx. Weight Per Doz., Lbs..	71	79	86	91	95	100	105
Size Inches, in 8ths.....	22½, 23	23½, 24	24½, 25	25½, 26	26½, 27	27½, 28	28½, 29
Per Dozen	\$190.08	208.56	227.70	246.84	265.98	285.12	304.26
Length Twist, Inches.....	15	15	15	15	15	15	15
Length Shank, Inches.....	12	12	12	12	12	12	12
Approx. Weight Per Doz., Lbs..	112	123	130	137	143	150	156
Size Inches, in 8ths.....	29½, 30	30½, 31	31½, 32	32½, 33	33½, 34	34½, 35	35½, 36
Per Dozen	\$323.40	342.12	360.78	379.50	389.22	416.94	435.60
Length Twist, Inches.....	15	15	15	15	15	15	15
Length Shank, Inches.....	12	12	12	12	12	12	12
Approx. Weight Per Doz., Lbs..	162	168	174	180	186	192	198

Individually wrapped in heavy paper

Note—Plain Wooden Handles for Ring Augers can be furnished; prices (according to size) on application.

SNELL PNEUMATIC AUGERS



WITH SCREW, No. 535



WITHOUT SCREW, No. 536

These ship auger machine bits are commonly known as pneumatic or air augers, being used in machines operated by compressed air, also designed for use in electrically-driven machines.

For nearly a century the "Snell" name has stood for all that is best in ship auger construction. No other type can equal the Snell Single Twist, which is preferred and specified by ship, bridge and dock builders and for all heavy work where quality tools are essential.

All the above are Made to Order Only

List prices are same as those for Machine Bits on pages 18 and 19.

SNELL SHIP AUGER BITS



WITH SCREW, No. 503

Forged from crucible steel. Made with single cutting edge and one side lip, for difficult boring in hard, knotty or end grain wood; bores easily and clears chips readily.

Length of Twist, 5 Inches; Length Over All, 9 Inches

Size Inches, in 8ths..	2	2½, 3	3½, 4	4½, 5	5½, 6	6½, 7	7½, 8	8½, 9	9½, 10
Per Dozen	\$6.00	6.00	6.00	7.50	9.00	10.50	12.00	13.50	15.00
Weight Per Dozen, Lbs.	1½	1¾	2¼	4	5	5½	6¼	7¾	8

Half dozen in a box

IN SETS, ASSORTED

Set No. 503 A—Contains one bit each, 2, 2½, 3, 3½, 4, 4½, 5, 5½, 6, 6½, 7, 7½ and 8-8ths; weight per set, 7¾ lbs. **Per Set \$9.00**

WITHOUT SCREW, No. 504

For Very Straight Boring, Does not Drift Off with the Grain

Size Inches, in 8ths..	2	2½, 3	3½, 4	4½, 5	5½, 6	6½, 7	7½, 8	8½, 9	9½, 10
Per Dozen	\$7.20	7.20	7.20	9.00	10.80	12.60	14.40	16.20	18.00
Weight Per Dozen, Lbs.	1½	1¾	2¼	4	5	5½	6¼	7¾	8

Half dozen in a box

IN SETS, ASSORTED

Set No. 504 A—Contains one bit each, 2, 2½, 3, 3½, 4, 4½, 5, 5½, 6, 6½, 7, 7½ and 8-8ths; weight per set, 7¼ lbs. **Per Set \$10.80**

SNELL IMPROVED SHIP AUGER CAR BITS



Forged from crucible steel; lacquered twists, polished edges and rounds. Used by car and ship builders, millwrights and others doing deep boring; made with a good clearance for chips and accurately formed twist so that they will work easily and true in cross grain, angular or end boring.

No. 509—WITH SCREW, 12 Inch TWIST, 18 Inches Over All

Size Inches, in 8ths.....	2½, 3	3½, 4	4½, 5	5½, 6	6½, 7	7½, 8	8½, 9
Per Dozen	\$11.00	11.00	11.00	12.00	13.00	14.50	16.00
Approx. Weight Per Doz., Lbs..	2¾	3¾	6¼	8¾	11¾	15¼	17½
Size Inches, in 8ths.....	9½, 10	10½, 11	11½, 12	12½, 13	13½, 14	14½, 15	15½, 16
Per Dozen	\$18.00	20.00	23.00	27.00	32.00	38.00	45.00
Approx. Weight Per Doz., Lbs..	20½	24	27½	36	44	52½	59½

No. 507—WITH SCREW, 8 Inch TWIST, 12 Inches Over All

Size Inches, in 8ths.....	2½, 3	3½, 4	4½, 5	5½, 6	6½, 7	7½, 8	8½, 9	9½, 10	10½, 11	11½, 12
Per Dozen	\$10.00	10.00	10.00	11.00	12.00	13.50	15.00	16.50	18.50	21.00
Approx. Weight Per Doz., Lbs..	1⅞	2⅞	4⅞	5¾	7¾	9	10¼	12	13¾	15¾

WITHOUT SCREW

Preferred for boring in green, pithy and knotty woods, does not drift off with the grain.

No. 510—WITHOUT SCREW, 12 Inch TWIST, 18 Inches Over All

Size Inches, in 8ths.....	2½, 3	3½, 4	4½, 5	5½, 6	6½, 7	7½, 8	8½, 9
Per Dozen	\$13.20	13.20	13.20	14.40	15.60	17.40	19.20
Approx. Weight Per Doz., Lbs..	2¾	3¾	6¼	8¾	11¾	15¼	17½
Size Inches, in 8ths.....	9½, 10	10½, 11	11½, 12	12½, 13	13½, 14	14½, 15	15½, 16
Per Dozen	\$21.60	24.00	27.60	32.40	38.40	45.60	54.00
Approx. Weight Per Doz., Lbs..	20½	24	27½	36	44	52½	59½

No. 508—WITHOUT SCREW, 8 Inch TWIST, 12 Inches Over All

Size Inches, in 8ths.....	2½, 3	3½, 4	4½, 5	5½, 6	6½, 7	7½, 8	8½, 9	9½, 10	10½, 11	11½, 12
Per Dozen	\$12.00	12.00	12.00	13.20	14.40	16.20	18.00	19.80	22.20	25.20
Approx. Weight Per Doz., Lbs..	1⅞	2⅞	4⅞	5¾	7¾	9	10¼	12	13¾	15¾

NOTE.—12 Inch TWIST is FURNISHED, Unless Otherwise Specified

All the above 2½ to 8/8ths., half dozen in a box; 8½ to 16/8ths., quarter dozen in a box.

SNELL SOLID CENTER SHIP AUGERS



WITH SCREW, No. 841—WITHOUT SCREW, No. 842

Forged from crucible steel, polished bright.

Used principally by ship and car builders; has one cutting edge and one side lip, and is equal to any ship auger of this type.

Length of Shank, 6 Inches

Size Inches, in 8ths..	2	2½	3	3½	4	4½	5
Per Dozen	\$11.00	11.00	11.00	11.00	11.00	11.00	11.00
Length Over All, Inches.	14	14	14	14	14	16	16
Weight Per Dozen, Lbs..	2	2½	3¼	3¾	4¾	6	6¼
Size Inches, in 8ths..	5½	6	6½	7	7½	8	8½
Per Dozen	\$12.00	12.00	13.00	13.00	14.50	14.50	16.00
Length Over All, Inches.	16	16	16	16	16	16	19
Weight Per Dozen, Lbs..	6¾	7¾	8	8½	8¾	9¼	10½
Size Inches, in 8ths..	9	9½	10	10½	11	11½	12
Per Dozen	\$16.00	18.00	18.00	20.00	20.00	23.00	23.00
Length Over All, Inches.	19	19	19	19	19	19	19
Weight Per Dozen, Lbs..	10¾	11¼	12¼	12¾	13½	14¼	15

2 to 8/8ths, half-dozen in a box; 8½/8ths and larger, quarter dozen in a box

SNELL SOLID CENTER LONG TWIST SHIP AUGERS

For lists on Solid Center Long Twist Augers use Long Twist Ship Auger lists on page 12.

SNELL SOLID CENTER SHIP AUGER CAR BITS



WITH SCREW, No. 809—WITHOUT SCREW, No. 810

Used chiefly by ship and car builders for heavy work

Length of Twist, 12 Inches; Length Over All, 18 Inches

Size Inches, in 8ths..	2	2½	3	3½	4	4½	5	5½	6
Per Dozen	\$11.25	11.25	11.25	11.25	11.25	12.50	13.75	15.00	16.25
Weight Per Dozen, Lbs..	2	2¼	3¾	4	4¾	6	6¼	6¾	7¼
Size Inches, in 8ths..	6½	7	7½	8	8½	9	10	11	12
Per Dozen	\$17.50	19.00	20.50	22.00	24.00	26.00	30.00	34.00	38.00
Weight Per Dozen, Lbs..	8	8½	8¾	9	10½	10¾	12	13½	15

2 to 8/8ths., half dozen in a box; 8½/8ths. and larger, quarter dozen in a box

SNELL SOLID CENTER SHIP AUGER BITS



WITH SCREW, No. 803—WITHOUT SCREW, No. 804

Forged from crucible steel; full polished, except nib.

Designed primarily for rapid, heavy work; has one cutting edge and one side lip.

Size Inches, in 8ths..	2	2½	3	3½	4	4½	5	5½	6
Per Dozen	\$6.00	6.00	6.00	6.00	6.00	7.50	7.50	9.00	9.00
Length Over All, Inches.	7¾	7¾	7¾	8	8½	8¼	8¾	8½	8¾
Weight Per Dozen, Lbs..	1	1¼	1½	1¾	2	2¼	2½	2¾	3
Size Inches, in 8ths..	6½	7	7½	8	8½	9	10	11	12
Per Dozen	\$10.50	10.50	12.00	12.00	13.50	13.50	15.00	16.50	18.00
Length Over All, Inches.	8¾	8¾	9	9	9½	9¼	9½	9½	9½
Weight Per Dozen, Lbs..	3¼	3¾	4¼	4½	4¾	5½	6	6½	8

2 to 10/8ths.; half dozen in a box; 11 and 12/8ths., quarter dozen in a box.

SNELL MACHINE BITS

All are forged from crucible steel, oil tempered and full polished, in a variety of types as illustrated below.

The Snell No. 235 is always sent when no pattern is specified.



Snell Double Twist No. 235



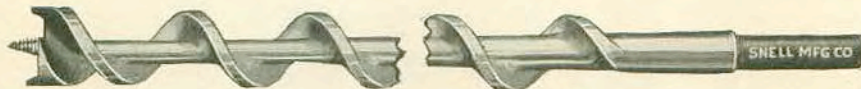
Snell Extension Lip No. 335



Snell Ship Auger (Pneumatic Auger) No. 535 With Screw
 " " " " " " No. 536 Without Screw



Snell Star Single Twist No. 635



Snell Solid Center No. 835



Snell Solid Center No. 838



Snell Solid Center No. 839

NOTE—List prices for all the above are on following pages.

SNELL POWER MACHINE COUNTERSINKS



No. 237 Snell Power Machine Countersinks..... Each \$1.50

LIST FOR ALL STYLES OF POWER MACHINE BITS

Illustrations on Page 17

LENGTH OF TWIST, AS BELOW

Unless Otherwise Specified, Shanks are Furnished $\frac{1}{2}$ Inch x $2\frac{1}{4}$ Inches

List Adopted October 12, 1905

Diameter Inches	6-Inch Per Doz.	8-Inch Per Doz.	10-Inch Per Doz.	12-Inch Per Doz.	14-Inch Per Doz.	16-Inch Per Doz.	18-Inch Per Doz.	20-Inch Per Doz.	22-Inch Per Doz.	24-Inch Per Doz.
4-16	\$10.80	\$12.96	\$15.12	\$17.28	....	....	....	....	....	....
5-16	10.80	12.96	15.12	17.28	....	....	....	....	....	....
6-16	10.80	12.96	15.12	17.28	\$19.44	\$21.60	....	....	....	....
7-16	10.80	12.96	15.12	17.28	19.44	21.60	....	....	....	....
8-16	10.80	12.96	15.12	17.28	19.44	21.60	\$23.76	\$25.92	\$28.08	....
9-16	12.00	14.40	16.80	19.20	21.60	24.00	26.40	28.80	31.20	....
10-16	13.20	15.84	18.48	21.12	23.76	26.40	29.04	31.68	34.32	\$36.96
11-16	14.40	17.28	20.16	23.04	25.92	28.80	31.68	34.56	37.44	40.32
12-16	15.60	18.72	21.84	24.96	28.08	31.20	34.32	37.44	40.56	43.68
13-16	16.80	20.16	23.52	26.88	30.24	33.60	36.96	40.32	43.68	47.04
14-16	18.00	21.60	25.20	28.80	32.40	36.00	39.60	43.20	46.80	50.40
15-16	19.20	23.04	26.88	30.72	34.56	38.40	42.24	46.08	49.92	53.76
16-16	20.40	24.48	28.56	32.64	36.72	40.80	44.88	48.96	53.04	57.12
17-16	21.60	25.92	30.24	34.56	38.88	43.20	47.52	51.84	56.16	60.48
18-16	22.80	27.36	31.92	36.48	41.04	45.60	50.16	54.72	59.28	63.84
19-16	24.00	28.80	33.60	38.40	43.20	48.00	52.80	57.60	62.40	67.20
20-16	25.20	30.24	35.28	40.32	45.36	50.40	55.44	60.48	65.52	70.56
21-16	26.40	31.68	36.96	42.24	47.52	52.80	58.08	63.36	68.64	73.92
22-16	27.60	33.12	38.64	44.16	49.68	55.20	60.72	66.24	71.76	77.28
23-16	28.80	34.56	40.32	46.08	51.84	57.60	63.36	69.12	74.88	80.64
24-16	30.00	36.00	42.00	48.00	54.00	60.00	66.00	72.00	78.00	84.00
25-16	31.50	37.80	44.10	50.40	56.70	63.00	69.30	75.60	81.90	88.20
26-16	33.00	39.60	46.20	52.80	59.40	66.00	72.60	79.20	85.80	92.40
27-16	34.50	41.40	48.30	55.20	62.10	69.00	75.90	82.80	89.70	96.60
28-16	36.00	43.20	50.40	57.60	64.80	72.00	79.20	86.40	93.60	100.80
29-16	37.50	45.00	52.50	60.00	67.50	75.00	82.50	90.00	97.50	105.00
30-16	39.00	46.80	54.60	62.40	70.20	78.00	85.80	93.60	101.40	109.20
31-16	40.50	48.60	56.70	64.80	72.90	81.00	89.10	97.20	105.30	113.40
32-16	42.00	50.40	58.80	67.20	75.60	84.00	92.40	100.80	109.20	117.60
33-16	43.80	52.56	61.32	70.08	78.84	87.60	96.36	105.12	113.88	122.64
34-16	45.60	54.72	63.84	72.96	82.08	91.20	100.32	109.44	118.56	127.68
35-16	47.40	56.88	66.36	75.84	85.32	94.80	104.28	113.76	123.24	132.72
36-16	49.20	59.04	68.88	78.72	88.56	98.40	108.24	118.08	127.92	137.76
37-16	51.00	61.20	71.40	81.60	91.80	102.00	112.20	122.40	132.60	142.80
38-16	52.80	63.36	73.92	84.48	95.04	105.60	116.16	126.72	137.28	147.84
39-16	54.60	65.52	76.44	87.36	98.28	109.20	120.12	131.04	141.96	152.88
40-16	56.40	67.68	78.96	90.24	101.52	112.80	124.08	135.36	146.64	157.92
42-16	60.60	72.72	84.84	96.96	109.08	121.20	133.32	145.44	157.56	169.68
44-16	64.80	77.76	90.72	103.68	116.64	129.60	142.56	155.52	168.48	181.44
46-16	69.00	82.80	96.60	110.40	124.20	138.00	151.80	165.60	179.40	193.20
48-16	73.20	87.84	102.48	117.12	131.76	146.40	161.04	175.68	190.32	204.96
50-16	78.00	93.60	109.20	124.80	140.40	156.00	171.60	187.20	202.80	218.40
52-16	82.80	99.36	115.92	132.48	149.04	165.60	182.16	198.72	215.28	231.84
54-16	87.60	105.12	122.64	140.16	157.68	175.20	192.72	210.24	227.76	245.28
56-16	92.40	110.88	129.36	147.84	166.32	184.80	203.28	221.76	240.24	258.72

JOHN H. GRAHAM & CO. DIRECT REPRESENTATIVES

LIST FOR ALL STYLES OF POWER MACHINE BITS—Continued

Illustrations on Page 17

LENGTH OF TWIST, AS BELOW

Unless Otherwise Specified, Shanks are Furnished $\frac{1}{2}$ Inch x $2\frac{1}{4}$ Inches

Diameter Inches	26-Inch Per Doz.	28-Inch Per Doz.	30-Inch Per Doz.	32-Inch Per Doz.	34-Inch Per Doz.	36-Inch Per Doz.	42-Inch Per Doz.	48-Inch Per Doz.	54-Inch Per Doz.	60-Inch Per Doz.
10-16	\$39.60	\$42.24	....	....	....	....	....	....	....	....
11-16	43.20	46.08	....	....	....	....	....	....	....	....
12-16	46.80	49.92	\$53.04	\$56.16	\$59.28	\$62.40	\$71.76	\$81.12	\$90.48	\$99.84
13-16	50.40	53.76	57.12	60.48	63.84	67.20	77.28	87.36	97.44	107.52
14-16	54.00	57.60	61.20	64.80	68.40	72.00	82.80	93.60	104.40	115.20
15-16	57.60	61.44	65.28	69.12	72.96	76.80	88.32	99.84	111.36	122.88
16-16	61.20	65.28	69.36	73.44	77.52	81.60	93.84	106.08	118.32	130.56
17-16	64.80	69.12	73.44	77.76	82.08	86.40	99.36	112.32	125.28	138.24
18-16	68.40	72.96	77.52	82.08	86.64	91.20	104.88	118.56	132.24	145.92
19-16	72.00	76.80	81.60	86.40	91.20	96.00	110.40	124.80	139.20	153.60
20-16	75.60	80.64	85.68	90.72	95.76	100.80	115.92	131.04	146.16	161.28
21-16	79.20	84.48	89.76	95.04	100.32	105.60	121.44	137.28	153.12	168.96
22-16	82.80	88.32	93.84	99.36	104.88	110.40	126.96	143.52	160.08	176.64
23-16	86.40	92.16	97.92	103.68	109.44	115.20	132.48	149.76	167.04	184.32
24-16	90.00	96.00	102.00	108.00	114.00	120.00	138.00	156.00	174.00	192.00
25-16	94.50	100.80	107.10	113.40	119.70	126.00	144.90	163.80	182.70	201.60
26-16	99.00	105.60	112.20	118.80	125.40	132.00	151.80	171.60	191.40	211.20
27-16	103.50	110.40	117.30	124.20	131.10	138.00	158.70	179.40	200.10	220.80
28-16	108.00	115.20	122.40	129.60	136.80	144.00	165.60	187.20	208.80	230.40
29-16	112.50	120.00	127.50	135.00	142.50	150.00	172.50	195.00	217.50	240.00
30-16	117.00	124.80	132.60	140.40	148.20	156.00	179.40	202.80	226.20	249.60
31-16	121.50	129.60	137.70	145.80	153.90	162.00	186.30	210.60	234.90	259.20
32-16	126.00	134.40	142.80	151.20	159.60	168.00	193.20	218.40	243.60	268.80
33-16	131.40	140.16	148.92	157.68	166.44	175.20	201.48	227.76	254.04	280.32
34-16	136.80	145.92	155.04	164.16	173.28	182.40	209.76	237.12	264.48	291.84
35-16	142.20	151.68	161.16	170.64	180.12	189.60	218.04	246.48	274.92	303.36
36-16	147.60	157.44	167.28	177.12	186.96	196.80	226.32	255.84	285.36	314.88
37-16	153.00	163.20	173.40	183.60	193.80	204.00	234.60	265.20	295.80	326.40
38-16	158.40	168.96	179.52	190.08	200.64	211.20	242.88	274.56	306.24	337.92
39-16	163.80	174.72	185.64	196.56	207.48	218.40	251.16	283.92	316.68	349.44
40-16	169.20	180.48	191.76	203.04	214.32	225.60	259.44	293.28	327.12	360.96
42-16	181.80	193.92	206.04	218.16	230.28	242.40	278.76	315.12	351.48	387.84
44-16	194.40	207.36	220.32	233.28	246.24	259.20	298.08	336.96	375.84	414.72
46-16	207.00	220.80	234.60	248.40	262.20	276.00	317.40	358.80	400.20	441.60
48-16	219.60	234.24	248.88	263.52	278.16	292.80	336.72	380.64	424.56	468.48
50-16	234.00	249.60	265.20	280.80	296.40	312.00	358.80	405.60	452.40	499.20
52-16	248.40	264.96	281.52	298.08	314.64	331.20	380.88	430.56	480.24	529.92
54-16	262.80	280.32	297.84	315.36	332.88	350.40	402.96	455.52	508.08	560.64
56-16	277.20	295.68	314.16	332.64	351.12	369.60	425.04	480.48	535.92	591.36

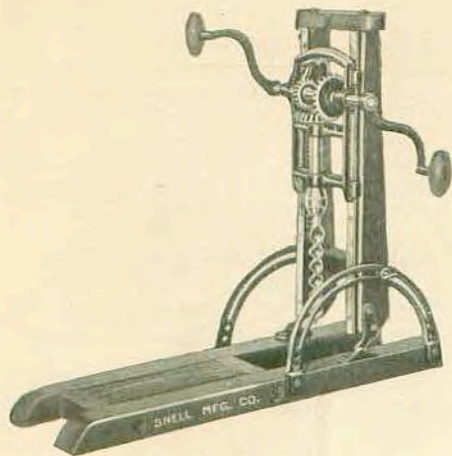
Note—No extra charge for turning shanks on machine bits to any size required, provided they are straight and do not exceed 3 inches in length or 12/16-inch diameter. For shanks exceeding 3 inches in length an extra charge will be made of 3 cents per inch and if tapered, \$1.80 per dozen, net.

Morse taper shanks and special taper shanks to blue print, \$2.50 per dozen, net.

Special shanks of any desired shape made to order. We will not be held responsible for perfect fit unless we are furnished a sample shank of exact size desired.

All bits made by odd 32ds will be charged the price of the 16th larger.

SNELL RICE PATENT BORING MACHINES



No. 1

ANGULAR

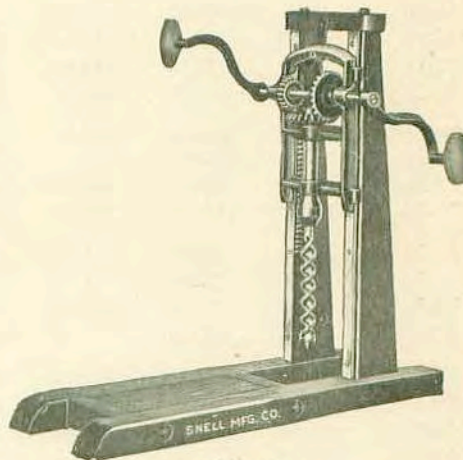
Natural finish and varnished hardwood base and uprights; Japanned cast iron arch, gears and cranks; steel spindle, chuck and axle; hardwood swivel grips; frame is firmly bolted; Japanned cast iron clamp frame at base of upright; adjustable for angular boring; width of base, 8 inches; length of base, 29 inches; height of upright, 26 inches; length of cranks, 8½ inches; bores, 10 inches deep.

No. 1 Angular; Weight each, 30 lbs..... **Each \$6.75**
One in a case

UPRIGHT

Natural finish and varnished hardwood bolted frame; Japanned cast iron arch, gears, rack and cranks; steel spindle, chuck and axle; formed hardwood grips; width of base, 8 inches; length of base, 29 inches; height of upright, 26 inches; length of cranks, 8½ inches; bores 10 inches deep.

No. 2 Upright; Weight each, 25 lbs..... **Each \$5.50**
One in a case



No. 2

EXTRA PARTS FOR ABOVE BORING MACHINES

No.	Description	Each	No.	Description	Each
1	Wooden Base	\$1.00	9	Bevel Gear, Small Hole on Spindle.....	\$0.60
2	Wooden Upright or Frame.....	1.80	10	Small Gear .....	.40
3	Circle .....	.60	11	Gear Rack, Screwed to Frame.....	.60
4	Crank <i>Spindle</i>	1.00	12	Steel Spring, Top of Wood Frame.....	.20
5	Arbor or Chuck with Set Screw.....	2.00	13	Set Screw .....	.20
6	Crank and Handle .....	.80	14	Hook and Eye .....	.60
7	Iron Sliding Frame	1.80	15	Thumb Screw .....	.20
8	Bevel Gear, Large Hole on Arbor.....	.60	16	Wrench .....	.20

SNELL BORING MACHINE AUGERS

SNELL EXTRA



No. 243

SNELL SOLID CENTER



No. 843

For use in hand boring machines; feed rapidly and cut smoothly; full polished.

Length of Twist, 7 to 8 Inches; Length Over All, 12 Inches

Size Inches	1/4	3/8	7/16	1/2	5/8	3/4	7/8	1	1 1/8
Per Dozen	\$10.00	10.00	10.00	10.00	10.00	11.00	13.00	15.00	17.00
Weight Per Dozen, Lbs.	4 1/4	4 1/2	5 1/4	5 3/4	6 3/4	7	7 1/4	7 1/2	8 1/2
Size Inches	1 1/4	1 3/8	1 1/2	1 3/4	2	2 1/4	2 1/2	2 3/4	3
Per Dozen	\$19.00	21.00	24.00	28.00	32.00	42.00	52.00	72.00	92.00
Weight Per Dozen, Lbs.	9 3/4	10 3/4	11	13 1/2	15 1/2	18	24	32	40

2 1/4, 2 1/2, 2 3/4 and 3 Inch Sizes, not made in Solid Center

1/4 to 3/4 inch, half dozen in a box; 7/8 to 2 inch, quarter dozen in a box; larger sizes individually wrapped in heavy paper

IN SETS—ASSORTED

Set of 18 Quarters, contains one bit each, 1, 1 1/2 and 2 inches; weight per set, 3 lbs.	Per Set	\$6.00
Set of 23 Quarters, contains one bit each, 1, 1 1/4, 1 1/2 and 2 inches; weight per set, 3 1/2 lbs.	Per Set	7.50
Set of 41 Quarters, contains one bit each, 1/2, 5/8, 3/4, 7/8, 1, 1 1/4, 1 1/2, 1 3/4 and 2 inches; weight per set, 5 lbs.	Per Set	13.50

SNELL SHIP AUGER PATTERN BORING MACHINE AUGERS



No. 543

Forged from crucible steel; lacquered twists; polished edges.

Recommended for strength, rigidity, easy cutting and free clearance in boring hard woods.

Length of Twist, 7 to 8 Inches; Length Over All, 12 Inches

Size Inches	1/2	5/8	3/4	7/8	1	1 1/8	1 1/4	1 1/2	1 3/4	2
Per Dozen	\$11.75	12.00	13.00	14.25	16.00	17.50	19.70	25.10	35.00	48.50
Weight Per Dozen, Lbs.	5 3/4	6 3/4	7	7 1/4	7 1/2	8 1/2	9 3/4	11	13 1/2	15 1/2

1/2 to 3/4 inch, half dozen in a box; 7/8 to 2 inch, quarter dozen in a box

IN SETS—ASSORTED

Set of 18 Quarters, contains one bit each, 1, 1 1/2 and 2 inches; weight per set, 3 1/2 lbs.	Per Set	\$7.50
Set of 23 Quarters, contains one bit each, 1, 1 1/4, 1 1/2 and 2 inches; weight per set, 4 1/2 lbs.	Per Set	9.25
Set of 41 Quarters, contains one bit each, 1/2, 5/8, 3/4, 7/8, 1, 1 1/4, 1 1/2, 1 3/4, and 2 inches; weight per set, 5 1/2 lbs.	Per Set	16.50

SNELL CARPENTERS' NUT AUGERS



No. 240

Best quality crucible steel; 2 inch and smaller, polished finish.

Used chiefly by framers, bridge and trestle builders for heavy timber boring; construction of flat head is such that it feeds rapidly and clears easily, cutting edges and side lips being correctly formed and easily resharpened.

Length of Twist, 7 to 8 Inches

Size Inches	1/2	5/8	3/4	7/8	1	1 1/8	1 1/4
Per Dozen	\$10.00	10.00	11.00	13.00	15.00	17.00	19.00
Length Over All, Inches.	16	16	16	17	17	18	18
Weight Per Dozen, Lbs..	4 3/4	5 3/4	7	8 3/4	9 1/2	10 1/2	11 3/4
Size Inches	1 3/8	1 1/2	1 3/4	2	2 1/8	2 1/4	2 1/2
Per Dozen	\$21.00	24.00	28.00	32.00	37.00	42.00	52.00
Length Over All, Inches.	18	18	19	19	20	20	20
Weight Per Dozen, Lbs.	13	15 1/2	17 1/2	20	23 1/2	27 1/2	30 1/2
Size Inches	2 3/4	3	3 1/4	3 1/2	3 3/4	4	
Per Dozen	\$72.00	92.00	122.00	152.00	182.00	212.00	
Length Over All, Inches.	20	20	20	20	20	20	
Weight Per Dozen, Lbs...	35	40	43	48	52	54 3/4	

Sizes 1/2 to 2 inches, half dozen in a box; 2 1/8 to 4 inches, individually wrapped in heavy paper.

SNELL SOLID CENTER CARPENTERS' NUT AUGERS



No. 840

Forged from crucible steel; full polished, except nib.

Used chiefly for heavy timber boring; head has two cutters of the flat cut type, with side lips.

Length of Twist, 7 to 8 Inches

Size Inches	3/8	1/2	5/8	3/4	7/8	1
Per Dozen	\$10.00	10.00	10.00	11.00	13.00	15.00
Length Over All, Inches.	16	16	16	16	17	17
Weight Per Dozen, Lbs...	3 1/2	4 3/4	5 3/4	7	8 3/4	9 1/2
Size Inches	1 1/8	1 1/4	1 3/8	1 1/2	1 3/4	2
Per Dozen	\$17.00	19.00	21.00	24.00	28.00	32.00
Length Over All, Inches.	18	18	18	18	19	19
Weight Per Dozen, Lbs...	10 1/2	11 3/4	13	15 1/2	17 1/2	20

Half dozen in a box

NOTE—All augers are carefully oil tempered and sharpened and finished by hand.

SNELL SCOTCH EYE AUGERS



No. 245 A

Forged from crucible steel; polished twist; black head; black enameled round forged eyes; export type with flat cut head, made with coarse screw and especially designed for boring in hard woods.

LENGTH OF TWIST, 7 to 9 Inches, According to Diameter

Size Inches	1/4	5/16	3/8	7/16	1/2	9/16	5/8
Per Dozen	\$18.00	18.00	18.00	18.00	18.00	20.00	20.00
Length Over All, Inches.	20	20	20	21	21	21	22
Weight Per Dozen, Lbs..	4	4½	5½	6	6¾	7¾	8¾
Size Inches	3/4	13/16	7/8	15/16	1	1 1/8	1 1/4
Per Dozen	\$22.00	25.00	25.00	28.00	28.00	30.00	33.00
Length Over All, Inches.	22	22	22	22	23	24	25
Weight Per Dozen, Lbs..	10	11¾	12¾	13	13¾	15	17¼
Size Inches	1 1/8	1 1/2	1 5/8	1 3/4	1 7/8	2	2
Per Dozen	\$37.50	41.00	45.00	48.00	53.00	56.00	56.00
Length Over All, Inches.	25	25	25	26	26	26	26
Weight Per Dozen, Lbs..	19½	22	23½	25	28	29	29

Half dozen in a package

SNELL TREENAIL AUGERS



No. 249

Forged from crucible steel, full polished, black head. Pointed for welding to cranks, also used in pneumatic machines for wooden ship building.

Shank, 5/8 x 6 Inches

Size Inches	1	1 1/8	1 1/4	1 3/8	1 1/2
Per Dozen	\$25.00	25.00	27.00	30.00	33.00
Length of Twist, Inches	12	12	13	14	15
Length Over All, Inches	18	18	19	20	21
Weight Per Dozen, Lbs..	13½	15	17½	18¾	20

NOTE.—Can be furnished in special diameters and lengths as desired; when ordering specify whether fine screw of 14 threads to inch, medium screw of 9 threads or coarse screw of 6 threads to inch is desired.

Half dozen in a package

SNELL ICE AUGERS



No. 91

Forged from crucible steel, welded on 8-inch crank handle, fitted with swivel head; total length, 31½ ft. Used for boring holes in ice to measure thickness or to start ice saws.

WITH CRANK HANDLE

WITHOUT CRANK HANDLE

Size Inches	1 1/4	1 1/2	2 1/2	Size Inches	1 1/4	1 1/2	2 1/2
Weight Per Dozen, Lbs...	80	90	140	Weight Per Dozen, Lbs...	26	36	81

PRICES ON APPLICATION

SNELL GAS FITTERS' AUGERS



No. 256

Specially made for gas fitters for boring through thick plastering, the screw being extra long so as to reach into the wood; regularly made with 8-inch twist and 10-inch round shank so that it can be welded to an extra extension; screws are from 1/2 to 2 inches in length, varying with the diameter of the auger.

Diameter of Auger, In.	5/8	3/4	7/8	1	1 1/4	1 1/2	1 3/4	2
Per Dozen	\$19.00	21.50	24.00	30.00	34.00	44.00	52.00	60.00
For Pipe Size, Inches..	1/4	3/8	1/2	....	3/4	1	1 1/4	1 1/2
Size of Shank, Inches...	1/2	1/2	5/8	5/8	5/8	1 1/8	1 1/8	1 1/8
Weight Per Dozen, Lbs..	10 1/2	12 1/2	14	16	18	23 1/2	28	30

NOTE.—These augers can be made with any shape or size of shank desired, to order; when ordering augers varying from above specifications, give full particulars; always order by the size of auger, and not the diameter of the pipe.

SNELL SHORT RING AUGERS



No. 244

Forged from crucible steel; two inches and smaller have polished twist; rings and part of rounds are black jappaned.

Flat cut type, used by bridge and dock builders or for boring in heavy timbers.

LENGTH OF TWIST, 7 to 8 Inches

Size Inches	3/8	1/2	5/8	3/4	7/8	1	1 1/8
Per Dozen	\$12.00	12.00	12.00	13.00	14.00	15.00	16.50
Length Over All, Inches.	15	15	15	15	16	16	18
Weight Per Dozen, Lbs..	4 1/2	6 1/4	7	7 3/4	10	11	11 3/4
Size Inches	1 1/4	1 3/8	1 1/2	1 5/8	1 3/4	2	2 1/4
Per Dozen	\$18.25	20.00	22.75	24.50	26.75	30.00	39.00
Length Over All, Inches.	18	18	18	20	20	20	20
Weight Per Dozen, Lbs..	12 3/4	14 3/4	16 1/2	17	19 1/2	21 3/4	23
Size Inches	2 1/2	2 3/4	3	3 1/4	3 1/2	3 3/4	4
Per Dozen	\$48.00	69.00	88.00	117.00	146.00	175.00	204.00
Length Over All, Inches.	20	20	20	20	20	20	20
Weight Per Dozen, Lbs..	25 1/2	27	29	31	33	35	38

Sizes 3/8 to 2 inches, half dozen in a package; 2 1/4 to 4 inches, individually wrapped in heavy paper

SNELL LONG OR CUBAN RING AUGERS



No. 245

Flat type head, with cast steel ring eye; two inches and smaller are polished; rings and part of rounds are black jappaned.

LENGTH OF TWIST, 7 to 8 Inches

Size Inches	3/8	1/2	5/8	3/4	7/8	1	1 1/8	1 1/4
Per Dozen	\$13.50	13.50	13.50	14.75	16.00	17.25	19.00	21.00
Length Over All, Inches.	20	20	20	20	22	22	22	22
Weight Per Dozen, Lbs..	5 1/2	6 3/4	8 3/4	10	12 3/4	13 3/4	15	17 1/4
Size Inches	1 3/8	1 1/2	1 5/8	1 3/4	1 7/8	2	2 1/8	2 1/4
Per Dozen	\$23.00	26.00	28.00	30.00	32.00	34.00	39.00	44.00
Length Over All, Inches.	24	24	24	24	24	24	24	24
Weight Per Dozen, Lbs..	19 1/2	22	23 1/2	25	28	29	36 1/2	4
Size Inches	2 1/4	2 1/2	3	3 1/4	3 1/2	3 3/4	4	4
Per Dozen	\$44.00	54.00	96.00	126.00	156.00	186.00	216.00	216.00
Length Over All, Inches.	26	26	26	26	26	26	26	26
Weight Per Dozen, Lbs..	43	50	57 1/2	64	71	78	86	86

Sizes 3/8 to 2 inches, half dozen in a package; 2 1/8 to 4 inches, individually wrapped in heavy paper

SNELL SOLID CENTER SHORT RING AUGERS



Illustration Shows Flat Type Head

Forged from crucible steel, polished twist and round; furnished also with lacquered twist; for deep boring and heavy work; fitted with riveted rings; detachable rings can be furnished.

FLAT TYPE HEAD, No. 844

EXTENSION LIP HEAD, No. 850

	Length of Twist, 7 Inches—Length of Shank, 11 Inches						
Size Inches, in 16ths.	6	7	8	9	10	11	12
Per Dozen	\$12.00	12.00	12.00	12.00	12.00	13.00	13.00
Weight Per Dozen, Lbs..	2½	3½	4¾	5¾	7	7¾	8¾
Size Inches, in 16ths..	13	14	15	16	17	18	18
Per Dozen	\$14.00	14.00	15.00	15.00	16.50	16.50	16.50
Weight Per Dozen, Lbs..	9½	10½	11½	12¾	13	14	14
Size Inches, in 16ths..	20	22	24	26	28	32	32
Per Dozen	\$18.25	20.00	22.75	24.50	26.75	30.00	30.00
Weight Per Dozen, Lbs..	15	16	17½	18½	19½	20	20

Quarter dozen in a package, wrapped in heavy paper

SNELL SOLID CENTER LONG RING AUGERS



Illustration Shows Extension Lip Head

FLAT TYPE HEAD, No. 845

EXTENSION LIP HEAD, No. 851

	Length of Twist, 12 Inches—Length of Shank, 12 Inches						
Size Inches, in 16ths.	6	7	8	9	10	11	12
Per Dozen	\$12.00	12.00	12.00	12.00	12.00	13.00	13.00
Weight Per Dozen, Lbs..	9	10	10½	11	11½	12	12½
Size Inches, in 16ths..	13	14	15	16	17	18	18
Per Dozen	\$14.00	14.00	15.00	15.00	16.50	16.50	16.50
Weight Per Dozen, Lbs..	13	13½	14	14½	15	17½	17½
Size Inches, in 16ths..	20	22	24	26	28	32	32
Per Dozen	\$18.25	20.00	22.75	24.50	26.75	30.00	30.00
Weight Per Dozen, Lbs..	18	20½	23	25½	29	30	30

Quarter dozen in a package, wrapped in heavy paper

SNELL MILLWRIGHT AUGERS



No. 247

Forged from crucible steel, polished twists; flat cut type; made with square nib or forged ring.

	Length of Twist, 12 Inches—Length Over All, 30 Inches					
Size Inches	1/2	9/16	5/8	11/16	3/4	13/16
Per Dozen	\$16.50	19.00	19.00	21.50	21.50	24.00
Weight Per Dozen, Lbs..	8	10	12	13	14	15
Size Inches	7/8	15/16	1	1½	1¼	1¾
Per Dozen	\$24.00	26.50	30.00	30.00	34.00	38.00
Weight Per Dozen, Lbs..	16	17	17½	20	21½	22½
Size Inches	1½	1⅝	1¾	1¾	1⅞	2
Per Dozen	\$44.00	48.00	52.00	56.00	60.00	60.00
Weight Per Dozen, Lbs..	24½	27½	31	35	42	42

NOTE.—For rings, add \$1.50 per dozen to LIST PRICES.

Individually wrapped in heavy paper

SNELL LONG RAFTING AUGERS



No. 246

Forged from crucible steel; two inches and smaller are polished finish; rings and part of rounds are black japanned; used in heavy timber for deep boring, as in log rafts, booms, etc.

Length of Twist, 12 Inches—Length Over All, 30 Inches

Size Inches	1¼	1½	1¾	2	2¼	2½
Per Dozen	\$32.00	40.00	48.00	56.00	66.00	76.00
Weight Per Dozen, Lbs..	19½	30	34	42	47	52
Size Inches	2¾	3	3¼	3½	3¾	4
Per Dozen	\$90.00	105.00	140.00	180.00	210.00	240.00
Weight Per Dozen, Lbs..	56	67	78	89	95	100

NOTE—For sizes under 1¼ inches, use Millwright Auger List on page 25.

Individually wrapped in heavy paper

SNELL SOLID CENTER RAFTING AUGERS



No. 846

Forged from crucible steel, polished head and twist; used chiefly for heavy timber boring; head has two cutters and is of the flat cut type, having side lips.

Length of Twist, 12 Inches—Length Over All, 30 Inches

Size Inches	1¼	1½	1¾	2
Per Dozen	\$32.00	40.00	48.00	56.00
Weight Per Dozen, Lbs..	28¾	30½	32	33¾

Individually wrapped in heavy paper

SNELL SOLID CENTER DERRICK AUGERS



No. 847

Forged in one piece from crucible steel, polished twist; furnished also with lacquered twist; extensively used by oil well derrick builders and for deep boring work; this type of auger is made only in the solid center pattern with double cutter, flat head.

Length of Twist, 18 inches—Length Over All, 36 Inches

Size Inches, in 16ths.	10	11	12	13	14	15	16	17
Per Dozen	\$27.90	30.30	31.80	34.50	36.30	39.00	40.80	43.50
Weight Per Dozen, Lbs..	28½	28¾	29	29¼	29½	29¾	30¼	30½
Size Inches, in 16ths.	18	20	22	24	26	28	30	32
Per Dozen	\$45.30	49.80	55.50	61.20	69.00	76.80	84.60	92.40
Weight Per Dozen, Lbs..	30¾	31½	32½	34½	36	38	40	42

Individually wrapped in heavy paper

SNELL TAPPING BITS



No. 262

Crucible steel, polished finish; double spur; coarse thread; used for tapping maple trees.

Size Inches, in 16ths.....	6	7	8	10
Per Dozen	\$5.00	5.00	5.00	6.00
Length Over All, Inches.....	6	6	6	6
Weight Per Dozen, Lbs.....	1¼	1½	1½	1¾

One dozen in a box

SNELL STAR TAPPING BITS



No. 662

Crucible steel, full polished finish; has single spur and single cutting edge; special form of spiral clears chips readily; unequalled for rapid work.

Size Inches, in 16ths.....	6	7	8	10
Per Dozen	\$5.00	5.00	5.00	6.00
Length Over All, Inches.....	6	6	6	6
Weight Per Dozen, Lbs.....	1	1¼	1½	1¾

One dozen in a box

SNELL COUNTERSINK GIMLET BITS



SCREW POINT, No. 65

Cast steel blade, spoon pattern, screw point; length over all, 4 to 5 inches.

No. 65—Assorted for screws ¾, 1, 1¼, and 1½ inches; weight per dozen, ¾ lb. Per Dozen \$2.00



DIAMOND, No. 66

Forged from cast steel; diamond point and full turn twist; for screws from ¾ to 1¾ inches; length over all, 4 to 5 inches.

Nos.	0	1	2	3	4
Per Dozen	\$2.00	2.00	2.00	2.00	2.00
To Bore, Inches.....	5/32 x 3/4	9/32 x 1	7/32 x 1 1/4	8/32 x 1 1/2	9/32 x 1 3/4
Weight Per Dozen, Lbs.....	¾	¾	1	1	1¼

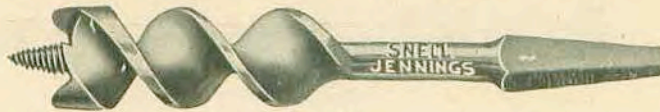
One dozen in a box

ASSORTMENT

No. 66 A—One dozen assorted sizes for screws ¾ to 1¾ inches; weight per dozen, 1 lb. Per Dozen \$2.00

One dozen in a box

SNELL EXTENSION LIP DOWEL BITS



No. 360

Forged from crucible steel; full polished, except nib.
Used by furniture makers, manual training schools and for boring where space is limited.

Length of Twist, 2 1/4 Inches—Length Over All, 4 1/2 Inches

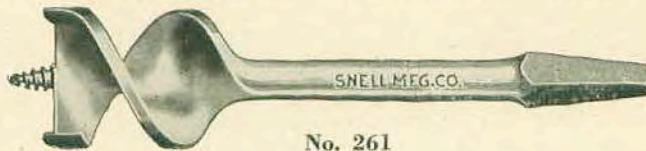
Size Inches, in 16ths...	3	4	5	6	7
Per Dozen	\$6.00	5.00	5.00	5.00	5.00
Weight Per Dozen, Lbs...	3/4	7/8	1	1	1 1/8
Size Inches, in 16ths...	8	9	10	11	12
Per Dozen	\$5.00	6.00	6.00	7.00	7.00
Weight Per Dozen, Lbs...	1 1/8	1 1/2	1 1/8	1 3/8	1 3/8

One dozen in a box

SNELL SOLID CENTER DOWEL BITS, No. 860

Will be furnished on order—List Prices same as above.

SNELL DOUBLE SPUR PLUG BITS



No. 261

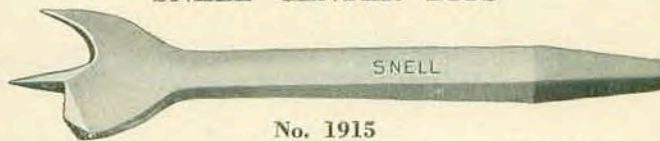
Forged from crucible steel; full polished, except nib.
Used by furniture makers, boat builders and others; has double spur and coarse thread screw.

Length of Twist, 1 to 2 Inches—Length Over All, 6 1/2 Inches

Size Inches, in 16ths...	12	13	14	15	16
Per Dozen	\$7.00	8.25	8.25	9.50	9.50
Weight Per Dozen, Lbs...	2	2 1/4	2 1/2	2 3/4	2 3/4
Size Inches, in 16ths...	17	18	20	22	24
Per Dozen	\$12.00	12.00	14.00	16.00	18.00
Weight Per Dozen, Lbs...	3	3 1/2	4	5 1/4	5 1/2

Half dozen in a box

SNELL CENTER BITS



No. 1915

Forged from cast steel, bright finish; used by stair builders and for shallow boring.

Length Over All, 4 to 5 1/2 Inches

Size Inches	1/4	5/16	3/8	1/2	5/8	3/4	7/8	1
Per Dozen	\$3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00
Weight Per Dozen.....	1	1 1/4	1 1/2	1 3/4	2	2 1/2	3	3 1/2
Size Inches	1 1/8	1 1/4	1 3/8	1 1/2	1 5/8	1 3/4	1 7/8	2
Per Dozen	\$4.00	4.80	5.60	6.40	7.60	8.40	9.20	10.00
Weight Per Dozen, Lbs...	3 3/8	4 1/4	4 1/2	5	5 1/2	5 3/4	6	6 1/2

ASSORTMENT

No. 1915 A—Assortment, contains one dozen bits; three bits 1/2 inch, two bits 5/8 inch, and one bit each, 3/4, 7/8, 1, 1 1/8, 1 1/4, 1 3/8 and 1 1/2 inches.....Per Assortment, \$4.40

One dozen in a box

SNELL GIMLET BITS



CONTINENTAL PATTERN, No. 72

Cast Steel, Tempered Straw Color, Cobra Point

Size Inches, in 32ds....	2	3	4	5	6	7
Per Dozen	\$2.00	2.20	2.20	2.20	2.20	2.20
Length, Inches	4	4	4½	5	5	5¼
Weight Per Dozen, Lbs..	½	½	⅝	⅝	¾	¾
Size Inches, in 32ds....	8	9	10	11	12	
Per Dozen	\$2.20	2.50	2.50	3.00	3.00	
Length, Inches	5¼	6	6¼	6¼	6¾	
Weight Per Dozen, Lbs..	⅞	1	1¼	1¾	1¾	

ASSORTMENT

No. 72 A—Assortment, contains one dozen bits, assorted sizes, 4 to 8-32ds; weight per assortment, ¾ lb.,
Per Assortment, \$2.20

One dozen in a box



DOUBLE CUT, No. 73

Forged from cast steel, oil tempered and polished.

Nos.	0	1	2	3	4	5	6
Per Dozen	\$2.00	2.00	2.20	2.50	2.75	3.00	3.25
Size Inches, in 32ds....	4	5	6	7	8	9	10
Length, Inches	4½	4½	4½	4½	4½	4¾	6
Weight Per Dozen, Lbs..	½	⅝	¾	⅞	1	1½	1¼

ASSORTMENT

No. 73 A—Assortment, contains one dozen bits, assorted sizes 4 to 10-32ds; weight per assortment, ⅞ lb.,
Per Assortment, \$3.25

One dozen in a box

SNELL ELECTRICIANS' GIMLET BITS



No. 75

Drawn from refined steel, bright finish.

Diameter in 32ds....	6	7	8	9	10	11	12
12 Inches Long, Per Doz.	\$5.00	5.00	5.00	5.00	5.00	5.00	5.00
15 Inches Long, Per Doz.	6.00	6.00	6.00	6.00	6.00	6.00	6.00
18 Inches Long, Per Doz.	7.00	7.00	7.00	7.00	7.00	7.00	7.00
24 Inches Long, Per Doz.	9.00	9.00	9.00	9.00	9.00	9.00	9.00
30 Inches Long, Per Doz.	12.00	12.00	12.00	12.00	12.00	12.00	12.00

NOTE—Specify length and diameter when ordering.

One dozen in a box

SNELL ELECTRICIANS' GIMLETS



No. 85

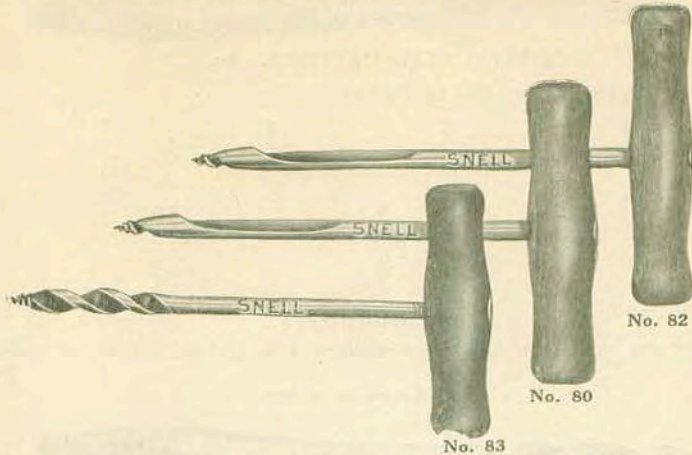
For bell hangers, telephone and telegraph workers; gimlets have hardwood handles.

Diameter in 32ds....	6	7	8	9	10	11	12
15 Inches Long, Per Doz.	\$6.00	6.00	6.00	6.00	6.00	6.00	6.00
18 Inches Long, Per Doz.	7.00	7.00	7.00	7.00	7.00	7.00	7.00
24 Inches Long, Per Doz.	9.00	9.00	9.00	9.00	9.00	9.00	9.00
30 Inches Long, Per Doz.	12.00	12.00	12.00	12.00	12.00	12.00	12.00
36 Inches Long, Per Doz.	15.00	15.00	15.00	15.00	15.00	15.00	15.00

NOTE—Specify length and diameter when ordering.

One dozen in a box

SNELL CONTINENTAL PATTERN GIMLETS



- No. 80—SCREW POINT, cast steel blade, hand filed screw point; turned hardwood handle; blade extends through handle and is riveted at end; length over all, 5 inches; assorted sizes 4 to 8-32ds; weight per gross, 7½ lbs.Per Gross, \$12.00
- No. 82—COBRA POINT, cast steel blade; turned hardwood handle; blade extends through handle and is riveted at end; length over all, 5 inches; assorted sizes 4 to 8-32ds; weight per gross, 7½ lbs.,
Per Gross, \$12.00
- No. 83—DOUBLE CUT, POLISHED, cast steel blade; turned hardwood handle; blade extends through handle and is riveted at end; length over all 5 inches; assorted sizes 4 to 8-32ds; weight per gross, 9 lbs.,
Per Gross, \$12.00

All the above, one dozen in a box

SNELL COUNTERSINKS

Forged from cast steel, polished finish.



No. 67

- No. 67—FLAT COUNTERSINKS, for metal, countersinks to 5/8 inch; length over all, 4¼ inches; weight per dozen, 1¼ lbs.....Per Dozen, \$2.50



No. 68

- No. 68—ROSE COUNTERSINKS, for metal, countersinks to 5/8 inch; length over all, 4¼ inches; weight per dozen, 1¼ lbs.Per Dozen, \$2.75



No. 69

- No. 69—SNAIL COUNTERSINKS, for wood, countersinks to 5/8 inch; length over all, 4¼ inches; weight per dozen, 1½ lbs.....Per Dozen, \$2.50

All the above, one dozen in a box

SNELL SCREW DRIVER BITS



No. 77

No. 77—Forged from tool steel, full polished, with ground ends; assorted width blades, $\frac{3}{8}$, $\frac{7}{16}$ and $\frac{1}{2}$ inch; length over all, $4\frac{1}{2}$ inches; weight per dozen, $1\frac{1}{8}$ lbs. Per Dozen, \$2.00



No. 78

No. 78—Cast steel, polished blades; assorted width blades, $\frac{1}{8}$ to $\frac{5}{8}$ inch; length over all, $4\frac{1}{2}$ inches; weight per dozen, $1\frac{1}{4}$ lbs. Per Dozen, \$1.50



No. 79

No. 79—DOUBLE END, cast steel, polished blades; length over all, $4\frac{1}{2}$ inches; $\frac{1}{4}$ inch blade on one end, $\frac{5}{16}$ inch on other end; weight per dozen, $1\frac{1}{2}$ lbs. Per Dozen, \$3.00

All the above, One Dozen in a Box

SNELL ROUND PUNCHES



"BLACK JACK" No. 37

Polished head and bevel; natural finish octagon body; hardened tool steel, will withstand severest usage as metal or machine punch; hollow tapered for removing section rivets.

Length over all, inches	8	9	10
Per dozen	\$4.00	4.00	4.00
Diameter of body, inches	$\frac{1}{2}$	$\frac{5}{8}$	$\frac{3}{4}$
Diameter of point, inches	$\frac{3}{16}$	$\frac{7}{16}$	$\frac{1}{4}$
Weight per dozen, lbs.	5	8	$12\frac{1}{4}$

Half Dozen in a Box

SNELL ROOFING PUNCHES



No. 38

No. 38—Polished head and taper, natural finish octagon body, hardened tool steel, length over all, $7\frac{1}{2}$ inches; weight per dozen, $3\frac{1}{2}$ lbs. Per Dozen, \$4.00

One Dozen in a Box

INDEX

	PAGE		PAGE
Air Augers.....	14	Crank Handle Ice Augers.....	23
Angular Boring Machines.....	20	Cuban Ring Augers.....	24
Auger and Bit Head Types.....	2	Derrick Augers.....	26
Auger and Bit Terms.....	1	Double End Screw Driver Bits.....	31
Auger Bit Sets.....	4, 5, 6, 7, 8, 9	Dowel Bits.....	28
Standard Lists.....	7	Electricians' Bits.....	7, 29
Auger Bits, Bates.....	6, 9	Gimlets.....	29
Extension Lip.....	4, 8, 9	Expansive Bits.....	3
Ship.....	14	Flat Countersinks.....	30
Snell Extra.....	4, 8, 9	Gas Fitters' Augers.....	24
Snell Special.....	6	Gimlet Bits.....	27, 29
Solid Center.....	5, 8, 9	Gimlets.....	29, 30
Star.....	7, 8, 9	Head Types of Bits and Augers.....	2
Augers, Air.....	14	Ice Augers.....	23
Boring Machine.....	21	Long Ring Augers.....	24, 25
Derrick.....	26	Machine Bits.....	17, 18, 19
Gas Fitters'.....	24	Countersinks.....	17
Ice.....	23	Machines, Boring.....	20
Millwright.....	25	Metal Punches.....	31
Nut, Carpenters'.....	22	Millwright Augers.....	25
Pneumatic.....	14	Nut Augers, Carpenters'.....	22
Rafting.....	26	Parts for Boring Machines.....	20
Ring.....	23, 24, 25	Plug Bits.....	28
Scotch Eye.....	23	Pneumatic Augers.....	14
Ship.....	11, 12, 13, 16	Power Machine Bits.....	17, 18, 19
Treenail.....	23	Punches, Roofing.....	31
Bates Auger Bits.....	6, 9	Round.....	26
Bit and Auger Head Types.....	2	Rafting Augers.....	20
Bit and Auger Terms.....	1	Repair Parts for Boring Machines.....	20
Bits, Auger, Bates.....	6, 9	Rice Patent Boring Machines.....	20
Extension Lip.....	4, 8, 9	Ring Augers.....	23, 24, 25
In Sets.....	4, 5, 6, 7, 8, 9	Roofing Punches.....	31
Ship.....	14	Round Punches.....	31
Snell Extra.....	4, 8, 9	Rose Countersinks.....	30
Snell Special.....	6	Scotch Eye Augers.....	23
Solid Center.....	5, 8, 9	Screw Driver Bits.....	31
Star.....	7, 8, 9	Sets, Auger Bits.....	4, 5, 6, 7, 8, 9
Bits, Car.....	10	Boring Machine Augers.....	21
Car, Ship Auger.....	15, 16	Car Bits.....	10
Center.....	28	Combination Bits.....	9
Clark Expansive.....	3	Ship Auger Bits.....	14
Countersink Gimlet.....	27	Standard Lists, Auger Bit.....	7
Dowel.....	28	Ship Auger Bits.....	14, 16
Electricians'.....	7, 29	Boring Machine Augers.....	21
Expansive.....	3	Car Bits.....	15, 16
Gimlet.....	29	Machine Bits.....	17
Machine.....	17, 18, 19	Ship Augers.....	11, 12, 13, 16
Plug.....	28	Short Ring Augers.....	24, 25
Screw Driver.....	31	Snail Countersinks.....	30
Ship Auger.....	14, 16	Solid Center Auger Bits.....	5, 8, 9
Ship Auger Car.....	15, 16	Boring Machine Augers.....	21
Tapping.....	27	Carpenters' Nut Augers.....	22
"Black Jack" Round Punches.....	31	Derrick Augers.....	26
Boring Machine Augers.....	21	Dowel Bits.....	28
Machines.....	20	Machine Bits.....	17
Canvas Roll Auger Bit Sets.....	9	Rafting Augers.....	26
Car Bits.....	10	Ring Augers.....	25
Ship Auger.....	15, 16	Ship Auger Bits.....	16
Carpenters' Nut Augers.....	22	Ship Auger Car Bits.....	16
Center Bits.....	28	Ship Augers.....	16
Clark Expansive Bits.....	3	Standard Lists, Auger Bit Sets.....	7
Columbia Box Auger Bit Sets.....	9	Star Auger Bits.....	7, 8, 9
Combination Bit Set.....	9	Electricians' Bits.....	7
Countersink Gimlet Bits.....	27	Machine Bits.....	17
Countersinks, Flat.....	30	Tapping Bits.....	27
Machine.....	17	Tapping Bits, Snell.....	27
Rose.....	30	Treenail Augers.....	23
Snail.....	30	Upright Boring Machines.....	20

THE WINSTED EDGE TOOL WORKS

Manufacturers of

Chisels, Drawing Knives and Gouges

OUR TOOLS ARE
STAMPED

**T. H. WITHERBY
WARRANTED**

AND CARRY THE MOST
LIBERAL GUARANTEE

WITHERBY SOCKET FIRMER CHISELS

Plain Handles

6 1/4 Inch Blade



PLAIN EDGE—No. 10

Size, inches	1/8	1/4	3/8	1/2	5/8	3/4	7/8	1	1 1/4	1 1/2	1 3/4	2
Per dozen	\$12.50	12.50	12.50	12.50	14.00	14.50	16.00	16.50	18.50	20.00	22.00	23.00

The above Chisels are packed 1/2 dozen in a box.

Assorted, 6 in set, 1/4 to 2 (1 each, 1/4, 1/2, 3/4, 1, 1 1/2, 2 inch)	Per set, \$8.66
Assorted, 12 in set, 1/8 to 2 (1 each, 1/8, 1/4, 3/8, 1/2, 5/8, 3/4, 7/8, 1, 1 1/4, 1 1/2, 1 3/4, 2 inch)	Per set, 17.02



BEVEL EDGE—No. 15

These Chisels take the same list as No. 10, with a net extra charge for Bevel Edge

Leather Tip Handles

6 1/4 Inch Blade



PLAIN EDGE—No. 100

Size, inches	1/8	1/4	3/8	1/2	5/8	3/4	7/8	1	1 1/4	1 1/2	1 3/4	2
Per dozen	\$14.00	14.00	14.00	14.00	15.50	16.00	18.00	18.50	20.50	22.00	24.00	25.00

The above Chisels are packed 1/2 dozen in a box

Assorted, 6 in set, 1/4 to 2 (1 each, 1/4, 1/2, 3/4, 1, 1 1/2, 2 inch)	Per set, \$9.59
Assorted, 12 in set, 1/8 to 2 (1 each, 1/8, 1/4, 3/8, 1/2, 5/8, 3/4, 7/8, 1, 1 1/4, 1 1/2, 1 3/4, 2 inch)	Per set, 18.86



BEVEL EDGE—No. 150

These Chisels take the same list as No. 100, with a net extra charge for Bevel Edge

(A)

WITHERBY SOCKET FIRMER CHISELS

Leather Tip Handles—Special Mirror Finish—6¼-Inch Blades



PLAIN EDGE—No. 70

These chisels are of extra fine quality, highly polished and distinctively attractive

Size, inches . . .	¼	½	¾	1	1¼	1½	1¾	2				
Per dozen	\$7.00	7.00	7.00	7.50	8.00	8.00	8.50	9.00	9.50	10.00	10.50	11.00

The above chisels are packed one-half dozen in a box

Assorted, 6 in set, ¼ to 2 (1 each, ¼, ½, ¾, 1, 1½, 2 inch) Per set, \$4.60

Assorted, 12 in set, ¼ to 2 (1 each, ¼, ½, ¾, 1, 1½, 2 inch) Per set, 9.01



BEVEL EDGE—No. 75

These Chisels take the same list as No. 70, with a net extra charge for Bevel Edge

WITHERBY SOCKET FIRMER CABINET CHISELS

Plain Handles

4½ Inch Blades



PLAIN EDGE—No. 180

Size, inches . . .	¼	½	¾	1	1¼	1½	1¾	2				
Per dozen	\$12.50	12.50	12.50	12.50	14.00	14.50	16.00	16.50	18.50	20.00	22.00	23.00

The above chisels are packed one-half dozen in a box

Assorted, 6 in set, ¼ to 2 (1 each, ¼, ½, ¾, 1, 1½, 2 inch) Per set, 8.66

Assorted, 12 in set, ¼ to 2 (1 each, ¼, ½, ¾, 1, 1½, 2 inch) Per set, 17.02

BEVEL EDGE—No. 185

These Chisels take the same list as No. 180, with a net extra charge for Bevel Edge

WITHERBY SOCKET FIRMER CABINET CHISELS

Leather Tip Handles

4 1/2 Inch Blades



PLAIN EDGE—NO. 190

Size, inches	1/8	1/4	3/8	1/2	5/8	3/4	7/8	1	1 1/4	1 1/2	1 3/4	2
Per dozen	\$14.00	14.00	14.00	14.00	15.50	16.00	18.00	18.50	20.50	22.00	24.00	25.00
Assorted, 6 in set, 1/4 to 2 (1 each, 1/4, 1/2, 3/4, 1, 1 1/2, 2 inch)	Per set \$9.59											
" 12 in set, 1/8 to 2 (1 each, 1/8, 1/4, 3/8, 1/2, 5/8, 3/4, 7/8, 1, 1 1/4, 1 1/2, 1 3/4, 2 inch)	" " 18.86											

BEVEL EDGE—NO. 195

These Chisels take the same list as No. 190, with a net extra charge for Bevel Edge

WITHERBY SOCKET POCKET CHISELS

Plain Handles

3 1/2 Inch Blades



PLAIN EDGE—NO. 500

Size, inches	1/4	1/2	3/4	1	1 1/4	1 1/2	1 3/4	2
Per dozen	\$12.50	12.50	14.50	16.50	18.50	20.00	22.00	23.00
Assorted, 6 in set, 1/4 to 1 1/2 (1 each, 1/4, 1/2, 3/4, 1, 1 1/4, 1 1/2 inch)	Per set \$8.27							



BEVEL EDGE—NO. 505

These Chisels take the same list as No. 500, with a net extra charge for Bevel Edge

Leather Tip Handles

3 1/2 Inch Blades



PLAIN EDGE—NO. 510

Size, inches	1/4	1/2	3/4	1	1 1/4	1 1/2	1 3/4	2
Per dozen	\$14.00	14.00	16.00	18.50	20.50	22.00	24.00	25.00
Assorted, 6 in set, 1/4 to 1 1/2 (1 each, 1/4, 1/2, 3/4, 1, 1 1/4, 1 1/2 inch)	Per set \$9.19							



BEVEL EDGE—NO. 515

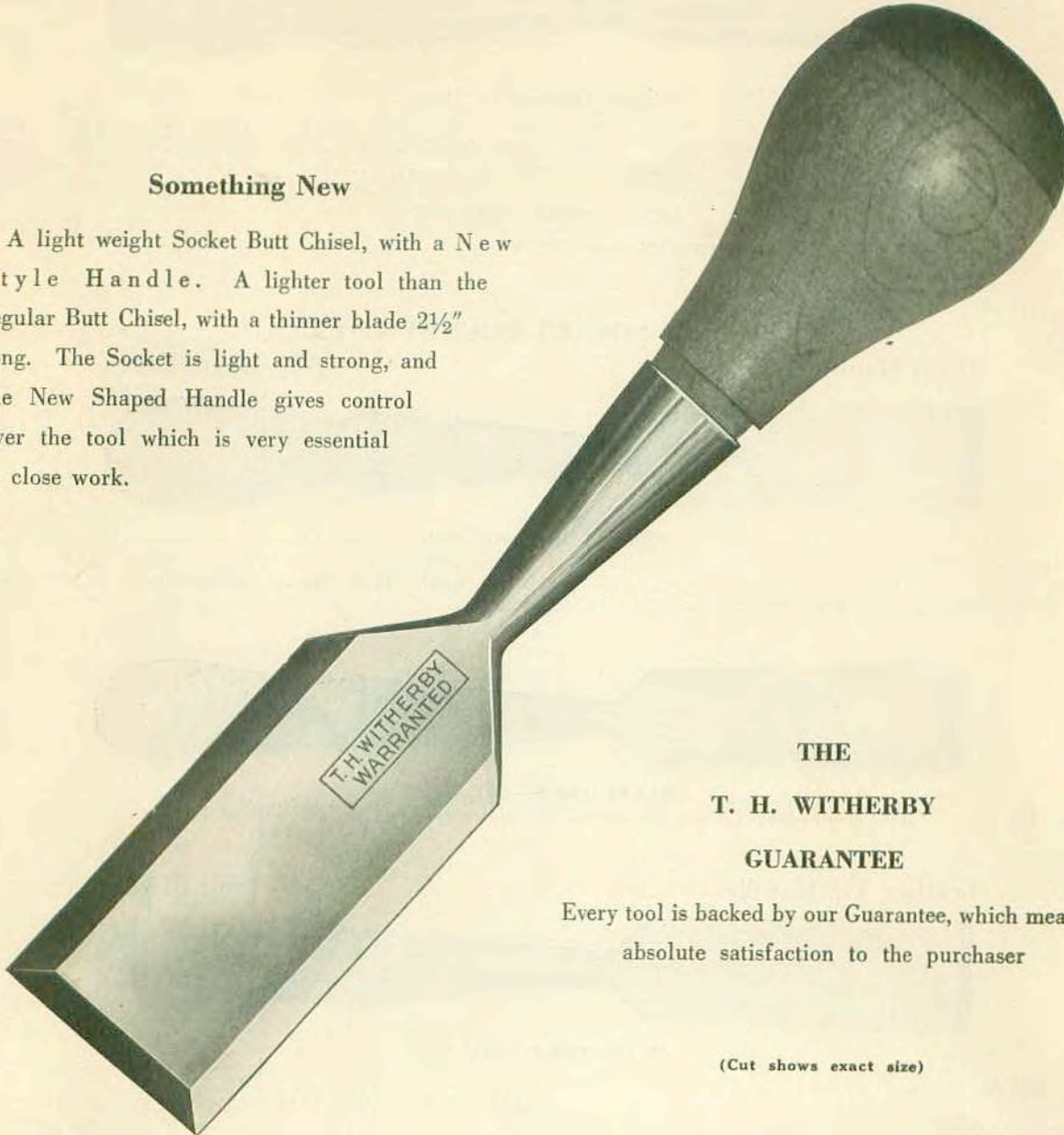
These Chisels take the same list as No. 510, with a net extra charge for Bevel Edge

All tools on this page are packed 1/2 dozen in a packing box excepting the sets, which are packed in fancy hardwood box, unless otherwise ordered. A net charge is added for the fancy box.

WITHERBY SOCKET BUTT CHISEL

Something New

A light weight Socket Butt Chisel, with a New Style Handle. A lighter tool than the regular Butt Chisel, with a thinner blade 2 1/2" long. The Socket is light and strong, and the New Shaped Handle gives control over the tool which is very essential in close work.



THE
T. H. WITHERBY
GUARANTEE

Every tool is backed by our Guarantee, which means absolute satisfaction to the purchaser

(Cut shows exact size)

Leather Tip Handle

NO. 565—MADE ONLY WITH BEVEL EDGE

Size, inches	1/4	1/2	3/4	1	1 1/4	1 1/2	1 3/4	2
(Plain List) Per dozen	\$14.00	14.00	16.00	18.50	20.50	22.00	24.00	25.00
Bevel Edge, Net Extra, Per dozen	\$							

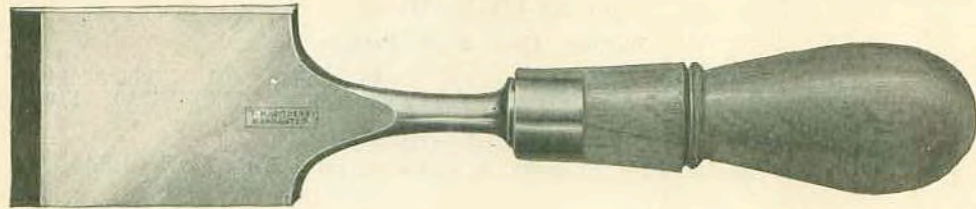
Packed 1/2 Dozen in a Box

Furnished in sets with canvas rolls, Net extra per dozen..... \$.....
 Furnished in slide-cover wood boxes, Net extra per dozen.....
 Assorted, 6 in set, 1/4 to 1 1/2 inch (1 each, 1/4, 1/2, 3/4, 1, 1 1/4, 1 1/2 inches) (Plain List)Per Set \$9.19
 Bevel EdgesNet Extra, Per Set

WITHERBY TANG BUTT CHISELS

Plain Handles

2¾ Inch Blade



PLAIN EDGE—NO. 270

Size, inches	¼	½	¾	1	1¼	1½	1¾	2
Per dozen	\$5.65	5.65	6.35	7.45	8.75	10.25	12.00	14.25

BEVEL EDGE—NO. 275

These Chisels take the same list as No. 270, with a net extra charge for Bevel Edge

Leather Tip Handles

2¾ Inch Blade



PLAIN EDGE—NO. 270LT

Size, inches	¼	½	¾	1	1¼	1½	1¾	2
Per dozen	\$6.40	6.40	7.10	8.20	9.50	11.00	12.75	15.00

BEVEL EDGE—NO. 275LT

These Chisels take the same list as No. 270LT, with a net extra charge for Bevel Edge

Packing

All tools on this page packed ½ dozen in a box.

Assortments in boxes of ½ dozen and 1 dozen.

WITHERBY SOCKET FRAMING CHISELS

Iron Ring Handles

8 Inch Blades



PLAIN EDGE—NO. 30

Welded, Oval Back Pattern

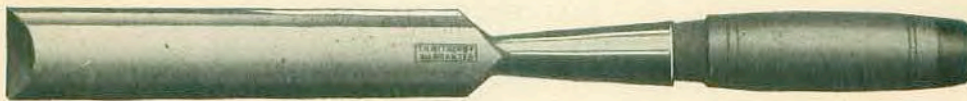
Size, inches	1/4	3/8	1/2	3/4	1	1 1/4	1 1/2	1 3/4	2
Per dozen	\$9.00	9.00	9.00	10.00	11.00	12.00	13.00	14.50	16.00

BEVEL EDGE—NO. 35

These Chisels take the same list as No. 30, with a net extra charge for Bevel Edge

Leather Tip Handles

8 Inch Blades



PLAIN EDGE—NO. 30LT

Size, inches	1/4	3/8	1/2	3/4	1	1 1/4	1 1/2	1 3/4	2
Per dozen	\$11.00	11.00	11.00	12.00	13.00	14.00	15.00	16.50	18.00

BEVEL EDGE—NO. 35LT

These Chisels take the same list as No. 30 LT, with a net extra charge for Bevel Edge

WITHERBY SOLID STEEL SOCKET FRAMING CHISELS

Iron Ring Handles

8 Inch Blades



PLAIN EDGE—NO. 60

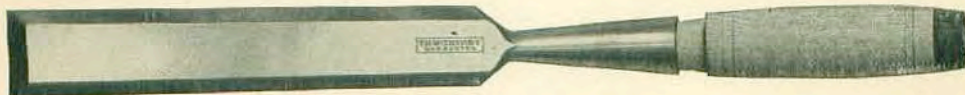
Size, inches	1/4	3/8	1/2	3/4	1	1 1/4	1 1/2	1 3/4	2
Per dozen	\$9.00	9.00	9.00	10.00	11.00	12.00	13.00	14.50	16.00

BEVEL EDGE—NO. 65

These Chisels take the same list as No. 60, with a net extra charge for Bevel Edge

Leather Tip Handles

8 Inch Blades



PLAIN EDGE—NO. 60LT

Size, inches	1/4	3/8	1/2	3/4	1	1 1/4	1 1/2	1 3/4	2
Per dozen	\$11.00	11.00	11.00	12.00	13.00	14.00	15.00	16.50	18.00

BEVEL EDGE—NO. 65LT

These Chisels take the same list as No. 65 LT, with a net extra charge for Bevel Edge

Packing

All tools on this page are packed one-half dozen in a box

WITHERBY TANG FIRMER CHISELS

Without Handles



PLAIN EDGE—NO. 200

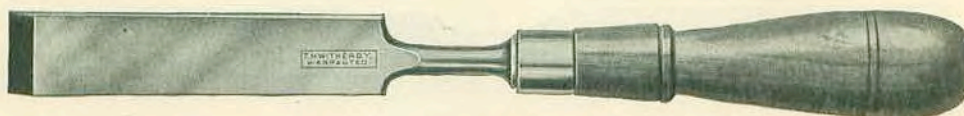
Length of Blades, 3½ to 5 inches, according to size.

Size, inches	1/8	1/4	3/8	1/2	5/8	3/4	7/8	1	1 1/4	1 1/2	1 3/4	2
Per dozen	\$4.40	4.40	4.40	4.40	4.70	5.10	5.60	6.20	7.50	9.00	10.75	13.00
Assorted: 6 in set, 1/4 to 1 1/2 (1 each, 1/4, 1/2, 3/4, 1, 1 1/4, 1 1/2 inch)	Per Set, \$3.20											
Assorted: 12 in set, 1/8 to 2 (1 each, 1/8, 1/4, 3/8, 1/2, 5/8, 3/4, 7/8, 1, 1 1/4, 1 1/2, 1 3/4, 2 inch)	Per Set, 6.95											

BEVEL EDGE—NO. 215

These Chisels take the same list as No. 200, with a net extra charge for Bevel Edge

With Plain Handles



PLAIN EDGE—NO. 240

Size, inches	1/8	1/4	3/8	1/2	5/8	3/4	7/8	1	1 1/4	1 1/2	1 3/4	2
Per dozen	\$5.65	5.65	5.65	5.65	5.95	6.35	6.85	7.45	8.75	10.25	12.00	14.25
Assorted: 6 in set, 1/4 to 1 1/2 (1 each, 1/4, 1/2, 3/4, 1, 1 1/4, 1 1/2 inch)	Per Set, \$3.86											
Assorted: 12 in set, 1/8 to 2 (1 each, 1/8, 1/4, 3/8, 1/2, 5/8, 3/4, 7/8, 1, 1 1/4, 1 1/2, 1 3/4, 2 inch)	Per Set, 8.25											

BEVEL EDGE—NO. 245

These Chisels take the same list as No. 240, with a net extra charge for Bevel Edge

With Leather Tip Handles

PLAIN EDGE—NO. 240LT

Size, inches	1/8	1/4	3/8	1/2	5/8	3/4	7/8	1	1 1/4	1 1/2	1 3/4	2
Per dozen	\$6.40	6.40	6.40	6.40	6.70	7.10	7.60	8.20	9.50	11.00	12.75	15.00
Assorted: 6 in set, 1/4 to 1 1/2 (1 each, 1/4, 1/2, 3/4, 1, 1 1/4, 1 1/2 inch)	Per Set, \$4.25											
Assorted: 12 in set, 1/8 to 2 (1 each, 1/8, 1/4, 3/8, 1/2, 5/8, 3/4, 7/8, 1, 1 1/4, 1 1/2, 1 3/4, 2 inch)	Per Set, 9.05											

BEVEL EDGE—NO. 245LT

These Chisels take the same list as No. 240LT, with a net extra charge for Bevel Edge

Packing

All tools on this page packed 1/2 dozen in a box.

Assortments in boxes of 1/2 dozen and 1 dozen.

WITHERBY TANG FIRMER GOUGES

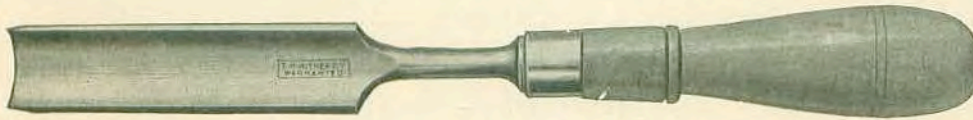
Without Handles No. 300 3½ to 5 Inch Blades



Length of Blades, 3½ to 5 inches, according to size.

Size, Inches	1/8	1/4	3/8	1/2	5/8	3/4	7/8	1	1 1/4	1 1/2
Per dozen	\$5.70	5.70	5.70	5.70	6.10	6.60	7.30	8.00	9.75	11.75

With Plain Handles No. 310 3½ to 5 Inch Blades



Size, Inches	1/8	1/4	3/8	1/2	5/8	3/4	7/8	1	1 1/4	1 1/2
Per dozen	\$6.95	6.95	6.95	6.95	7.35	7.85	8.55	9.25	11.00	13.00

With Leather Tip Handles No. 310LT 3½ to 5 Inch Blades



Size, Inches	1/8	1/4	3/8	1/2	5/8	3/4	7/8	1	1 1/4	1 1/2
Per dozen	\$7.70	7.70	7.70	7.70	8.10	8.60	9.30	10.00	11.75	13.75

WITHERBY SOCKET FIRMER GOUGES

Plain Handles No. 320 6¼ Inch Blade



Size, inches	1/8	1/4	3/8	1/2	5/8	3/4	7/8	1	1 1/4	1 1/2	1 3/4	2
Per dozen	\$9.50	9.50	9.50	10.00	10.50	11.25	12.00	12.75	14.25	16.00	17.50	20.00

Assorted, 6 in set, 1/4 to 1 1/2 (1 each, 1/4, 1/2, 3/4, 1, 1 1/4, 1 1/2 inch) Per set, \$6.47
 Assorted, 12 in set, 1/8 to 2 (1 each, 1/8, 1/4, 3/8, 1/2, 5/8, 3/4, 7/8, 1, 1 1/4, 1 1/2, 1 3/4, 2 inch) Per set, 13.37

Leather Tip Handles No. 320LT 6¼ Inch Blade

Size, inches	1/8	1/4	3/8	1/2	5/8	3/4	7/8	1	1 1/4	1 1/2	1 3/4	2
Per dozen	\$10.75	10.75	10.75	11.25	11.75	12.50	13.25	14.00	15.50	17.25	18.75	21.25

Assorted, 6 in set, 1/4 to 1 1/2 (1 each, 1/4, 1/2, 3/4, 1, 1 1/4, 1 1/2 inch) Per set, \$7.11
 Assorted, 12 in set, 1/8 to 2 (1 each, 1/8, 1/4, 3/8, 1/2, 5/8, 3/4, 7/8, 1, 1 1/4, 1 1/2, 1 3/4, 2 inch) Per set, 14.68

Outside bevel will be sent unless otherwise ordered.

All tools on this page packed 1/2 dozen in a box

WITHERBY HEAVY SOCKET MILLWRIGHT GOUGES



Iron Ring Handle No. 335 8 Inch Blade

Add \$1.00 per inch for each additional inch over 8 inches in length.

Size, inches	$\frac{3}{4}$	1	1 $\frac{1}{4}$	1 $\frac{1}{2}$
Per dozen	\$23.00	26.00	29.00	32.00

Leather Tip Handle No. 335LT 8 Inch Blade

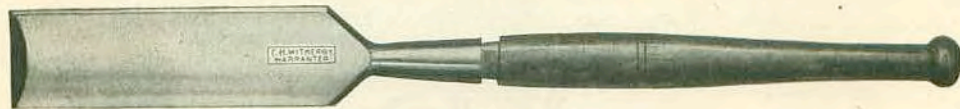
Add \$1.00 per inch for each additional inch over 8 inches in length.

Size, inches	$\frac{3}{4}$	1	1 $\frac{1}{4}$	1 $\frac{1}{2}$
Per dozen	\$24.25	27.25	30.25	33.25

Inside bevel will be sent unless otherwise ordered.

Above Gouges are packed One-half Dozen in slide cover wood boxes.

WITHERBY HEAVY SOCKET SLICKS



Long Handle No. 45 10 Inch Blade

Size, inches	2 $\frac{1}{2}$	3	3 $\frac{1}{2}$
Per dozen	\$33.50	38.00	45.50

Socket Slicks packed One-sixth Dozen in slide cover wood box

WITHERBY SOCKET DECK CHISELS, SOLID STEEL



Iron Ring Handle No. 50, Plain Edge 5 $\frac{1}{2}$ Inch Blade

Size, inches	$\frac{3}{4}$	1	1 $\frac{1}{4}$	1 $\frac{1}{2}$
Per dozen	\$7.00	8.00	9.00	10.00

Leather Tip Handle No. 50LT, Plain Edge 5 $\frac{1}{2}$ Inch Blade

Size, inches	$\frac{3}{4}$	1	1 $\frac{1}{4}$	1 $\frac{1}{2}$
Per dozen	\$8.50	9.50	10.50	11.50

Deck chisels are packed One-half Dozen in slide cover wood box.

WITHERBY SOCKET CORNER CHISELS

8-inch blade, made from solid bar of best silver steel



No. 40. Iron Ring Handle

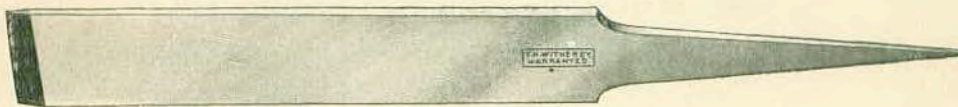
Size, inches	3/4	1
Per dozen	\$22.50	25.50

No. 40LT. Leather Tip Handle

Size, inches	3/4	1
Per dozen	\$23.25	26.25

WITHERBY TURNING CHISELS

Without Handles



No. 250. 6 1/2 INCH BLADE

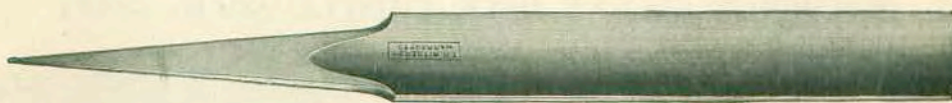
Size, inches	1/8	1/4	3/8	1/2	5/8	3/4	7/8	1	1 1/4	1 1/2	1 3/4	2
Per dozen	\$6.00	6.00	6.00	6.00	6.50	7.00	7.75	9.00	10.75	13.25	16.00	18.50

With Handles

For plain handles, add \$1.50 per dozen to list. For long handles, add \$2.75 per dozen to list.

WITHERBY TURNING GOUGES

Without Handles



No. 340. 6 1/2 INCH BLADE

Size, inches	1/8	1/4	3/8	1/2	5/8	3/4	7/8	1	1 1/4	1 1/2	1 3/4	2
Per dozen	\$7.50	7.50	7.50	7.50	8.00	9.25	10.50	11.50	14.50	18.50	21.75	26.25

With Handles

For plain handles, add \$1.50 per dozen to list. For long handles, add \$2.75 per dozen to list.

All Tools on this page packed One-half Dozen in a box.

WITHERBY PARTING TOOLS



No. 380—6-inch Blade

Without Handles, 1/2 inch, \$4.10 per dozen

Handled, 1/2 inch, \$5.60 per dozen

WITHERBY SCRATCH AWLS



No. 385—4-inch Blade

Plain Handle, \$4.00 per dozen

Leather Tip Handle, \$4.50 per dozen

WITHERBY ENGRAVING TOOLS



Plain Handle

No. 390

4 1/2-inch Blade

Size, inches	1/8	1/4	3/8	1/2	5/8	3/4	7/8	1	1 1/4	1 1/2	1 3/4	2
Per dozen	\$12.50	12.50	12.50	12.50	14.00	14.50	16.00	16.50	18.50	20.00	22.00	23.00

Leather Tip Handle

No. 395

4 1/2-inch Blade

Size, inches	1/8	1/4	3/8	1/2	5/8	3/4	7/8	1	1 1/4	1 1/2	1 3/4	2
Per dozen	\$14.00	14.00	14.00	14.00	15.50	16.00	18.00	18.50	20.50	22.00	24.00	25.00

Packing

All tools on this page packed 1/2 dozen in a box

WITHERBY HANDLES

Second Growth White Hickory.

SOCKET FIRMER

Plain



1/8 to 1/2	5/8 to 7/8	1 to 1 1/2	1 3/4	2 inch
\$5.50	5.75	6.25	6.50	6.75 per gross

Leather Tip



1/8 to 1/2	5/8 to 7/8	1 to 1 1/2	1 3/4	2 inch
\$12.00	12.25	12.50	12.75	13.00 per gross

SOCKET FRAMING

Ring



1/8 to 1/2	5/8 to 3/4	1	1 1/4 to 1 1/2	1 3/4 to 2 inch
\$7.00	7.25	7.50	7.75	8.00 per gross

Leather Tip



1/8 to 1/2	5/8 to 3/4	1	1 1/4 to 1 1/2	1 3/4 to 2 inch
\$18.50	18.75	19.00	19.25	19.50 per gross

SOCKET POCKET

Plain



1/8 to 3/8	1 to 1 1/2	1 3/4 to 2 inch
\$6.00	6.25	6.50 per gross

Leather Tip



1/8 to 3/8	1 to 1 1/2	1 3/4 to 2 inch
\$12.00	12.50	13.00 per gross

TANG BUTT

Plain



1/8 to 1/2	5/8 to 3/4	3/8 to 1	1 1/4 to 1 1/2	1 3/4 to 2 inch
\$10.00	10.25	10.50	10.75	11.00 per gross

Leather Tip



1/8 to 1/2	5/8 to 3/4	3/8 to 1	1 1/4 to 1 1/2	1 3/4 to 2 inch
\$17.20	17.75	18.00	18.25	18.50 per gross

The above sizes indicate width of tools

WITHERBY HANDLES

Second Growth White Hickory.

TANG FIRMER

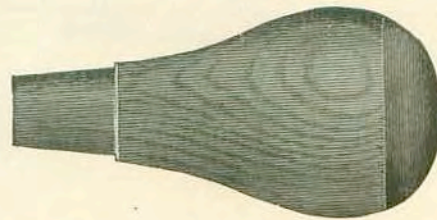
Plain



1/8 to 1/2	5/8 to 7/8	1	1 1/4 to 1 1/2	1 3/4 to 2 inch
\$10.00	10.25	10.50	10.75	11.00 per gross

SOCKET BUTT

Leather Tip



1/8 to 1 1/2	1 3/4 to 2 inch
\$12.50	13.00 per gross

TANG FIRMER

Leather Tip



1/8 to 1/2	5/8 to 7/8	1	1 1/4 to 1 1/2	1 3/4 to 2 inch
\$17.50	17.75	18.00	18.25	18.50 per gross

SOCKET FIRMER

Ring



1/8 to 1/2	5/8 to 7/8	1 to 1 1/2	1 3/4	2 inch
\$6.50	6.75	7.00	7.25	7.50 per gross

The above sizes indicate width of tools

WITHERBY SLICK HANDLES

Made of Maple



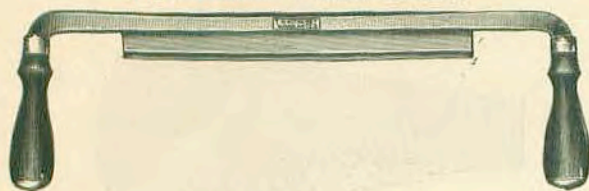
All one size.....\$18.00 per gross

WITHERBY DRAWING KNIVES

No. 105. Oval Back



No. 115. Razor Blade



No. 125. Carriage



PRICE LIST—PER DOZEN

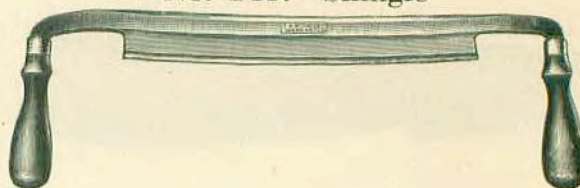
Size, inches	6	7	8	9	10	12
No. 105—Oval Back			\$13.50	14.40	15.60	....
No. 115—Razor Blade	\$13.50	13.50	13.50	14.40	15.60	18.00
No. 125—Carriage	....	....	....	13.00	....	....

WITHERBY DRAWING KNIVES

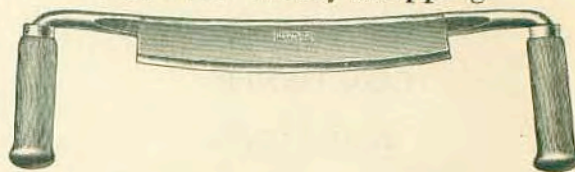
No. 135. Wagon



No. 145. Shingle



No. 175. Heavy Stripping



PRICE LIST—PER DOZEN

Size, inches	10	12	14
No. 135—Wagon	\$15.00	....	....
No. 145—Shingle	....	\$18.00	20.00
No. 175—Heavy Stripping	....	21.60	25.20

WITHERBY FOLDING DRAWING KNIVES

No. 205. Folding Handle



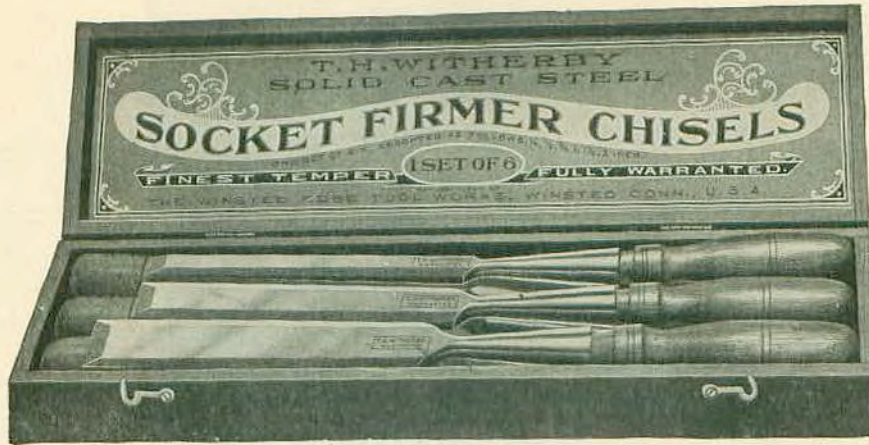
Size, inches	8	9	10
No. 205—Folding Handle	Per dozen \$28.00	29.00	30.50

Packing

All tools on this page packed 1/2 Dozen in pasteboard box

WITHERBY SOCKET FIRMER CHISELS IN DISPLAY BOXES

No. 1. For Set of Six Tools

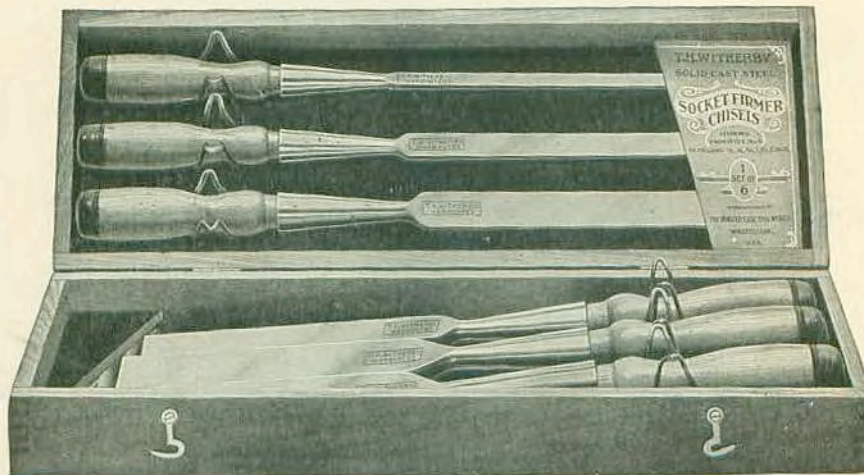


Showing No. 1 Fancy Box for Set of 6, which may be used as follows:

Net Prices—Including Boxes

Set No. 206—Set (6) Socket Firmers No. 10.....	Per set, \$.....
Set No. 226—Set (6) Bevel Edge Socket Firmers No. 15.....	Per set, \$.....
Set No. 406—Set (6) Socket Firmers, L. T. Handles, No. 100.....	Per set, \$.....
Set No. 446—Set (6) Bevel Edge Socket Firmers, L. T. Handles, No. 150.....	Per set, \$.....

No. 2. For Set of Six Tools



Showing No. 2 Fancy Box for Set of 6, which may be used as follows:

Net Prices—Including Boxes

Set No. 606—Set (6) Socket Firmers No. 10.....	Per set, \$.....
Set No. 666—Set (6) Bevel Edge Socket Firmer No. 15.....	Per set, \$.....
Set No. 806—Set (6) Socket Firmers, L. T. Handles, No. 100.....	Per set, \$.....
Set No. 886—Set (6) Bevel Edge Socket Firmers, L. T. Handles, No. 150.....	Per set, \$.....

WITHERBY SOCKET FIRMER CHISELS IN DISPLAY BOXES

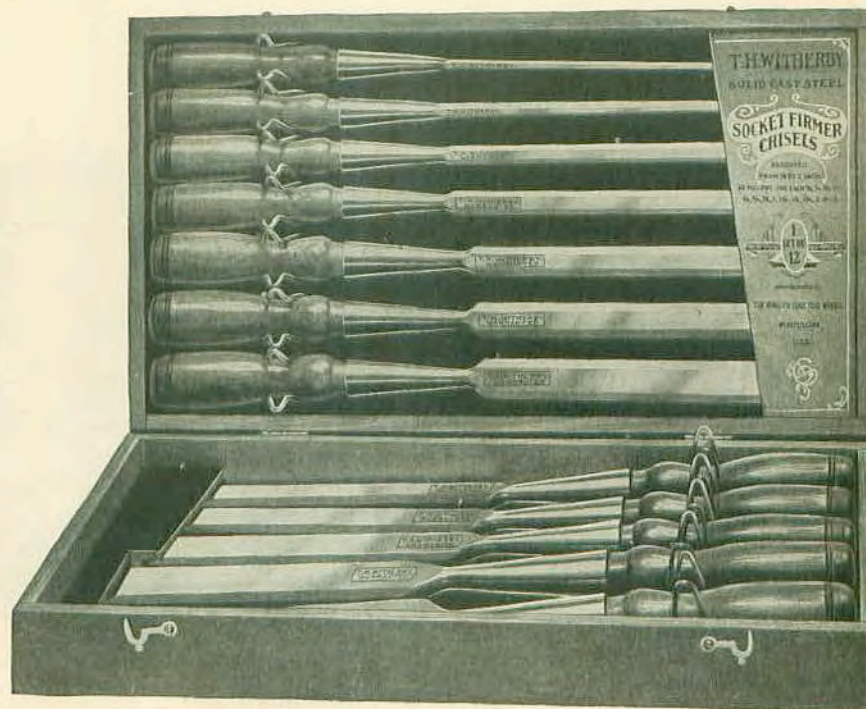


No. 1

For Set of Twelve Tools

Net Prices—Including Boxes

Set No. 701—Set (12)	No. 70 in No. 1 box.....	Per set, \$.....
Set No. 751—Set (12)	No. 75 in No. 1 box.....	Per set, \$.....
Set No. 212—Set (12)	Socket Firmers No. 10.....	Per set, \$.....
Set No. 222—Set (12)	Bevel Edge Socket Firmers No. 15.....	Per set, \$.....
Set No. 412—Set (12)	Socket Firmers, L. T. Handles, No. 100.....	Per set, \$.....
Set No. 442—Set (12)	Bevel Edge Socket Firmers, L. T. Handles, No. 150.....	Per set, \$.....



No. 2

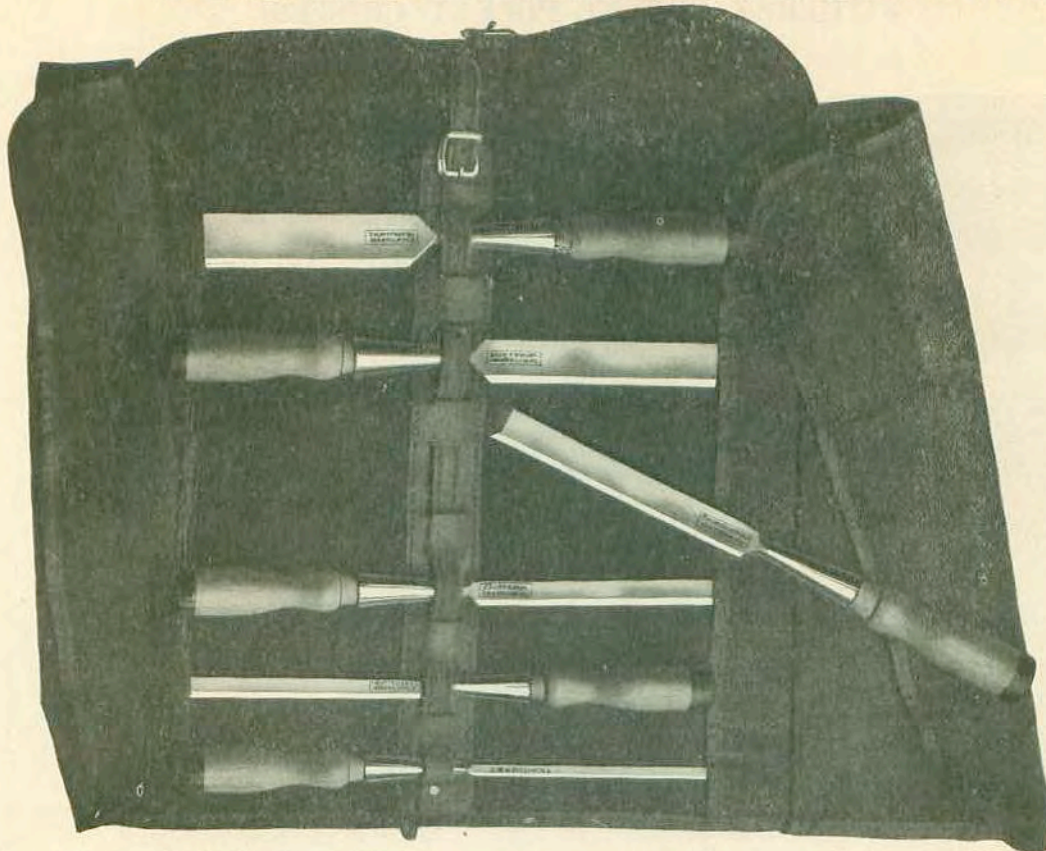
For Set of Twelve Tools

Net Prices—Including Boxes

Set No. 702—Set (12)	No. 70 in No. 2 box.....	Per set, \$.....
Set No. 752—Set (12)	No. 75 in No. 2 box.....	Per set, \$.....
Set No. 612—Set (12)	Socket Firmers No. 10.....	Per set, \$.....
Set No. 662—Set (12)	Bevel Edge Socket Firmers No. 15.....	Per set, \$.....
Set No. 812—Set (12)	Socket Firmers, L. T. Handles, No. 100.....	Per set, \$.....
Set No. 882—Set (12)	Bevel Edge Socket Firmers, L. T. Handles, No. 150.....	Per set, \$.....

JOHN H. GRAHAM & CO. DIRECT REPRESENTATIVES

WITHERBY SOCKET FIRMER CHISELS IN CANVAS ROLLS



No. 6
For Set
of Six
Tools

- No. 906—Set (6) Socket Firmers No. 10.....Net Per Set, with Roll, \$.....
- No. 966—Set (6) Bevel Edge Socket Firmers No. 15.....Net Per Set, with Roll, \$.....
- No. 1006—Set (6) Socket Firmers, L. T. Handles, No. 100.....Net Per Set, with Roll, \$.....
- No. 1066—Set (6) Bevel Edge Socket Firmers, L. T. Handles, No. 150.....Net Per Set, with Roll, \$.....

No. 12
For Set of Twelve
Socket Firmer Tools

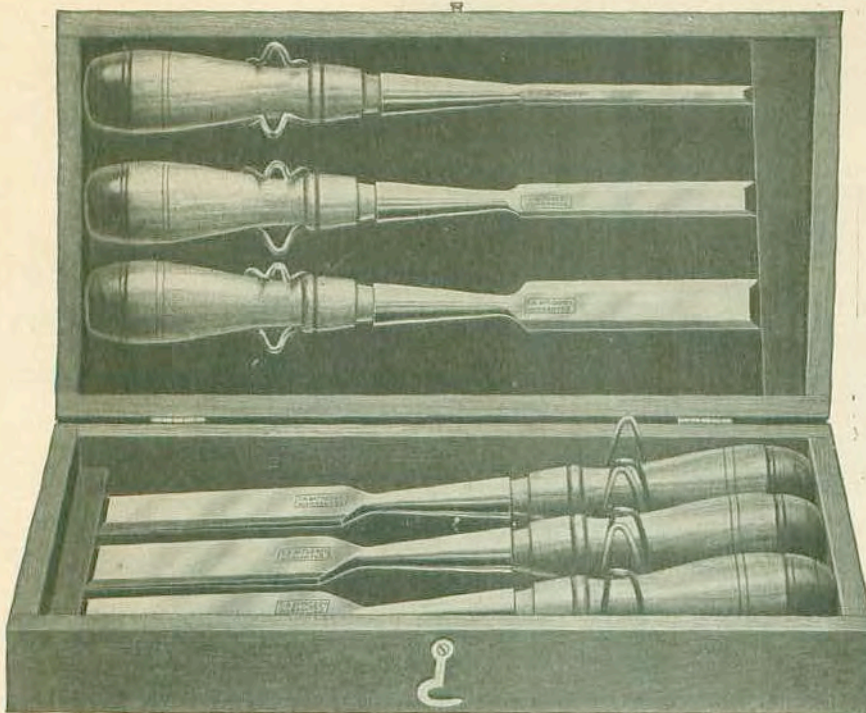
- No. 902—Set (12) No. 10
- 912—Set (12) Bevel Edge No. 15
- 1002—Set (12) L. T. Handles, No. 100
- 1022—Set (12) Bevel Edge, L. T. Handles No. 150



NET PRICES

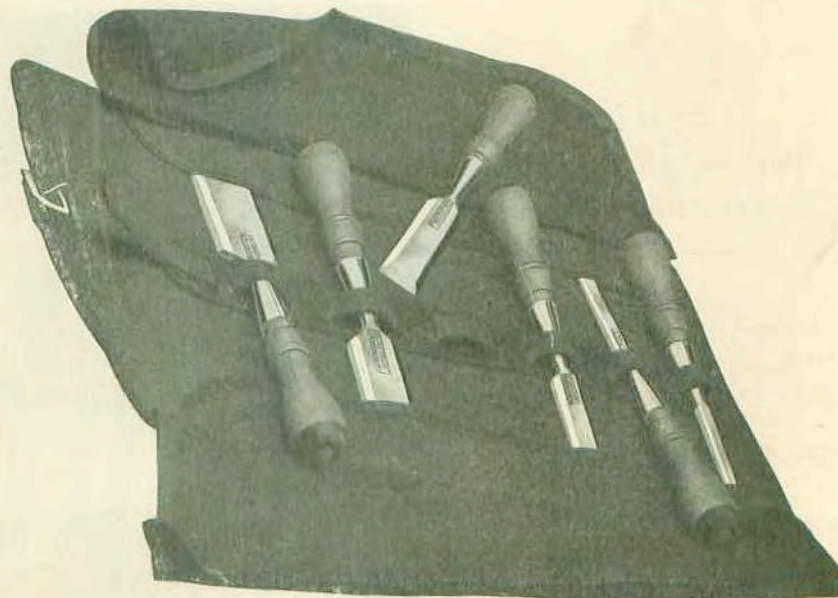
No.	902	912	1002	1022
Per Set, with Rolls	\$....	\$....	\$....	\$....

WITHERBY SOCKET POCKET CHISELS



No. 2
For Set of Six Tools

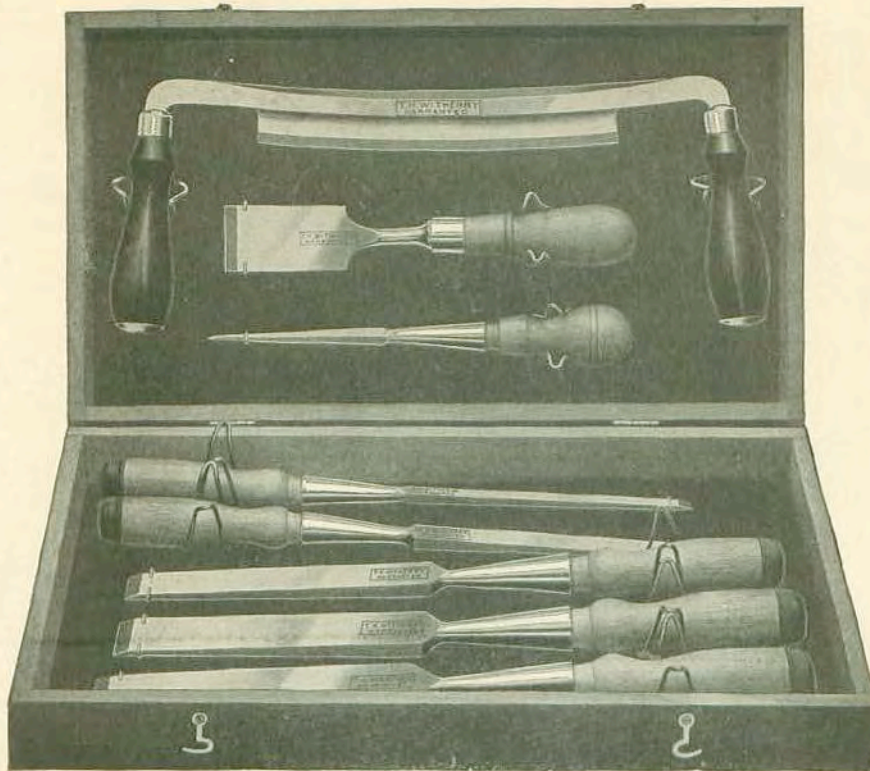
- No. 500—Plain Edge Chisels with Plain Handles.....Net Per Set (including box), \$.....
- No. 510—Plain Edge Chisels with Leather Tip Handles.....Net Per Set (including box), \$.....
- No. 505—Bevel Edge Chisels with Plain Handles.....Net Per Set (including box), \$.....
- No. 515—Bevel Edge Chisels with Leather Tip Handles.....Net Per Set (including box), \$.....



No. 3
For Set of Six Tools

- No. 520—Plain Edge Chisels with Plain Handles.....Net Per Set (including roll), \$.....
- No. 525—Plain Edge Chisels with Leather Tip Handles.....Net Per Set (including roll), \$.....
- No. 530—Bevel Edge Chisels with Plain Handles.....Net Per Set (including roll), \$.....
- No. 535—Bevel Edge Chisels with Leather Tip Handles.....Net Per Set (including roll), \$.....

WITHERBY COMBINATION SETS



No. 980

For Set of
Eight Tools

This Set contains the following tools:

No. 100—Socket Firmer Chisels, $\frac{1}{4}$, $\frac{1}{2}$, $\frac{3}{4}$, 1, $1\frac{1}{4}$ inch,
No. 270—Handled Butt Chisel, $1\frac{1}{2}$ inch

No. 115—Razor Blade Drawing Knife, 8 inch
No. 385—Combination Reamer and Scratch Awl.

Net Price, per Set (not including box) \$.....

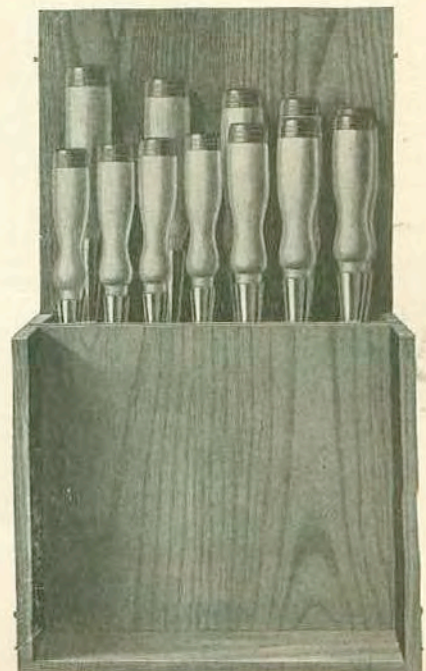
WITHERBY TOOL BOXES

No. 10

These boxes may be used for sets of 6 or 12 Socket Firmer or Pocket Chisels.

Net Price, per Box (not including Tools)

No. 10A—For 6 Chisels..... \$.....
No. 10B—For 12 Chisels..... \$.....



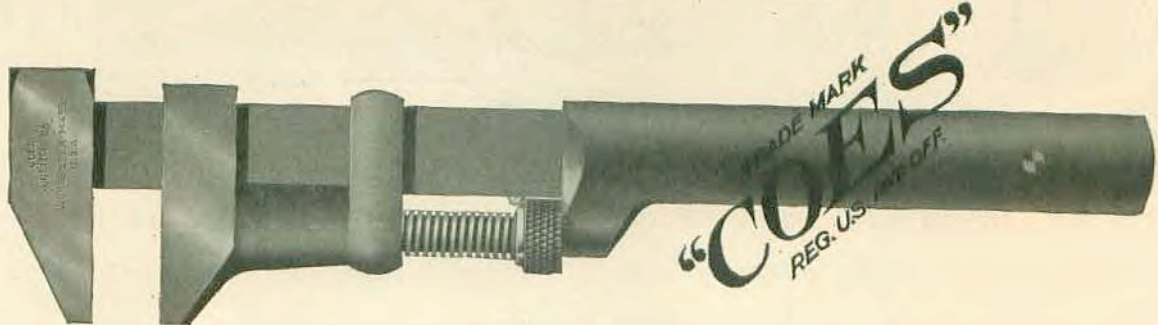
JOHN H. GRAHAM & CO. DIRECT REPRESENTATIVES

COES WRENCH CO.

Established 1841

Manufacturers of

Genuine Coes Screw Wrenches



Steel Handle

Popular Demand—The railroad wrench par excellence. Now adopted by the largest roads and manufacturers.

6-inch, 8-inch and 10-inch sizes made with standard bar slot for screw.

12-inch, 15-inch, 18-inch and 21-inch made with ball-bearing screw and extended screw support.

Bar—Steel, cold swaged and fully hardened. The stiffest bar made in any line.

Jaw—Extra heavy, semi-steel and hardened.

Screw—Steel, hardened and in the ball-bearing sizes, with polished and hardened ball race.

Ball—First quality standard bearing ball. Fully hardened.


Handle—Semi-steel casting. (Design and method patented.) Internally supported and retained by cross riveting and by extension of bar through handle and riveting same. This wrench tests 35 per cent stronger than any wrench made by competitors, and, owing to being heavier than our K. H. model, about 15 per cent stronger than that regular model.

Service—Made for use in extra difficult service, and in exposed places, where heat or damp would injure a wood handle.

Purposely made heavier for this duty and for special adaptation to railroad work.

Guarantee—Warranted free from mechanical defects and both wrench and trade name registered and each wrench stamped with maker's name, etc.

Inspection—All goods subject to eleven inspections in factory and five in finishing and packing rooms.

This cut shows the parts of the Steel  Handle Wrench. It is made up of five solid parts. The jaw and bar are hardened to resist wear, as is the ball race and ball, which is shown in place in the bar. The wrench is assembled by pressure and the handle is retained by a cross rivet and by riveting the end of the bar where it comes through the handle shell.

Section of Handle



Showing Internal Support of Steel Shell

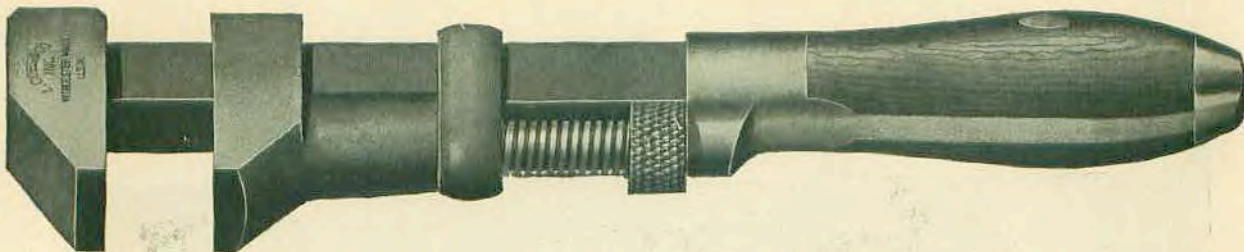
It is not amiss to call the attention of the trade to the fact that jaw and screw are each "one piece parts." That is, the jaw is not made of a casting, plus two rivets or plus two rivets and a bar introduced to cover mechanical faults in design. The screw is one piece and not a screw plus a moving dowel and a hidden spring. This is a feature the trade has overlooked, but it means much increased life and better service.

Price List

Size Inches	STEEL HANDLE WRENCHES			Per Dozen
	Full	Contents of Cases Half	Extra	
6	6 dozen	3 dozen	.....	\$15.00
8	6 "	3 "	.....	18.00
10	6 "	3 "	9 dozen	22.00
12*	6 "	3 "	4 "	28.00
15*	3 "	1½ "	2 "	38.00
18*	2 "	1 "	.....	48.00
21*	1 "	½ "	.....	58.00

* Ball Bearing.—Sizes 12, 15, 18 and 21 inch are supplied with Ball Bearing Screws.

TRADE
Coes' Genuine "Knife-Handle" Model Wrench
 MARK



Distinctive Features—An improvement of nearly every feature of the first and original type of "Knife-Handle" Wrench. No feature in this wrench is used in the imitations and each exclusive feature of handle and construction is the result of experiment and test.

Handle—Cast semi-steel frame, hardwood sides, secured at both ends by insertion under metal and riveted under pressure. The soundest, strongest wood handle made.

Screw—Steel, hardened and in one piece. Imitations are sometimes in two or three parts.

Jaw—Semi-steel casting. Hardened.

Bar—Steel, of special analysis and fully hardened. All parts interchangeable. Ten to fifteen per cent stronger than any imitation or substitute made by others.

Guarantee—Warranted free from mechanical defects, each wrench being stamped with maker's name.

Inspection—All goods subject to eleven inspections in factory and five in finishing and packing rooms.

General Construction—The Coes Knife-Handle wrench is assembled and riveted under pressure.

All wearing parts are fully hardened. The wood sides of the handle are held by and inserted beneath iron at *both* ends and by cross rivet.

Section of Handle



This Sectional Cut shows the Construction of the Coes Genuine Knife Handle—the strongest Wood Handle that is made.

Price List

"KNIFE-HANDLE"—BLACK FINISH

Size Inches	Contents of Cases			Per Dozen
	Full	Half	Extra	
6	6 dozen	3 dozen	.....	\$15.00
8	6 "	3 "	.....	18.00
10	6 "	3 "	.....	22.00
12	6 "	3 "	4 dozen	28.00
15	3 "	1½ "	2 "	38.00
18	2 "	1 "	.....	48.00
21	1 "	½ "	.....	58.00

Coes Key Model, 1919 Type Wrench

Purpose: This wrench was designed to fill the gap between the 21-inch and the heavy spanner wrench for large work. It will not batter and jam a large nut as will a chain wrench. It will not slip or make trouble and will take anything within its opening capacity no matter whether square or hexagon.

Material: Made of heavy steel forgings, fully hardened, and each wrench tested before shipping, to assure freedom from flaws.

Efficiency: In the Key Model wrench we have the finest engine room tool ever made. It is self-contained. The key cannot come off, and the two positions for jaw strap assure its going into corners without trouble.

Guarantee—Warranted free from mechanical defects. Patented and registered. Each wrench stamped with maker's name, etc.

Price List

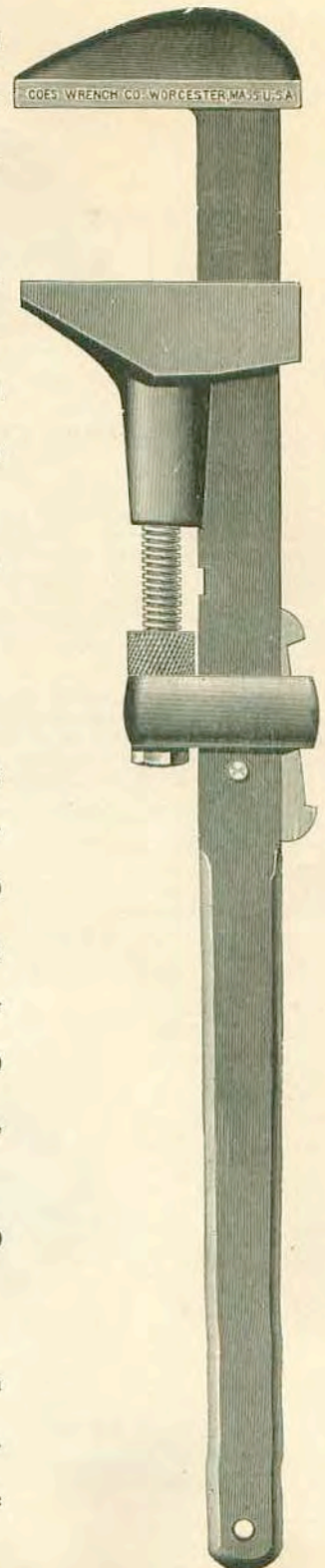
28-inch wrench takes a hexagon nut union on 4-inch pipe. Opens 5½ inches. Length, 28 inches over all. Weight, 19 pounds. Two positions for strap. List, each, **\$18.00**

36-inch wrench takes a hexagon nut union on 5-inch pipe. Opens 6¼ inches. Length 36 inches, over all. Weight, 27 pounds. Two positions for strap. List, each, **\$38.00**

48-inch wrench takes a 9-inch hexagon nut. Opens 9½ inches. Length, 48 inches over all. Weight, 62 pounds. Two positions for strap. List, each, **\$84.00**

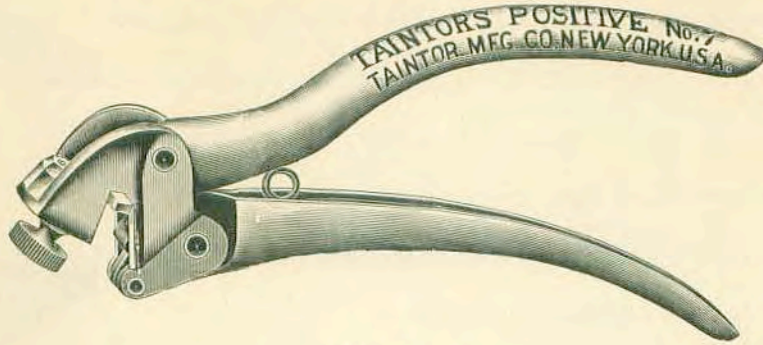
Larger Size

72-inch—We also make, in this model, a wrench to open 12 inches between jaws, having a jaw depth of 7 inches and a total length of 72 inches over all. This size weighs about 195 pounds and is designed for the heaviest duty. Price quoted on application.



TAINTOR MANUFACTURING CO.

Manufacturers of
TAINTOR POSITIVE SAW SETS



No. 7

MADE ENTIRELY OF STEEL—LIGHT, STRONG AND DURABLE
All Parts are Interchangeable and Fully Guaranteed

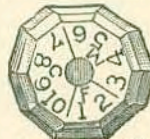
The Taintor Positive Saw Set No. 7 consists of a frame to which are attached two movable handles, an anvil and a punch. A spring opens the handles. It is self-adjusting, excepting the turning of the anvil to change the setting.

In use, the upper handle clamps the saw against the side (lower part) of the anvil. The lower handle carries the punch which forces the tooth against the face of the anvil.

The punch moves in nearly the same circle as the tooth which it sets, consequently the tooth is not distorted nor its point curled, as in the case of sets where the punch approaches the tooth in a straight line. It also leaves the inside face of the tooth of a much better shape.

The difference of angle between the face and side of

the anvil determines the set of the tooth. The faces of the anvil are numbered so that any setting may be repeated.



Face of Anvil
Full Size

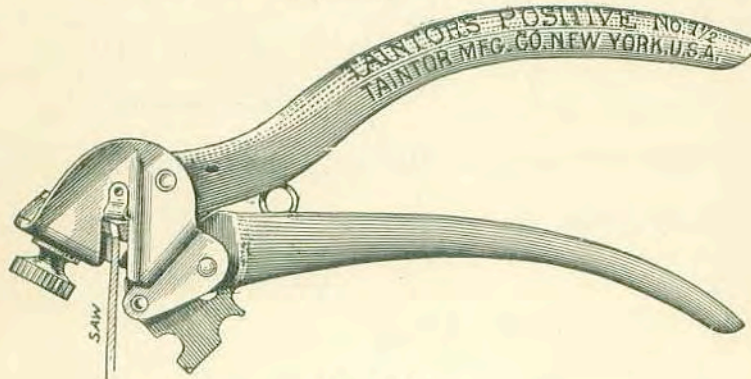
The Anvil is a block of steel having ten sides and faces, which are numbered. The faces are of three lengths, placed in lettered divisions—F for fine, M for medium and C for coarse teeth.

These faces will produce any setting ordinarily required, but for fine adjustment a washer is provided, which, when placed between the anvil and frame, causes each face to bend the tooth nearer its point, producing less set. Twenty adjustments are thus obtained.

No. 7. Taintor Saw Set.....	Per Dozen, \$12.00
Anvil	Each, .15
Punch	" .10
Set Screw (and washer)	" .10

Packed ½ dozen in wooden box. 1 gross in case.

Approximate weight, gross, 83 lbs.; net 61½ lbs.



No. 7½

The No. 7½ Set has all the advantages of No. 7 with several additional features. It has hardened ears and a double plunger, one side for fine teeth and the other for coarse teeth; thus giving two plungers in one. The plunger is secured by a screw permitting ready reversal of the ends.

No. 7½. Taintor Saw Set.....	Per Dozen, \$16.00
Anvil	Each, .15
Punch	" .20
Set Screw (and washer)	" .10

Packed 1 in a carton. ½ gross in case.

Approximate weight, gross, 55 lbs.; net, 40 lbs.

JOHN H. GRAHAM & CO. DIRECT REPRESENTATIVES

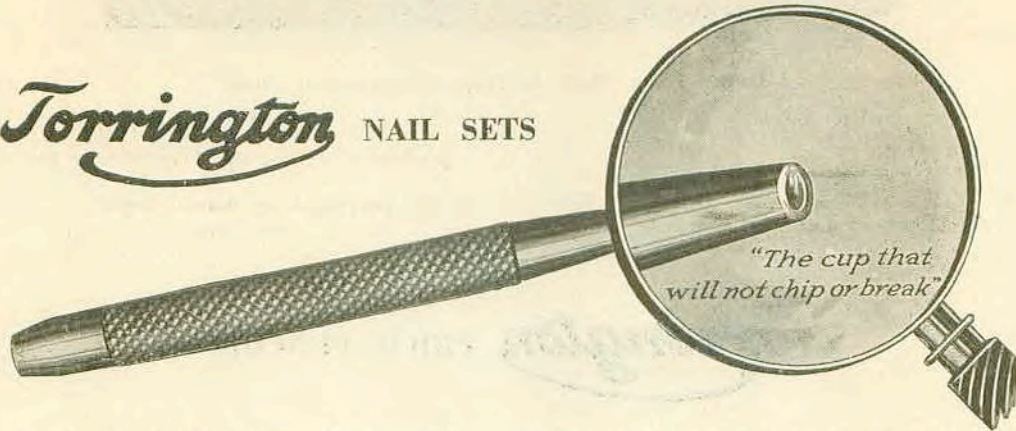
THE TORRINGTON COMPANY

EXCELSIOR PLANT

Manufacturers of

Nail Sets, Punches and Screw Drivers

Torrington NAIL SETS



The Torrington Nail Set is actually Swaged from a Special High Grade Tool Steel made to Our Specifications. By a Careful Process of Tempering, the Cup Point is rendered just right for its purpose and has Earned its Reputation as "The Cup Point that will not Chip or Break." The Body is Evenly Knurled, so as to insure a Firm, Comfortable Grip. The Blued Finish and Polished Ends provide a well finished Tool that is appreciated by Carpenters and Mechanics. The "Torrington" will set Large or Small Nails (with either Round or Flat Heads), Brads and Finishing Nails, without damaging the wood work.

The Attractive Display Box places the Torrington Nail Sets in the hands of the Dealer, ready to Display on his Counter, thus helping to sell them quickly and so encourage his repeat orders.

4 Inches Long, Knurled Handle, Blued Finish, Polished Points. Made in Five Sizes of Points.

Solid Sizes

Size No.	1	2	3	4	5
Diameter of Point, Inches	1/32	2/32	3/32	4/32	5/32
Per Dozen	\$1.80	\$1.80	\$1.80	\$1.80	\$1.80

One Dozen of a Size in a Box

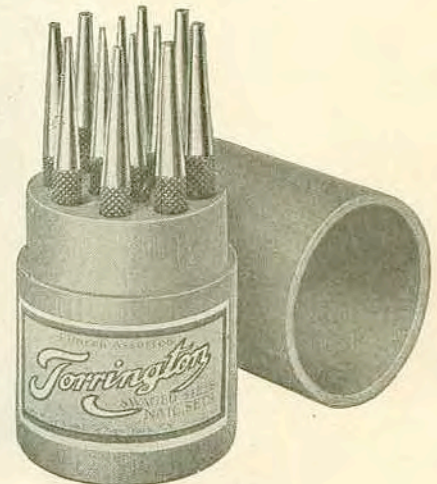
"A" Assortment

Assortment contains One Dozen Nail Sets, as follows:

Size No.	1	2	3	4	5
Quantity	1	3	4	3	1
"A" Assortment, per Dozen Nail Sets.....	\$1.80				

One Dozen in a Box

ASSORTED NAIL SETS, PRICK AND CENTER PUNCHES



"B" Assortment

Special Assortment, contains the following:
1½ dozen Assorted Nail Sets, ¼ dozen Prick Punches, ¼ dozen Center Punches.

Packed in an Attractive Counter Display Box.

"B" Assortment, as Illustrated and Described, per Assortment..... \$3.60

"C" Assortment

This Handy Assortment contains:
10 only Assorted Nail Sets
1 only Prick Punch
1 only Center Punch

In an Attractive Wood Holder Box.

"C" Assortment, per Assortment.. \$2.00

Torrington CENTER PUNCHES



4 Inches Long, Made in Three Diameters of Stock

Solid Sizes		1	2	3
Size, No.		1	2	3
Diameter of Stock, Inches.....		8/32	9/32	10/32
Per Dozen		\$1.80	\$1.80	\$1.80

One Dozen of a Size in a Box

"C. P." Assortment	
Assortment contains One Dozen Center Punches.	Per Dozen
"C. P." Assortment, per Dozen Punches.....	\$1.80

One Dozen in a Box

Torrington PRICK PUNCHES



4 Inches Long, Made in Three Diameters of Stock

Solid Sizes		1	2	3
Size, No.		1	2	3
Diameter of Stock, Inches.....		8/32	9/32	10/32
Per Dozen		\$1.80	\$1.80	\$1.80

One Dozen of a Size in a Box

"P. P." Assortment	
Assortment contains One Dozen Prick Punches.	
"P. P." Assortment, per Dozen Punches.....	\$1.80

One Dozen in a Box

Torrington SCREW DRIVERS



Length, 5 inches; width of Blade, 1/4 inch

Tempered Steel Blade, Tapered and Concaved Bit, Dull Nickel Finish, packed two dozen in an Attractive Display Box, per Dozen Screw Drivers \$1.20

SEYMOUR SMITH & SON, Inc.

Manufacturers of

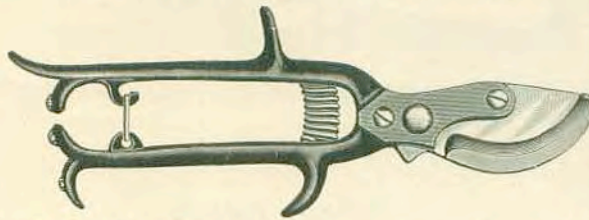
Pruning Shears, Spoke Shaves, Bench Hooks,
Bull Rings, Cattle Leaders, Etc.

PRUNING SHEARS

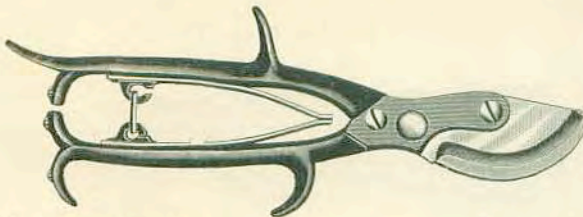
Concord Pattern

Not Warranted

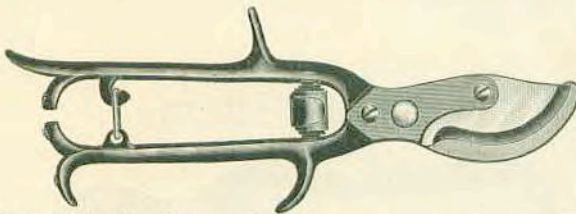
Made with bolt and nut and steel blades



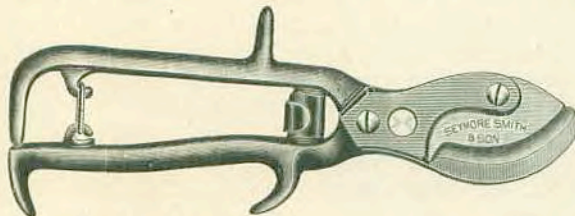
Cast Iron Handles Japanned
No. 0 Spiral Spring, 9 inches.....Per dozen \$7.00



Cast Iron Handles Japanned
No. 00 Flat Spring, 9 inches.....Per dozen \$8.00



Cast Iron Handles Japanned
No. 000 Volute Spring, 9 inches.....Per dozen \$8.00



Malleable Iron Handles Japanned
No. 6 Volute Spring, 9 inches.....Per dozen \$10.00

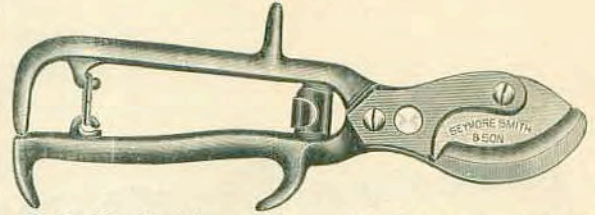
CONTENTS AND MEASUREMENTS OF CASES

No.	No. Doz. in Case	Outside Measurement	Weight	
			Gross	Net
0	12	26 1/4 x 16 3/4 x 11 in.	137 lbs.	117 lbs.
00	12	26 1/4 x 16 3/4 x 11 in.	137 lbs.	117 lbs.
000	12	26 1/4 x 16 3/4 x 11 in.	137 lbs.	117 lbs.
6	12	26 1/4 x 16 3/4 x 11 in.	145 lbs.	125 lbs.

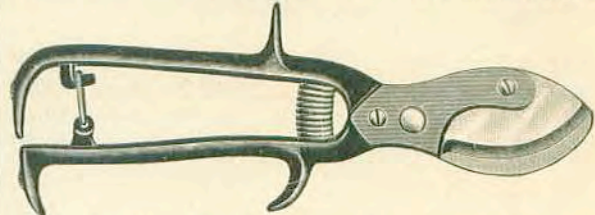
PRUNING SHEARS

High Grade

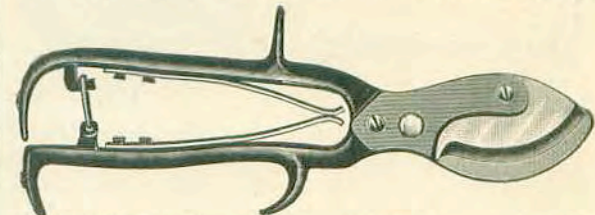
Warranted



Malleable Handles Black Japanned Finish
No. 12 Volute Spring, 9 inches.....Per dozen \$11.50



Malleable Handles Black Japanned Finish
No. 14 Coil Spring, 9 inches.....Per dozen \$11.50

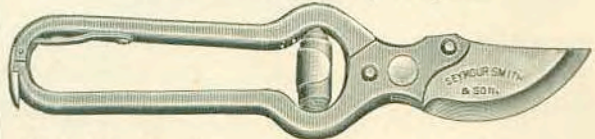


Malleable Handles Black Japanned Finish
No. 21 Flat Spring, 9 inches.....Per dozen \$12.00

CALIFORNIA PATTERN

Warranted

Steel Blades, carefully tempered



Malleable Handles Volute Spring
No. 80 Black Finish, 8 inches.....Per dozen \$12.50
No. 30 Black Finish, 9 inches.....Per dozen 13.00
No. 31 Black Finish, 10 inches.....Per dozen 15.50
No. 40 Nickel Plated, 9 inches.....Per dozen 22.00

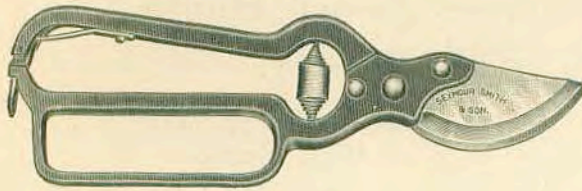
CONTENTS AND MEASUREMENTS OF CASES

No.	No. Doz. in Case	Outside Measurement	Weight	
			Gross	Net
12	12	26 1/4 x 16 3/4 x 11 in.	145 lbs.	125 lbs.
14	12	26 1/4 x 16 3/4 x 11 in.	145 lbs.	125 lbs.
21	12	26 1/4 x 16 3/4 x 11 in.	145 lbs.	125 lbs.
80	12	20 x 12 1/4 x 9 3/4 in.	104 lbs.	90 lbs.
30	12	21 1/2 x 15 x 11 in.	150 lbs.	134 lbs.
31	12	22 x 15 x 12 in.	162 lbs.	144 lbs.
40	12	21 1/2 x 15 x 11 in.	150 lbs.	134 lbs.

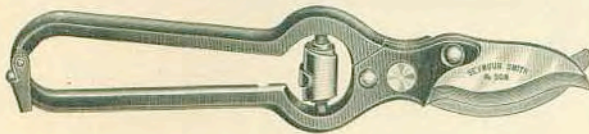
(A)

PRUNING SHEARS

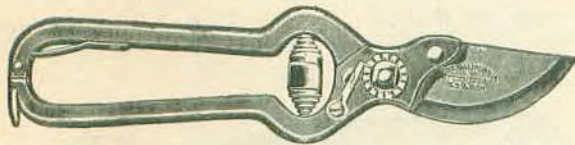
Warranted



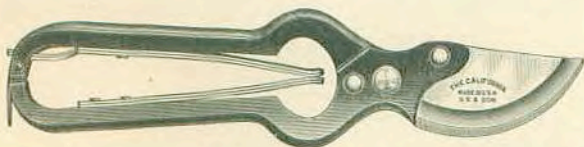
Loop Handle **Black Finish**
 No. 50 Volute Spring, 9 inch.....Per dozen \$15.00



Parrot Beak Blade **Black Finish**
 No. 75 Volute Spring, 7 inch.....Per dozen \$12.00
 No. 85 Volute Spring, 8 inch.....Per dozen 12.50
 No. 65 Volute Spring, 9 inch.....Per dozen 13.00



Volute Spring **Ratchet Nut**
 No. 130 Black Finish, 9 inch.....Per dozen \$15.00
 No. 131 Black Finish, 10 inch.....Per dozen 17.50
 No. 140 Polished, Nickel Plated, 9 inch. Per doz. 24.00



Double Flat Spring **Ratchet Nut**
 No. 230 Black Finish, 9 inch.....Per dozen \$18.00
 No. 240 Nickel Plated, 9 inch.....Per dozen 27.00

CONTENTS AND MEASUREMENTS OF CASES

No.	No. Doz. in Case	Outside Measurement	Weight	
			Gross	Net
50	12	26 1/4 x 17 x 11 1/2 in.	175 lbs.	155 lbs.
65	12	21 1/2 x 15 x 11 in.	135 lbs.	119 lbs.
75	12	20 x 12 1/4 x 9 1/4 in.	98 lbs.	84 lbs.
85	12	20 x 12 1/4 x 9 3/4 in.	104 lbs.	90 lbs.
130	12	21 1/2 x 15 x 11 in.	150 lbs.	134 lbs.
131	12	22 x 15 x 12 in.	162 lbs.	144 lbs.
140	12	21 1/2 x 15 x 11 in.	150 lbs.	134 lbs.
230	10	21 1/2 x 15 x 11 in.	143 lbs.	127 lbs.
240	10	21 1/2 x 15 x 11 in.	143 lbs.	127 lbs.

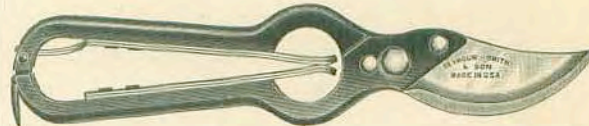
PRUNING SHEARS

Swiss Pattern

Warranted

Oval Spear Shaped Blade carefully tempered

Ratchet Lock Nut

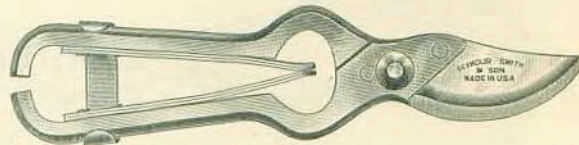


Double Brass Springs **Black Finish**
 No. 190 9 inchPer dozen \$19.00

Reiser Pattern

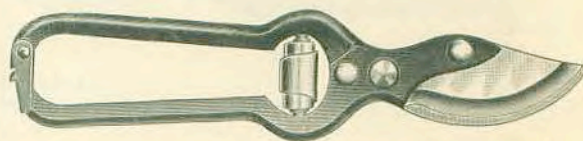
Oval Spear Shaped Blade carefully tempered

Ratchet Lock Nut



Double Brass Springs **Handles Full Polished**
 No. 290 9 inchPer dozen \$33.00

ROSE SHEAR



Malleable Handles, Steel Blade, riveted to handle, in order that a new blade may be attached in case of wear or accident. Full length 6 inches, weight 4 3/4 oz. One dozen in box. A neat and powerful little pruner.

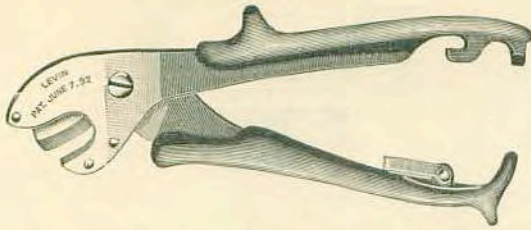
No. 10 Black Finish, 6 inch.....Per dozen \$10.00
 No. 20 Nickel Plated, 6 inch.....Per dozen 20.00

CONTENTS AND MEASUREMENTS OF CASES

No.	No. Doz. in Case	Outside Measurement	Weight	
			Gross	Net
190	10	21 1/2 x 15 x 11 in.	149 lbs.	133 lbs.
290	10	21 1/2 x 15 x 11 in.	146 lbs.	130 lbs.
10	12	19 x 9 3/4 x 9 in.	55 lbs.	48 lbs.
20	12	19 x 9 3/4 x 9 in.	55 lbs.	48 lbs.

THE LEVIN PRUNER

Warranted



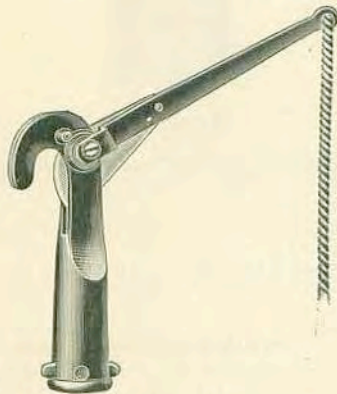
- No. 23 Cuts 1/2-inch dry oak.....Per dozen \$12.00
- No. 24 Cuts 3/4-inch dry oak.....Per dozen 16.00

CONTENTS AND MEASUREMENTS OF CASES

No.	No. Doz. in Case	Outside Measurement	Weight	
			Gross	Net
23	12	24 1/2 x 16 1/4 x 9 3/4 in.	110 lbs.	96 lbs.
24	12	27 1/2 x 15 x 11 1/2 in.	160 lbs.	140 lbs.

TELEPHONE PRUNER

Warranted



Without PolePer dozen \$24.00

6 Dozen in Case

CONTENTS AND MEASUREMENTS OF CASES

Outside Measurement	Weight	
	Gross	Net
28 1/4 x 16 1/4 x 12 1/4 in.	117 lbs.	96 lbs.

VOLUTE SPRINGS



Price List—Per Dozen

2 inch	2 1/2 inch	2 3/4 inch
\$1.50	\$1.75	\$1.90

No regular packages.
Shipped in bulk as required.

THE STANDARD TREE PRUNER

Warranted

With Lift Spring—Metal Brace Plate



Steel Lever

Simple

Strong

Durable

Price List—Per Doz.

4 feet	\$24.00
6 "	27.00
8 "	30.00
10 "	30.00
12 "	33.00
14 "	42.00
16 "	42.00

One-half Dozen in Bundle

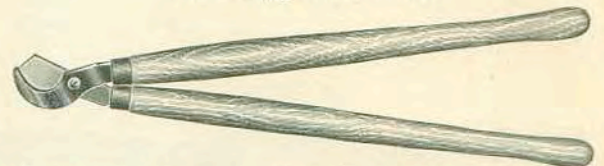
CONTENTS AND MEASUREMENTS OF CASES

Size	Outside Measurement	Weight Per Bundle	
		Gross	Net
4 feet	51 x 5 x 4 in.	16 lbs.	14 lbs.
6 "	72 x 5 x 4 in.	19 lbs.	17 lbs.
8 "	96 x 5 x 4 in.	22 lbs.	20 lbs.
10 "	120 x 5 x 4 in.	26 lbs.	24 lbs.
12 "	144 x 5 x 4 in.	30 lbs.	27 lbs.
14 "	168 x 5 x 4 in.	34 lbs.	30 lbs.
16 "	192 x 5 x 4 in.	36 lbs.	33 lbs.

ROCKDALE PRUNER

Warranted

Cuts 1 1/4 Inch Thick



Cutting Blade Drop Forged, Hardwood Handles

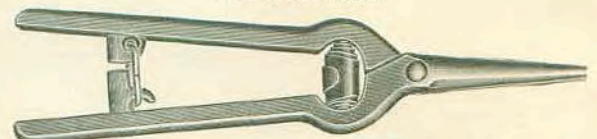
- No. 35 Length, 26 inches.....Per dozen \$20.00
- No. 38 Length, 41 inches.....Per dozen \$26.50

CONTENTS AND MEASUREMENTS OF CASES

No.	No. Doz. in Case	Outside Measurement	Weight	
			Gross	Net
35	4	29 1/2 x 23 x 23 in.	150 lbs.	130 lbs.
38	2	43 x 21 1/2 x 12 1/4 in.	110 lbs.	92 lbs.

GRAPE CLIPPER

Not Warranted



No. 28 7 inchPer dozen \$8.00

No. Doz. in Case	Outside Measurement	Weight	
		Gross	Net
24	24 1/4 x 12 x 9 1/2 in.	110 lbs.	97 lbs.

IRON SPOKESHAVES

Warranted

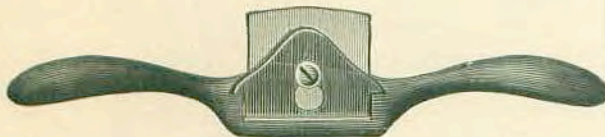
All Are Double Ironed



Cutter adjusted and set by a thumb-screw
 No. 0 1 3/4-inch Cutter, 9 inch.....Per dozen \$5.00



No. 1 1 3/4-inch Cutter, 9 inch.....Per dozen \$4.00



Raised Handles

No. 2 2 1/8-inch Cutter, 10 inch.....Per dozen \$4.50

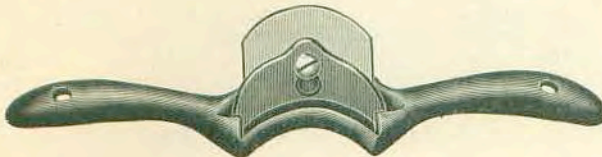


Straight Cutter, 1 3/4 inch; Curved Cutter, 1 3/8 inch
 No. 3 10 inchPer dozen \$6.00



Adjustable Screw Cap

No. 4 2 1/8-inch Cutter, 10 inch.....Per dozen, \$4.50

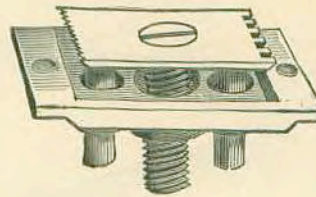


No. 5 2 1/8-inch Curved Cutter, 9 1/2 in....Per doz. \$4.50

CONTENTS AND MEASUREMENTS OF CASES

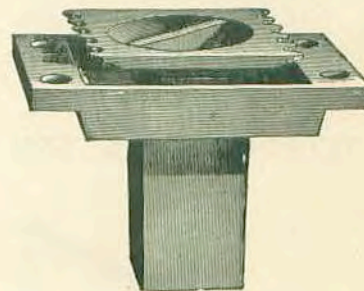
No.	No. Doz. in Case	Outside Measurement	Weight	
			Gross	Net
0	15	22 1/2 x 14 1/2 x 12 1/4 in.	113 lbs.	95 lbs.
1	15	22 1/2 x 14 1/2 x 12 1/4 in.	100 lbs.	83 lbs.
2	15	22 1/2 x 14 1/2 x 12 1/4 in.	136 lbs.	118 lbs.
3	15	22 1/2 x 14 1/2 x 12 1/4 in.	125 lbs.	107 lbs.
4	12	23 x 14 3/4 x 12 1/4 in.	108 lbs.	90 lbs.
5	12	23 x 14 3/4 x 12 1/4 in.	106 lbs.	88 lbs.

BENCH HOOKS



Screw Adjusting

No. 1 Per dozen \$8.00



Reversible

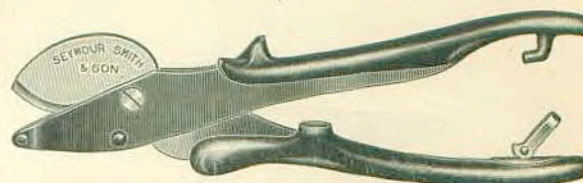
Designed for cabinet makers and jointers

No. 2 Per dozen \$8.00

CONTENTS AND MEASUREMENTS OF CASES

No.	No. Doz. in Case	Outside Measurement	Weight	
			Gross	Net
1	12	18 1/2 x 13 x 7 3/4 in.	108 lbs.	92 lbs.
2	12	22 1/2 x 14 1/2 x 12 1/4 in.	173 lbs.	156 lbs.

BRAKE LINING SHEAR



For Cutting Automobile Brake Lining

\$30.00 per dozen

Weight each, 18 oz. No regular cases

L. S. WATSON MANUFACTURING CO.

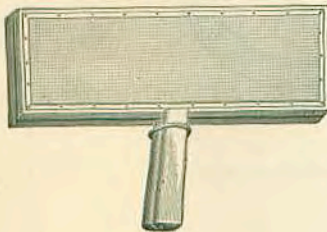
SOLE SUCCESSORS TO GENUINE WHITTEMORE

Manufacturers of

Hand Cards of Every Description

WATSON'S COTTON CARDS OF SUPERIOR FINISH AND WARRANTED

COTTON,
No. 10 A-1 PLANTATION.



Registered trade-marks

- No. 10-A 1. Style, Plantation, extra quality. Size, 10 $\frac{3}{8}$ x 4 $\frac{3}{8}$... per doz. pairs, \$24.00
- No. 10-B. Style, Whittemore " 10 $\frac{3}{8}$ x 4 $\frac{3}{8}$ " " 20.00
- No. 9. Style, Cotton " 9 $\frac{3}{4}$ x 4 $\frac{3}{8}$... " " 19.00

The above list constitutes all the qualities and sizes now made.

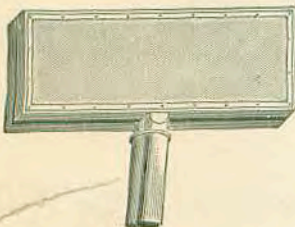
Cotton Cards made of BRASS WIRE add \$5.00 per dozen pairs to the above list.

	Quantity in Case.	Outside Measurement.	Gross Wt. Approximate	Net Wt. Approximate.
No. 10-A 1.	50 pairs.	36 $\frac{1}{4}$ x 10 $\frac{3}{8}$ x 17 inches.	75 lbs.	52 lbs.
No. 10-B.	50 "	35 x 10 $\frac{3}{8}$ x 16 $\frac{1}{2}$ "	52 $\frac{1}{2}$ "	32 $\frac{1}{2}$ "
No. 9.	50 "	33 x 10 $\frac{3}{8}$ x 17 "	52 $\frac{1}{2}$ "	32 $\frac{1}{2}$ "

Cotton cards are packed as ordered in 1 or 2 dozen pair cases. No charge for cases. Standard Cases for Domestic Trade 1 Dozen Pair.

WOOL, TOW, MIXING AND JIM CROW CARDS

WOOL.



The only satisfactory cards made.

- No. 8-A. Style, Wool Size 9 $\frac{3}{4}$ x 4 $\frac{3}{8}$... per doz. pairs, \$18.00
- No. 8-B. " Wool, " 9 $\frac{1}{4}$ x 4 $\frac{1}{4}$ " " 17.00
- No. 5. " Wool, Canada size..... " 8 $\frac{3}{4}$ x 4 $\frac{7}{8}$ " " 18.00
- No. 9. " Wool, Canada size..... " 9 x 5 $\frac{1}{2}$... " " 20.00

Wool Cards made of BRASS WIRE add \$5.00 per dozen pairs to the above list.

	Quantity in Case.	Outside Measurement.	Gross Wt. Approximate	Net Wt. Approximate.
No. 8-A.	24 pairs.	22 $\frac{1}{2}$ x 10 $\frac{1}{2}$ x 12 inches.	38 $\frac{1}{2}$ lbs.	25 lbs.
No. 8-B.	24 pairs.	22 $\frac{1}{2}$ x 10 $\frac{1}{2}$ x 12 inches.	38 $\frac{1}{2}$ lbs.	25 "

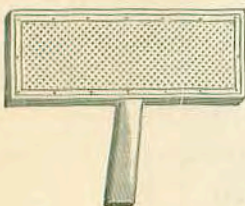
Tow Cards, No. 22 wire.....Size, 9 $\frac{3}{4}$ x 4 $\frac{3}{8}$ per doz. pairs, \$18.00

Mixing Cards, No. 28 wire..... " 9 $\frac{3}{4}$ x 4 $\frac{3}{8}$ " " 20.00

Jim Crow Cards, in paper boxes of 1 dozen each, in cases of 6 boxes, per single doz. 4.00

Wool, Tow and Mixing Cards are packed as ordered in 1 or 2 dozen pair cases. No charge for cases. Standard cases for domestic trade 1 dozen pair.

LARGE HORSE.



WATSON'S HORSE CARDS

These cards are made extra strong and serviceable. Please order by these numbers.

- No. 2. Horse, large, 8 $\frac{1}{4}$ x 3 $\frac{1}{2}$, not bound... per single doz., \$5.50
- No. 4. " small, 5 $\frac{3}{4}$ x 3 $\frac{1}{2}$, " ... " 5.00
- No. 02. " large, 8 $\frac{1}{4}$ x 3 $\frac{1}{2}$, leather board " " 4.50
- No. 04. " small, 5 $\frac{3}{4}$ x 3 $\frac{1}{2}$, " " 4.00

The above list constitutes all the qualities and sizes now made.

SMALL HORSE.



Nos. 2 and 02 large horse cards are packed in standard cases of 8 single dozen. Nos. 4 and 04 small horse cards are packed in standard cases of 12 single dozen. In cases of smaller sizes than above, add 15 cts. per dozen to list.

AFRICAN CARDS

The above prices do not apply on the special styles of cards made for the trade in Africa. Special prices will be submitted on request.

HATTER'S JACKS

- Made of brass wire.....per single dozen, \$15.00
- Made of steel wire " " 13.00

Two, three, four or five dozen in a box.

FILE CLEANERS



File Cleaners, our regular size, handled, in boxes of 1 dozen each, one gross in a standard case, per single dozen \$4.50

G. W. GRIFFIN CO.

Established in 1880

TRADE **GRIFFIN** MARK**Hack Saw Blades All Have Milled Teeth**

Straight Blades—GRIFFIN BLADES come to you straight, not bowed, hence they cut true.

Result—More work in less time. More work with less power. A big reduction in your Hack Saw bills.

GRIFFIN "NEW FLEXIBLE" HACK SAW BLADES*"All Have Milled Teeth"*

Will Not Sag, Stretch, Heat Nor Bind

Material—Made from tungsten-toughened steel, with hard edges and spring center.

Teeth—The teeth are actually milled and set by our special machinery. These teeth will not shell or strip.

Temper—GRIFFIN NEW FLEXIBLE HACK SAW BLADES are tempered throughout, but by a special process the toothed portion of the blade, or about one-quarter of its width, is given the high temper necessary for cutting metals, the central portion is given a spring temper, while the back is only a little less hard than the toothed edge.

Durability—By this process a blade is produced which has the best cutting and wearing qualities, the stiffness of the all tempered blade and the freedom from breakage found in the flexible blade.

No Stretching—The GRIFFIN BLADE holds its shape and will not stretch when used in a machine, overcoming the objections common to the ordinary "flexible" blades on the market.

*For Price List see Page 212.***GRIFFIN "ALL HARD" HACK SAW BLADES***"All Have Milled Teeth"*

The Fastest Cutting Blade on the Market

Purposes—GRIFFIN "ALL HARD" BLADES will saw anything from cast iron and soft steel, brass and copper, to the hardest and toughest high carbon, unannealed crucible steel.

Material—GRIFFIN "ALL HARD" BLADES are made of a tungsten-toughened special analysis steel and tempered by a recently developed process, which makes them outwear any other hard blade on the market.

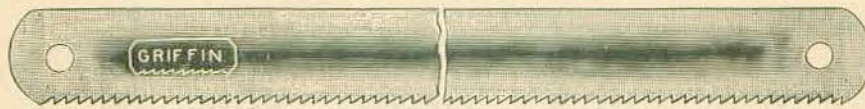
Teeth—The teeth are actually milled and of absolute uniformity. The cutting edges are perfect and sharp and the set is true and even. Griffin blades with milled teeth are not to be compared with other blades the teeth of which are made by punching. All Griffin teeth are milled to insure the maximum of cutting efficiency.

Power Blades—We specialize on Power Blades, and the Griffin "All Hard" Blades will be found to cut fast and true, with wonderful endurance for machine work. They are made in all sizes.

For Price List see Page 213.

GRIFFIN

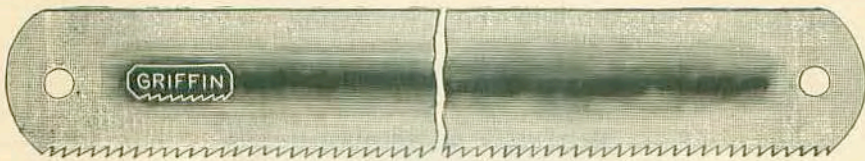
“NEW FLEXIBLE” HACK SAW BLADES



1/2" WIDE. For General Use in Hand Frames

Length—Inches	6	7	8	9	10	11	12	14	
.025 or 23 gauge	\$7.00	7.50	8.00	9.00	10.00	11.00	12.00	14.80	per gross
Number of Teeth per inch:			Regular 16	Special 18	Medium 22	Fine 28	Very Fine 32		

Note: No other blade equals the above for use in hand frames.



9/16" WIDE. For Use in Hand Frames, or Light Power Machines

Length—Inches	12	14			
.028 or 22 gauge	\$12.00	15.00	per gross.		
Number of Teeth per inch:	Regular 16	Special 18	Medium 22	Fine 28	Very Fine 32

5/8" WIDE. For Use in Hand Frames, or Light Power Machines

Length—Inches	10	11	12	14	
.028 or 22 gauge	\$10.20	11.40	12.60	15.00	per gross
.032 or 21 gauge	—	—	14.40	16.80	per gross
Number of Teeth per inch:	Regular 16	Special 18	Medium 22	Fine *28	Very Fine *32

* Blades No. 21 Gauge are not supplied with "Fine" or "Very Fine" Teeth.

3/4" WIDE. For Use in Hand Frames, or Light Power Machines

Length—Inches	10	12	14	17	18	
.032 or 21 gauge	\$13.50	16.20	18.90	22.95	24.30	per gross
Number of Teeth per inch:	Regular 16	Special 18	Medium 22			

Packages: New Flexible Blades one dozen in a bundle, one-half gross in a Box.

For Power Machines we advise the use of Griffin "All Hard" Blades, illustrated and listed on Page 213.

SPECIFICATION DATA

Purposes: This table applies to both "Flexible" and "All Hard" Blades and is intended to assist in the proper selection of blades for each requirement.

REGULAR, "Flexible"	16 teeth to inch	} For Soft Steel, Cast Iron, etc. For General Shop Use. For Tool Steel, Hard Metals, etc. For Iron Pipe, Brass and Copper. For Thin Tubing and Sheet Metals.
REGULAR "All Hard"	14 " "	
SPECIAL	18 " "	
MEDIUM	22 " "	
FINE	28 " "	
VERY FINE	32 " "	

JOHN H. GRAHAM & CO. DIRECT REPRESENTATIVES

GRIFFIN

"ALL HARD" HACK SAW BLADES

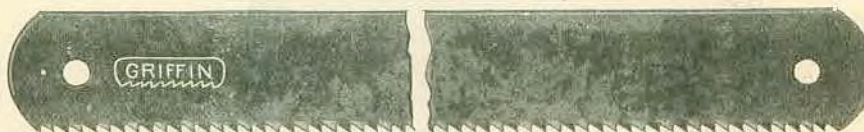


1/2" WIDE.		For Hand Frames or Light Power Use						
Length—Inches	6	7	8	9	10	11	12	14
.025 or 23 gauge	\$7.00	7.50	8.00	9.00	10.00	11.00	12.00	14.80 per gross
Number of Teeth per inch:		Regular 16		Special 18		Medium 22	Fine 28	Very Fine 32

9/16" WIDE.		For Hand Frames or Light Power Use					
Length—Inches	12	14					
.028 or 22 Gauge	\$12.00	\$15.00	per gross				
Number of Teeth per inch:		Regular 14	Special 18		Medium 22	Fine 28	Very Fine 32

5/8" WIDE.		For Hand Frames or Light Power Use					
Length Inches	10	11	12	14			
.028 or 22 Gauge	\$10.20	11.40	12.60	15.00	per gross		
.032 or 21 Gauge			14.40	16.80	per gross		
Number of Teeth per inch:		Regular 14	Special 18		Medium 22	Fine *28	Very Fine *32

*Blades No. 21 Gauge are not supplied with "Fine" or "Very Fine" Teeth.



3/4" WIDE.		For Heavy Power Work or High Speed Machines					
Length—Inches	10	11	12	14	16	17	18
.032 or 21 gauge	\$13.50	14.85	16.20	18.90	21.60	22.95	24.30 per gross
.049 or 18 gauge	19.50	21.45	23.40	27.30	31.20	33.15	35.10 per gross
Number of Teeth per inch:		Regular 14		Special 18		Special 22	

1" WIDE.		For Heavy Power Work or High Speed Machines					
Length—Inches	11	14	16	17	18	20	24
.049 or 18 gauge	\$26.95	34.30	39.20	41.65	44.10	49.00	58.80 per gross
.065 or 16 gauge	34.65		50.40	53.55	56.70	63.00	75.60 per gross
Number of Teeth per inch:		Regular 10		Special 8		Special 14	

1 1/4" WIDE.		For Heavy Power Work or High Speed Machines		
Length—Inches	14	17	24	
.065 or 16 gauge	\$59.50	72.25	102.00	per gross
Number of Teeth per inch:		Regular 10		Special 8

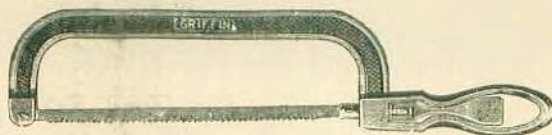
Power Blades 14 inch and 17 inch measure one-half inch less between holes than length given.

Handy Packages: "ALL HARD" Blades under 1 inch wide are put up in our new Handy Package.



Sizes 9/16, 5/8 and 3/4 inch are packed one dozen in a carton, one-half gross in a box.
 Sizes 1 and 1 1/4 inch are packed one dozen in a bundle, one-quarter gross in a box.

GRIFFIN PATENT HACK SAW FRAMES



No. 30—Japanned Frame. Patent adjustment, quick and positive. Blade secured in place by two staple pins, easily detached or replaced.

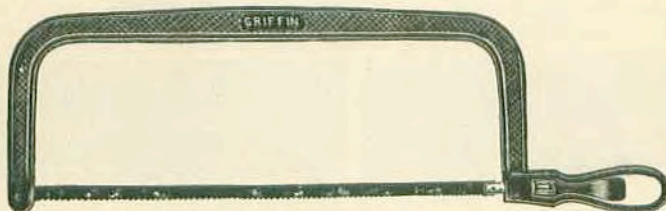
List For Frames Complete With One Dozen Extra Blades

Size, inches.....	6	7	8	9	10	11	12	13
Per dozen	\$12.75	\$13.45	\$14.35	\$15.65	\$16.85	\$19.35	\$20.00	\$24.75

Packed One in a Box.

GRIFFIN PATENT HACK SAW FRAME

No. 30, Extra Heavy, 14 Inch



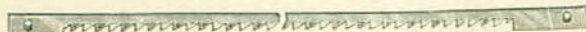
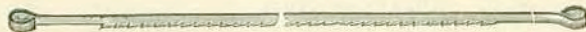
Japanned Frame. Patent adjustment, quick and positive. Blade secured in place by two staple pins, easily detached or replaced; depth of cut 4¾ inches.

No. 30. 14 inch, complete with one dozen extra blades.....Per dozen, \$27.60

Packed One in a Box.

GRIFFIN COPING SAW BLADES

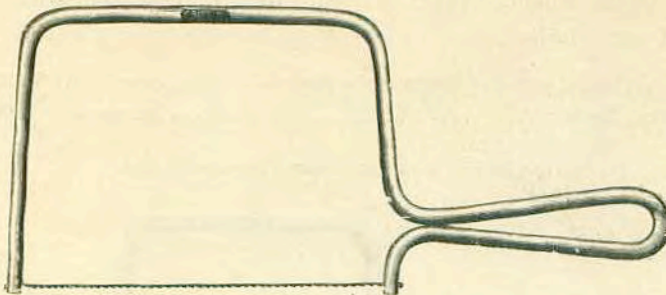
These blades are made from superior stock. They are tempered to withstand hard usage and will cut through nails imbedded in wood. They cut rapidly and have a slight set which prevents heating or binding. Each blade is carefully inspected.



	Per gross
Griffin Coping Saw Blades, 6 inch, bent ends (No. 10) (Regular).....	\$3.00
Griffin Coping Saw Blades, 6 inch, straight ends.....	3.00
Griffin Coping Saw Blades, 6 inch, bent ends (No. 6) (Special).....	3.00
Griffin Coping Saw Blades, 6½ inch, pin ends (Regular).....	9.00
Griffin Coping Saw Blades, 6 inch, pin ends (Special).....	9.00

Packed one dozen in an envelope; twelve envelopes in a box

GRIFFIN COPING SAWS



Steel Wire Frames. Adjustable

All Wire, 6 inch bent end blades. Depth of cut 4 inches.

No. 100—Nickel Plated Frame, complete, with one dozen extra bladesPer dozen, \$4.80

No. 0100—Tinned Frame, complete, with one dozen extra blades " 4.30

Extra bladesPer gross, 3.00

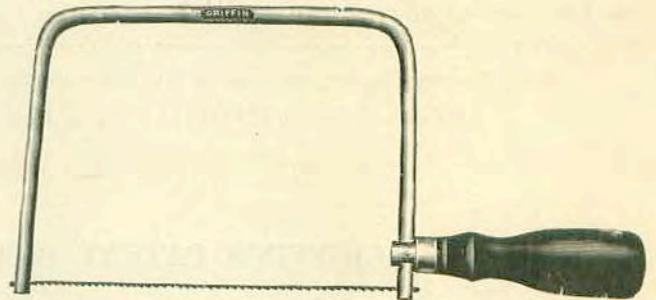
Packed One-half Dozen in a Box

Nickel Plated Wire Frame, Black Hardwood Handle, 6 inch, bent end blades. Depth of cut 4 inches.

No. 110—Complete, with one dozen extra bladesPer dozen, \$5.00

Extra bladesPer gross, 3.00

Packed One-half Dozen in a Box



Steel Frames. Adjustable

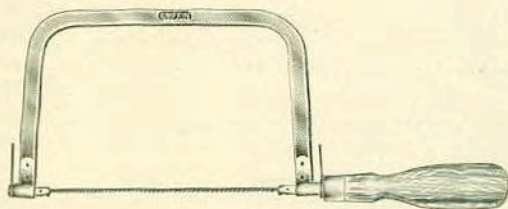
Nickel Plated Steel Frame. Black Rubberoid Handles. Depth of cut, 4 1/4 inches.

No. 120—Complete with one dozen extra 6 in. bent end bladesPer doz. \$12.50

Extra bladesPer gross, 3.00

No. 125—Complete with one 6 1/2 in. pin blade....Per doz. 12.00

Extra bladesPer gross, 9.00

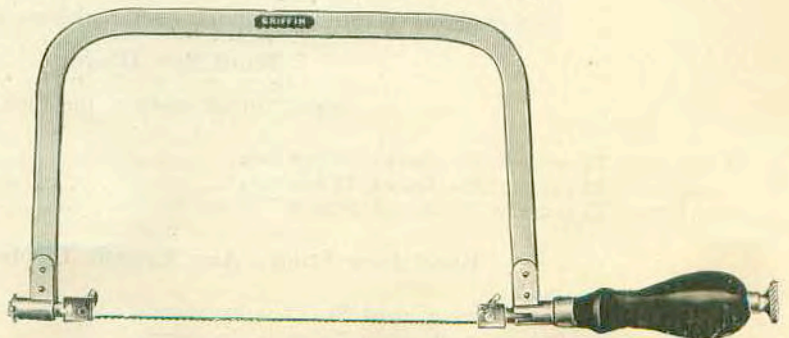


Polished steel frame, with thumb screw attachment for holding straight blades.

No. 130—Complete, with one dozen extra straight blades...Per doz. \$25.00

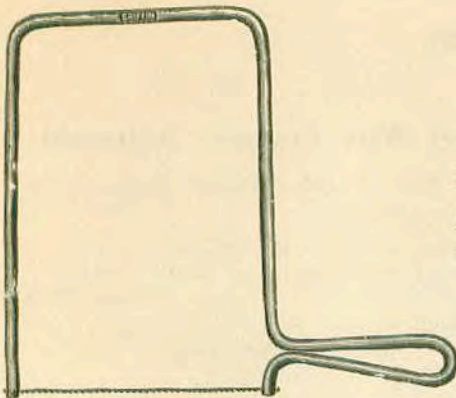
Extra blades, 6 inch....Per gross 3.00

Packed one-half dozen in a box.



GRIFFIN BRACKET SAWS

Nickel Plated Steel Wire Frames. Adjustable



All Wire Frame, Nickel Plated. 6 inch, bent end blades.
Depth of cut 8 inches.

No. 160—Complete, with one dozen extra blades.....per dozen \$6.00
Extra blades, No. 6.....per gross 3.00

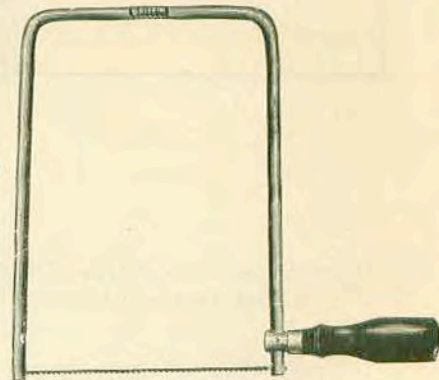
Packed one frame, with one dozen blades in a box.

All Wire Frame, Nickel Plated, Black Hardwood Handles.
6 inch, bent end blades. Depth of cut 8 inches.

No. 170—Complete, with one dozen extra blades.....per dozen \$7.50
Extra blades No. 6.....per gross 3.00

Blades for these frames are gauge of No. 6 Bracket Saw Blades.

Packed One-half Dozen in a Box



GRIFFIN'S PATENT BRACKET SAW BLADES



Our scroll saw blades have been on the market for more than thirty years. They are very keen cutters, have a slight set by which all heating or binding is avoided, and are tempered.

Sizes	Per gross
No. 000, 00, 0.....	\$1.90
No. 1, 2, 3.....	2.00
No. 4, 5, 6.....	2.10
No. 7, 8.....	2.20
No. 9, 10.....	2.20
Assorted (000 to 6).....	2.00

Packages contain one gross

BAND SAW BLADES AND BAND SAW STOCK

Made from a special grade of steel, and have a special temper.

Band Saw Blades

16, 22 or 28 teeth to the inch.

	Per dozen
13/32 inch wide, 24 gauge (.022) Brazed, 12 feet long	\$15.00
1/2 inch wide, 23 gauge (.026) Brazed, 12 feet long	17.25
1/2 inch wide, 23 gauge (.026) Brazed, 17 feet 7 inches long.....	22.50

Band Saw Stock, Any Length Up to 500 Feet

	Per pound
13/32 inch wide, 16, 22 or 28 teeth, about 30 feet to the pound.....	\$3.75
1/2 inch wide, 16, 22 or 28 teeth, about 25 feet to the pound.....	3.00

JOHN H. GRAHAM & CO. DIRECT REPRESENTATIVES

GRIFFIN HANDY HACK SAWS

For Sawing Brass, Iron, Steel, Lead Pipe, Bone and Metals of All Kinds



Wire Handle

A convenient and practical tool for the household and shop; should be in every amateur tool set. The blade is secured by two pins and may be readily removed or replaced.

- No. 250—8 inch Coppered Frame, complete, with one blade.....Per dozen, \$4.80
- No. 251—8 inch Nickel Plated Frame, complete, with one blade....." 5.50
- Extra blades.....Per gross, 8.00

Packed One-Half Dozen in a Box.



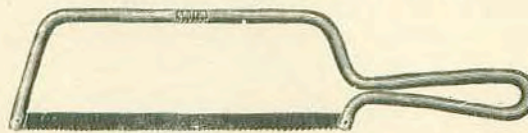
"Household" Wooden Handle

- No. 25—8 inch Coppered Frame, complete, with one blade.....Per dozen, \$4.80
- Extra blades.....Per gross, 8.00

Packed One-Half Dozen in a Box.

GRIFFIN JEWELERS' HACK SAWS

For Sawing Metals of All Kinds

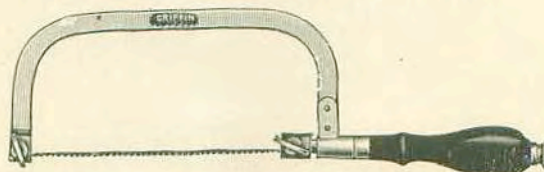


A handy tool for the Jeweler, Watchmaker and Locksmith.

- No. 150—6 inch, complete, with one blade.....Per dozen, \$4.80
- Extra blades.....Per gross, 7.50

Packed One-Half Dozen in a Box.

GRIFFIN JEWELERS' SAWS



- No. 40—5 inch blade, Polished Frame, complete, with one dozen extra blades.....Per dozen, \$18.00
- No. 50—5 " " Nickel Plated Frame, complete, with one dozen extra blades....." 20.00

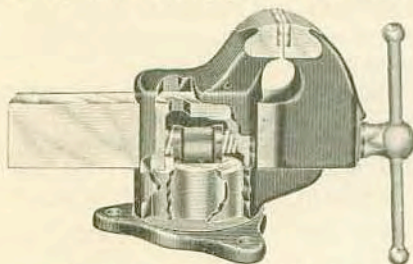
Packed one frame in a box, with one dozen extra blades.

ROCK ISLAND MFG. CO.

Manufacturers of

Vises, Anvils, Shaft Hangers, Etc., Sad Irons, Grinders, Cement Tools,
Grist Mills, Corn Shellers, Air Compressors, Miscellaneous
Hardware and Specialties

ROCK ISLAND PATENT AUTOMATIC SWIVEL VISE

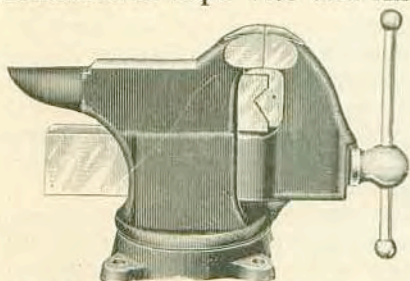


This cut shows the simplicity of construction. Has fewer parts than any swivel on the market; in fact, no more than the ordinary stationary vise.

Casting is our special alloy; screw and handle, cold rolled steel; jaws, crucible cast tool steel, carefully hardened; nut, malleable iron. Dead black finish. Finished parts highly polished and lacquered.

Number	Width Jaw	Opens	Weight	List Price
1	1½ in.	2 in.	3 lbs.	\$6.00
2	2½ in.	2½ in.	11 lbs.	7.50
3	3 in.	4 in.	20 lbs.	9.50
4	3½ in.	5 in.	33 lbs.	11.00
5	4 in.	6 in.	57 lbs.	13.50
6	4½ in.	8 in.	75 lbs.	16.50
7	5¼ in.	9 in.	122 lbs.	24.00
8	6 in.	11 in.	140 lbs.	36.00
9	7 in.	12 in.	224 lbs.	45.00

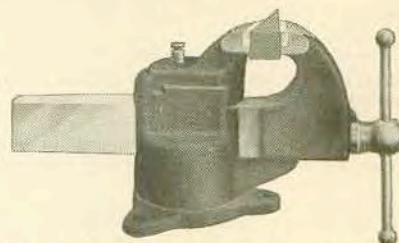
ROCK ISLAND AUTOVISE Patented A Combination Pipe Vise and Anvil.



This vise is especially adapted for automobile repair work. There is nothing on the market so suitable for all kinds of repair work. This vise is very heavy, is made of same material as our other well-known types.

No.	Width Jaw	Capacity Pipe	Weight	List Vise	List Pipe Jaws
240	3 in.	⅜ to 1½ in.	42 lbs.	\$13.00	\$1.30
241	4 in.	⅜ to 2 in.	80 lbs.	16.00	1.50

ROCK ISLAND PATENT AUTOMATIC SWIVEL VISE WITH SELF-ADJUSTING JAW



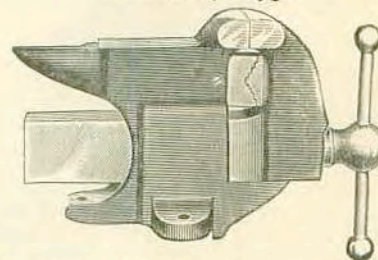
Note the strength of our adjustable jaw. Our vises are known for their great strength.

The advantage of the adjustable jaw is obvious to all mechanics.

Casting is our special alloy; screw and handle, cold rolled steel; jaws, crucible cast tool steel, carefully hardened; nut, malleable iron.

Number	Width Jaw	Opens	Weight	List Price
20	3½ in.	5 in.	44 lbs.	\$13.00
21	4 in.	6 in.	66 lbs.	16.00
22	4½ in.	8 in.	85 lbs.	19.80
23	5¼ in.	9 in.	135 lbs.	28.80
24	6 in.	11 in.	160 lbs.	38.00
25	7 in.	12 in.	238 lbs.	54.00

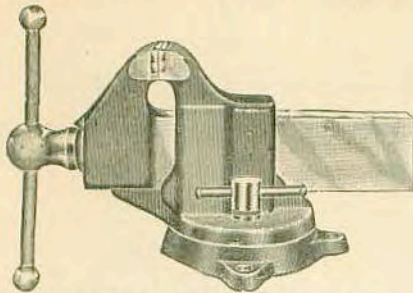
ROCK ISLAND AUTOVISE Patented Stationary Type



This Vise is similar to the Swivel type, except not so large and heavy. There is nothing on the market so suitable for all kinds of repair work. It has regular vise jaws for all kinds of machinists' work, pipe jaws for holding pipe and rods, and can also be used as an anvil. This vise can be sold at a price attractive to the individual automobile owner.

No.	Width Jaw	Capacity Pipe	Weight	List Vise	List Pipe Jaws
231	3 in.	⅜ to 1½ in.	32 lbs.	\$10.00	\$1.30
232	4 in.	⅜ to 2 in.	65 lbs.	14.00	1.50

DIAMOND SWIVEL VISE



This is our standard swivel vise, and we believe we have the best design on the market. Notice the lines of this vise.

These vises are heavy, and the material is well distributed. All vital points are reinforced. Our Diamond vises are practically unbreakable.

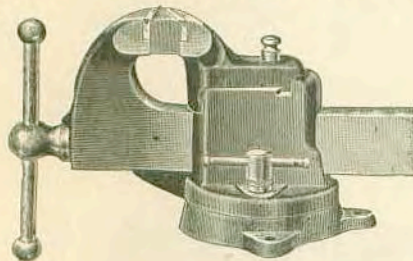
This vise can be turned in any position on an axis parallel with the floor and is locked by a clamping bolt, which works in a channel.

The grip is positive, and allows no slip.

Casting is our special alloy; screw and handle, cold rolled steel; jaw, crucible cast tool steel, carefully hardened; nut, malleable iron.

Number	Width Jaw	Opens	Weight	List Price
70	2½ in.	2½ in.	20 lbs.	\$12.00
71	3 in.	4 in.	28 lbs.	13.00
72	3½ in.	5 in.	38 lbs.	15.00
73	4 in.	6 in.	54 lbs.	17.00
74	4½ in.	6½ in.	65 lbs.	20.00
75	5 in.	7½ in.	90 lbs.	30.00
76	5½ in.	8½ in.	120 lbs.	38.00
77	6 in.	10 in.	136 lbs.	52.00
78	7 in.	12 in.	240 lbs.	70.00

DIAMOND SWIVEL VISE WITH SELF-ADJUSTING JAW



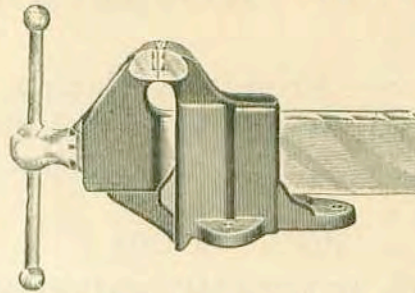
Our standard swivel vise with self-adjusting jaw. This vise can be turned in any position on an axis parallel with the floor, and is locked by a clamping bolt which works in a channel.

This vise is lower in design than other manufacturers', so that they can be placed on same height bench with standard swivel and stationary vises. Workmen do not have to stand on platforms to work at our self-adjusting jaw vises. Don't forget this feature when buying self-adjusting jaw vises.

The back jaw of this vise is *self-adjusting* and when in use conforms *automatically* to any angle and makes firm the object held.

Number	Width Jaw	Opens	Weight	List Price
50	3½ in.	5 in.	37 lbs.	\$20.00
51	4 in.	6½ in.	53 lbs.	24.00
52	4½ in.	7 in.	70 lbs.	28.00
53	5 in.	7½ in.	95 lbs.	35.00
54	5½ in.	8½ in.	125 lbs.	44.00
55	6 in.	11 in.	158 lbs.	60.00
56	7 in.	12 in.	220 lbs.	75.00

DIAMOND STATIONARY VISE



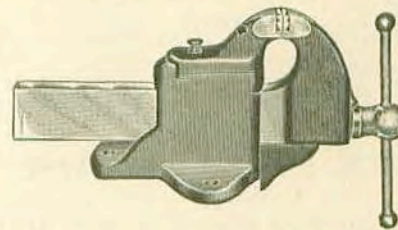
This is our standard stationary base vise. It has all the qualities of design, strength and material of the Diamond Swivel base vise.

These vises are heavy, and the material is well distributed. All vital points are reinforced.

Casting is our special alloy; screw and handle, cold rolled steel; jaws, crucible cast tool steel, carefully hardened; nut, malleable iron.

Number	Width Jaw	Opens	Weight	List Price
90	2½ in.	2½ in.	17 lbs.	\$9.00
91	3 in.	4 in.	22 lbs.	10.00
92	3½ in.	5 in.	28 lbs.	11.25
93	4 in.	6 in.	42 lbs.	12.75
94	4½ in.	6½ in.	54 lbs.	15.50
95	5 in.	7½ in.	75 lbs.	20.00
96	5½ in.	8½ in.	101 lbs.	30.00
97	6 in.	10 in.	135 lbs.	39.00
98	7 in.	12 in.	210 lbs.	55.00
67	8 in.	12½ in.	286 lbs.	75.00

DIAMOND STATIONARY VISE WITH SELF-ADJUSTING JAW

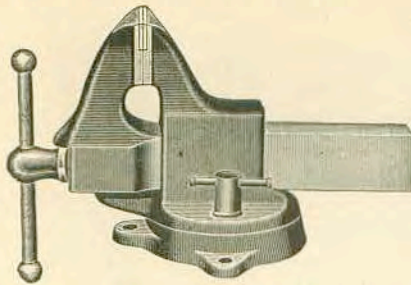


Our self-adjusting jaw vises are lower in design than other manufacturers', so that they can be placed on same height benches with standard swivel and stationary vises. Workmen do not have to stand on platforms to work at our self-adjusting jaw vises. This feature should not be overlooked when buying self-adjusting jaw vises.

The back jaw of this vise is *self-adjusting*, and when in use conforms *automatically* to any angle and makes firm the object held. The *self-adjusting* jaw feature is of such a design that it is absolutely as strong and durable as a solid jaw.

Number	Width Jaw	Opens	Weight	List Price
81	3½ in.	5 in.	30 lbs.	\$16.00
82	4 in.	6½ in.	48 lbs.	19.00
83	4½ in.	7½ in.	58 lbs.	22.00
84	5 in.	8½ in.	78 lbs.	28.00
85	5½ in.	9 in.	110 lbs.	35.00
86	6 in.	10 in.	146 lbs.	50.00
87	7 in.	12 in.	195 lbs.	65.00

**ROCK ISLAND
SWIVEL WOOD WORKER'S VISE**

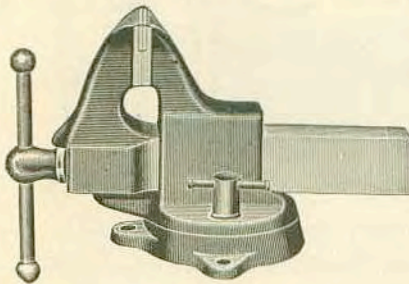


This vise can be turned in any position on an axis parallel with the floor, and is locked by a clamping bolt which works in a channel. The grip is positive, absolutely will not slip. This vise has all the qualities in design, material, workmanship and finish of the Stationary Wood Worker's vise.

Casting, is our special alloy; *screw and handle*, cold rolled steel; *jaws*, crucible cast tool steel, carefully hardened; *nut*, malleable iron.

Number	Width Jaw	Opens	Weight	List Price
155	4¼ in.	9 in.	53 lbs.	\$21.25
156	4½ in.	11 in.	66 lbs.	22.50

**ROCK ISLAND
SWIVEL WOOD WORKER'S VISE
WITH SELF-ADJUSTING JAW**



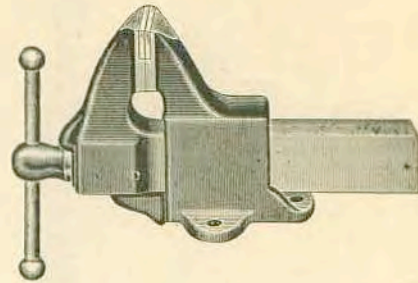
This vise has the same design, material, finish, etc., as the Swivel Wood Worker's vise, but has the self-adjusting jaw feature.

The back jaw of this vise is *self-adjusting*, and in use conforms *automatically* to any angle and makes firm the object held. The *self-adjusting* jaw feature is of such a design that it is absolutely as strong and durable as a solid jaw.

Casting, is our special alloy; *screw and handle*, cold rolled steel; *jaws*, crucible cast tool steel, carefully hardened; *nut*, malleable iron.

Number	Width Jaw	Opens	Weight	List Price
157	4¼ in.	9 in.	62 lbs.	\$27.50
158	4½ in.	11 in.	76 lbs.	30.00

**ROCK ISLAND
STATIONARY WOOD WORKER'S
VISE**



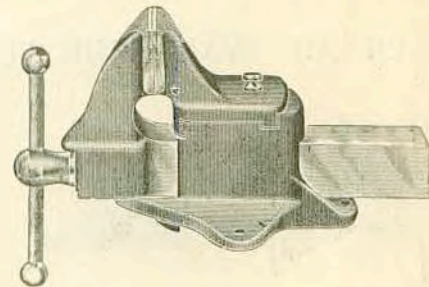
We have the best line of wood workers' vises on the market. It is absolutely the best designed vise of this type. The vise is low and sturdy. Workmen can work to advantage at this vise, which is impossible with some of the high patterns on the market.

This vise should be seen and used to be appreciated.

Casting, is our special alloy; *screw and handle*, cold rolled steel; *jaws*, crucible cast tool steel, carefully hardened; *nut*, malleable iron.

Number	Width Jaw	Opens	Weight	List Price
151	4¼ in.	9 in.	48 lbs.	\$16.25
152	4½ in.	11 in.	60 lbs.	17.50

**ROCK ISLAND
STATIONARY WOOD WORKER'S
VISE WITH SELF-ADJUSTING JAW**



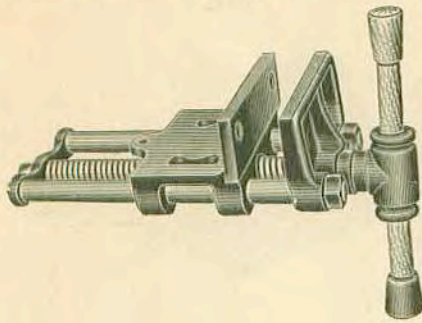
This vise is the same as our Stationary Wood Worker's, but has the self-adjusting jaw.

Our self-adjusting jaw vises are lower in design than other manufacturers', so that they can be placed on same height benches with standard swivel and stationary vises. Workmen do not have to stand on platforms to work at our self-adjusting jaw vises.

Casting, is our special alloy; *screw and handle*, cold rolled steel; *jaws*, crucible cast tool steel, carefully hardened; *nut*, malleable iron.

Number	Width Jaw	Opens	Weight	List Price
153	4¼ in.	9 in.	52 lbs.	\$23.00
154	4½ in.	11 in.	66 lbs.	25.00

ROCK ISLAND QUICK-ACTING WOOD WORKER'S VISE



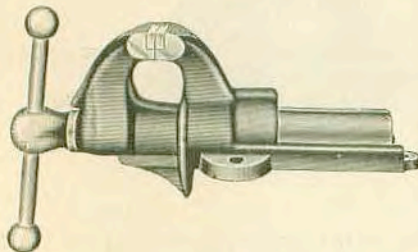
The Rock Island Quick-Acting Wood Worker's Vise is the most simply constructed vise on the market. Has fewer parts than any other. We use no triggers, springs or complicated mechanism to break or get out of order.

This vise is especially adapted for manual training and trade schools.

Number	Length Jaw	Depth Jaw	Opens	Weight	List Price
161	7 in.	4 in.	9 in.	26 lbs.	\$9.60
162	7 in.	4 in.	12 in.	27 lbs.	10.40
163	7 in.	4 in.	14 in.	28 lbs.	11.20
164	7 in.	4 in.	16 in.	28 lbs.	12.00
165	10 in.	4 in.	12 in.	29 lbs.	12.80
166	10 in.	4 in.	14 in.	29 lbs.	13.60
167	10 in.	4 in.	16 in.	30 lbs.	14.00
168	10 in.	4 in.	18 in.	30 lbs.	15.20
169	10 in.	4 in.	20 in.	31 lbs.	16.00

Nos. 161 and 165 are standard sizes, and are carried in stock; other numbers are made up promptly.

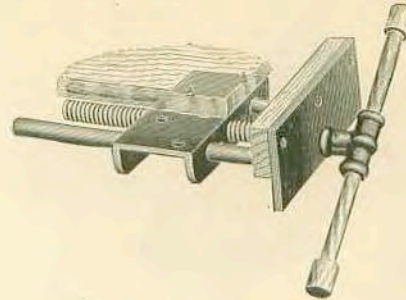
ROCK ISLAND OVAL SLIDE VISE



We call your attention to the design of this vise. The strongest and best finished oval slide vise on the market. The screw is steel, handle cold rolled steel, jaws are crucible tool steel. Painted a dull black. All finished parts are highly polished and lacquered.

Number	Width Jaw	Opens	Weight	List Price
361	2½ in.	3¾ in.	8 lbs.	\$2.50
362	3 in.	4 in.	14 lbs.	3.00
363	3½ in.	4½ in.	22 lbs.	4.75
364	4 in.	4½ in.	30 lbs.	6.50
365	4½ in.	4¾ in.	35 lbs.	8.00

ACME WOOD WORKER'S VISE

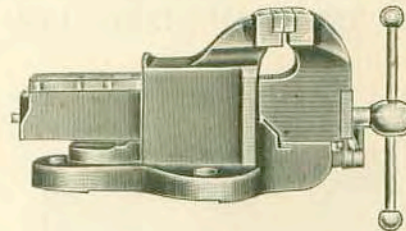


Where the quick-acting feature is not wanted, this is the best vise on the market.

The screw is cold-rolled steel, front jaw is steel, frame or body is cast iron. The front jaw is faced with wood.

Number	Width Jaw	Opens	Weight	List Price
261	10 in.	9 in.	16 lbs.	\$4.00

ROCK ISLAND QUICK-ACTING VISE



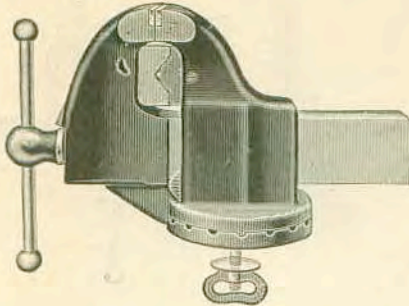
This is the Parkinson Pattern, a very popular type used in Europe for many years. We manufactured large quantities for our Allies during the war.

Most quick action Vises sacrifice strength for the quick action feature. This design does not.

Castings, our special grey iron; screws, solid steel; handle, cold rolled steel; jaws, crucible tool steel, renewable; nut and operating lever, malleable iron.

Number	Width Jaw	Opens	Weight	List Price
203	3 in.	5 in.	38 lbs.	\$12.00
204	4 in.	5 in.	47 lbs.	14.00
205	5 in.	6 in.	70 lbs.	24.00

**ROCK ISLAND
COMBINATION PIPE VISE**



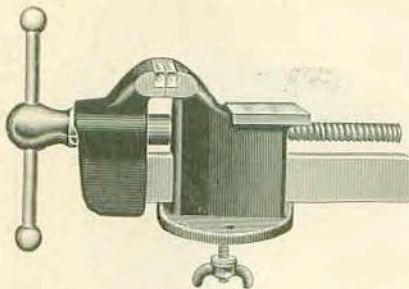
We believe this to be the strongest pipe vise on the market. No vise is better made, better finished or more durable. These vises are heavier than made by most manufacturers, and the material is well distributed. All vital parts are reinforced. The front pipe jaw is reversible. Can be used either stationary or swivel.

Casting, is our special alloy; *screw and handle*, cold rolled steel; *jaws*, crucible cast tool steel, carefully hardened; *nut*, malleable iron.

Number	Width Jaw	Weight	Capacity Pipe	List Vise	List Jaw
141	3½ in.	55 lbs.	¼ to 2	\$16.00	\$1.50
142	4¼ in.	73 lbs.	¼ to 3	22.00	1.75
143	5 in.	125 lbs.	½ to 4	32.00	2.00
144	6 in.	190 lbs.	½ to 6	45.00	3.00

ROCK ISLAND STEEL BEAM VISE

Stationary Type.

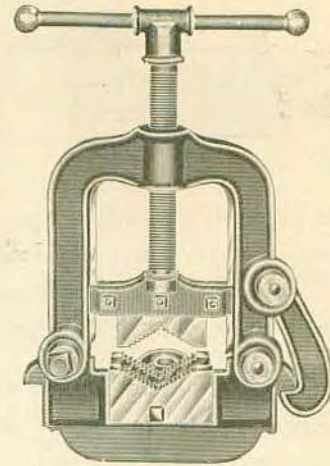


These vises have steel beams, or sliding bars, steel screws, cold rolled steel handles, and crucible tool steel jaws. The vise is so designed that there is an anvil provided. All finished parts are highly polished, and we are sure this is the best finished vise of this type on the market. Each vise is furnished with a center bolt, nut and washer for fastening to bench. Also provided with bolt holes for permanently fastening to bench.

Number	Width Jaw	Opens	Weight	List Price
351	2½ in.	3 in.	11 lbs.	\$3.75
352	3 in.	3½ in.	13 lbs.	4.75
353	3½ in.	4 in.	19 lbs.	5.25
354	4 in.	6 in.	30 lbs.	8.25
355	4½ in.	7½ in.	45 lbs.	12.00

ROCK ISLAND PIPE VISE

Self-Locking Type.



The base has lugs on both sides, so that the latch may hang on either side.

The body and base are malleable.

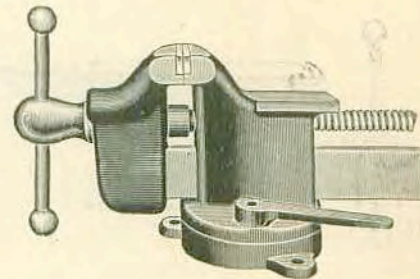
The screw and handle are cold rolled steel.

The jaws are crucible cast tool steel.

By using this class of material we are able to offer the best pipe vise of this type on the market.

Number	Capacity Pipe	List Vise	List Jaw Set
115	¼ to 2½ in.	\$10.00	\$3.75
116	¼ to 3½ in.	14.00	5.25
117	½ to 4½ in.	20.00	7.50

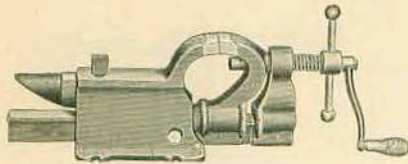
**ROCK ISLAND STEEL BEAM
SWIVEL VISE**



This vise is the same as the Rock Island Steel Beam Stationary vise, but provided with a swivel base. This vise can be quickly turned on the base, and securely fastened by the lever.

Number	Width Jaw	Opens	Weight	List Price
341	2½ in.	3 in.	12 lbs.	\$4.50
342	3 in.	3½ in.	16 lbs.	5.50
343	3½ in.	4 in.	20 lbs.	7.00
344	4 in.	6 in.	32 lbs.	10.25
345	4½ in.	7½ in.	50 lbs.	15.00

COMBINATION ANVIL VISE DRILL



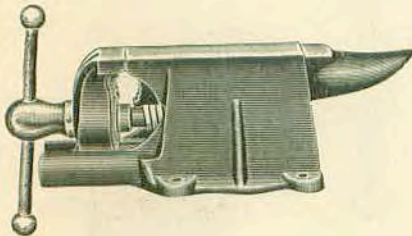
The most practical combination vise ever offered. Can be used as an anvil and also designed so that it can be changed from vise to drill instantly. The vise will hold work while it is being drilled.

It is a strong, durable tool. The slide or draw bar is a heavy T-beam section. Castings are of our special alloy. Handle is cold rolled steel. Jaws are provided with crucible cast tool steel. Anvil and finished parts highly polished and lacquered.

Number	Width Jaw	Opens	Weight	List Price
390	3 3/4 in.	12 in.	52 lbs.	\$6.00

**ROCK ISLAND
COMBINED ANVIL AND VISE**

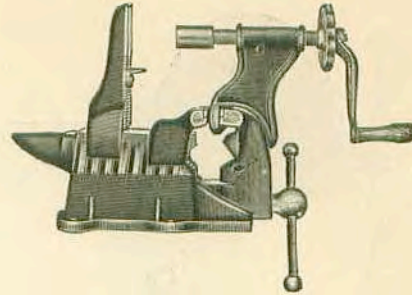
With Jaws for Holding Pipe



This vise is intended only for light work. This is the best finished vise of this type on the market. Has steel screw with cut threads, steel nut, and cold rolled steel handle. Anvil and all finished parts highly polished and lacquered.

Number	Width Jaw	Opens	Weight	List Price
380	3 in.	5 in.	26 lbs.	\$2.00

**RIMCO ANVIL AND VISE
With Drill Attachment**

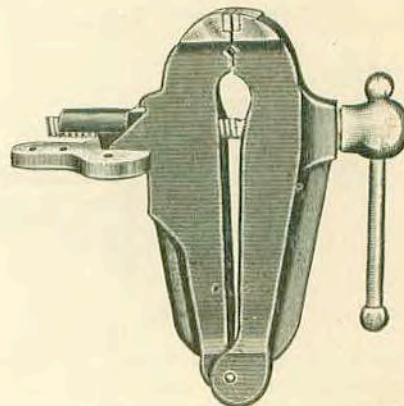


This is one of the few good combination anvil and vises on the market. It is a strong, well-made tool. Jaws are faced with steel. Screw and handle cold rolled steel.

The drilling attachment is a splendid feature. Mechanically better than most attachments of this kind. A separate feed screw with fine thread for feeding drills. Work support is adjustable.

Number	Width Jaw	Opens	Weight	List Price
370	3 3/4 in.	9 in.	50 lbs.	\$8.00
		Drill Attachment	10 lbs.	2.00

RIMCO BLACKSMITHS' VISE



This vise is suitable for light blacksmith work, and many other places.

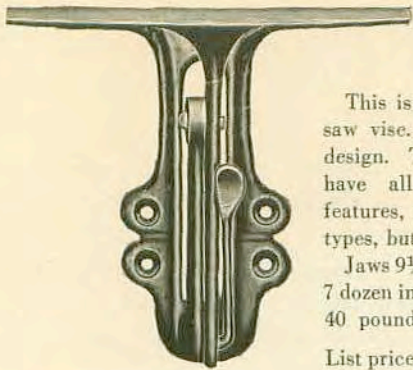
A splendid vise for the farmer, contractor and others who occasionally have blacksmith work to do and need a vise of this type.

Jaws are faced with steel, screw and handle are steel.

Number	Width Jaw	Weight	List Price
34	4 in.	43 lbs.	\$6.00

SAW VISES

No. 100

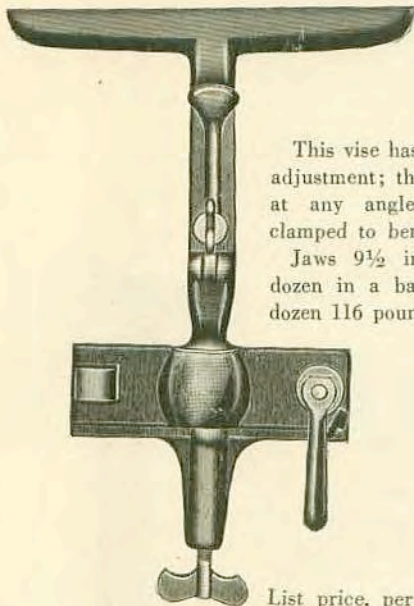


This is a stationary type saw vise. Very simple in design. This vise does not have all the adjustable features, as in some other types, but is a good tool.

Jaws 9½ inches. Packed 7 dozen in a barrel. Weight 40 pounds per dozen.

List price, per dozen, \$12.00

No. 120



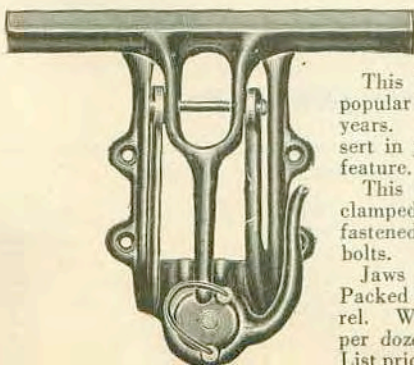
This vise has a ball and socket adjustment; the saw can be held at any angle desired. It is clamped to bench when used.

Jaws 9½ inches. Packed 4 dozen in a barrel. Weight per dozen 116 pounds.

List price, per dozen... \$24.00

No. 140

(WENTWORTH PATTERN)



This has been a very popular saw vise for years. The rubber insert in jaw is a splendid feature.

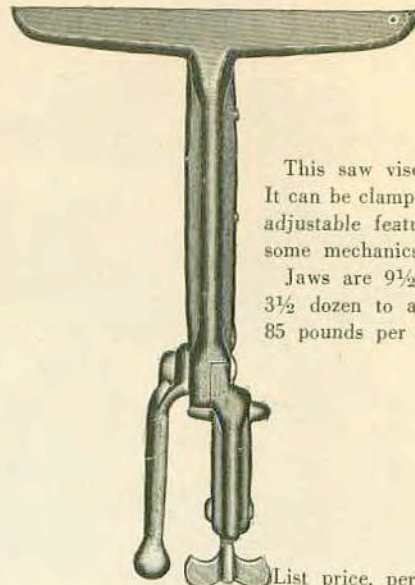
This vise can not be clamped to bench; it is fastened by screws or bolts.

Jaws are 11 inches. Packed 5 dozen in a barrel. Weight 63 pounds per dozen.

List price, per doz. \$20.00

SAW VISES

No. 110s

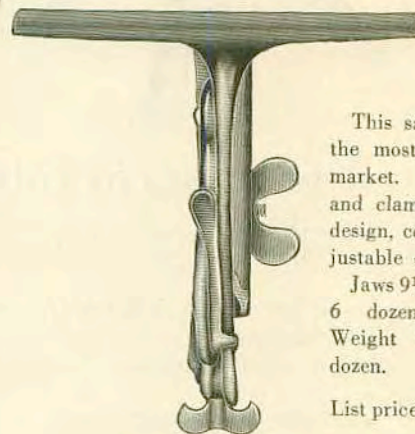


This saw vise is extra heavy. It can be clamped to bench. The adjustable feature is desired by some mechanics.

Jaws are 9½ inches. Packed 3½ dozen to a barrel. Weight 85 pounds per dozen.

List price, per dozen... \$18.00

No. 130



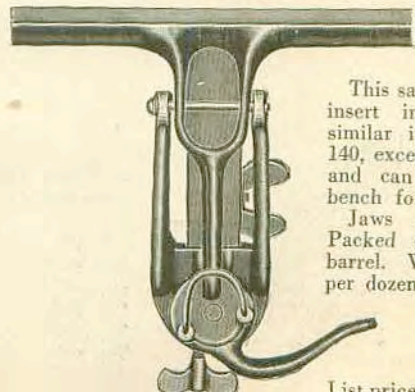
This saw vise is one of the most popular on the market. It is adjustable and clamps. Very simple design, considering the adjustable clamp feature.

Jaws 9½ inches. Packed 6 dozen in a barrel. Weight 58 pounds per dozen.

List price, per dozen \$18.00

No. 150

(WENTWORTH PATTERN)

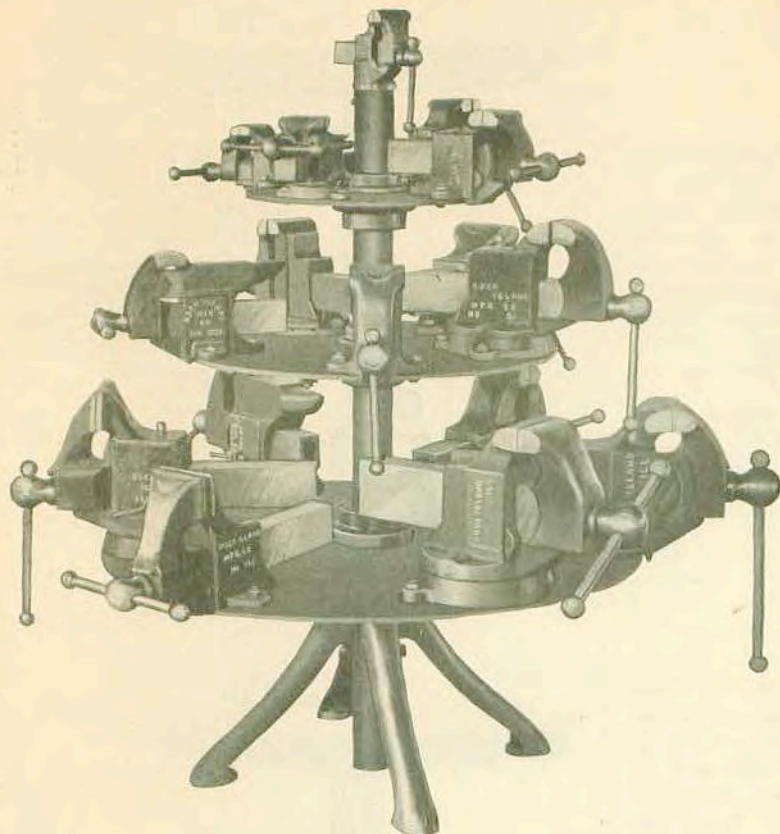


This saw vise has rubber insert in jaws, and is similar in design to No. 140, except it is adjustable and can be clamped to bench for use.

Jaws are 11 inches. Packed 4½ dozen in a barrel. Weight 72 pounds per dozen.

List price, per dozen \$24.00

ROCK ISLAND VISE STAND



This is a strong, well-made stand. Shelves are of boiler plate, and revolve.

Bottom shelf is 38 inches in diameter, middle shelf 26 inches and top shelf 18 inches. It is 53 inches high, and weighs 235 pounds.

We sell or loan this display stand to dealers.

ROCK ISLAND COLUMNS

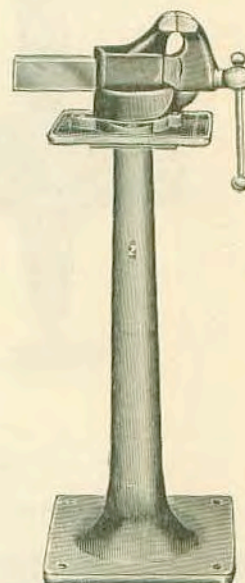
The columns are suitable for mounting bench tools, such as grinders, drills, vises, etc. They do not take up so much room as wooden benches, and are more solid.

Illustration shows one of our No. 5 Automatic Swivel Vises mounted on a No. 2 column. The vise swivels so that it is possible to use it from any position.

To find cost of vises mounted, choose size and type of vise wanted, and add price of column.

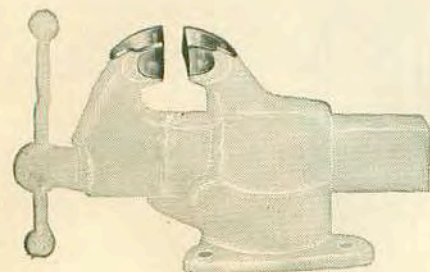
We make no extra charge for mounting.

Number	1	2	3	4
Height	33½"	32½"	30½"	27½"
Base	11 x 12"	13 x 14"	14 x 16"	15 x 19"
Top Plate	7 x 9"	9½ x 12"	9½ x 13½"	11½ x 17½"
Weight, Lbs.	45	55	70	85
List Price	\$6.50	\$7.00	\$8.00	\$10.00



BRASS VISE JAW CAPS

These caps will fit any vise. They are made from an alloy best adapted for the work intended for them. Are polished.



Width	List Per Pair	Width	List Per Pair
2½ inch	\$.50	4½ inch	\$0.80
3 inch	.55	5 inch	1.00
3½ inch	.60	5½ inch	1.00
4 inch	.75	5½ inch	1.50
4¼ inch	.75	6 inch	2.00
4½ inch	.80	7 inch	2.50

ROCK ISLAND FOOT POWER GRINDER

The most popular machine of this kind on the market. The construction is so simple that the cost is less than other Foot Power Grinders. Frame and pedals are made of steel.

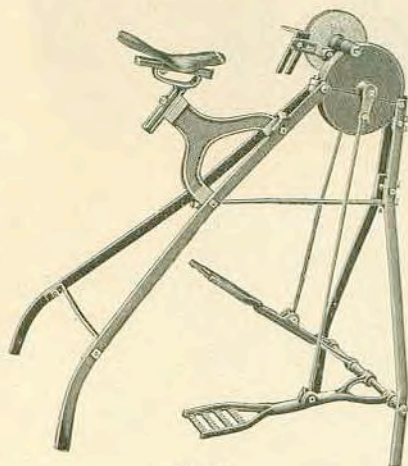


Fig. 1

This machine is a combination of gear and crank. The pinion and gear are incased and protected from dust, etc. Bearings are in upper part of case (one casting). Impossible for pinion to bind or stick. This is an important feature not found in any other grinder. The pinion is cut from a solid piece of steel. The frame is steel, bars well braced. Seat is steel and arranged for adjustment as required. The wheel is a 6 x 1¼ inch corundum.

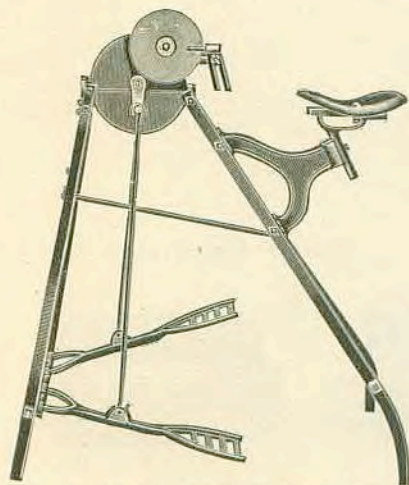
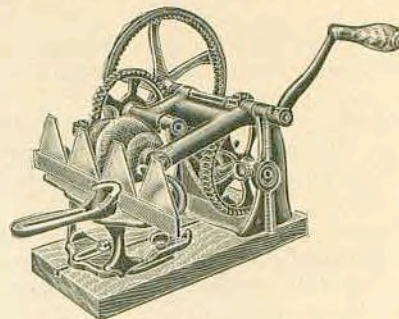


Fig 2. Showing Opposite Side

There is no other foot power grinder on the market so simple in design or so powerful. The arrangement of the pedals and the method of getting the power to the wheel is a feature of this machine. The machine is well finished, weighs crated for shipment about 70 pounds.

List price, each\$12.00

STAR SICKLE GRINDER



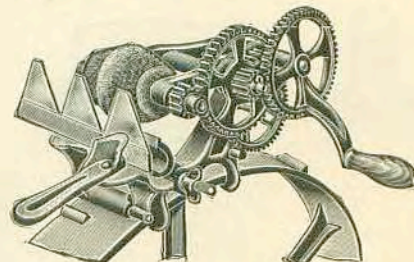
This cut represents the Star Sickle and Tool Grinder, which has been on the market for 15 years and added improvements each year have made it the very acme of perfection. It is generally conceded both at home and abroad to be the most perfect of any machine of this description and is increasing in popularity each year.

The machine grinds both sides of any section simultaneously and it is impossible to grind them inaccurately, as it grinds the heel of the section as perfectly as the point.

The machine measures 11½ inches at the top of wheel, length over all is 18 inches, width 11 inches, weight 24 lbs., with two stones.

List price, with bevel and flat stones..... \$5.50
 Extra bevel stone, each..... 1.00
 Extra plain stone, each..... 1.00
 Saw gumming stone, each..... .75

ROYAL SICKLE GRINDER



Is the most compact, strongest and simplest Sickle and Tool Grinder on the market; grinds both blades at once, even and true; is always in line as the knife-holder cannot turn round. It grinds out nicks. It fastens to the wheel of a mower or a block as you may wish. The stones may be changed in one minute by pulling out one cotter pin.

List price, with bevel and flat stone..... \$5.00
 Extra bevel stone, each..... 1.00
 Extra plain stone, each 1.00
 Saw gumming stone, each75

The flat stone is 2 inches thick and 4 inches in diameter, and will grind anything to be sharpened around a house or shop. Size, with handle up, 12½ inches high, 12 inches wide, 19½ inches long. Weight 16 lbs. with one stone, 18½ lbs. with 2 stones. Size of box, 8 inches high, 9¾ inches wide, 12½ inches long. Shipping weight, boxed, with two stones, 21 lbs.

ROCK ISLAND CEMENT TOOLS

The Rock Island line of Cement Tools is offered to the trade demanding the best. The same careful attention is given in the making of cement tools as to our other well-known tools.

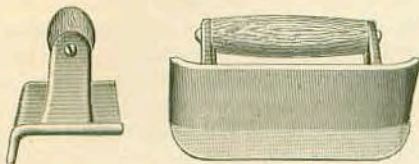
Our cement tools will **outwear** any other on the market. We have added metal where they wear. This is a very important feature and should not be overlooked.

Handle is hard wood and a shape that fits naturally to the hand without straining the arm or wrist.

Tools having 100 numbers are grey iron, polished, nickel plated and buffed.

Tools having 200 numbers are bronzed, highly polished.

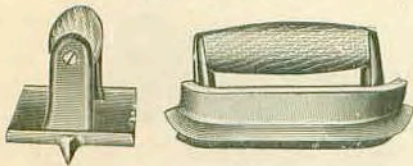
Edger



Number	100	200	102	202
Radius	3/8 in.	3/8 in.	3/4 in.	3/4 in.
Material	Iron	Bronze	Iron	Bronze
Length	6 in.	6 in.	6 in.	6 in.
Width	2 3/4 in.	2 3/4 in.	2 3/4 in.	2 3/4 in.
Depth	5/8 in.	5/8 in.	7/8 in.	7/8 in.
List, dozen	\$7.00	16.00	7.00	16.00

Jointer

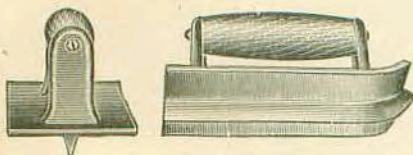
Ends Turned Up



Number	106	206
Material	Iron	Bronze
Length	6 in.	6 in.
Width	2 3/4 in.	2 3/4 in.
Depth of Cut	1/2 in.	1/2 in.
Width of Cut	3/8 in.	3/8 in.
List, dozen	\$7.00	16.00

Jointer

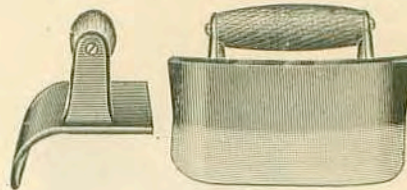
One End Straight



Number	109	209
Material	Iron	Bronze
Length	6 in.	6 in.
Width	3 in.	3 in.
Depth of Cut	1/2 in.	1/2 in.
Width of Cut	3/8 in.	3/8 in.
List, dozen	\$7.00	16.00

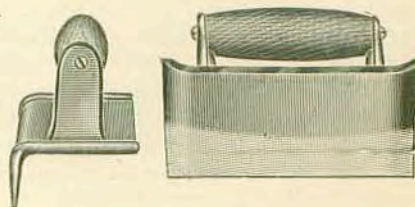
ROCK ISLAND CEMENT TOOLS

Curbing Edger



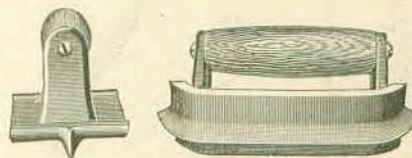
Number	115	215
Radius	1 in.	1 in.
Material	Iron	Bronze
Length	6 in.	6 in.
Width	3 5/8 in.	3 5/8 in.
Depth	1 1/2 in.	1 1/2 in.
List, dozen	\$15.00	22.80

Square Edger



Number	114	214
Radius	1/8 in.	1/8 in.
Material	Iron	Bronze
Length	6 in.	6 in.
Width	3 in.	3 in.
Depth	1 in.	1 in.
List, dozen	\$11.10	18.60

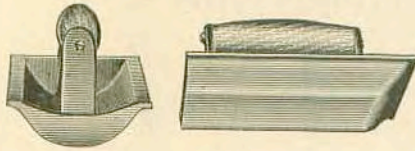
Small Groover



Number	104	204
Material	Iron	Bronze
Length	6 in.	6 in.
Width	3 in.	3 in.
Depth of Cut	1/2 in.	1/2 in.
Width of Cut	1/2 in.	1/2 in.
List, dozen	\$7.00	16.00

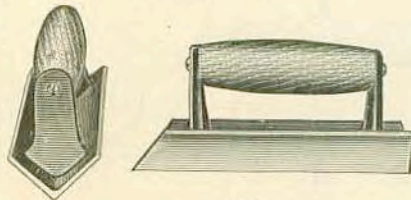
ROCK ISLAND CEMENT TOOLS

Gutter Tool



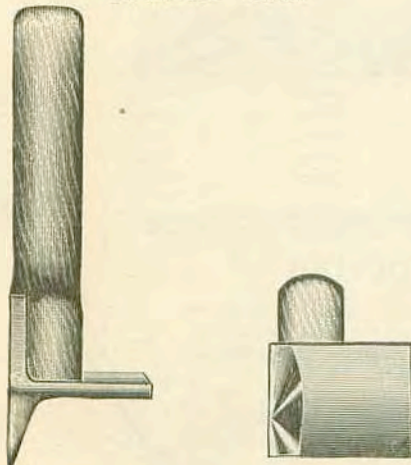
Number	117	217
Material	Iron	Bronze
Length	6 in.	6 in.
Width	3¾ in.	3¾ in.
Width Gutter	3½ in.	3½ in.
Depth Gutter	1 in.	1 in.
List, dozen	\$15.00	25.00

Corner Tool



Number	116	216
Material	Iron	Bronze
Length	6 in.	6 in.
Sides	1½ in.	1½ in.
List, dozen	\$7.00	16.00

Radius Tool

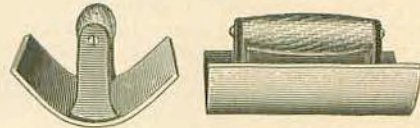


Number	130	230	131	231
Material	Iron	Bronze	Iron	Bronze
Radius	¾ in.	¾ in.	¾ in.	¾ in.
List, dozen	\$7.00	13.00	7.00	13.00

ROCK ISLAND CEMENT TOOLS

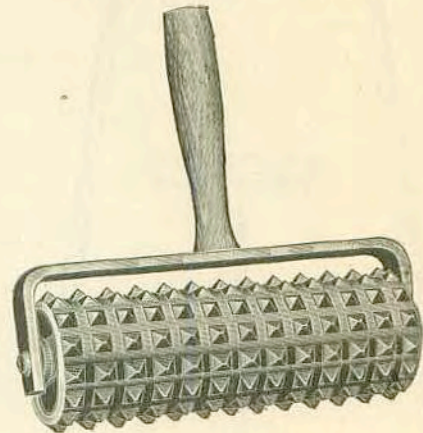
Curb Gutter

Finishing Tool



Number	118	218
Material	Iron	Bronze
Length	6 in.	6 in.
Sides	3 in.	3 in.
List, dozen	\$15.00	25.00

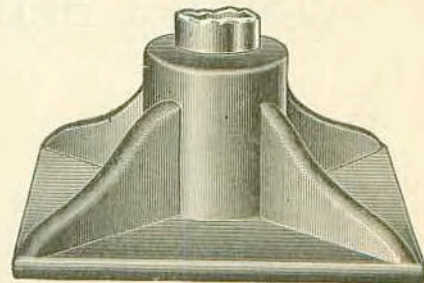
Indentation Roller



Number	120	220
Material	Iron	Bronze
Length	9 in.	9 in.
Diameter	3¼ in.	3¼ in.
List, each	\$4.00	10.00

ROCK ISLAND SEMI-STEEL TAMPER

With Four-foot Pipe Handle



These tampers are made of our Semi-Steel mixture, are very tough and strong, practically unbreakable. Handles are one-inch pipe, cast into the tamper, therefore cannot get loose.

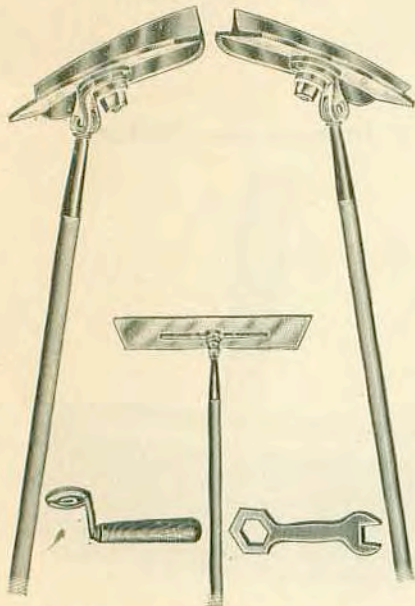
Number	11	12	13
Size	6 x 6	8 x 8	10 x 10
Weight, pounds	14	19	24
List, each	\$1.20	1.70	2.00

←ARROWSMITH→

CEMENT TOOLS

The above trademark has had a significant meaning to cement workers for the last few years. The Tools with this brand have represented a logical step in advance. Their efficiency in saving time and labor has caused hundreds of contractors and cement workers to throw out all their old short handled tools.

**COMBINATION
Nos. 1 and 2**

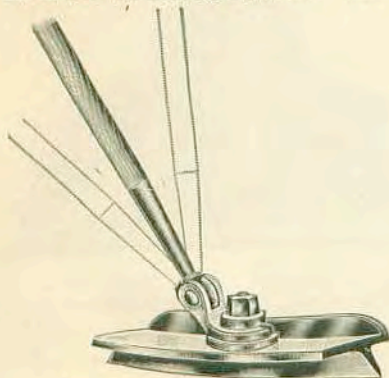


Contractors and cement workers usually want a complete outfit of these tools; we therefore list these different assortments. When bought this way a saving is made.

This outfit contains 1 15-inch trowel, 1 jointer, 1 edger, 3 long regulation handles, 1 short emergency handle and a wrench.

- No. 1-I. Combination, 15-inch Trowel, iron. List. \$12.50
- No. 1-B. Combination, 15-inch Trowel, bronze. List. 15.00
- No. 2-I. Combination, 24-inch Trowel, iron. List. 13.50
- No. 2-B. Combination, 24-inch Trowel, bronze. List. 17.00

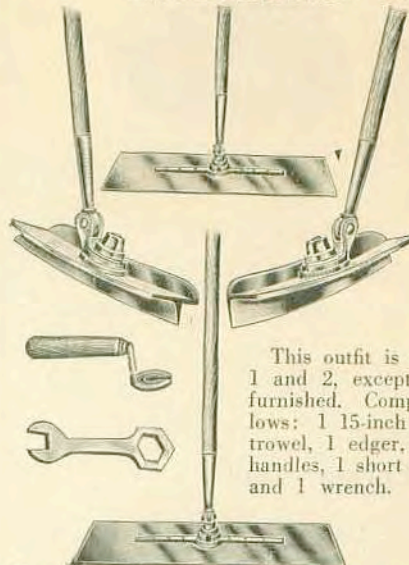
←ARROWSMITH→ **EDGER**



Number	Material	Length	List Each
151	Iron	6½-in.	\$4.00
251	Bronze	6½-in.	6.00

←ARROWSMITH→

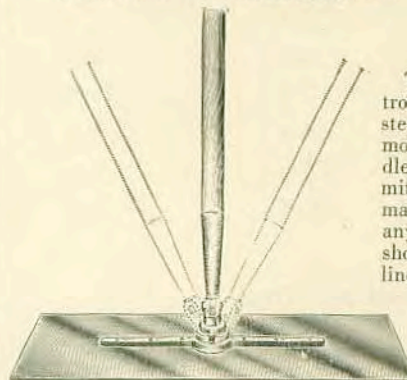
COMBINATION No. 3



This outfit is the same as Nos. 1 and 2, except two trowels are furnished. Complete outfit as follows: 1 15-inch trowel, 1 24-inch trowel, 1 edger, 1 jointer, 3 long handles, 1 short emergency handle and 1 wrench.

- No. 3-I. Combination, iron. List.....\$18.00
- No. 3-B. Combination, bronze. List..... 22.00

←ARROWSMITH→ **TROWELS**



The blade of this trowel is 21 gauge steel, with malleable mounting. The handle is adjustable, permitting operator to manipulate tool from any direction, as shown by dotted lines.

Number	Length	Width	List Each
161	15-in.	5-in.	\$5.00
162	18-in.	5-in.	5.75
163	20-in.	5-in.	6.25
164	24-in.	5-in.	7.00

←ARROWSMITH→

JOINTER

This jointer, same as all other Arrowsmith Tools, has the adjustable handle. Long or short handle can be used.

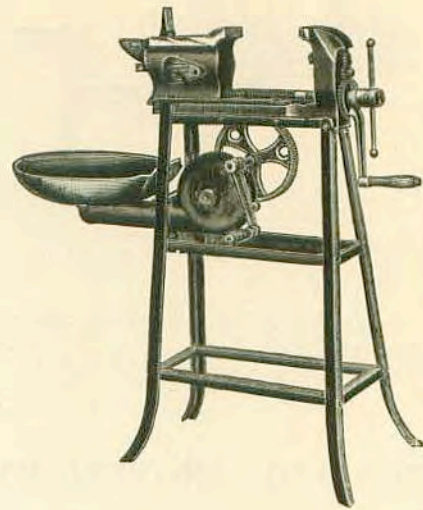
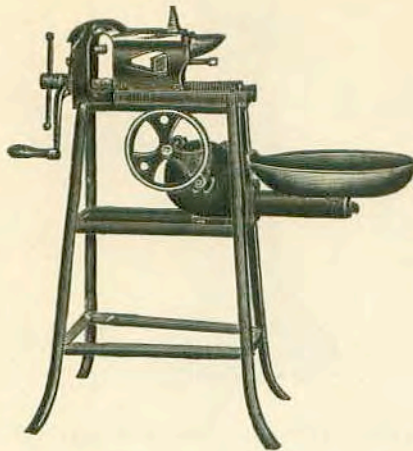
The ends curve upward, giving the tool a "rocker" shape and permitting it to cut its way instead of plowing.



Number	Material	Length	List Each
150	Iron	6¼-in.	\$4.00
250	Bronze	6¼-in.	6.00

JOHN H. GRAHAM & CO. DIRECT REPRESENTATIVES

ROCK ISLAND COMBINATION FORGE, ANVIL, VISE, DRILL, ETC.



For a Man's Job:

This Combination Tool is in no sense a plaything—it is devised and built to do hard, heavy, practical work.

Frame—Is steel solidly braced and with center shelf for tools, oil can, etc.

Forge—Is oval—12 x 15 inches and 27 inches above floor.

Fan—Is 7 inches in diameter and driven by accurately cut gear and pinion.

Anvil—Is 3½ inches wide by 12 inches long.

Vise—Jaws are 3½ inches wide and open 11 inches. Pipe jaws will take pipe up to 2 inches in diameter.

Drill Chuck—These are steel and take ½ inch round shank drills.

Overall Dimensions—40 inches high and 29 inches long.

Weight—135 pounds.

The Rock Island Home Repair Shop is built to perform and to endure. Thousands of them are making good a full 100 per cent.

This COMBINATION MACHINE is indispensable to the farmer, ranchman, contractor and others at a distance from repair shops. It is equally useful and profitable to others who have automobiles, tractors, heating and water plants, machinery, equipment, etc., needing upkeep and repairing.

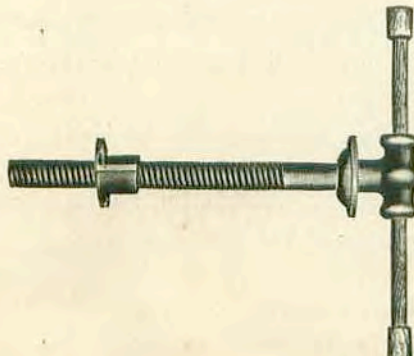
The different tools are in no sense attachments, but are built as an integral part of the machine. No bench is required and machine and tools are always ready for use. Construction is solid, strong and simple—there is nothing to break or get out of order. IT IS A MARVEL OF COMPACTNESS, EFFICIENCY AND ENDURANCE.

It Turns Spare Time Into Profit

No man with boys growing up could make a better investment as a matter of manual education and training. We have sold hundreds for this very purpose.

Just the thing for the man or boy who likes to putter around home making or fixing things.

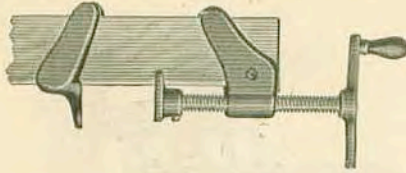
ROCK ISLAND BENCH SCREWS



The screws are steel, castings are extra heavy, handle is hard wood. The threads are accurately cut. These Bench Screws are carefully made and are high grade goods.

Number	1	1½	1¾
Diameter	1 in.	1½ in.	1¾ in.
Length	16½ in.	16½ in.	17½ in.

ROCK ISLAND CLAMP ATTACHMENT



Our clamp will fit 1 3/8 x 2 1/2 bar of any length. Is quickly adjusted.

This is the best design clamp on the market, more practical than any other.

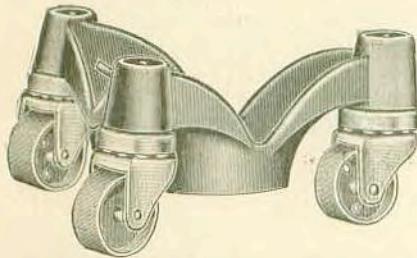
Screw is cold rolled steel, threads are accurately cut. The castings are extra heavy.

ROCK ISLAND SEMI-STEEL MAULS



These Mauls are made of a mixture of Iron and Steel, are very tough and strong, will not chip off and break like the ordinary kind. Made in five sizes: 10-lb., 13-lb., 16-lb., 18-lb., 20-lb. each. We do not ship our Mauls as they come from the foundry—without being finished. Our Mauls are all finished. A well finished article is more easily sold than a rough looking casting, many times badly rusted. The use of this Maul will increase your sales.

STOVE CASTERS



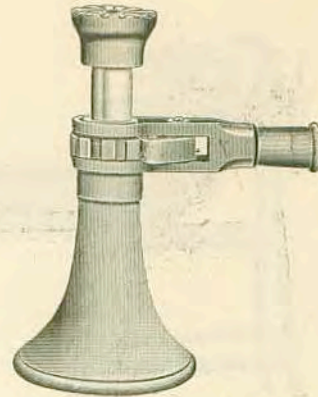
These casters are extra heavy.

Roller bearings require little effort to move stoves or heavy furniture.

No other caster on the market is so well made. Weight, per set of 4, 10 pounds.

List price, per set of 4..... \$2.00

ROCK ISLAND RATCHET JACK SCREW



The three sizes we make will take care of most any requirement, and it is not necessary to carry such a large assortment.

The screw of our jack is cold rolled steel. Base and cap cast iron. Lever is malleable iron. Threads are accurately cut, and entire jack is well made and finished.

No.	Capacity	Diam. Base	Diam. Screw	Height Closed	Height Open	List
1	25 ton	9 in.	2 in.	9 1/2 in.	18 in.	\$3.50
2	25 ton	9 in.	2 in.	15 1/2 in.	24 in.	4.50
3	25 ton	9 in.	2 in.	21 1/2 in.	30 in.	6.00

ROCK ISLAND EMERY WHEEL DRESSER

(Huntington Pattern)



For truing, shaping and removing glaze from emery wheels while running.

Handle is a strong, clean grey iron casting.

Cutters are made from steel most suitable for this purpose.

All cutters are carefully hardened the proper temper to give good service.

These dressers are enameled black. One extra set cutters furnished with each dresser.

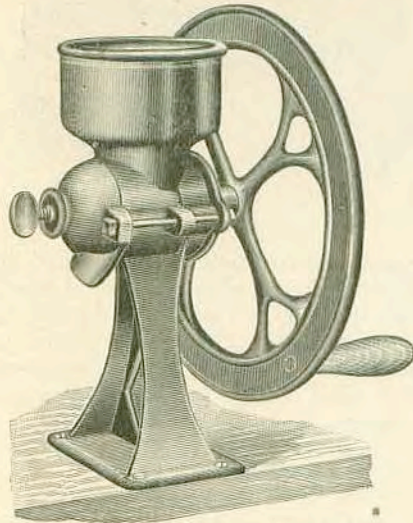
List price, per dozen..... \$12.00
List price, extra cutters..... 3.00

JOHN H. GRAHAM & CO. DIRECT REPRESENTATIVES

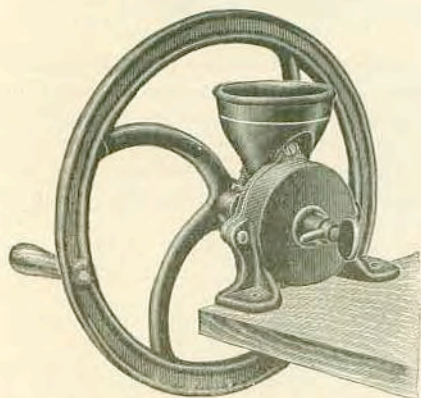
ROCK ISLAND HAND GRIST MILLS

Our line of grist mills is the very best that can be made. Each part is made of the best material for the work it has to do. Castings are made in our own foundry. All shafts are cold rolled steel. The burrs (the parts of greatest wear) are made of an alloy, and are easily and cheaply replaced.

These mills are adapted to grinding corn, coffee, salt, dried bones, dried shells, small grains, etc.



Number	Shipping Weight	List Price	List Price, Extra Burrs
1½	27 lbs.	\$2.50	\$0.50 per Pair
2	47 lbs.	5.00	.75 per Pair
3	86 lbs.	7.50	1.00 per Pair



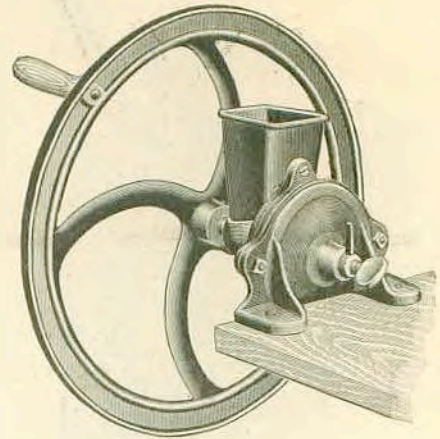
This is a different type, but is made of the same material as our other types.

The most durable, rapid and best finished hand grist mills made.

The mills are attractively finished.

Number	Shipping Weight	List Price	List Price, Extra Burrs
1	30 lbs.	\$4.00	\$0.75 per Pair

ROCK ISLAND HAND GRIST MILLS

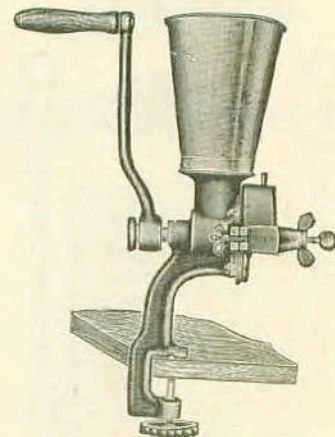


This type of mill is preferred by some.

It is a very rapid grinder. Will not grind so fine as the other types, but is just the mill for grinding coarse grains, dry bones, shells, charcoal, etc.

Number	Shipping Weight	List Price	Complete Burr Equipment
4	27 lbs.	\$4.00	\$1.00

RIMCO GRAIN MILL



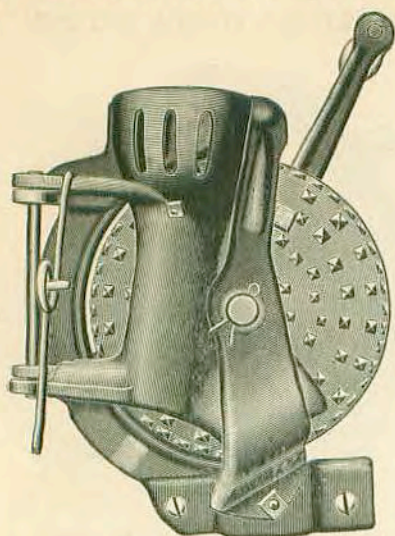
This mill will grind wheat suitable for making whole wheat bread, also grinding corn for meal, coffee and other grains. Our new designed burrs are superior to any on the market. Burrs furnished with mill will last a long time. New burrs quickly and easily attached. Hopper is heavy tin. Mill is well made and nicely finished.

Packed singly, suitable for reshipment.

Shipping weight about 13 pounds.

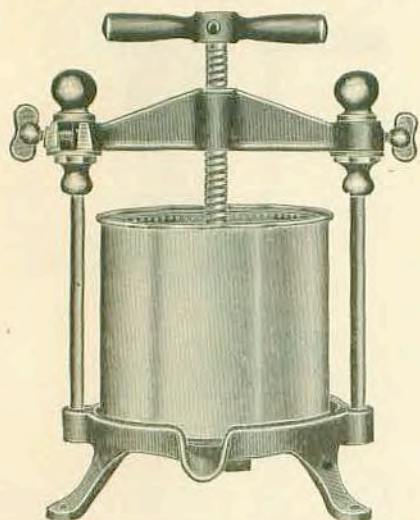
List price	..... each,	\$5.00
List price, extra burrs	..... per pair,	1.00

ROCK ISLAND CORN SHELLER



Our hand corn sheller is a well designed machine, and is manufactured with more care than is usually given a machine of this kind. It is adjustable to any size ear by a tension spring and thumb screw. Shells clean and does not crack the corn. Each machine furnished with an attachment for pop corn. Attractively finished.
Weight, 13 1/2 pounds.

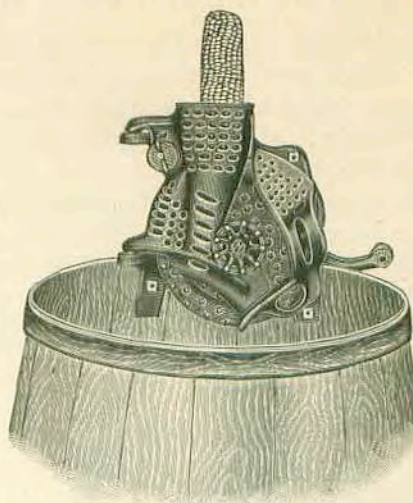
ROCK ISLAND FRUIT PRESS



Our fruit presses are well made, and of good material. Cylinders are extra heavy tin plate. Screws are cold rolled steel, threaded to give powerful pressure. These presses are attractively finished with a grey baking enamel.

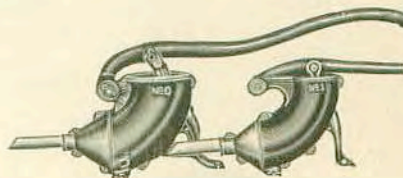
Number	Capacity	Weight
1	2 Quart	14 lbs.
2	4 Quart	26 lbs.
3	10 Quart	43 lbs.

RIMCO CORN SHELLER



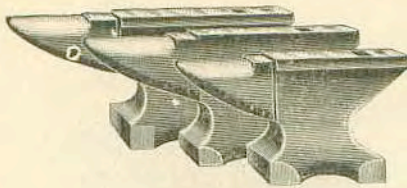
This is an excellent sheller. Strong and durable. Shells rapidly all sizes of corn. Adjustable feature permits small or large ears. Butting and tipping attachment furnished. Imperfect grains can be shelled off when used for seed. Cobs are discharged separately. This sheller can be attached to barrel or box. Weight about 20 pounds.

ROCK ISLAND SAUSAGE STUFFER



These sausage stuffers are carefully made. The body castings are accurately ground, insuring a tight joint. This is an important feature not found in other stuffers on the market. Levers are extra long and strong. Made in 2 sizes. No. 0 weighs about 13 lbs., and No. 1 about 8 pounds.

ROCK ISLAND SEMI-STEEL ANVILS

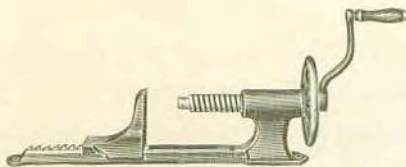


This is an ideal anvil for farm or light shop use. Have a large percentage of steel in the mixture, which makes them hard and tough. The anvil is well finished, the top being true and well polished. Made in three sizes only: 50 lbs., 70 lbs., and 100 lbs. each.

SMALL ANVILS

Aside from the above, we make a good anvil for the home—also suitable for jeweler and other trades requiring a small light anvil. Made of cast iron, face, sides and horn nickel plated—base black. Write for prices.

ROCK ISLAND BLACKSMITH'S DRILL

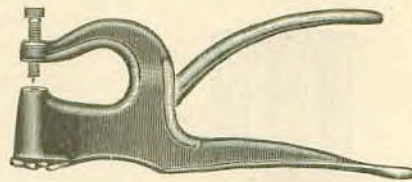


This is a strong and substantial drill. It will do good work on all kinds of light drilling. Spindle is bored for one-half inch round shank drills.

Our drill is carefully made and well finished.

Number	Length	Adjustment	Weight
600	20 in.	12 in.	29 lbs.

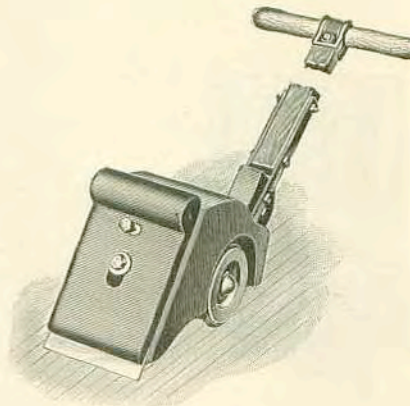
RIMCO RIVETER



This riveter is for hollow rivets; solid rivets cannot be used. Well made and extra strong. Special design of lever insures greater power. Black enamel finish. Weight about 4 pounds.

List price, each, without rivets..... \$1.00

RIMCO FLOOR SCRAPER



More work possible with this scraper than several hand scrapers.

Operator draws scraper toward him, similar to the hand scraper, the weight of the machine keeps blade to the surface being scraped.

Wheels are rubber-tired to prevent scarring or scratching. Handle is adjustable to permit scraping close to walls, etc.

Blades are made of crucible steel properly tempered and finished. They are six inches wide.

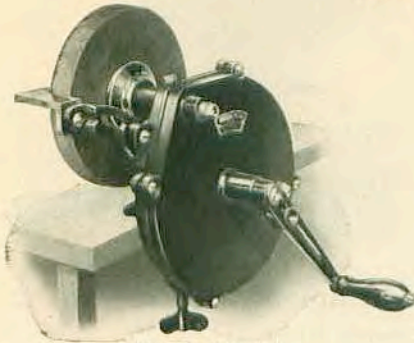
Machine is well finished and securely packed. Weight about 125 pounds.

AMERICAN GRINDER MFG. CO.

Manufacturers of

High Grade Cut Gear Tool Grinders

AMERICAN GRINDERS



Nos. 1, 2 and 3

American Grinder No. 1

For Household Use

A small size, light in weight, and can be easily clamped on the kitchen table or sink, or on the little bench in the home workshop. It is small enough to fit easily into a drawer or cupboard when not in use. With this grinder all the household cutlery can be kept in good condition, and the man who loves to tinker around the house can have his set of household tools in perfect shape for immediate use.

Size of Grinding Wheel	4 x 1 in.
Diameter of Gear Case.....	5 in.
Carborundum Wheel, Grade and Grit.....	100-J
Net Weight of Grinder	4½ lbs.
Case of 12, Gross Weight, 86 lbs., Net Weight.....	54 lbs.
Measurements of Case.....	21 x 16 x 14
Cubic Capacity of Case, in Feet.....	2.9

American Grinder No. 2

For the Mechanic

A popular size for the mechanic. It is just the right size to fit handily into a tool chest, and big enough to do the largest tool grinding required by the carpenter or mechanic who goes out on the job.

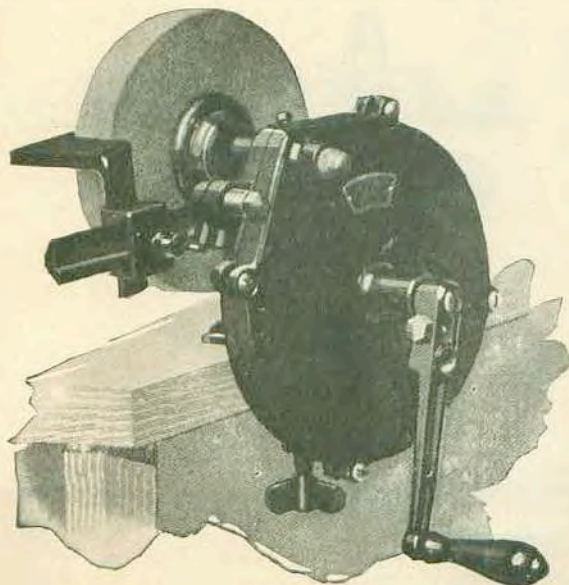
Size of Grinding Wheel	5 x 1 in.
Diameter of Gear Case.....	6 in.
Carborundum Wheel, Grade and Grit.....	80-J
Net Weight of Grinder	7 lbs.
Case of 12, Gross Weight, 114 lbs., Net Weight.....	84 lbs.
Measurements of Case.....	24 x 19 x 16
Cubic Capacity of Case, in Feet.....	4.3

American Grinder No. 3

For Shop and Garage

Just the right size to have a permanent place at the end of the work bench in a small work shop or private garage. Monument workers find it just the thing for sharpening their lettering tools.

Size of Grinding Wheel	6 x 1 in.
Diameter of Gear Case.....	7½ in.
Carborundum Wheel, Grade and Grit.....	70-J
Net Weight of Grinder.....	10 lbs.
Case of 12, Gross Weight, 150 lbs., Net Weight.....	120 lbs.
Measurements of Case.....	26 x 20 x 17
Cubic Capacity of Case, in Feet.....	5.1



No. 4

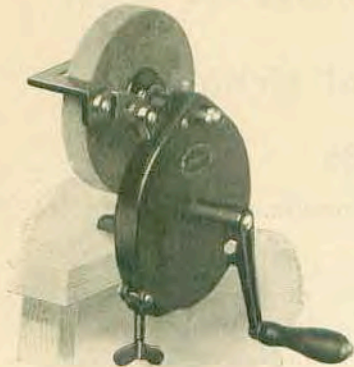
American Grinder No. 4

For Factory Use

A powerful tool sharpener for heavy work in Factories, Machine Shops, Lumber Camps and on Ranches and Plantations; although large in size it is so smooth-running that the heaviest grinding is easily handled. It can be furnished with Foot Power Attachment if desired.

Size of Grinding Wheel	7 x 1¼ in.
Diameter of Gear Case.....	10 in.
Carborundum Wheel, Grade and Grit.....	60-J
Net Weight of Grinder.....	17½ lbs.
Case of 6, Gross Weight, 136 lbs., Net Weight.....	105 lbs.
Measurements of Case	29 x 16 x 15
Cubic Capacity of Case, in Feet.....	4.0

CHAMPION GRINDERS

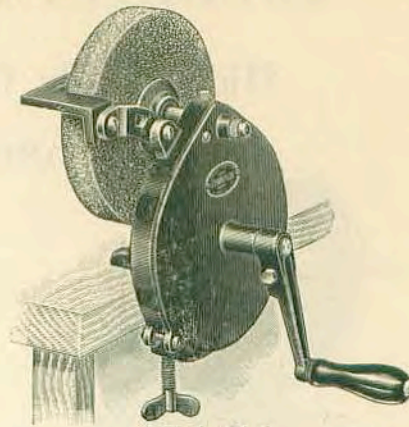


No. 1

Champion Grinder No. 1
For Household Use

This is the smallest size of a standard type popular-priced grinder for competitive trade. It has not the distinctive finish or exclusive features of the American, but is a well-made, useful grinder which gives good service, and an excellent value at its price. It is a handy little household tool for keeping cutlery sharpened.

Size of Grinding Wheel4 x 3/4 in.
Diameter of Gear Case......5 in.
Corundum Wheel, Grade and Grit.....100-J.
Net Weight of Grinder4 1/2 lbs.
Case of 12, Gross Weight, 86 lbs., Net Weight.....54 lbs.
Measurements of Case21 x 16 x 14
Cubic Capacity of Case, in Feet.....2.9



Nos. 2 and 3

Champion Grinder No. 2

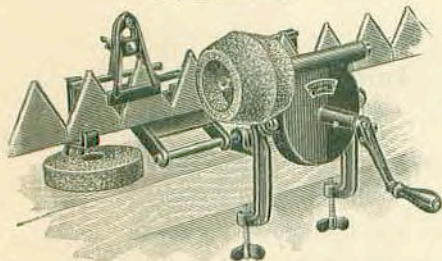
Size of Grinding Wheel5 x 1 in.
Diameter of Gear Case6 in.
Corundum Wheel, Grade and Grit80-J.
Net Weight of Grinder.....7 lbs.
Case of 12, Gross Weight, 114 lbs., Net Weight.....84 lbs.
Measurements of Case.....24 x 19 x 16
Cubic Capacity of Case, in Feet.....4.3

Champion Grinder No. 3

Size of Grinding Wheel.....6 x 1 in.
Diameter of Gear Case.....7 1/2 in.
Corundum Wheel, Grade and Grit.....70-J.
Net Weight of Grinder10 lbs.
Case of 12, Gross Weight, 150 lbs., Net Weight....120 lbs.
Measurements of Case.....26 x 20 x 17
Cubic Capacity of Case, in Feet.....5.1

SICKLE AND TOOL GRINDERS

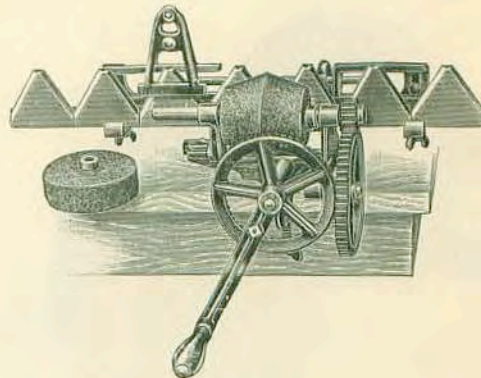
American No. 5
Sickle and Tool Grinder
For Farm Use



A grinder for all around use on the farm, is furnished with two corundum wheels—one sickle cone for grinding mower knives, and one tool wheel for general work. This grinder, with its ball bearings and worm shaft drive, runs as smoothly and quietly as a cream separator. A double malleable clamp locks the grinder firmly in place, on work bench or mower wheel, insuring perfect balance and accurate sharpening, with smooth, even transmission.

Size of Tool Grinding Wheel......5 x 1 1/4 in.
Size of Sickle Cone......4 1/4 x 3 1/2 in.
Corundum Wheels, Grade and Grit.....60-J.
Net Weight of Grinder18 lbs.
Case of 6, Gross Weight, 150 lbs., Net Weight....108 lbs.
Measurements of Case......30 x 20 x 15
Cubic Capacity of Case in Feet.....5.3

Champion No. 25
Sickle and Tool Grinder

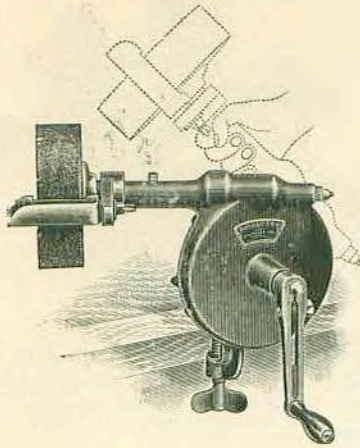


Specifications

Size of Tool Grinding Wheel4 x 1 1/4 in.
Size of Sickle Cone......3 x 3 1/2 in.
Corundum Wheels, Grade and Grit.....60-J.
Net Weight of Grinder.....38 lbs.
Case of 6, Gross Weight, 150 lbs., Net Weight....108 lbs.
Measurements of Case30 x 20 x 15
Cubic Capacity of Case, in Feet.....5.3

American No. 6, Tilting Grinder

For Broad Edged Tools

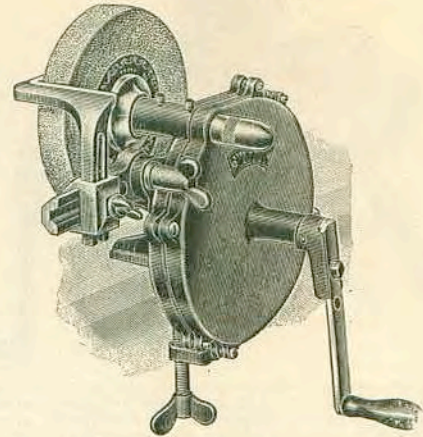


A world-beater for sharpening broad-edged tools—meat chopper blades, clippers, etc.—and for garage use. The bearing is placed at a 30-degree angle from the drive wheel, keeping the handle out of the way of the operator. It adjusts with an easy one-hand lift. Ball bearings and worm shaft drive insure smooth, noiseless transmission.

Size of Grinding Wheel.....	5 x 1½ in.
Diameter of Gear Case.....	6 in.
Carborundum Wheel, Double Grit.....	70-J. and F.
Net Weight of Grinder.....	10½ lbs.
Case of 12, Gross Weight, 170 lbs., Net Weight.....	126 lbs.
Measurements of Case.....	26 x 19 x 17
Cubic Capacity of Case, in Feet.....	4.1

American Liberty Grinder

With Bronze Bearings



The Liberty Model of the American line is the highest development of hand power grinder, designed for use with our perfected Twist Drill Attachment, Flat Bit and Chisel Attachments and Wheel Dresser, as shown on pages 277 and 278. The Liberty Grinder is recommended for use in Shipyards, Railroad and Construction Work, Lumber Camps, Mining and Engineering, Signal and Line Repair Work, Machine Shops, Garages, Industrial Training Schools, etc.

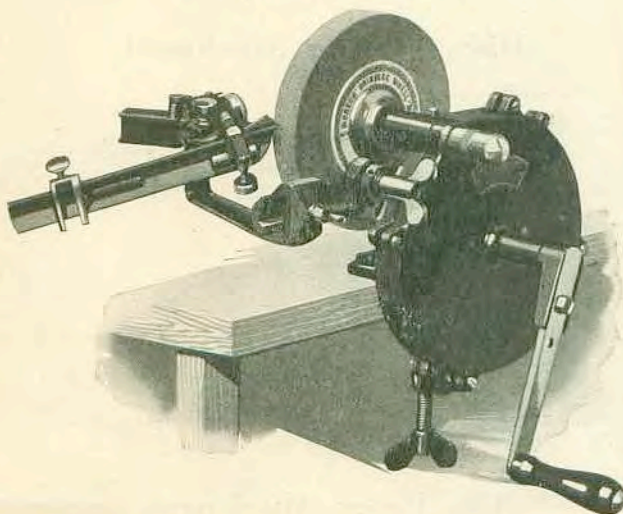
Size of Grinding Wheel.....	8 x 1¼ in.
Diameter of Gear Case.....	12 in.
Corundum Grinding Wheel, Grade and Grit.....	60-J.
Box of 1, Gross Weight, 50 lbs., Net Weight.....	38 lbs.
*Measurements of Case.....	19 x 13 x 11
Cubic Capacity of Case, in Feet.....	1.7

*Large enough to include Attachments if ordered.

ATTACHMENTS

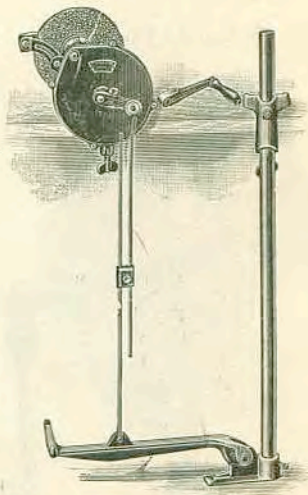
Flat Bit Attachment

Used for Railroad Work

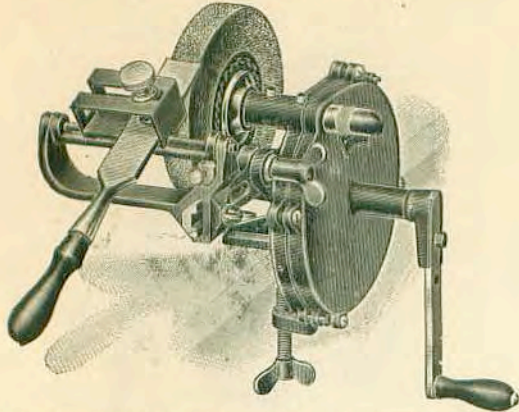


The Flat Bit Attachment for use with the Liberty Model American Grinder is used largely on railroad work. It is carefully designed with standard clearance, correctly centered, and will dress a bit with perfect cutting edges.

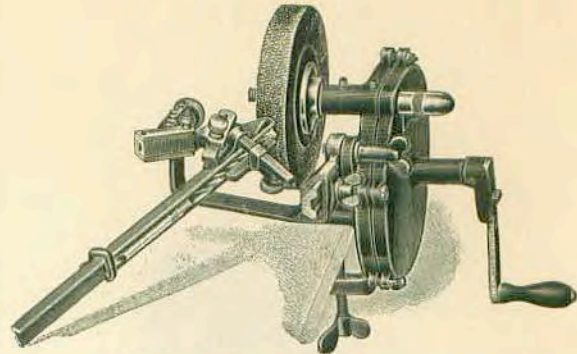
Foot Power Attachment



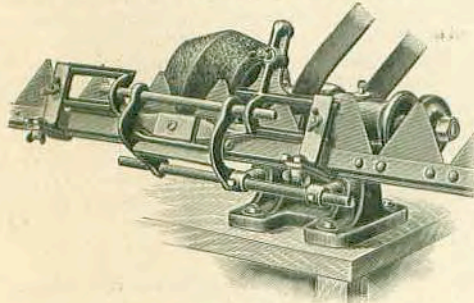
Foot power attachment for American Grinders Nos. 3 and 4, the Liberty Model, and Champion, No. 3, is illustrated here. It is easy to set up, compact and convenient. Adjusts to height of work bench.

Chisel Attachment

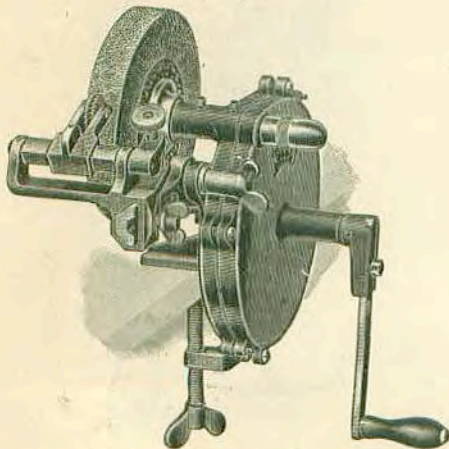
This attachment insures positive and accurate grinding of Chisels and Plane Bits to any bevel of cutting edge. The tool is held firmly in place by an adjustable clamping device. A roller bearing allows free movement, left and right, to insure even grinding on the face of the wheel.

Twist Drill Attachment

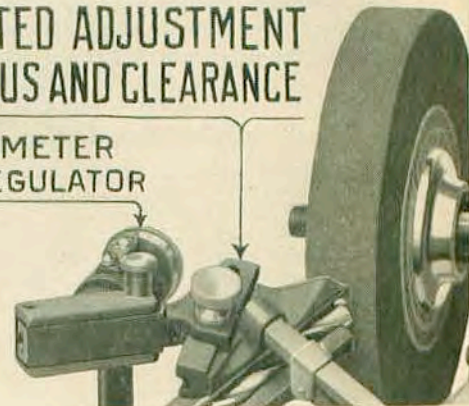
The American Liberty Grinder Twist Drill Attachment insures correct cutting clearance for drills $3/16$ inch to $1/4$ inch in diameter, with Graduated Adjustment by sixteenths. It gives results equal to the expensive machines especially built for twist drill grinding, is easy to set up in the shop or on outside work, and prevents costly delays by keeping drills in condition on the job.

Sickle Holding Attachment

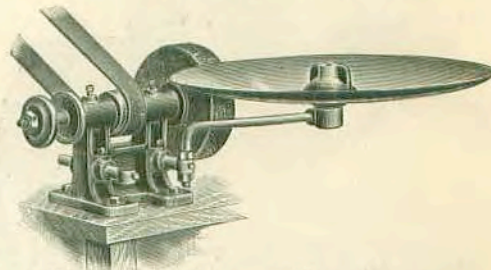
The Automatic Sickle Holder furnished with the American No. 60 Power Grinder, described on the following page, is capable of holding any make of mower knife. It can be adjusted to any width or thickness of knife, and it carries the full weight of the sickle. The operator has full view of the work and easily controls the pressure. Furnished complete with No. 60 Farm Equipment.

Wheel Dresser

A grinding wheel becomes glazed, especially when soft metals are ground, or it may become rounded or grooved. The Wheel Dresser trues it up and dresses the grinding surface, as good as new. This minimizes heating of the tool and prolongs the life of the wheel. A screw adjustment gives the necessary pressure on the wheel to cut away imperfections.

GRADUATED ADJUSTMENT FOR RADIUS AND CLEARANCE**MICROMETER FEED REGULATOR**

The Micrometer Feed Regulator used with Twist Drill Attachment, illustrated above, insures accurate grinding of both lips of drill to the same exact point.

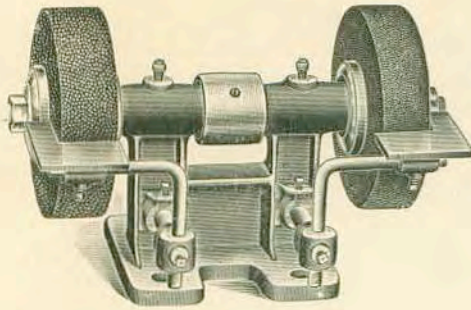
Disc Grinding Attachment

The American Disc Grinding Attachment, furnished with the No. 60 outfit, is simple and convenient, keeping the operation in full view of the operator and permitting the greatest freedom of movement. Furnished complete with No. 60 Farm Equipment.

Also Power Attachments

The attachments listed on pages 277 and 278 (Twist Drill, Flat Bit, Chisel and Wheel Dresser), for use with the American Liberty Model Grinder, may also be used with American Power Grinder No. 75, described on Page 279. The tool Holder with Micrometer Feed Regulator is a basic part of the Twist Drill and Flat Bit Attachments.

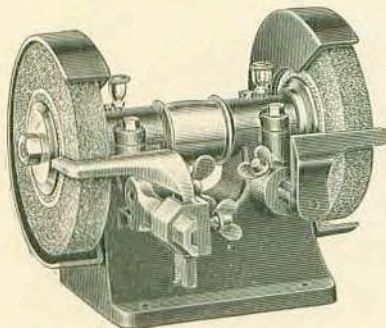
American No. 50, Power Grinder
For Shop Use



This is a simple, inexpensive, yet efficient and reliable grinder for shop use. It is designed especially for farms and small shops where power is available. It is furnished complete with two adjustable tool rests and two Corundum Grinding Wheels, one coarse and one fine grit.

Size of Grinding Wheels.....	6 x 1 1/4 in.
Height to Center of Spindle	4 1/2 in.
Length of Spindle.....	12 in.
Diameter of Spindle.....	3/4 in.
Diameter of Pulley.....	2 in.
Face of Pulley.....	1 5/8 in.
Distance Between Wheels	8 3/8 in.
Length of Bearings	2 1/4 in.
Measurements of Base.....	5 1/2 x 5 in.
Net Weight, Each	18 lbs.
In Crates of 4, Shipping Weight.....	120 lbs.
Measurements of Crate	41 x 15 x 13
Cubic Capacity of Crate, in Feet.....	4.8

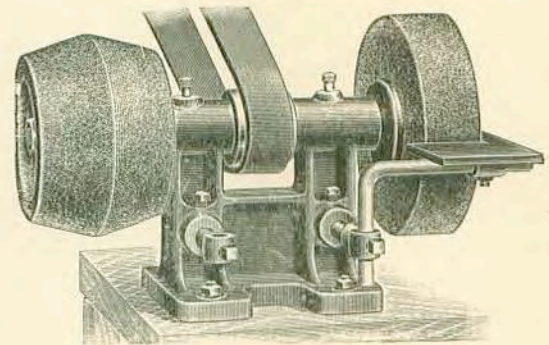
American No. 75, Power Grinder
With Bronze Bearings



Built with specially ground high carbon steel shaft and liberal bearing capacity, also substantial bronze bearings, split for adjusting and interchangeable. The bearings are self-oiled, by means of a ring oiler, and all parts are protected from dust and dirt. One of the two rest supports is machined for using the Liberty Twist Drill Attachment, Flat Bit and Chisel Attachments and the Wheel Dresser, described on the foregoing pages. The Power Grinder is equipped with two grinding wheels, one fine and one coarse grit, and protected by adjustable Wheel Guards.

Size of Grinding Wheels, each.....	8 x 1 1/4 in.
Height to Center of Spindle.....	6 1/2 in.
Length of Spindle.....	13 1/2 in.
Diameter of Spindle.....	7/8 in.
Diameter of Pulley.....	2 1/2 in.
Face of Pulley.....	2 1/2 in.
Distance Between Wheels.....	11 in.
Length of Bearing.....	3 in.
Measurement of Base.....	8 x 9 in.
Net Weight of Grinder.....	50 lbs.
In Crates of 3, Gross Weight.....	180 lbs.
Measurements of Crate.....	38 x 18 x 11
Cubic Capacity of Crate, in Feet.....	4.4

American No. 60, Power Grinder
With Farm Equipment



Ideal for farm use where there is a gasoline engine, wind mill, or other form of power available. It is the same power head as the American No. 50, equipped with two Tool Grinding Wheels, one fine and one coarse grit, a large bevel Sickle Cone, Mower Knife Holder and Disc Grinding Attachment.

Size of Grinding Wheels.....	6 x 1 1/4 in.
Size of Sickle Cone.....	5 1/2 x 3 1/2

Sickle Attachment and Disc Attachment	
Height to Center of Spindle.....	4 1/2 in.
Length of Spindle.....	12 in.
Diameter of Spindle.....	3/4 in.
Diameter of Pulley	2 in.
Face of Pulley.....	1 5/8 in.
Distance Between Wheels	8 3/8 in.
Length of Bearings	2 1/4 in.
Measurements of Base.....	5 1/2 x 5 in.
Net Weight, Each, Complete.....	30 lbs.
In Crate of 4, Shipping Weight.....	170 lbs.
Measurement of Crate.....	41 x 15 x 13
Cubic Capacity of Crate, in Feet.....	4.8

THE MANY-USE OIL CO.

Manufacturers of

A perfect lubricant }
A thorough cleaner of bearings }



{ A sure rust preventive
{ A fine furniture polish

The purest and most effective lubricant, cleaner, polisher and rust-preventive all in one. It is germless, free from acid, varnish, grease, sediment, and all impurities. "The last drop is as good as the first."

In Bottles



1 oz. bottle the standard for home use.
8 oz. bottle for users of large quantities.

Packed 1 dozen in box—1 oz., 3 lbs.
8 oz.—13 lbs.

1 oz.—5 Gross in case—Gross wgt. 200 lbs. Net wgt. 160 lbs.
3 Gross in case—Gross wgt. 125 lbs. Net wgt. 100 lbs.
8 oz.—1 Gross in case—Gross wgt. 175 lbs. Net wgt. 150 lbs.

2 Oz. Typewriter Oiler



This package is an Office Necessity.
Every can of oil a New-Clean Oiler

Cleans all bearings and type faces.
Polishes the enamel frame.
Prevents rust on all metal parts.
Preserves and extends the life of the ribbon.

Packed 1 dozen in box—Weight 3 lbs.
5 Gross in case—Gross weight 200 lbs. Net weight 165 lbs.
3 Gross in case—Gross weight 125 lbs. Net weight 100 lbs.

2 Oz. Handy Oiler



Flat with spring sides—fits the vest pocket—for sportsman, mechanic, office, shop and home uses.

Packed 1 dozen in box—Weight 3 lbs.
5 Gross in case—Gross weight 200 lbs. Net weight 165 lbs.
3 Gross in case—Gross weight 125 lbs. Net weight 100 lbs.

3 Oz. Handy Oiler



Flat Oiler—for autoist, soldier, aviator—for machine and aircraft guns—for magnetos, motors, bicycles and airplanes.

Packed 1 dozen in box—Weight 4 lbs.
5 Gross in case—Gross weight 270 lbs. Net weight 240 lbs.
2 Gross in case—Gross weight 125 lbs. Net weight 100 lbs.

Bulk Shipments

Many-Use Oil is also Supplied in 1/2 and 5 Gallon Cans and in Barrels.