

# Armstrong Tool Holders

Patent Feb. 28, '93. and March 12, '95.

Practical all around every day Tools.

Saves Forging, Tempering and Dressing,  
OF LATHE AND PLANNER TOOLS.

70% GRINDING. 90% TOOL STEEL.

Guaranteed to save their cost in 30 days use.

The CAST IRON IMITATIONS of our Tools  
are FRAUDS.

The Genuine Armstrong Tools are  
Drop Forged of Steel.



## Catalogue and Price List

... OF ...



### ARMSTRONG PATENT TOOL HOLDERS

FOR

Turning, Planing and Boring  
METALS.

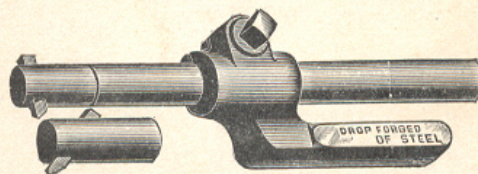
OVER 100,000 IN USE.

MANUFACTURED ONLY BY

**Armstrong Bros.  
Tool Co.**

106-108 WEST WASHINGTON ST.

Chicago, Ill.





**For the Convenience  
and Information of  
Inquiring Correspondents**

**W**E have decided to issue this Catalogue and Price List of our .....

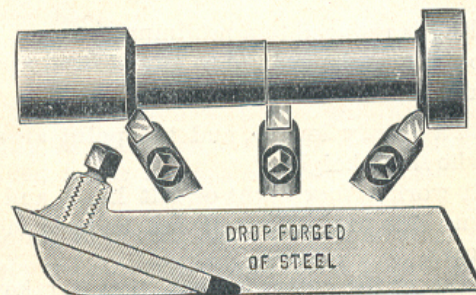
**Patent Tool Holders.**

Making it of a convenient size and style for general distribution by mail. While we feel that the growth in popularity of these tools and the gratifying and almost surprising increase in our business would justify us in issuing a much more pretentious volume, we are convinced that the practical ends of business requirements will be best served by this modest publication.

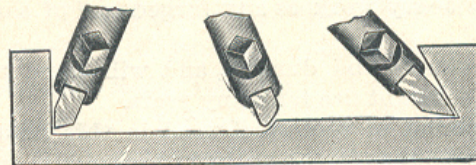


## Armstrong Tool Holder

**A Practical Substitute for Forged Tools.**



**FOR GENERAL LATHE AND PLANER WORK.**



Patented February 28th, 1893.

**Especially adapted for the Economical Use  
of Self-Hardening Steel.**

Used and endorsed by many large concerns and acknowledged by all to be the only practical Tool Holder ever put on the market.



# The Armstrong Tool Holder.

## ITS POINTS OF MERIT.

Forging and tempering are entirely dispensed with.

Grinding is reduced to a minimum.

The points can be ground to any desired shape or clearance.

It is of a handy length, and the point always keeps at the same height.

It will work either right or left hand, and as there are no side projections it can be used close into a corner.

The rake of the cutter is such that it takes a clean curling chip from wrought iron or steel. NO TOP GRINDING BEING NECESSARY.

There is absolutely no slip to the cutter; it is supported directly under the strain of the cut, and will do as heavy work as any forged tool of same size.

It is simple and durable, and will stand the racket of constant use for many years.

One pound of tool steel used in this holder equals ten pounds in the ordinary tool.

## —THE HOLDER—

IS DROP-FORGED OF STEEL AND CASE HARDENED. The top and bottom is planed square with the sides. The hole for receiving the cutters is drilled and squared from the solid, insuring a straight and true seat. The Set-Screw is TOOL STEEL with tempered point.

## —THE CUTTERS—

ARE MADE OF SPECIAL SELF-HARDENING STEEL,

and the points ground to shape. With this steel speeds and feeds can be increased, and grinding will be required less frequently. Self-Hardening Steel can be made extra hard by heating to redness and cooling off in cold blast. It will be found an advantage to oil-stone the edge of the cutters before using.

## —THE SAVING—

In Time, Money, Labor and Annoyance can hardly be over-estimated. It obviates all danger of steel being burned or worked badly. It saves the men from going to the tool dresser, machines standing idle, etc., etc. With it no stock of heavy steel need be carried, and many points of various shapes can be kept on hand, ready for instant use, which will take up but little room and enable the men to turn out more and better work.

## FITCHBURG MACHINE WORKS.

FITCHBURG, MASS., Dec. 5th, 1892.

ARMSTRONG BROS. TOOL CO.

Gentlemen:—We have been using the Armstrong Tool Holders in our works for the past seven months, and we are very much pleased with them. We have tried several other styles of tool holders but until we tried yours, had not found one that was satisfactory to us and to our lathe men. No machine shop should be without them. In the near future we shall send you further orders.

Yours truly,

J. L. CHAPMAN, Supt.



# NET PRICE LIST.

Complete with Drop Forged Wrench and Three Self-Hardening Steel Cutters.

No.	Size of Holder.	Size of Cutter.	Price Complete.	By Mail—Extra.	Extra Cutters.
0	$\frac{3}{8}$ x $\frac{3}{4}$ x 5 in.	3-16 in. square.	\$1.65	15 cts.	12 cts. each,
1	$\frac{3}{8}$ x 1 x 6 "	1-4 "	1 80	20 "	15 "
2	$\frac{3}{8}$ x 1 $\frac{1}{2}$ x 7 "	5-16 "	2.30	35 "	22 "
3	$\frac{3}{8}$ x 1 $\frac{3}{4}$ x 8 "	3-8 "	3.00	55 "	30 "
4	$\frac{1}{2}$ x 1 $\frac{1}{2}$ x 9 "	7-16 "	3.80	Express.	40 "
5	1 x 1 $\frac{1}{2}$ x 10 "	1-2 "	4.75	"	50 "
6	1 $\frac{1}{4}$ x 1 $\frac{1}{2}$ x 12 "	5-8 "	7.00	"	75 "
7	1 $\frac{1}{2}$ x 2 $\frac{1}{4}$ x 16 "	3-4 "	12.00	"	\$1.50

## This will give you an Idea

How these Tools gain in favor after being once tried.

From J. A. FAY & EGAN CO.

CINCINNATI, OHIO.

- Sept. 15th, 1892. Please send us 1 No. 2 Armstrong Tool Holder for trial to be returned if not satisfactory.
- Oct. 17th, 1892. Sample tool satisfactory, send us 2 more No. 2 Tool Holders.
- Oct. 25th, " Please send us 1 No. 1 and 6 No. 2 Tool Holders.
- Nov. 3d, " Send us 12 No. 2 Tool Holders.
- Nov. 19th, " " " 18 No. 2 " "
- Dec. 31st, " " " 30 No. 2 " "
- Aug. 4th, 1893. Please send us Tool Holders as follows: 1 No. 0, 6 No. 1, 18 No. 2, 3 No. 3, 3 No. 4, 3 No. 5, 3 No. 6.
- Aug. 31st, 1894. Send us at once 2 more No. 6 Tool Holders.
- March 8th, 1895. Send us at once 6 No. 2 Tool Holders.
- June 1st, 1895. Send us by freight 2 No. 7 and 1 No. 11 Tool Holders and allow us discount on this as we expect soon to send you a large order.
- Dec. 4th, 1897. Express us 24 No. 2 Armstrong Tool Holders.
- March 9th, 1898. Send us at once by freight 82 No. 2, 30 No. 3, 12 No. 4, 30 No. 6 Armstrong Tool Holders.

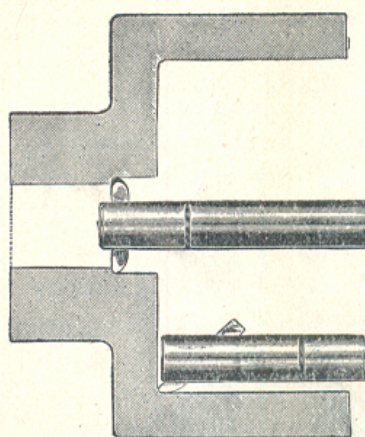


## NET PRICE LIST.

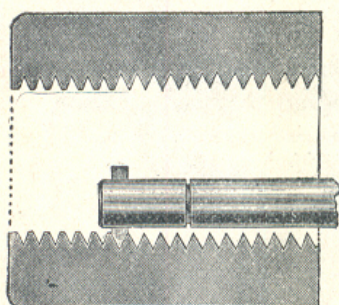
Each set is put up in a lock-cornered wooden box. It consists of holder and bar with straight and 45 deg end caps, two cutters (ground for boring,) wrench and a piece of Self-Hardening steel, about enough for 10 extra cutters.

No.	SIZE OF SHANK.	SIZE OF BAR.	SIZE OF CUTTER	PRICE COMPLETE	Extra Cutters Ground for Boring
8.	$\frac{3}{8}$ x $\frac{3}{4}$ in.	9-16 in. Round	3-16 in. Square	\$3.00	12 cts. Each
9	$\frac{1}{2}$ in. x 1 in.	3-4 in. " "	1-4 in. " "	3.60	15 " "
10	$\frac{5}{8}$ in. x 1 $\frac{1}{4}$ in.	15-16 in. " "	5-16 in. " "	4.75	20 cts. Each
11	$\frac{3}{4}$ x 1 $\frac{1}{2}$ in.	1 $\frac{1}{8}$ in. " "	3-8 in. " "	6.75	30 " "

## THE Armstrong Boring Tool.



The above cut shows Double Ended Cutter, roughing out cored hole and also Angle Cutter Boring and Facing End.



Showing Tool cutting a Thread.

same size, and as it will take the place of about one dozen forged tools the great economy effected by its use can readily be seen.

This Tool is made entirely of steel, the wearing parts are hardened, and it is finished in a first-class manner. The bar can be extended from its holder to any desired length to suit depth of hole. The cutters can be ground for V, or square thread, double end, round nose, or any desired shape. They can easily be made by simply grinding end of piece of self-hardening steel to the proper shape on a dry emery wheel, then nick all around on corner of stone, and break off with sharp blow of hammer.

We guarantee this tool to be as stiff and to take as heavy a cut as any forged tool of



From WILLIAMSPORT MACHINE CO.

WILLIAMSPORT, PA., May 10, 1894.

ARMSTRONG BROS. TOOL CO.

GENTLEMEN:—We received the No. 9 Boring Tool and like it very much. Send us 5 more. We think you should allow us at least 10 per cent. discount, as we have bought quite a number of your tools and have showed them up to others in our line of business. Any practical man will like your tool holders. It is hard to make men who are not practical see the advantage of any improvement.

Yours respectfully,

FRED W. SWEET,

General Manager.

From PURDUE UNIVERSITY.

LAFAYETTE, IND.

ARMSTRONG BROS. TOOL CO.

GENTLEMEN:—Some time ago you sent us for trial one of your No. 9 Boring Tools. It has proved very satisfactory, more than taking the place of the ordinary forged boring tool, and in some instances far surpassing it. I am much pleased with your tools, and have shown them to a number of visitors, who have appreciated their value, and said they hoped to give them a trial. Enclosed please find another order for tools, which kindly send at once, and oblige,

Yours respectfully,

W. P. TURNER,

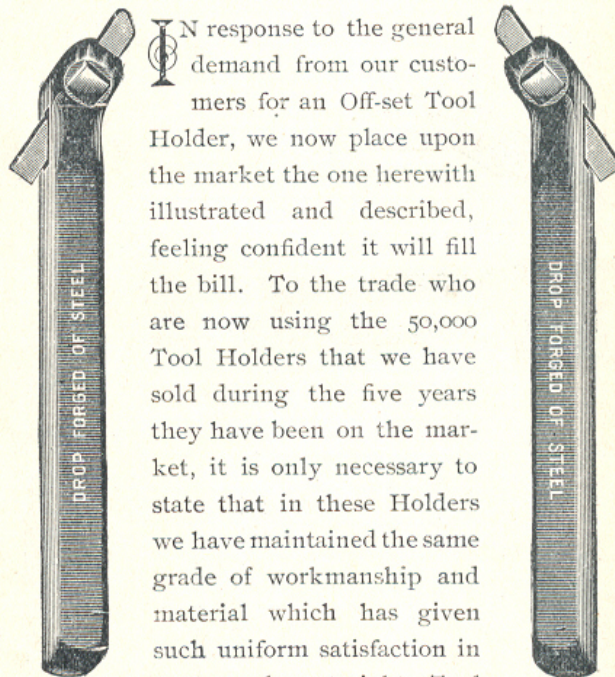
Instructor in Machine Work.

Armstrong Boring Tools will save you time and tool steel and this means money.

## THE ARMSTRONG OFF-SET TOOL HOLDERS.

For General Lathe and Planer Work.

Especially adapted for the Economical use of  
Self-Hardening Steel.



IN response to the general demand from our customers for an Off-set Tool Holder, we now place upon the market the one herewith illustrated and described, feeling confident it will fill the bill. To the trade who are now using the 50,000 Tool Holders that we have sold during the five years they have been on the market, it is only necessary to state that in these Holders we have maintained the same grade of workmanship and material which has given such uniform satisfaction in our regular straight Tool Holders. The Holder is a Solid Steel Forging. The Set Screw is made of Tool Steel with tempered point. The slot for receiving the cutter is drilled and squared from the solid. The cutters are made of fine Self-Hardening Steel.



## NET PRICE LIST OF OFF-SET TOOLS.

Complete with Drop-Forged Wrench and two Self-Hardening Steel Cutters, ground to shape.

No. Right or Left.	SIZE OF HOLDER.	SIZE OF CUTTER.	PRICE COMPLETE.	EXTRA CUTTERS.
1	$\frac{1}{2}$ x 1 x 8 in.	$\frac{1}{4}$ in. square.	\$1.80	15c. each.
2	$\frac{5}{8}$ x $1\frac{1}{4}$ x 9	$\frac{5}{16}$ " "	2.30	22c. "
3	$\frac{3}{4}$ x $1\frac{3}{8}$ x 10	$\frac{3}{8}$ " "	3.00	30c. "
4	$\frac{7}{8}$ x $1\frac{1}{2}$ x 11	$\frac{7}{16}$ " "	3.80	40c. "
5	1 x $1\frac{5}{8}$ x $12\frac{1}{2}$	$\frac{1}{2}$ " "	4.75	50c. "
6	$1\frac{1}{4}$ x $1\frac{3}{8}$ x 15	" "	7.00	75c. "
7	$1\frac{1}{2}$ x $2\frac{1}{4}$ x 20	" "	12.00	1.50 "

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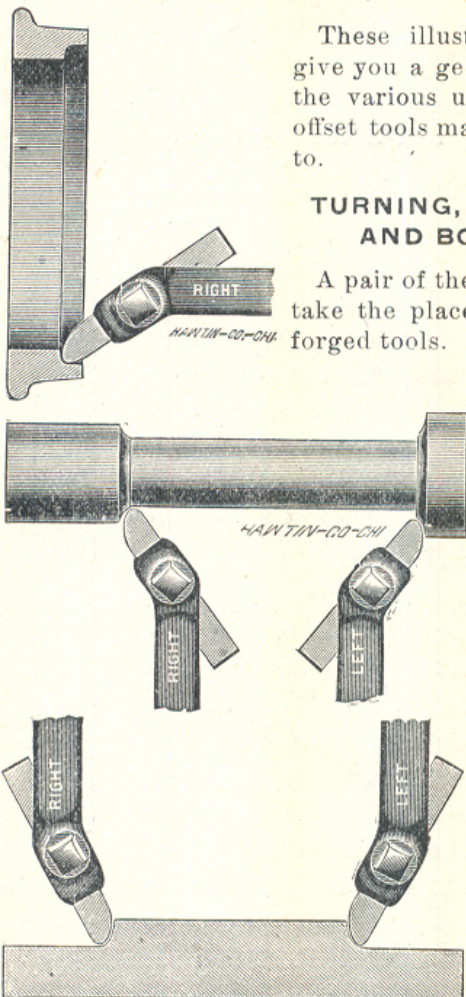
Notice—In ordering always specify whether Right or Left is wanted. We will always send straight shank as listed on page 6 if right or left is not mentioned.

## ARMSTRONG OFF-SET TOOL HOLDERS.

These illustrations will give you a general idea of the various uses that the offset tools may be applied to.

### TURNING, PLANING AND BORING

A pair of these tools will take the place of a dozen forged tools.



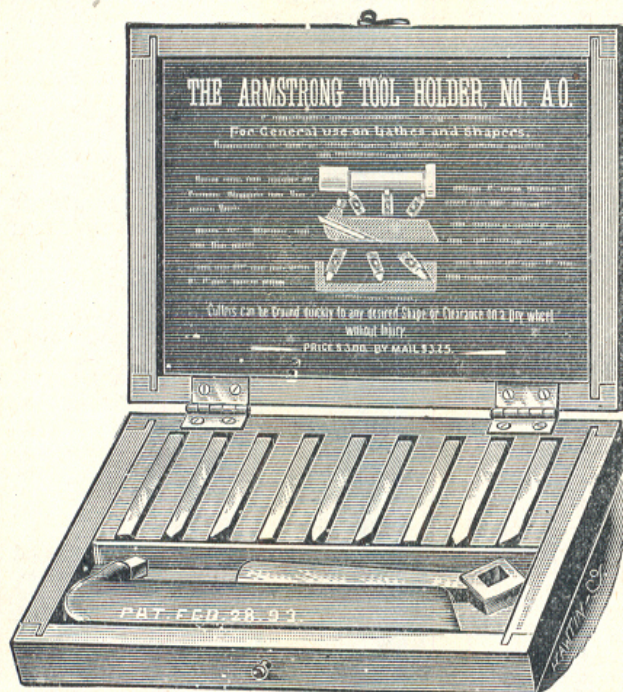
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# The Armstrong Tool Holder, No. A.O.

A practical substitute for Forged Tools.

✚ For general use on Lathes and Shapers. ✚



Especially adapted for Electricians, Model Makers,  
Bicycle Makers and Amateur Machinists.

Price \$3.00 Net. - - - By Mail \$3.25

# The Armstrong Tool Holder No. A.O.

This set consists of a Holder  $3\frac{1}{2} \times 5$  inches with Wrench and 9 Cutters, in a polished hardwood case. Holder is drop forged of Steel and case-hardened. Set Screw is made of Tool Steel with tempered point.

Cutters are made of fine Self-Hardening Steel, and can be ground quickly to any desired shape or clearance on a dry wheel without injury.

The rake of the cutter is such that it takes a clean curling chip from Wrought Iron or Steel; no Top Grinding being necessary.

Saves time and trouble of Forging, Dressing and Tempering Tools. 70 per cent. Grinding, and 90 per cent. Tool Steel. One set will take the place of  $\frac{1}{2}$  dozen Forged Tools.

The following is one of the many testimonial letters we have received from practical Mechanics.

OFFICE OF  
D. H. BURNHAM, Director of Works,  
World's Columbian Exposition,  
JACKSON PARK, CHICAGO.

ARMSTRONG BROS. TOOL CO.,  
CHICAGO, ILL. September 29, 1893.

GENTLEMEN:—Yours of the 27th at hand; concerning the Armstrong Tool Holder I most cheerfully say I have been using your Tool Holders in the World's Fair Machine Shop for several months, and find the same to be very convenient as well economical; and I would recommend the use of this Tool Holder to all those desiring to reduce their bills for Tool Steel, Grind Stones and Emery Wheels.

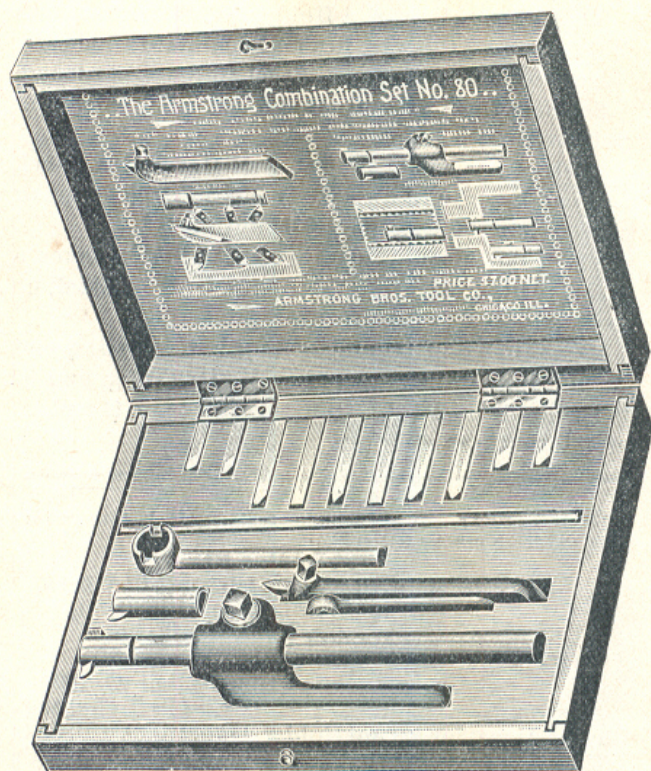
Yours very respectfully,

J. M. THOMAS,  
Supt. World's Fair Machine Shop,  
JACKSON PARK, CHICAGO.



# ARMSTRONG COMBINATION SET

No. 80.



This set comprises one No. 8 Boring Tool with wrench and six cutters; one No. 8 Lathe and Shaper Tool with wrench and six cutters; one piece special Self-Hardening Steel 9 in. long. Put up in polished hardwood case.

**Price, \$7.00 Net.**

Extra warranted Self-Hardening Steel for use in Armstrong Tool Holders. Furnished in 3 ft. lengths only.

## NET PRICE LIST.

LENGTH	SIZE	PRICE	LENGTH	SIZE	PRICE
3 feet	3-16in. Square	\$ .50	3 feet	7-16in. square	\$1.50
"	1-4in. "	.60	"	1-2in. "	1.85
"	5-16in. "	.85	"	5-8in. "	2.85
"	3-8in. "	1.20	"	3-4in. "	4.75



## DISCOUNTS.

### COMPLETE TOOLS.

On orders for less than 6 Armstrong Tool Holders or Boring Tools the list price is strictly net.

On orders for 6 Tools,	10 % dis.
" " " 12 "	12 $\frac{1}{2}$ % "
" " " 18 "	15 % "
" " " 24 "	17 $\frac{1}{2}$ % "
" " " 36 "	20 % "

### EXTRA CUTTERS.

On orders for less than 1 doz. Cutters the list price is NET.

On orders for 1 doz. Cutters,	10 % dis.
" " " 3 " "	12 $\frac{1}{2}$ % "
" " " 5 " "	15 % "
" " " 8 " "	17 $\frac{1}{2}$ % "
" " " 1 gross "	20 % "

## ILLINOIS STEEL CO.

JOLIET, ILL., Feb. 4, 1892.

ARMSTRONG BROS. TOOL CO.

GENTLEMEN:—We are using the Lathe Tools we bought from you some time ago, constantly, and think without doubt it is the best Tool Holder that has come under our notice. It will certainly pay any machine shop to use them.

Yours truly,

CHAS. PETTIGREW, Supt.

## THE SNOW STEAM PUMP WORKS.

BUFFALO, N. Y., April 21, 1892.

ARMSTRONG BROS. TOOL CO.

GENTLEMEN:—We have your favor of the 18th inst. The Lathe Tools we bought of you are satisfactory to us and we do not think they can be improved upon in any way.

Yours truly,

A. C. CHRISTENSEN, Supt.

## From THE PRATT CHUCK CO.

CLAYVILLE, N. Y.

ARMSTRONG BROS. TOOL CO.

GENTLEMEN:—We are in receipt of your invoice of the 7th inst. for Tool Holders and beg to say that they have given us entire satisfaction. Our Mr. Pratt reports that he will use them hereafter exclusively..

Yours very truly,

The PRATT CHUCK CO.



The Armstrong Tool Holders are used and endorsed by the following well-known concerns:

FITCHBURG MACHINE WORKS,	Fitchburg, Mass.
BUILDER'S IRON FOUNDRY,	Providence, R. I.
BROWN & SHARPE MFG. Co.,	Providence, R. I.
JEANSVILLE IRON WORKS,	Jeansville, Pa.
WOONSOCKET MACH. & PRESS Co.,	Woonsocket, R.I.
DE LAVERGNE REF'G. MACH. Co.,	New York, N. Y.
LODGE & SHIPLEY MACH. TOOL Co.,	Cincinnati, O.
The CRANE Co.,	Chicago, Ill.
WALBURN-SWANSON Co.,	Chicago, Ill.
NILES TOOL WORKS Co.,	Hamilton, O.
BICKFORD DRILL & TOOL Co.,	Cincinnati, O.
MORAN BROS. Co.,	Seattle, Wash.
PELTON WATER WHEEL Co.	San Francisco, Cal.
WARNER & SWASEY,	Cleveland, O.
FRICK Co.,	Waynesboro, Pa.
F. E. REED Co.,	Worcester, Mass.
STANDARD TOOL Co.,	Cleveland, O.
KEMPSMITH MACH. TOOL Co.,	Milwaukee, Wis.
LANE & BODLEY Co.,	Cincinnati, O.
CINCINNATI MILLING MACH. Co.,	Cincinnati, O.
MORSE TWIST DRILL & MACH. Co.,	New Bedford, Mass.
CHICAGO SCREW Co.,	Chicago, Ill.
W. F. & JOHN BARNES Co.,	Rockford, Ill.
WESTERN WHEEL WORKS,	Chicago, Ill.
The G. A. GRAY Co.,	Cincinnati, O.
The LLOYD BOOTH Co.,	Youngstown, O.
CAMBRIA IRON Co.,	Johnstown, Pa.
PENNSYLVANIA STEEL Co.,	Steelton, Pa.
ILLINOIS STEEL Co.,	Joliet, Ill.
BASS FDY. & MACH. Co.,	Fort Wayne, Ind.
ILLINOIS CENTRAL R. R. Co.,	Chicago, Ill.
WISCONSIN CENTRAL R. R. Co.,	Milwaukee, Wis.
A. L. IDE ENGINE Co.,	Springfield, Ill.

CHICAGO & NORTHWESTERN RY. Co., Chicago, Ill.  
 NORFOLK & WESTERN R. R. Co., Norfolk, Va.  
 CHICAGO & EASTERN ILL. R. R. Co., Danville, Ill.  
 ATCHISON, TOPEKA & SAN. FE RY. Co., Topeka, Kan.  
 UNION PACIFIC RAILWAY Co., Leavenworth, Kan.  
 CHICAGO, BURLINGTON & QUINCY R. R. Co.,  
 Chicago, Ill.

ST. JOSEPH & G'D ISLAND R.R. Co., St. Joseph, Mo.  
 LEHIGH VALLEY R. R. Co., Philadelphia, Pa.  
 FT. WORTH & DENVER CITY RY., Ft. Worth, Tex.  
 MARIETTE & NO. GEORGIA RY. Co., Mariette, Ga.  
 THE NATIONAL TRANSIT Co., Oil City, Pa.  
 COOK LOCOMOTIVE & MACH. Co., Patterson, N. J.  
 WM. CRAMP & SONS Ship and Engine Bld. Co.

Philadelphia, Pa.  
 THE LINK BELT MACHINERY Co., Chicago, Ill.  
 THE LINK BELT ENGINEERING Co., Philadelphia, Pa.  
 THE OTTO GAS ENGINE WORKS, Philadelphia, Pa.  
 FOX MACHINE Co., Grand Rapids, Mich.  
 GRAND RAPIDS CYCLE Co., Grand Rapids, Mich.  
 A. FEATHERSTONE & Co., Chicago, Ill.  
 NATIONAL TUBE WORKS, McKeesport, Pa.  
 LANDIS BROS., Waynesboro, Pa.  
 RICHMOND LOCOMOTIVE & MACH. WORKS,

Richmond, Va.  
 NEWPORT NEWS DRY DOCK Co., Newport News, Va.  
 MARYLAND STEEL Co., Sparrow Point, Md.  
 HOLYOKE MACHINE Co., Holyoke, Mass.  
 THE GOLDIE & McCULLOCH Co., Galt, Ont., Can.  
 THE FORT WORTH ELECTRIC CORPORATION,  
 Ft. Worth, Ind.  
 PUTNAM MACHINE Co., Fitchburg, Mass.



The LONG & ALLSTATTER Co., Hamilton, O.  
 LANDIS BROS., Waynesboro, Pa.  
 GEO. B. GRANT, Lexington, Mass.  
 MARYLAND STEEL Co., Sparrowspoint, Md.  
 HUGO BILGRAM, Philadelphia, Pa.  
 WILEY & RUSSELL MFG. Co., Greenfield, Mass.  
 CHANDLER & TAYLOR Co., Indianapolis, Ind.  
 WM. A. HARRIS STEAM ENG. Co., Providence, R. I.  
 KRAJEWSKI & PESANT, Brooklyn, N. Y.  
 TINIUS OLSEN & Co., Philadelphia, Pa.  
 PAWTUCKET MFG. Co., Pawtucket, R. I.  
 STILLWELL-BIERCE & SMITH VAILE Co., Dayton, O.  
 STERLING CYCLE WORKS, Chicago, Ill.  
 CURTIS & Co. MFG. Co., St. Louis, Mo.  
 FISHKILL LANDING MACH. Co., Fishkill-on-the-Hudson, N. Y.  
 The PURDUE UNIVERSITY, LaFayette, Ind.  
 The LAIDLAW-DUNN-GORDON Co., Cincinnati, O.  
 ATCHISON, TOPEKA & SANTA FE R. R. Co., Chicago, Ill.  
 J. A. FAY & EGAN Co., Cincinnati, O.  
 The GARVIN MACHINE Co., New York, N. Y.  
 GLOBE IRON WORKS Co., Cleveland, O.  
 REMINGTON MACHINE Co., Wilmington, Del.  
 CYRUS CURRIER & SON, Newark, N. J.  
 J. S. MUNDY, Newark, N. J.  
 The BILLINGS & SPENCER Co., Hartford, Conn.  
 L. WRIGHT MACHINE WORKS, Newark, N. J.  
 EDWIN HARRINGTON'S SONS Co., Philadelphia, Pa.  
 P. P. MAST & Co., Springfield, Ill.  
 SULZER-VOGT MACHINE Co., Louisville, Ky.  
 The DAYTON GAS ENG. & MFG. Co., Dayton, O.  
 ADVANCE THRESHER Co., Battle Creek, Mich.  
 The ADAMS BROS. Co., Findlay, O.  
 The GOSS PRINTING PRESS Co., Chicago, Ill.  
 MEDART PATENT PULLEY Co., St. Louis, Mo.  
 The HORNE & DANZ Co., St. Paul, Minn.  
 The PRATT & WHITNEY Co., Hartford, Conn.  
 BUTTERFIELD & Co., Derby Line, Vt.  
 W. P. CALLAHAN & Co., Dayton, O.  
 MANCHESTER LOCOMOTIVE WORKS, Manchester, N. H.  
 and hundreds of others.

## 30 Per Cent Duty

IS WHAT THE GOLDIE & McCULLOCH CO.  
PAID ON THESE TOOLS.

Seeing their great advantage they ordered as follows:

From GOLDIE & McCULLOCH CO.

GALT, ONTARIO, CANADA.

September 6th, 1895.

Express at once:

4 No. 1 Tool Holders.  
 4 No. 3 " "  
 4 No. 5 " "

October 12th, 1895.

Send us 1 No. 10 Boring Tool.  
 1 No. 7 Tool Holder. (right).  
 1 No. 7 " " (left).

January 9th, 1896.

Ship as soon as possible

10 No. 1 Armstrong Tool Holders.  
 3 No. 2 " "  
 10 No. 3 " "  
 10 No. 4 " "  
 7 No. 5 " "  
 10 No. 6 " "  
 3 No. 7 " " (right).  
 3 No. 7 " " (left).  
 3 No. 9 " " Boring Tools.  
 3 No. 10 " "  
 3 No. 11 " "

36—3 ft. Bars Self Hardening Steel for above.