SKINNER CHUCKS

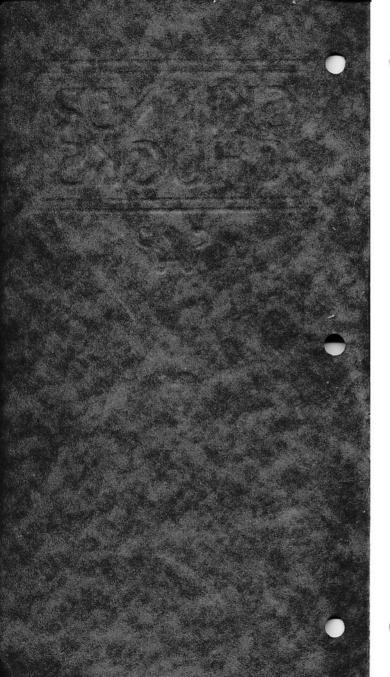
Henry Prentiss & Company

INCORPORATED

MACHINE TOOLS

NEW YORK BUFFALO ROCHESTER BOSTON SYRACUSE

SKINNER CHUCK CO.
NEW BRITAIN, CONN. U.S.A.



CATALOG AND PRICE LIST

No. 30

THE SKINNER CHUCK COMPANY

MANUFACTURERS OF

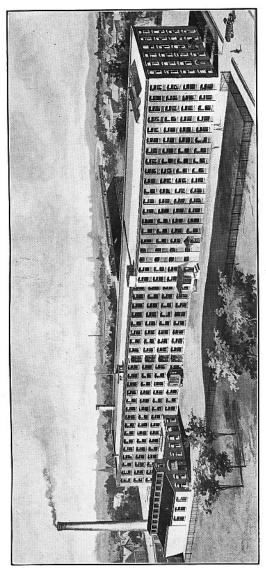
TATHE - DRILL - PLANER CHUCKS
AND VISES

MAIN OFFICE AND FACTORY
NEW BRITAIN, CONN., U. S. A.

BRANCH OFFICES:

NEW YORK 94 Reade Street SAN FRANCISCO Rialto Building LONDON 149 Queen Victoria St.

ESTABLISHED 1887 Cable Address: Skinner New Britain



CO. FACTORY, NEW BRITAIN, CONN., U. exclusively to the manufacture of Skinner Chucks. CHUCK THE SKINNER Devoted

TO THE TRADE

In the preparation and arrangement of this Catalog we have had constantly in mind the convenience of our patrons and have endeavored to make the book a useful illustrative source of information as well as a silent representative of our line. To meet the present day requirements of the trade we have made changes and improvements in certain lines and have discontinued manufacturing certain Chucks shown in former Catalogs. It is possible, however, that such Chucks can be supplied if desired. This Catalog will supersede all previous Catalogs and Price Lists. We trust that the quality of our goods, the excellent service and the uniformly courteous treatment that we endeavor to give everyone will commend our product and our company to your favorable consideration.

CHUCKS IN STOCK

We intend to carry at all times a complete stock of all styles and sizes of Chucks listed.

Dealers in Machinery and Machinists' tools have in stock, or will furnish, the Skinner Chucks. Where they do not, we will be pleased to receive orders direct.

WHEN ORDERING CHUCKS

Please use the numbers given in this Price List.

5

TABLE OF CONTENTS

THE SKINNER CHUCK CO.

Independent Chucks Iron and Steel Body Three and Four Jaws Pages
Face Plate Jaws
Iron and Steel Body Single and Double Rib Pages16–19
Universal and Combination Geared Screw Chucks
Pages
Two-Jaw Chucks
Round and Box Body Universal and Independent Types Pages
Universal Geared Scroll Chucks
Iron and Steel Body Three and Four Jaws
Pages
Geared Scroll Combination Chucks
Three and Four Jaws
Pages
Page 50
Planer Chucks
Round, Square and Square Swivel Bases Pages
Drill Press Vises
Page 56
Page
Drill Chucks New Model, Geared Pattern, Standard, Positive Drive Pages
Center Arbors for Drill Chucks
Page

Telegraph Code

63 - 69

SPECIAL CHUCKS

We will make special Chucks and Chucks with special jaws promptly, and at reasonable prices. In ordering special work of any kind, always send drawing of what is wanted, or a sample of the work to be held. Extra charges will be made only to cover extra time and material.

REPAIRS

When needing repairs for Skinner Chucks, it is advisable to return Chuck to us for attention, prepaying charges, and having your name and address plainly marked on box. Our facilities for doing this work guarantee a satisfactory job, which more than offsets cost of transportation.

We will estimate cost of repairs if requested to do so.

If parties intend to do their own repairing, it is desirable and often necessary to send us sample of new parts wanted, but even then we cannot insure a perfect fit as the rest of the Chuck is apt to be somewhat worn.

All of our Chucks are stamped on the face with a number which indicates size and style, and it is well to refer to this in ordering new parts.

When ordering new pinion screws, state whether they are for Chuck with "flush" or "projecting screw" heads.

When ordering wrenches, state size and style of Chuck, and whether it is to fit "flush" or "projecting screw" heads.

SKINNER INDEPENDENT LATHE CHUCKS

THE SKINNER CHUCK CO.

DEFINITION OF INDEPENDENT CHUCK

An Independent Chuck is one in which each Jaw is operated independently of the others.

Figure 900

For General Manufacturing Purposes

A Four-Jaw Iron Body Chuck with solid Reversible Jaws. See page 8.

FIGURE 1900

For Extra Heavy Work and Severe Service

A Four-Jaw Heavy Steel Body Chuck with solid Reversible Jaws.

A recognized standard in railroad shops, steel mills and government arsenals.

See page 10.

FIGURE 9200

A Three-Jaw Iron Body Chuck with Solid Reversible Jaws. Similar in design to the Figure 900.

See page 15.

FIGURE 9300 THREE-JAW FIGURE 9400 FOUR-JAW

Light Pattern Iron Body Chuck

Especially designed for Amateur and Experimental Work. See page 14.

FIGURE 100-J

A Four-Jaw Iron Body Independent Chuck with patent 2-piece Reversible Jaws.

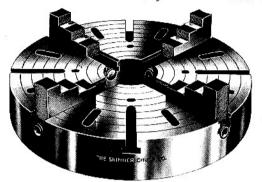
Especially designed for Universal Grinding Machines on which these Chucks are recognized as Standard Equipment. See page 12.

SKINNER INDEPENDENT CHUCKS

Figure 900 Figure 1900

Iron Body Steel Body

Four-Jaw Four-Jaw



SPECIFICATIONS

BODY—A single casting, well proportioned, of great strength, highly finished, the face being ground true to straight edge and accurately graduated in inches, the larger sizes being very heavy, 8 inch and smaller have solid face. 9 inch and 10 inch have openings in the face between the jaws. 12 inch to 16 inch have T slots in the face. 18 inch and larger have T slots and openings in the face. as shown in cut above.

JAWS-The Jaws are made of steel and thoroughly casehardened, and have raised and ground steps. They are reversed by running off the screw at the periphery and

turning end for end.

SCREWS-The screws are made of a fine quality of steel, are of large diameter with a heavy square thread, are nicely fitted to the bearings, and are threaded the full length, giving a long range of adjustment to the jaws.

BEARINGS—Hardened steel thrust bearings for the jaw

adjusting screws are furnished in both the Iron and Steel Body Chucks.

BOLTS-A set of 4 bolts is furnished with each Chuck. WRENCH-A T-handle steel wrench of suitable propor-

tion is furnished with each Chuck.

FITTING TO THE LATHE-The Chuck is provided with a recess in the back, to which a face plate is fitted, this plate also being fitted to the lathe or machine spindle. It is never furnished except as an extra. We are prepared to furnish when desired rough face plate casting, or make a finished face plate ready to attach to machine if favored with sample plate (to be used as a gauge) from machine to which Chuck is to be attached.

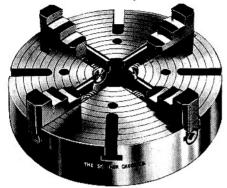
Price and Code Words, pages 8 and 10.

Dimensions, page 11. Description, page 9.

SKINNER INDEPENDENT CHUCKS

THE SKINNER CHUCK CO.

Figure 900 Iron Body Four-Jaw



Rated Size of Chuck Inches	Order by these Numbers	List Price	Will Hold About Inches	Approxi- mate Shipping Weight Lbs.	Code Word
4½ 5 6 7½ 8	904	\$20.00	6	10	Abandon
5	905	21.00	7	12	Abend
6	906	22.00	71/2	17	Abbott
71/2	907	25.00	834	23	Abstruct
8	908	26.00	91/2	34	Abduce
9	909	28.00	111/2	42	Abhor
10	910	30.00	121/2	49	Abject
12	912	35.00	141/2	80	Ablegate
14	914	40.00	161/2	105	Abnet
15	915	43.00	18	122	Abolish
16	916	46.00	19	133	Abrupt
18	918	54.00	21	175	Abscene
20	920	62.00	23	195	Absolve
21	921	66.00	24	215	Abstain
22	922	70.00	25	226	Abstringe
24	924	80.00	27	270	Absume
26	926	93.00	29	315	Abvolate
28	928	110.00	31	340	Abuse
30	930	130.00	35	485	Abutment
32	932	155.00	36	540	Abjure
34	934	180.00	38	560	Abbess
36	936	210.00	41	715	Acumen
38	938	245.00	43	1089	Abigail
40	940	280.00	45	1175	Abacus
42	942	320.00	47	1203	Ablaze
44	944	360.00	49	1250	Abase
46	946	420.00	52	1500	Abbey
48	948	500.00	54	1600	Abreast

Description pages 7 and 9. Dimensions page 11.

SKINNER INDEPENDENT CHUCKS

Figure 1900

Steel Body

Four-Jaw



This is the heaviest and strongest Independent Chuck made. The body is of cast steel of high tensile strength. This Chuck was designed especially for the heaviest class of work in railroad shops and government works, where it has given entire satisfaction.

The Jaws are extra wide and the adjusting screws are of large diameter with a heavy square thread nicely fitted in the bearings and threaded their full length, giving a long range of adjustment of the jaws. The bearings for receiving the thrust of the jaw adjusting screws are hardened steel.

We have no hesitation in recommending this Chuck for the hardest work, under the most severe conditions. In place of using Chucks larger than 36" we usually recommend the Skinner Improved Face Plate Jaws illustrated on pages 16 to 19.

List prices on pages 8 and 10.

Dimensions page 11.

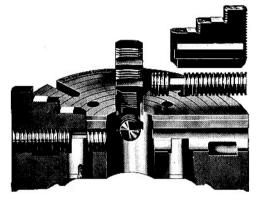
Specifications page 7.

SKINNER INDEPENDENT CHUCKS

Figure 1900

Steel Body

Four-Jaw



ALL STEEL

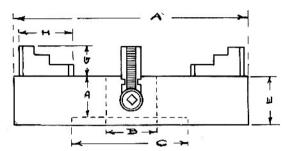
Rated Size of Chuck Inches	Order by these Numbers	List Price	Will Hold About Inches	Approxi- mate Shipping Weight Lbs.	Code Word
6	1906	\$36.00	7½	18	Rate
8	1908	42.00	91/2	34	Robe
8 9	1909	46.00	111/2	43	Rogue
10	1910	50.00	121/2	53	Raft
12	1912	58.00	141/2	86	Rug
14	1914	67.00	161/2	113	Rail
15	1915	71.00	18	134	Rash
16	1916	76.00	19	145	Rapid
18	1918	87.00	21	191	Rally
20	1920	100.00	23	214	Rave
22	1922	114.00	25	242	Reach
24	1924	130.00	27	308	Reflect
26	1926	150.00	29	358	Reform
28	1928	175.00	31	367	Record
30	1930	200.00	35	559	Regal
32	1932	240.00	37	625	Robust
34	1934	300.00	39	690	Realm
36	1936	345.00	41	711	Regard
42	1942	500.00	44	1200	Renig

Description pages 7 and 9.

Dimension page 11.

SKINNER INDEPENDENT CHUCKS

Figure 900 Figure 1900 Iron Body Steel Body Four-Jaw Four-Jaw



DIMENSIONS IN INCHES

Size	A	В	С	D	E	G	H
4	41/2	1	4	1 7/8 1 5/8 1 7/8	2	15	115
4 5 6 7 8 9 10 2 114 15 16 8 20 21 224 6 28 33 34 40 44 44 44 6 48	$4\frac{1}{2}$ 5 6 $7\frac{1}{2}$ 8 9 10 12 14 15 16 18 20 21 22 24 26 28 30 32 34 36 38 40 42 44 46 48	$\begin{vmatrix} 1 \\ 1\frac{1}{8} \\ 1\frac{1}{2} \end{vmatrix}$	4 3 116 5 5 5 6 6 3 8 7 3 4 10 11 11 12 13 14 15 18 18 18 18 20 20 20 20 20 20	1112222222222222222222222333333366666666	2 1 2 3 3 4 4 4 4 4 5 5 5 5 5 5 6 6 6 6 6 6 6 6 6	1 1 3 8 8 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4	1112233513%。44555566677774次。888888888888888888888888888888888
6	6	11/2	5	17/8	2	11/8	$\bar{2}$
7	$7\frac{1}{2}$	$\begin{array}{c c} 1\frac{1}{8} \\ 1\frac{1}{2} \\ 1\frac{3}{4} \\ 1\frac{3}{4} \\ 1\frac{3}{4} \end{array}$	5	2	23/8	11/8	$2\frac{1}{1}$
8	8	13/4	5	27	234	13/8	3
9	9	13/4	5	2 16	27/8	13/8	3.5
10	10	2	6	$2\frac{1}{4}$	3	15%	37
12	12	23/4	63/8	23/4	31/2	13/4	33
14	14	3	73/4	23/4	31/2	13/4	33
15	15	3	8	3	35/8	21/4	41
16	16	3	834	25/8	35/8	21/4	41
18	18	4	10	27/8	4	25/8	5 3
20 -	20	4	11	$2\frac{7}{8}$	4	25/8	$5\frac{3}{10}$
21	21	4	11	$2\frac{7}{8}$	4	211	$5^{\frac{3}{10}}$
22	22	5	12	$2\frac{7}{8}$	4	211	$5\frac{3}{10}$
24	24	5	13	$3\frac{1}{4}$	43/8	23/4	63
26	26	5	14	$3\frac{1}{4}$	43/8	23/4	63
28	28	5	15	$3\frac{1}{4}$	43/8	23/4	63
30	30	.5	15	$3\frac{7}{8}$	$5\frac{1}{8}$	31/8	71
32	32	6	18	$3\frac{7}{8}$	51/8	$3\frac{1}{8}$	71/
34	34	6	18	$3\frac{7}{8}$	51/8	$3\frac{1}{8}$	$7\frac{1}{2}$
36	36	6	18	$3 \frac{1}{8}$	51/8	31/8	71/
38	38	6	20	61/8	$6\frac{3}{8}$	4	81/2
40	40	6	20	61/8	63/8	4	81
42	42	1344 1344 234 33 34 44 45 55 55 66 66 66 66 66	20	61/8	63/8	4	$8\frac{1}{2}$
44	44	6	20	$6\frac{1}{8}$	63/8	4	81/2
46	46	6	20	61/8	63/8	4	81/

Description pages 7 and 9.

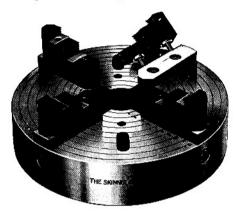
SKINNER INDEPENDENT CHUCK

Figure 100-J

Iron Body

Four-Jaw

Special Grinding Machine Chuck



This Independent Chuck is furnished as a part of regular equipment on several different makes of Grinders. It is very popular because of the patented two-piece style "J" reversible jaws, which are reversed above the face of the Chuck without removing from the Adjusting Screws.

This Chuck was formerly made in all sizes from 3" to 42", but has been discontinued in all except sizes listed

SPECIFICATIONS

BODY—Well proportioned casting, carefully machined, highly finished, the face being ground true to straight edge, and perfectly parellel to face plate seat. Accurately graduated in inches.

JAWS—The jaws are made of steel with full threaded nut, carefully case hardened. Have raised and ground steps, they are reversed above the face of the Chuck without disturbing the lower section or jaw body. A feature much appreciated by busy mechanics.

SCREWS—The jaw adjusting screws are flush with body of Chuck. Made of a fine quality of steel, of liberal diameter with U. S. S. thread nicely fitted.

BEARINGS—The bearings are of liberal dimensions, nicely fitted and will give lasting satisfaction.

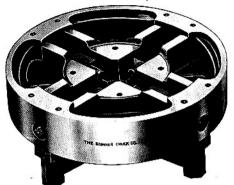
BOLTS—Bolts are furnished with each Chuck for attaching Chuck to face-plate.

WRENCH—A steel wrench of suitable proportion is furnished with each Chuck.

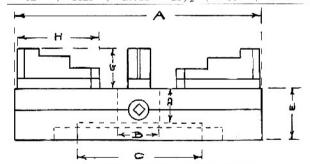
Dimensions page 13.

SKINNER INDEPENDENT CHUCKS

Figure 100-J Iron Body Four Jaws



Rated Size of Chuck Inches	Order by these Numbers	List Price	Will Hold About Inches	Approxi- mate Shipping Weight Lbs.	Code Wor
4	104J	\$26.00	43/4	10	Saw
6	106J	30.00	8	22	Sap
8	108J	34.00	91/4	30	Sin
10	110J	40.00	1034	45	Sir
12	112J	48.00	131/2	65	Sod



Approximate Dimensions in Inches

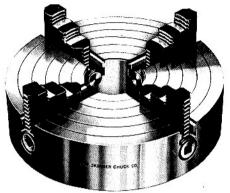
Size	A	В	C	D	E	G	H
4	53/8	1_{16}^{1}	31/2	11/2	1 15	13/8	$2\frac{1}{32}$
6	73/8	15/8	4	$1\frac{7}{16}$	$\frac{21/8}{93}$	$\frac{2\frac{1}{16}}{21}$	$\frac{3\frac{5}{16}}{25}$
10	11	2 15	43/4	1.2	218	$\frac{2}{16}$	313
12	$12\frac{7}{8}$	$2\frac{10}{16}$	6	2	$2\frac{3}{4}$	25/8	45/8

Description page 12,

SKINNER INDEPENDENT CHUCKS

Light Pattern Figure 9300 Three-Jaw Iron Body

Figure 9400 Four-Jaw



For Use on Light Lathes and for Amateur Work
Figure 9300 Three-Jaw

Rated Size of Chuck Inches	Order by these Numbers	List Price	Will Hold About Inches	Dia. of* Face Plate Recess	Code Word	
2	9302	\$ 9.00	21/4	113	Bag	
$\frac{21/2}{3}$	$9302\frac{1}{2}$	10.00	23/4	134	Ban	
3	9303	11.00	334	211	Bat	
4	9304	13.00	5	231	Bay	
5	9305	15.00	6	2	Beg	
6	9306	17.00	71/4	325	Bet	
71/2	9307	19.00	834	335	Bid	
9	9309	22.00	101/2	325	Bin	
10	9310	25.00	11 1/2	429	Bow	

Figure 9400

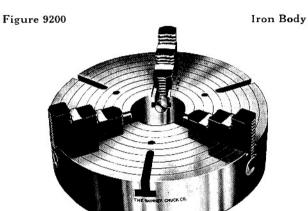
Four-Jaw

Rated Size of Chuck Inches	Order by these Numbers	List Price	Will Hold About Inches	Approxi- mate Shipping Weight Lbs.	Code Word
2	9402	\$11.00	$\begin{array}{r} 2\frac{1}{4} \\ 2\frac{3}{4} \\ 3\frac{3}{4} \end{array}$	3/4	Bail
21/2	$9402\frac{1}{2}$	12.00	234	1 1/4	Bait
$\frac{2\frac{1}{2}}{3}$	9403	13.00	334	2	Band
4	9404	15.00	5	4	Bank
5	9405	17.00	6	51/4	Bark
6	9406	20.00	71/4	9	Bask
$7\frac{1}{2}$	9407	22.00	834	121/2	Bear
9	9409	25.00	101/2	$15\frac{1}{2}$	Bend
10	9410	28.00	$11\frac{1}{2}$	19	Brad

*NOTE—The diameter of Face Plate Recess is the same in Figure No. 9400 as in Figure No. 9300.

SKINNER INDEPENDENT CHUCKS

With Three Solid Reversible Jaws



These Chucks are of the same general design as our Figure 900 line. In most cases for general machine shop use we recommend the Four-Jaw Figure 900 Chuck, but where it is desirable to use a three-jaw Chuck the Figure 9200 will be found satisfactory.

Rated Size of Chuck Inches	Order by these Numbers	List Price	Will Hold About Inches	Code Word
6	9206	\$20.00	71/2	Vann
$7\frac{1}{2}$	9207	23.00	934	Vat
8′*	9208	24.00	1034	Vamp
8	9209	26.00	1134	Vex
10	9210	28.00	1234	Verb
12	9212	32.00	141/2	Vim
14	9214	37.00	$16\frac{1}{2}$	Vast
15	9215	40.00	18	Viz
16	9216	43.00	19	Veal
18	9218	50.00	21	Vest
21	9221	60.00	24	Vow
$\overline{24}$	9224	72.00	27	Volt

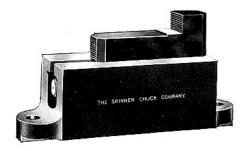
SKINNER REVERSIBLE FACE PLATE JAWS

(Single Rib)

and

BORING MILL JAWS

(Double Rib)



We recommend the Reversible Face Plate Jaws for use on Face Plates of large Lathes and Boring Mill Tables where the slots are in a direct line with the center of the table.

The 1¼ inch Rib, cast solid on bottom, adds to the strength of the body. It can easily be fitted to slot in Face Plate and is preferable to the use of keys. Where customer wishes us to do the fitting it is necessary to send a gauge. We charge extra for this work to cover cost.

The Boring Mill Jaws are furnished with double ribs being used on Boring Mill Tables and Lathe Face Plates where there are parallel slots usually six inches center to center. Jaws can be altered for different widths of Ribs and spacing when desired. (Extra charge is made to cover alterations.)

The Iron Body Jaws will be found entirely satisfactory under all the ordinary conditions of general manufacturing. Where the work is unusually severe requiring Jaws suitable for the heaviest work and hard usage, we recommend the Steel Body Jaws.

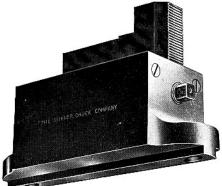
The Adjustable Jaws are reversible and are made of Steel carefully hardened.

These Jaws are of the most approved type of full nut construction. The adjusting screws are made with U. S. Standard Thread, giving unusual gripping power. Ample Bearings take all the end thrust from the adjusting screws, insuring long life and satisfactory service.

With each set of Jaws is packed a wrench and complete set of bolts for attaching.

SKINNER REVERSIBLE FACE PLATE JAWS

Figure 95 Figure 97 Iron Body Steel Body



With Single Rib

The Face Plate Jaw illustrated above is fully described on the preceding page and the table of dimensions is shown on page 19.

Figure 95

Iron Body

Single Rib

Size Inches	List Price Per Set of Three	Code Word	Approx. Shipping Weight Per Set Four Jaws Lbs.	List Price Per Set of Four	Code Word
4	\$30.00	Wall	34	\$40.00	Warn
6	39.00	Wage	100	52.00	Wag
8	48.00	Wade	185	64.00	Weed
10	60.00	Waft	240	80.00	Weal
12	84.00	Waist	270	112.00	Wild
14	108.00	Wake	375	144.00	Wait

Figure 97

All Steel

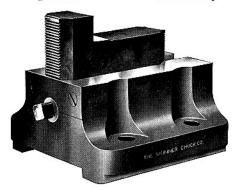
Single Rib

Size Inches	List Price Per Set of Three	Code Word	Approx. Shipping Weight Per Set Four Jaws Lbs.	List Price Per Set of Four	Code Word
6	\$54.00	Recall	100	\$72.00	Repent
8	69.00	Recant	185	92.00	Report
10	90.00	Recede	240	120.00	Reproof
12	120.00	Recite	270	160.00	Replace
14	165.00	Recline	375	220.00	Reprieve

Dimensions page 19.

SKINNER BORING MILL JAWS

Figure 96 Figure 98 Iron Body Steel Body



With Double Rib

There is a full description of our line of Boring Mill Jaws as shown above on page 16. On the following page you will find a table of dimensions.

F	igure	96	
_			

Iron Body

Double Rib

Size Inches	List Price Per Set of Three	Code Word	Approx. Shipping Weight Per Set Four Jaws Lbs.	List Price Per Set of Four	Code Word
6	\$51.00	Azure	115	\$68.00	Berne
8	63.00	Azote	200	84.00	Benton
10	81.00	Axis	260	108.00	Butler
12	105.00	Awning	330	140.00	Barton
14	135.00	Award	400	180.00	Burke

Figure 98

All Steel

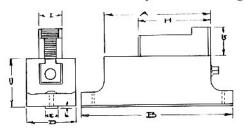
Double Rib

Size Inches	List Price Per Set of Three	Code Word	Approx. Shipping Weight Per Set Four Jaws Lbs.	List Price Per Set of Four	Code Word
6	\$84.00	Awaken	125	\$112.00	Bevis
8	108.00	Avowal	220	144.00	Brewster
10	138.00	Avouch	280	184.00	Bristol
12	180.00	Avocation	350	240.00	Benson
14	225.00	Aversion	430	300.00	Barstow

Dimensions page 19.

SKINNER FACE PLATE JAWS

Figure 95 Figure 97 Iron Body Steel Body Single Rib



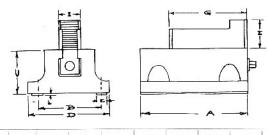
Approximate Dimensions in Inches

Size	Α	В	C	D	E	F	H	G	Ι
6" 8"	6" 8"	$9\frac{1}{2}''$ $11\frac{13}{16}''$	31/4"	31/4"	11/4"	3/8"	51/2"	2"	15/8" 2"
10" 12"	10" 12"	14½" 1636"	41/2"	41/2"	11/4"	16 16 16 7	71/4"	234"	2" 2"
14"	14"	185%"	5"2	45/8"	11/4"	1/2"	9"4	314"	2"

SKINNER BORING MILL JAWS

Figure 96 Iron Figure 98 Steel

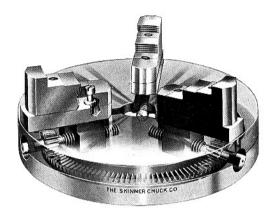
Iron Body Steel Body Double Rib



Size	A	\mathbf{B}	C	D	\mathbf{E}	F	G	H	I
6"	6"	6"	31/4"	8"	11/4"	16	51/2"	2"	15/8"
8"	8"	6"	4"	8"	1 1/4"	16	$6\frac{1}{2}''$	23/4"	2"
10"	10"	6''	$4\frac{1}{2}''$	8" 8"	$1\frac{1}{4}''$	16	71/4"	23/4"	2"
12"	12"	6"	4 1/2"	8"	11/4"	7 "	71/4"	23/4"	2"
14"	14"	6"	5"	8"	11/4"	$\frac{\frac{16}{7}}{16}''$	9"	31/4"	2"

Described on page 16. Illustrated on pages 17 and 18.

SKINNER UNIVERSAL AND COMBINATION GEARED SCREW CHUCKS



DEFINITIONS OF UNIVERSAL AND COMBINATION CHUCKS

A Universal Lathe Chuck is one in which the Jaws are all operated at once moving to and from the center together and having a common center at all times.

A Combination Chuck is one which may be operated either as a universal chuck or as an independent chuck.

The cut above illustrates in phantom the mechanism of a Skinner Universal Geared Screw Chuck.

On the following pages are illustrated the complete line of Skinner Universal and Combination Lathe Chucks of the Geared Screw type showing the different styles of Jaws with which these Chucks can be equipped.

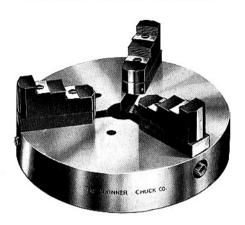
These are the most accurate types of Lathe Chucks made and are recommended for use where accuracy is essential. The Skinner Geared Screw type of Chuck has extra strong gearing and a very powerful grip.

We invariably recommend the purchase of a three-jaw Chuck in preference to the four-jaw type when ordered in the Universal pattern.

The Combination Chuck is especially useful in the tool room and machine shop where a large variety of work is to be handled.

The style "J" patent 2-piece Reversible Jaws are ordinarily furnished with Universal and Combination Geared Screw Lathe Chucks. These are fully described on page 23.

SKINNER UNIVERSAL AND COMBINATION GEARED SCREW CHUCKS



SPECIFICATIONS

BODY—Highly finished castings; face being ground true to straight edge. The three-jaw Chucks under 12 inches have solid faces. Three-jaw Chucks 15 inch to 24 inch have two slots between the jaws. 27 inch to 36 inch three-jaw Chucks have three slots between the jaws. 15 inch to 36 inch four-jaw Chucks have two slots between the jaws.

JAWS—Drop forged steel; thoroughly hardened with raised and ground steps. There is no considerable strain on the binding screws in the Reversible "J" Jaws, as hardened steel bushings (fitted in the upper section) engage in both sections and receive the end thrust. (See page 23)

SCREWS—Of a fine quality of steel, and of liberal diameter with U. S. standard thread, insuring the strongest possible gripping power.

BOLTS—A set of bolts and nuts is furnished with each Chuck for attaching Chuck to face plate.

WRENCH—The wrench is of drop forged steel, hardened. FITTING TO THE LATHE—The Chuck is provided with a recess in the back, to which a face plate is fitted, this plate also being fitted to the lathe or machine spindle. It is never furnished except as an extra. We are prepared to furnish when desired rough face plate casting, or make a finished face plate ready to attach to machine if favored with sample plate (to be used as a gauge) from machine to which Chuck is to be attached.

23

UNIVERSAL GEARED SCREW

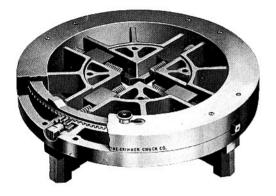
THE SKINNER CHUCK CO.

Figure 300-Three-Jaw, 400-Four-Jaw

and

COMBINATION GEARED SCREW

Figure 600-Three-Jaw, 800-4-Jaw



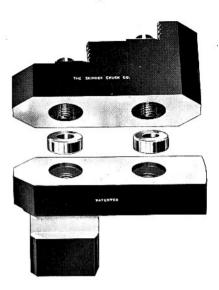
Back view of Skinner Combination Chuck, Fig. 800, 4-Jaw, showing construction

The Skinner Combination Lathe Chucks can be used either universally or independently, but care should be taken in changing from the independent position to make the jaws true universally. The Chucks are always sent out in the universal position, but after the jaws have been used independently and are to be brought into the universal position, it is necessary that all the jaws be of equal distance from the center, before the stud is shifted and the gears brought in mesh. One way to do this is to revolve the Chuck by hand and make each jaw bear evenly on a tool held in the tool post, and when this is accomplished, throw in the gears by shifting the stud.

If these instructions are carefully followed, the Chuck will hold true.

SKINNER PATENT REVERSIBLE JAW

Style "J"



The above illustration shows the construction of our patent reversible jaw Style "J". These jaws are made of drop forged steel carefully hardened and ground true. They are so constructed that there is but little strain on the screws which hold the two parts of the jaws together. Hardened steel bushings, fitted into the upper section, engage in both sections of the jaw and receive the strain. The dowels are so carefully fitted that this jaw when in use is as solid as if made of one piece, thus insuring accuracy and strength.

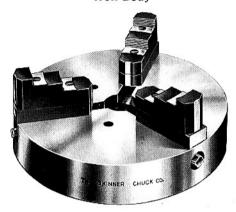
To reverse this jaw simply loosen the jaw screws, turn the upper section end for end and tighten the screws again.

All our Figure 100 Independent Lathe Chucks and a large proportion of our Universal and Combination Geared Screw Chucks are equipped with this Patent Reversible Style "J" Jaw. These Chucks thus equipped are capable of the greatest variety of work.

SKINNER UNIVERSAL CHUCKS and

COMBINATION CHUCKS Geared Screw

*Iron Body



With Style "J" Patent Reversible Jaws

Universal	Figure 300	Three	e-Jaw Combination Fig. 6 Three-Jaw		
Rated Size Inches	Order by These Numbers	Will Hold Approximately, Inches	List Price	Order by These Numbers	List Price
3	303 J	3¾	\$24.00	603 J	\$26.00
4 5	304 J	$4\frac{1}{16}$	27.00	604 J	29.00
5	305 J	$5\frac{3}{4}$	30.00	605 J	32.00
6	306 J	71/4	32.00	606 J	35.00
8	308 J	85/8	38.00	608 J	42.00
9	309 J	91/2	41.00	609 J	45.00
12	312 J	$12\frac{7}{8}$	49.00	612 J	56.00
15	315 J	165/8	60.00	615 J	70.00
18	318 J	183/8	75.00	618 J	87.00
21	321 J	211/4	96.00	621 J	110.00
24	324 J	25	120.00	624 J	136.00
27	327 J	281/2	145.00	627 J	160.00
30	330 J	31 3/4	180.00	630 J	200.00
36	336 J	37	235.00	636 J	264.00
42	342 J	421/4	300.00	642 J	360.00

Dimensions, page 28. Specifications, pages 20 and 21. Code Words, pages 64 and 66. Definition page 20.

*Steel Body Chucks not carried in stock but can be furnished if desired.

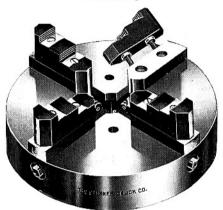
SKINNER UNIVERSAL CHUCKS

and

COMBINATION CHUCKS

Geared Screw

*Iron Body



Universal Figure 400		Four	-Jaw	Combination Fig. 80 Four-Jaw		
Rated Size, Inches	Order by these Numbers	Will Hold Approxi- mately, Inches	List Price	Order by these Numbers	List Price	
4	404 J	$4\frac{1}{16}$	\$34.00	804 J	\$36.00	
4 5	405 J	$5\frac{3}{4}$	37.00	805 J	39.00	
6	406 J	71/4	39.00	806 J	42.00	
6 8	408 J	85/8	46.00	808 J	50.00	
9	409 J	$9\frac{1}{2}$	50.00	809 J	54.00	
12	412 J	$12\frac{7}{8}$	59.00	812 J	66.00	
15	415 J	165/8	72.00	815 J	82.00	
18	418 J	183/8	90.00	818 J	102.00	
21	421 J	$21\frac{1}{4}$	116.00	821 J	130.00	
24	424 J	25	144.00	824 J	160.00	
27	427 J	$28\frac{1}{2}$	177.00	827 J	192.00	
30	430 J	$31\frac{3}{4}$	220.00	830 J	240.00	
36	436 J	37	296.00	836 J	325.00	
42	442 J	421/4	390.00	842 J	450.00	

Dimensions page 28. Specifications pages 20 and 21. Code Words, pages 65 and 67. Definition page 20.

*Steel Body Chucks not carried in stock but can be furnished if desired.

SKINNER UNIVERSAL CHUCKS

Geared Screw

Figure 300-Three-Jaw Figure 400-Four-Jaw Iron Body



Common Jaw, Style "A" (Not Reversible)

Style "C" Jaws with Inside Bite Only

11

"A" Jaws. For holding work on the steps, jaws to be on the outside.

"B" Jaws. For holding work such as rings, jaws to be on the inside. Can also be used for holding drills or rods. "C" Jaws. For holding drills, bars and rods.

			Capac	ity of Chuc	ks equippe	d with
Rated Size	Fig 300 List	Fig. 400 List	"A"	When I		"C"
Inches	Price 3-Jaw	Price 4-Jaw	Jaws	Rods or Drills	Rings	Jaws
3	\$24.00		35/8"	7/8"	$\frac{4\frac{7}{16}''}{5\frac{3}{4}''}$	15"
4	27.00	\$34.00	41/8"	1½" 15%"	53/4"	11/8"
$\frac{4}{5}$	30.00	37.00	51/2"	15/8"	71/4"	1 1/4"
6	32.00	39.00	63/8"	2"	81/4"	17/8"
8	38.00	46.00	81/4"	21/4"	91/2"	21/4"
9	41.00	50.00	91/2"	31/2" 6"	103/4"	33/8"
12	49.00	59.00	121/4"	6"	14"	6"
15	60.00	72.00	16"	75/8"		
18	75.00	90.00	191/4"			
21	96.00		22"			
24	120.00		251/2"			
27	145.00	177.00	293/4"			
30	180.00	220.00	32"			
36	235.00		37"			
42	300.00	390.00	421/8"			

We can furnish Combination Chucks with "A", "B" or "C" Jaws if desired. Not regularly carried in stock. Dimensions page 28.

Specifications pages 20-21. Code words pages 64 to 67.

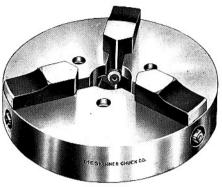
SKINNER UNIVERSAL MILLING MACHINE CHUCKS

Geared Screw

Figure 300

Iron Body

Three-Jaw



With Style "D" Jaws

Chucks with Style "D" Jaws as shown above are especially adapted for use on Universal Milling Machines. They are also used on screw machines and other hollow spindle machines. The bite on the jaws is below as well as above the jaw screws thus insuring long and even grip on the work. Each Chuck is carefully tested for accuracy before leaving factory.

	Figure 300	Three-Jaw				
Rated Size Inches	Order by these Numbers	Will Hold Approxi- mately, Inches	List Price	Code Word		
3	303 D	15 16	\$24.00	Dame		
4	304 D	11/8	27.00	Damp		
5	305 D	15/8	30.00	Dance		
*6	306 D	23/8	32.00	Dark		
8	308 D	3	38.00	Dash		
9	309 D	41/4	41.00	Dead		
$1\overline{2}$	312 D	61/8	49.00	Deaf		

We can furnish Combination Chucks with Style "D" Jaws, if desired.

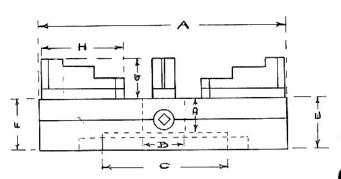
*The 6 inch Chuck is regularly furnished with 4 inch face plate seat.

Milling Machine Chucks are made with screw heads either "flush" or "projecting."

In case there is a preference be sure to specify on order. Dimensions, page 28. Specifications, pages 20 and 21.

SKINNER UNIVERSAL AND COMBINATION CHUCKS

Geared Screw

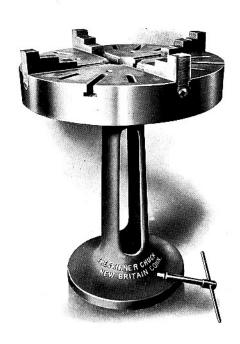


- E. Dimensions of Combination Chuck only.
- F. Dimensions of Universal Chuck only. All other dimensions the same.

Approximate Dimensions in Inches

Size	A	В	C	D	E	F'	G	H
3	$\begin{array}{c} 4\frac{3}{16} \\ 5\frac{1}{2} \\ 7 \end{array}$	3/4	$\begin{array}{c} 1\frac{15}{16} \\ 2\frac{3}{44} \\ 3\frac{1}{2} \\ 4\frac{1}{2} \\ 4\frac{1}{2} \\ 5\frac{6}{3} \\ 8\\ 10\\ 12 \\ \end{array}$	1	$\begin{array}{c} 1\frac{3}{8}8\\ 1\frac{1}{16}\frac{1}{16}\\ 1\frac{1}{16}\frac{1}{16}\frac{1}{16}\\ 2\frac{5}{16}\frac{1}{16}\\ 2\frac{5}{16}\frac{1}{16}\\ 2\frac{1}{16}\frac{1}{16}\\ 2\frac{1}{16}\frac{1}{16}\\ 2\frac{1}{16}\frac{1}{16}\\ 3\frac{1}{16}\\ \end{array}$	11/4	$\begin{array}{c} 1\frac{9}{32} \\ 1\frac{3}{8}8 \\ 1\frac{29}{32} \\ 2\frac{1}{16} \\ 2\frac{7}{32} \\ 2\frac{7}{16} \\ 2\frac{5}{8} \\ 2\frac{3}{32} \\ 3 \end{array}$	1 %
4 5 6 8 9 12 15 18 21 24 27 30 36 42	$5\frac{1}{2}$	$\begin{array}{c} 3/4 \\ 15 \\ 11/4 \\ 13/8 \\ 11/2 \\ 15/8 \\ 17/8 \\ 21/2 \\ 3 \\ \end{array}$	23/4	$\begin{array}{c} 1\frac{3}{6} & \\ 1\frac{3}{6} & \\ 1\frac{3}{6} & \\ 1\frac{1}{2} & \\ 1\frac{1}{2} & \\ 1\frac{1}{2} & \\ 1\frac{3}{2} & $	$1\frac{11}{16}$	$\begin{array}{c} 1 \\ 1 \\ 1 \\ 1 \\ 1 \\ 1 \\ 1 \\ 1 \\ 1 \\ 1 $	13/8	$\begin{array}{c} 1 \stackrel{1}{\overset{1}{\overset{1}{\overset{1}{\overset{1}{\overset{1}{\overset{1}{\overset{1}{$
-5	7	11/4	$3\frac{1}{2}$	13/8	$1\frac{15}{16}$	$1\frac{17}{32}$	1 29	214
6	8	13/8	31/2	11/4	1 15	15/8	$2\frac{1}{16}$	$3\frac{5}{16}$
-8	91/4	11/2	$4\frac{1}{2}$	$1\frac{17}{32}$	$2\frac{5}{16}$	$1\frac{15}{16}$	$2\frac{7}{32}$	35/8
9	$10^{\frac{9}{16}}$	15/8	5	11/2	$2\frac{5}{16}$	1 14	$2\frac{7}{16}$	3 13
12	$13\frac{1}{2}$	17/8	63/8	134	$2\frac{17}{32}$	21/8	25/8	45/8
15	8 9½ 10 16 13 ½ 16 ¼	21/8	7	17/8	219	23/8	227	55/8
18	18	21/2	8	1 15	25/8	$2\frac{7}{16}$	3	$6\frac{3}{16}$
21	21	3	10	23%	37	31/8	33/4	75/8
24	24	3	12	31/8	416	334	334	75/8
27	273/4	3	13	21/	3 3	27/8	41/8	81/8
30	31 7/6	3	$\frac{13}{15}$	27/8	33/4	3.1	41/8	81/8
36	37½ 37½	3	18	213	3 ³ / ₄ 3 ³ / ₄ 3 ³ / ₄	3 16	33/4 33/4 41/8 41/8 41/8 41/8	81/8
42	371%	3	18	213	33/	31	41%	$10^{\frac{13}{16}}$

SKINNER REAMER AND ASSEMBLING STAND



Skinner Improved Reamer and Assembling Stands are especially designed for holding work to be hand reamed, and can also be used to advantage in the erecting room for assembling work. The stands are furnished with any size or style of chuck which can be detached from the stand and used on a lathe or boring mill, if desired.

Prices on application.

-31

SKINNER UNIVERSAL CHUCKS

Heavy Pattern

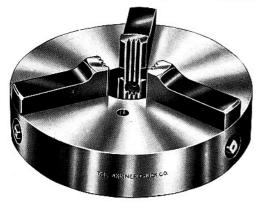
Geared Screw

For Cutting-off Machines.

Figure 0300-E

*Iron Body

Three-Jaw



With Style "E" Jaws.

This is a Heavy Pattern Chuck with large Hole through the center. The unusual gripping power together with the long bites on the Jaws and heavy gearing, makes it especially suitable for Cutting-off Machines, and also for machines handling bars. The bite of the Jaws in Chuck above 9 inch size is grooved. Cut shows 12 inch Chuck.

Jaws in smaller sizes can be grooved if desired.

Figure 0300-E

*Iron Body

†Three-Jaw

Jaws have Extra Long Bite suitable for Cutting-off Machines

Order by these Numbers	Rated Size of Chuck Inches	Diameter of Center Hole †Inches	Diameter of Face Plate Seat Inches	List Price	Code Word
0308 E	8	17/8	41/2	\$34.00	Toll
0309 E	9	21/8	5	38.00	Ton
0312 E	12	31/8	71/4	50.00	Tonic
0314 E	14	41/8	817	63.00	Tool
0317 E	17	51/8	11"	78.00	Tooth
0320 E	20	61/4	12	90.00	Topic
0324 E	24	81/4	$\overline{15}$	110.00	Toy
0330 E	30	101/4	18	170.00	Toast

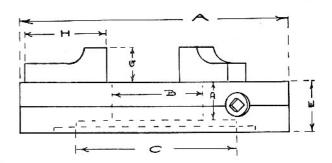
*Steel Body Chucks not carried in stock but can be furnished if desired. †We can furnish Chucks with larger center hole if desired. ‡Four-Jaw Chuck can be supplied if so desired, No. 0400-E.

Prices quoted on application. Dimensions page 31.

SKINNER HEAVY PATTERN UNIVERSAL CHUCK

Style "E" Jaws

Geared Screw Type



Approximate Dimensions in Inches

Rated Size	A	В	С	D	Е	G	н
8	81/4	17/8	41/2	$2\frac{1}{16}$	25/8	13/8	31/4
9	9	$2\frac{1}{8}$	5	$2\frac{1}{8}$	25/8	13/8	$3\frac{7}{16}$
12	12	31/8	71/4	21/8	2 16	15/8	43
14	14	41/8	817	23/8	3	1 3/4	47
17	17	51/8	11	23/8	3	13/4	6
20	20	61/4	12	$2\frac{7}{16}$	3	13/4	67
24	24	81/4	15	31/4	33/4	1 15	8
$\frac{20}{24}$ $\frac{30}{30}$	30	101/4	18	31/4	33/4	1 15	10

The bite of the Jaws extends not only above but below the face of the Chuck and even below the Adjusting Screw itself. The long bite thus obtained insures a rigid grip of unusual power. The extra large center hole allows the work to be held inside the Chuck Body and not above the face as in other Chucks. This eliminates much of the strain and makes the grip much stronger. Ease of operation coupled with extraordinary strength and general durability are additional features found in this Chuck.

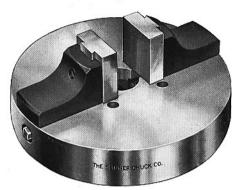
In cases where the Chucks are not to be used on small work, the center holes can be bored out somewhat, and the capacity of the Chuck be correspondingly increased.

For prices see page 30.

SKINNER TWO-JAW CHUCKS

THE SKINNER CHUCK CO.

Figure 200-G Round Body Universal Geared Screw



With Style "G" Jaws

This type of Chuck is operated by means of a rack gear and geared pinion screws. The pinion screws are flush with the body of the Chuck. Unobstructive center hole through chuck. See dimension "B" page 33.

Usually furnished in the Universal type, and recommended for holding odd shaped pieces, which need a bearing all around, and delicate work which would be crushed if gripped in the bite of ordinary Chuck Jaw. One set of machinery steel slip jaws are furnished with each Chuck, and extra pairs of slip jaws of machinery or tool steel can be furnished if desired.

Used largely by brass workers. This Chuck can also be furnished either Independent, or Combination, but are only carried in stock in Universal type. Prices on other types quoted on application.

Order by th_se Numbers	Rated Size of Chuck Inches	List Price	Extra Slip Jaws Machinery Steel Per Set	Code Word
204 G	4	\$22.00	\$2.00	Good
205 G	5	24.00	2.50	Gate
206 G	6	26.00	2.50	Gale
208 G	8	32.00	3.50	Gap
209 G	9	35.00	3.50	Garb
212 G	12	45.00	3.50	Gasp
215 G	15	64.00	5.00	Gauge

Dimensions page 33.

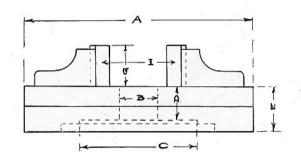
SKINNER TWO-JAW CHUCKS

Universal Geared Screw

Figure 200

Style "G" Jaws

Iron Body



Approximate Dimensions in Inches

Size	A	В	С	D	E	G	I
4	53/8	15 16	23/4	$1\frac{5}{32}$	11/2	$1\frac{11}{16}$	11/4
5	67/8	$1\frac{1}{4}$	31/2	$1\frac{5}{32}$	$1\frac{9}{16}$	23/8	15/8
8	77/8	13/8	31/2	11/4	15/8	23/8	21/4
8	91/8	11/2	41/2	11/2	17/8	$2\frac{13}{16}$	33/8
9	10 7	$1\frac{11}{16}$	5	11/2	$1\frac{15}{16}$	$2\frac{13}{16}$	$4\frac{3}{16}$
12	13 5	1 1/8	63/8	1 11 16	21/8	$2\frac{13}{16}$	61/4
15	1616	$2\frac{5}{32}$	7	17/8	23/8	31/4	81/8

List prices and code words page 32.

ROUND BODY TWO-JAW CHUCKS

Figure 21

Universal

Figure 23

Independent



With "V" Groove in Jaws

Furnished in Universal or Independent Pattern with recess for face plate. Right and left hand adjusting screws are at the side in the Universal Chuck and beneath the jaws in the Independent Chuck, but do not obstruct center hole.

2-Jaw Chucks are designed for work where the 3-Jaw or 4-Jaw Chucks are impracticable.

The chucks having a V groove (sometimes called "V Jaws") are for use on screw machines and for holding bars, rods, drills, square shank tools, etc.

Nominal Size, Inches	Diam. of Body, Inches	Thick- ness Body, Inches	Hole through Body, Inches	Diam. of FacePlate Recess, Inches	Jaws open, Inches	Depth of V Groove Inches	List Price
4½	4½ 6	23/8 27/8	1 11/4	4½ 55/8	11/4	1/8	\$20.00 24.00
7 9	7 9	$\frac{3\frac{5}{16}}{3\frac{1}{2}}$	1 1/2	$6\frac{11}{16}$ $6\frac{11}{16}$	$\frac{2}{2\frac{1}{2}}$	3/8 3/8 3/8	30.00 35.00
12 15	12	3½	21/4	9½	3	3/8 5/8	45.00 64.00

ROUND BODY TWO-JAW CHUCKS

Figure 22

Universal

Figure 24

Independent



With Slip Jaws

Furnished in Universal Pattern with adjusting screws at side or in the Independent Pattern with adjusting screws underneath the jaws. Unobstructed hole through center. Extra slip jaws of machinery or tool steel as desired.

2-Jaw Chucks are designed for work where the 3-Jaw or 4-Jaw Chucks are impracticable. The "slip jaw" Chucks are especially adapted for brass work and for holding soft metal pieces of special shape. The slips or faces are furnished not hardened.

Nominal Size Inches	Diam. of Body, Inches	Thick- ness Body, Inches	Hole through Body, Inches	Diam. of Face Plate Recess, Inches	Jaws open, Inches	List Price	Extra Slip Jaws Mach'y Steel Per Set
41/2	41/2	23/8	1	41/8	2	\$20.00	\$1.00
6	6	27/8	11/4	$\frac{4\frac{1}{8}}{5\frac{5}{8}}$	$\frac{2\frac{1}{2}}{3}$	24.00	1.00
7	7	$3\frac{5}{16}$	11/2	$6\frac{11}{16}$	3	30.00	1.00
.9	9	$3\frac{1}{2}$	13/4	$6\frac{11}{16}$	4	35.00	1.25
12	.12	$3\frac{1}{2}$	21/4	$9\frac{1}{2}$	6	45.00	1.25
15						64.00	

Code Words page 69.

BOX BODY TWO-JAW CHUCKS



With Slip Jaws

The Universal Chuck is operated by right and left hand screw beneath the jaws. Furnished also in Independent pattern. One pair of machinery steel slip jaws furnished with each Chuck, but tool steel jaws can be substituted or furnished extra.

Above cut shows Chuck with recess for face plate, but Chuck with hub for threading to screw on lathe spindle can be furnished if desired.

Universal, Figure No. 27 | with face plate recess. Independent, Figure No. 28 |

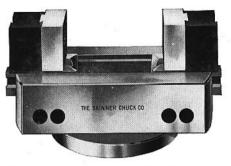
Universal, Figure No. 25 Independent, Figure No. 26 $\}$ with hub.

Nominal Size and Length of Body, Inches	Width of Body, Inches	Width of Jaws, Inches	Face of Body to Top of Jaws, Inches	Jaws Open Inches	Diam. Recess for Face Plate Style 27 & 28 Inches	List Price	Extra Slip Jaws Mach'y Steel Per Set
7	31/2	13/4	13/4	3	43/4	\$28.00	\$1.00
9	4	2	2	4	55/8	33.00	1.25
12	41/2	21/4	27/8	6	7	40.00	1.25
15	5	21/4	31/2	8	7	50.00	1.50
18	55/8	21/4	6	10	91/2	75.00	2.00
21						100.00	
24						120.00	

Code Words, page 69.

BOX BODY TWO-JAW CHUCKS

Figures 325 and 327 Figures 326 and 328 Universal Independent



With Reversible Jaws

Double Dove-Tailed

Jaw when in reverse position more than doubles the holding capacity of a regular chuck.

We now have a line of Box Body Chucks equipped with reversible jaws, which enable the chucks to hold a great range of work. The slips when placed on the inner side of the main jaws will hold very small pieces, and by simply reversing them end for end, they will then hold quite large pieces, and in both positions practically the entire jaw is engaged with the screw threads.

Universal, Figure No. 327 Independent, Figure No. 328

with face plate recess.

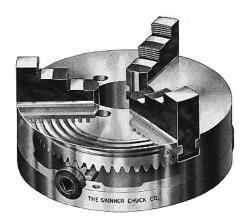
Universal, Figure No. 325 Independent, Figure No. 326

with hub.

Extra Slip Jaws Mach'y Steel Per Set	List Price	Diameter Recess for Face Plate Style 327 & 328 Inches	Jaws Open Inches	Face of Body to Top of Jaws, Inches	Width of Jaws, Inches	Width of Body, Inches	Nominal Size and Length of Body. Inches
	\$32.00	43/4	3	13/4	13/4	31/2	7
	39.00	5 1/8	4	2	. 2	4	9
	48.00	7	6	21/8	21/4	$\frac{41/2}{5}$ $\frac{55}{8}$	12
	60.00	7	8	31/2	21/4	5	15
	85.00	91/2	10	6	21/4	55/8	18
	110.00						21
	135.00						24

Code words, page 68.

SKINNER UNIVERSAL AND COMBINATION GEARED SCROLL CHUCKS



DEFINITIONS OF UNIVERSAL AND COMBINATION CHUCKS

A Universal Lathe Chuck is one in which the jaws are all operated at once moving to and from the center together and having a common center at all times.

A Combination Chuck is one in which the Jaws may be operated either universally or independently as desired.

The cut above illustrates in phantom the mechanism of a Skinner Universal Geared Scroll Chuck.

The Jaws are moved simultaneously by a scroll threaded disc or plate. This scroll is revolved by the pinion gears to which the wrench is directly applied. The jaws are made of steel carefully hardened with raised and ground steps and nicely fitted to the Chuck body.

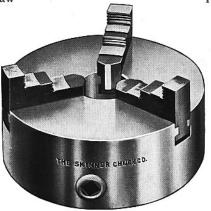
On the following pages are illustrated a complete line of Universal and Combination Iron and Steel Body Scroll Chucks.

These Chucks are designed for general manufacturing purposes. The Steel Body Chucks are made of the best grade of steel and are especially adapted for extra hard service. The design and dimensions of the All Steel Chucks are practically the same as the Iron Body Chucks.

SKINNER UNIVERSAL CHUCKS

Geared Scroll

Figure 3100 Iron Body Figure 4100 Three-Jaw Four-Jaw



Common Jaws, Style No. 1

(Not Reversible)

Figur	re 3100		Three-Jaw	Figure	4100	Four-Jaw
Size Inches	Order by these Numbers	Price	Code Word	Order by these Numbers	List Price	Code Word
3	3103	\$17.00	Palate	4103	\$19.00	Pocket
4	3104	19.00	Paper	4104	21.00	Pointed
4 5 6	3105	21.00	Pardon	4105	23.00	Polemic
6	3106	24.00	Passable	4106	27.00	Poltroon
$7\frac{1}{2}$	3107	27.00	Patch	4107	30.00	Pompou
9	3109	33.00	Peaceful	4109	36.00	Populate
$10\frac{1}{2}$	3110	38.00	Peel	4110	42.00	Port
12	3112	45.00	Penalty	4112	50.00	Portend
15	3115	60.00	Perfect	4115	65.00	Portico
18	3118	80.00	Percolate	4118	87.00	Posey
21	3121	105.00	Perhaps	4121	115.00	Possible
24	3124	140.00	Perform	4124	150.00	Paine

Jaws of No. 1 Style are mostly used for lathe work and will hold as large as the diameter of body.

Description, page 38.

Dimensions, page 51.

SKINNER UNIVERSAL CHUCKS

Geared Scroll

Figure 3200 Iron Body

Figure 4200

Three-Jaw

Four-Jaw



Reverse Jaws, Style No. 2

(Not Reversible)

Figure	3200	Т	hree-Jaw	Figure	4200	Four-Jaw
Size Inches	Order by these Numbers	List Price	Code Word	Order by these Numbers	List Price	Code Word
3	3203	\$17.00	Palm	4203	\$19.00	Poetess
4	3204	19.00	Parade	4204	21.00	Poison
4 5	3205	21.00	Park	4205	23.00	Polish
6	3206	24.00	Passport	4206	27.00	Polygor
71/2	3207	27.00	Pathetic	4207	30.00	Pontiff
9	3209	33.00	Peasant	4209	36.00	
101/2	3210	38.00	Peeler	4210	42.00	
12	3212	45.00	Penitent	4212	50.00	
15	3215	60.00	Perfume	4215	65.00	
18	3218	80.00	Perdu	4218	87.00	
21	3221	105.00	Peril	4221	115.00	
24	3224	140.00	Produce	4224	150.00	Pack

Description, page 38.

Dimensions, page 51.

SKINNER UNIVERSAL CHUCKS

Geared Scroll

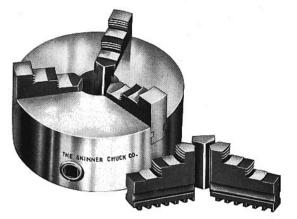
Figure 3400

Iron Body

Figure 4400

Three-Jaw

Four-Jaw



Chuck with Two Sets of Jaws

Style No. 1 and No. 2

Figur	е 3400	Т	hree-Jaw	Figure	4400	Four-Jaw	
Size Inches	Order by these Numbers	List Price 2 Sets Jaws	Code Word, 2 Sets Jaws	Order by these Num- bers	List Price, 2 Sets Jaws	Code Word, 2 Sets Jaws	
3	3403	\$20.00	Panel	4403	\$22.00	Poetry	
	3404	22.00	Parasol	4404	24.00	Polarity	
4 5 6	3405	24.00	Parrot	4405	27.00	Politics	
6	3406	28.00	Pastoral	4406	31.00	Pomatum	
$7\frac{1}{2}$	3407	32.00	Patriot	4407	36.00	Populace	
9	3409	38.00	Pedal	4409	42.00	Porringer	
101/2	3410	44.00	Peerage	4410	49.00	Poach	
12	3412	52.00	Pensive	4412	58.00	Porthole	
15	3415	70.00	Persecute	4415	76.00	Portrait	
18	3418	92.00	Perfuse	4418	102.00	Possess	
21	3421	120.00	Perish	4421	135.00	Postal	
24	3424	155.00		4424	170.00	Parlow	

Description, page 38. Dimensions, page 51.

UNIVERSAL CHUCKS

**Geared Scroll

With Two-Piece Reversible Jaws.

Figure 3500

Iron Body

Three-Jaw

Size Inches	Order by these Numbers	List Price	Code Word
3	3503	\$19.00	Jabber
4	3504	21.00	Jacket
5	3505	23.00	Jewel
6	3506	27.00	Judson
$7\frac{1}{2}$	3507	30.00	Josie
9	3509	36.00	Jacob
101/2	3510	41.00	Jingle
12	3512	49.00	Jerry
15	3515	64.00	Jonah
18	3518	85.00	Join
21	3521	112.00	Joshua
24	3524	147.00	Judd

E:	~	***	45	nn
T. T	цu	re	40	υU

Iron Body

Four-Jaw

Size Inches	Order by these Numbers	List Price	Code Word
3	4503	\$21.00	Louis
4	4504	23.00	Laura
5	4505	25.00	Lucius
6	4506	30.00	Leonard
$7\frac{1}{2}$	4507	34.00	Leroy
9	4509	40.00	Lizzie
$10\frac{1}{2}$	4510	46.00	Lemuel
12	4512	54.00	Luke
15	4515	70.00	Lottie
18	4518	95.00	Levi
21	4521	125.00	Lucifer
24	4524	160.00	Lane

^{**}These Scroll Chucks are similar in construction to those illustrated on the preceding pages, but are furnished with the reversible two-piece jaw.



ALL STEEL SKINNER UNIVERSAL CHUCKS

Geared Scroll

Figure 3600

Steel Body

Three-Jaw

Common Jaws, Style No. 1

(Not Reversible)

Size Inches	Order by these Numbers	List Price	Approx. Shipping Weight Lbs.	Code Word
3	3603	\$24.00	21/2	Labrus
4	3604	27.00	61/2	Lace
5	3605	30.00	934	Lack
6	3606	34.00	15	Lackey
$7\frac{1}{2}$	3607	38.00	26	Laconie
9	3609	47.00	36	Lactic
101/2	3610	54.00	48	Ladder
12	3612	64.00	71	Laddie
15	3615	85.00	119	Ladle
18	3618	114.00	141	Lady
21	3621	150.00	194	Lagoon
24	3624	200.00		Lang

Figure 4600

Steel Body

Four-Jaw

Common Jaws, Style No. 1

(Not Reversible)

Size Inches	Order by these Numbers	List Price	Code Word
3	4603	\$26.00	Laver
4	4604	29.00	Lavish
5	4605	32.00	Lawful
6	4606	37.00	Lawn
$7\frac{1}{2}$	4607	41.00	Laxity
9	4609	50.00	Layer
$10\frac{1}{2}$	4610	58.00	Laying
12	4612	69.00	Layman
15	4615	90.00	Lazily
18	4618	121.00	Lazy
21	4621	160.00	Leach
24	4624	210.00	Lamson

NOTE—These Scroll Chucks are in every way the same as those illustrated on page 39 except that the body is made of Cast Steel

trated on page 39 except that the body is made of Cast Steel. We recommend this Chuck for heavy duty service where the iron body Chuck would not stand the heavy strain.

Dimensions, page 51.



ALL STEEL SKINNER UNIVERSAL CHUCKS

Geared Scroll

Figure 3700

Steel Body

Three-Jaw

Jaws, Style No. 2.

(Not Reversible)

Size Inches	Order by these Numbers	List Price	Approx. Shipping Weight Lbs.	Code Word
3	3703	\$24.00	21/2	Lake
4	3704	27.00	$6\frac{1}{2}$	Lame
5	3705	30.00	934	Lamely
6	3706	34.00	15	Lament
$7\frac{1}{2}$	3707	38.00	26	Lamina
9	3709	47.00	36	Lamp
$10\frac{1}{2}$	3710	54.00	48	Lanate
12	3712	64.00	71	Lance
15	3715	85.00	119	Land
18	3718	114.00	141	Landan
21	3721	150.00	194	Lanky
24	3724	200.00		Lawton

Figure 4700

Steel Body

Four-Jaw

Jaws, Style No. 2.

(Not Reversible)

		/	
Size Inches	Order by these Numbers	List Price	Code_Word
3	4703	\$26.00	Lead
4	4704	29.00	Leaded
5	4705	32.00	Leaf
6	4706	37.00	League
71/2	4707	41.00	Leak
9	4709	50.00	Lean
101/2	4710	58.00	Leap
12	4712	69.00	Learn
15	4715	90.00	Lease
18	4718	121.00	Leash
21	4721	160.00	Leave
24	4724	210.00	Lears

NOTE-These Scroll Chucks are in every way the same as those illus-

trated on page 40 except that the body is made of Cast Steel.

We recommend this Chuck for heavy duty service where the iron body
Chuck would not stand the heavy strain.

Dimensions, page 51.

ALL STEEL SKINNER UNIVERSAL CHUCKS

Geared Scroll

Figure 3800

Steel Body

Three-Jaw

With Two Sets of Jaws

Style No. 1 and No. 2.

Size Inches	Order by these Numbers	List Price	Code Word
3	3803	\$27.00	Lasher
4	3804	30.00	Lass
$\hat{5}$	3805	33.00	Lassie
6	3806	38.00	Lastly
71/2	3807	43.00	Latch
9 2	3809	52.00	Late
10	3810	60.00	Lateen
12	3812	71.00	Lately
$\hat{15}$	3815	95.00	Latent
18	3818	126.00	Latero
21	3821	165.00	Lather
24	3824	215.00	Lennox

Figure 4800

Steel Body

Four-Jaw

With Two Sets of Jaws

Style No. 1 and No. 2.

Size Inches	Order by these Numbers	List Price	Code Word
3	4803	\$29.00	Lemur
4	4804	32.00	Lend
5	4805	36.00	Lens
6	4806	41.00	Lenten
$7\frac{1}{2}$	4807	47.00	Lentil
9	4809	56.00	Leper
101/2	4810	65.00	Lessen
12	4812	77.00	Lest
15	4815	101.00	Lethal
18	4818	136.00	Lethe
21	4821	180.00	Levant
24	4824	230.00	Leah

NOTE-These Scroll Chucks are in every way the same as those illustrated on page 41, except that the body is made of Cast Steel.

We recommend this Chuck for heavy duty service where the iron body
Chuck would not stand the heavy strain.

Dimensions, page 51.

UNIVERSAL CHUCKS

Geared Scroll

Light Pattern for Amateur Work

Figure 5100 Iron Body

Three-Jaw

Common Jaws, Style No. 1. (Not Reversible)

Size Inches	Order by these Numbers	List Price	Approx. Shp'g Weight, Lbs.	CodeWord
3	5103	\$12.00	23/4	Nab
4	5104	14.00	4	Nag
5	5105	16.00	6	Nail
6	5106	18.00	9	Name
$7\frac{1}{2}$	5107	21.00	14	Nap
9	5109	28.00	22	Navy

Figure 7100

Iron Body

Four-Jaw

Common Jaws, Style No. 1.

(Not Reversible)

Size Inches	Order by these Numbers	List Price	Code Word
3	7103	\$13.50	Near
4	7104	15.50	Neat
5	7105	17.50	Neck
6	7106	20.00	Need
$7\frac{1}{2}$	7107	23.00	Next
9	7109	30.00	Net

Figure 5200

Iron Body

Three-Jaw

Reverse Jaws, Style No. 2.

(Not Reversible)

Size Inches	Order by these Numbers	List Price	Approx. Shp'g Weight, Lbs.	Code Word
3	5203	\$12.00	23/4	Nice
4	5204	14.00	4	Nibble
5	5205	16.00	6	Night
6	5206	18.00	9	Nimble
$7\frac{1}{2}$	5207	21.00	14	Ninny
9	5209	28.00	22	Niter

Figure 7200

Iron Body

Four-Jaw

Reverse Jaws, Style No. 2.

(Not Reversible)

Size Inches	Order by these Numbers	List Price	Code Word
3	7203	\$13.50	Noble
4	7204	15.50	Noddy
5	7205	17.50	Noise
6	7206	20.00	None
$7\frac{1}{2}$	7207	23.00	Noon
9	7209	30.00	North



Geared Scroll

Light Pattern for Amateur Work

This line of Light Pattern Universal Chucks is adapted especially for use on light lathes. They are amply strong for this service and are recommended for light and amateur work.



Figure 5400

Iron Body

Three-Jaw

Two Sets of Jaws, Style No. 1 and No. 2.

Size Inches	Order by these Numbers	List Price	Code Word
3	5403	\$14.00	Nudge
4	5404	16.50	Null
5	5405	18.50	Numb
6	5406	21.00	Number
71/2	5407	24.50	Nurse
9´²	5409	32.00	Nutmeg

Figure 7400

Iron Body

Four-Jaw

Two Sets of Jaws, Style No. 1 and No. 2.

Size Inches	Order by these Numbers	List Price	Code Word
3	7403	\$16.00	Nun
4	7404	18.50	Nuptial
5	7405	21.00	Nursery
6	7406	23.50	Nubbin
71/2	7407	27.00	Nugget
9′2	7409	35.00	Numeric

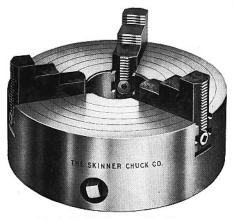
COMBINATION CHUCKS

Geared Scroll

Figure 6500

Iron Body

Three-Jaw



With Solid Reversible Jaws

Rated Size of Chuck Inches	Order by these Numbers	Lîst Price	Will Hold About Inches	Approxi- mate Weight Lbs. 3-Jaw	Dia. of Face Plate Recess Inches	Code Word
4	6504	\$26.00	53/8	9	325	Fad
4 5 6	6505	29.00	61/2	13	$3\frac{25}{32}$ $4\frac{5}{8}$	Fag
6	6506	33.00	75/8	20	55/8	Fan
$7\frac{1}{2}$	6507	40.00	91/4	29	7	Far
9	6509	48.00	111/4	45	$8\frac{9}{16}$ $9\frac{13}{16}$	Fat
$10\frac{1}{2}$	6510	56.00	$12\frac{1}{2}$	60	$9\frac{13}{16}$	Fed
12	6512	64.00	143/4	85	7	Fin
15	6515	85.00	$17\frac{1}{2}$	115	85/8	Fit
18	6518	106.00	21	190	913	Fix
21	6521	134.00	24	275	$10\frac{1}{2}$	Fog
24	6524	170.00	27	375	$13\frac{1}{2}$	Fox
28	6528	220.00	30	550	$13\frac{1}{2}$	Fun
32	6532	300.00	35	700	$13\frac{1}{2}$	Fry

This improved Chuck is provided with independently adjustable jaws which may be set as required for chucking round, elliptical or irregular work, either in a concentric or in an eccentric position, and the Geared Scroll Jaw operating mechanism may be used to grip the work. In tightening by the scroll mechanism universally, it is not necessary to apply the wrench successively in different positions around the Chuck, as any single application will give the full gripping power.

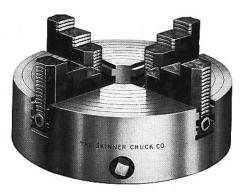
COMBINATION CHUCKS

Geared Scroll

Figure 8500

Iron Body

Four-Jaw

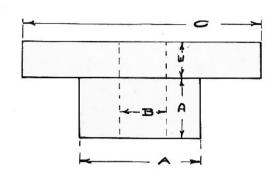


With Solid Reversible Jaws

Rated Size of Chuck Inches	Order by these Numbers	List Price	Will Hold About Inches	Dia. of Face Plate Recess Inches	Code Word
4	8504	\$31.00	53/8	325	Fail
5	8505	34.00	61/2	45/8	Farm
6	8506	39.00	75/8	55/8	Fawn
$7\frac{1}{2}$	8507	47.00	91/4	7	Fear
9 2	8509	55.00	111/4	8 9 16	Felt
101/2	8510	63.00	$12\frac{1}{2}$	$9\frac{13}{16}$	Fend
12	8512	75.00	143/4	7	Find
15	8515	96.00	171/2	85/8	Fish
18	8518	124.00	21	$9\frac{13}{16}$	Fold
21	8521	152.00	24	101/2	Ford
24	8524	190.00	27	$13\frac{1}{2}$	Form
28	8528	250.00	30	$13\frac{1}{2}$	Flit
32	8532	350.00	35	$13\frac{1}{2}$	Flow

This improved Chuck is provided with independently adjustable jaws which may be set as required for chucking round, elliptical or irregular work, either in a concentric or in an eccentric position, and the Geared Scroll Jaw operating mechanism may be used to grip the work. In tightening by the scroll mechanism universally, it is not necessary to apply the wrench successively in different positions around the Chuck, as any single application will give the full gripping power.

FACE PLATE CASTING



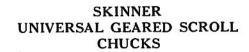
Approximate Dimensions in Inches

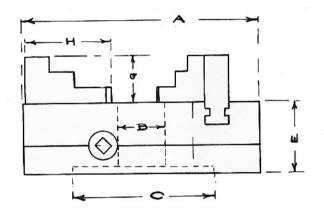
A	В	С	D	Е	Approx. Weight, Lbs.
25/5"		$\frac{1\frac{15}{16}''}{23/4''}$	5/8"	1 1/2"	2
25/8" 31/4" 31/2" 4" 4" 5" 6" 6" 6"		$ \begin{array}{cccccccccccccccccccccccccccccccccccc$	115% 155% 155% 155% 155% 155% 155% 155%	1 ½" 3½" 7,8" 7,8" 7,8" 7,8" 1"	2 3 6 8 9 9 13 17 20 27 28 33 49 61 74 83
$3\frac{74}{2}$ "		41/2"	15/8"	7/8"	9
$\frac{31}{2}''$		43/4"	15/8"	1/8"	9
4"		63/8"	$\frac{2}{2}$ "		17
4"	1"	7″	21/2"	1"	20
5" 4"	11/4"	734" 8" 834" 10" 12" 13" 14" 15" 18"	21/2"	1" 1" 1" 1"	27
5"	11/2" 11/2" 2" or 31/2" 2" or 31/2" 2" or 31/2" 2" or 31/2" 2" or 31/2"	83/4"	21/2"		33
6"	2" or 3½"	10"	234"	1 1/4" 1 1/4" 1 1/4" 1 3/8" 1 3/8" 1 5/8"	49
6"	2" or 3½" 2" or 3½" 2" or 3½"	12"	31/4"	114"	61
6"	2" or 31/2"	14"	31/4"	13/8" 13/8" 15/8"	83
6"	2" or 3½"	15"	31/2"	15/8"	94
6"	2" or 3½"	18"	31/2"	15/8"	133

We are often requested to supply Face Plate Casting of proper dimensions for the different Chucks which we furnish. The above table will give the dimensions of the Standard Plates we are prepared to furnish. We have Patterns and can supply many sizes not included in the above list.

We can make finished Face Plate ready to attach to machine if furnished with suitable gauge.

Dimension C is diameter of recess in back of our Chucks. Face Plate Castings are large enough to finish to this size.





Approximate Dimensions in Inches

Rated Size	A	В	C	D	E	G	Н
3	31/8	5/8	23/8	$1\frac{17}{32}$	15/8	$\frac{17}{32}$	11/4
4	41/4	1	3	$2\frac{1}{16}$	$2\frac{5}{32}$	$\frac{27}{32}$	$1\frac{11}{16}$
5	5	$1\frac{1}{4}$	4	$2\frac{3}{16}$	$2\frac{5}{16}$	3/4	1 15
6	61/8	11/2	41/2	$2\frac{5}{16}$	$2\frac{7}{16}$	1 16	21/
71/2	71/2	2 .	43/4	$2\frac{11}{16}$	$2\frac{13}{16}$	$1\frac{3}{16}$	31
9	9	$2\frac{1}{2}$	6	23/4	27/8	13/4	31/
101/2	103/4	3	63/8	23/4	$2\frac{15}{16}$	1 13	33/4
12	12	3	7	$2\frac{13}{16}$	3	$1\frac{11}{16}$	4
14	14	3	7	31/8	3 5	$1\frac{11}{16}$	4
15	15	31/4	8	3 9	33/4	1 116	41/

SKINNER PLANER CHUCKS

Round, Square and Square Swivel Base

The Planer Chucks illustrated on pages 53, 54 and 55 are designed for holding a large variety of work. They are quickly adjusted from naught to the full capacity of Chuck.

The construction of the Jaws is such that the tendency of the work to "buckle" is eliminated and the object held will not raise up under the most severe conditions.

The front jaw is also made so that it is adjustable for tapor work.

They are built in sixteen sizes, heavy and strong throughout, and are so constructed that when the work (either straight or taper) is chucked it will not raise or slip.

A tool for hard service, such as railroad shops, navy yards and shops where the work is severe.

A necessary Planer Equipment.

SPECIFICATIONS

BODY—These Chucks are very heavy and powerful, having an abundance of strength, and guaranteed not to spring under the severest service. They are nicely finished. The upper section of the Round Swivel Base Chuck is accurately graduated and carefully fitted to the base.

JAWS—Of such proportions as to permit of repeated redressing after having been bruised in service.

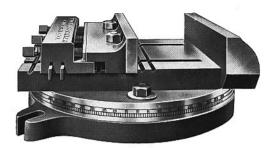
SCREWS—Set screws and holding strips are of crucible steel. Set screws and nuts are hardened.

WRENCH—A case hardened forged steel wrench is furnished with each Chuck.

FITTING—The Round Base Chucks have rib $1\frac{1}{4}$ " wide cast on bottom which can be machined to fit slot in planer table, and also have two ears for bolting to table.

The Square Base Chucks have a flange on all sides for clamping to machine table.

SKINNER PLANER CHUCKS



Round Swivel Base

The heaviest and strongest Planer Chuck made.

This Chuck is made heavy and strong throughout, and accurately graduated in degrees. Holds either straight or taper work, and the jaws are so constructed that work will not raise from the bed. The jaws are heavy and will permit of repeated dressing after having become bruised from hard service.

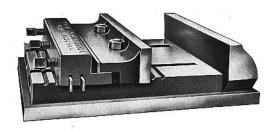
Round Base Chucks have a rib $1\frac{1}{4}$ inches wide cast on bottom, to fit in planer table. This rib adds to the strength of the Chuck and the machining of the rib is a simple operation.

Size Chuck No.	List Price	Code Word	Length of Jaw Inches	Depth of Jaw Inches	Jaws Will Open Inches	*Space Re- quired Inches	Approx. Shipp'g Weight Lbs.
6R	\$32.00	 Vacant	7	1½	31/2	10	77
8R	38.00	Vagary	9	17/8	5	111/2	95
10R	45.00	Vague	11	23/8	6	14	165
12R	54.00	Vain	13	23/8	8	16	220
15R	70.00	Valet	151/2	21/2	91/2	20	310
18R	90.00	Valid	181/2	23/4	111/4	22	442
24R	130.00	Valor	241/4	23/4	16	26	722
30R	200.00	Valve	301/4	3	211/2	33	1200

*When necessary to use Chuck at angle 45 degrees, space required will be greater.

See Specifications on page 52.

SKINNER PLANER CHUCKS



Square Base

This Chuck is made heavy and strong, and will not spring under the heaviest work. A strip of steel is fitted to the movable jaw to take the thrust of the set screws. All nuts are case hardened, and a forged steel wrench goes with every Chuck.

Size Ch'k No.	List Price	Code Word	Length of Jaw, Inches	Depth of Jaw, Inches	Jaws Will Open, Inches	Space Required, Inches	Approx Ship'g Wght., Lbs.
6S	\$22.00	Veto	7	1½	31/2	7¼x11	55
88	27.00	Vital	9	17/8	5	9 x12½	68
10S	32.00	Vice	11	23/8	6	11 x15	110
12S	38.00	Vide	13	23/8	8	13 x17	130
15S	50.00	Viol	151/2	21/2	$9\frac{1}{2}$	15½x21	234
18S	64.00	Visit	181/2	23/4	111/4	18½x24	320
24S	92.00	Vouch	241/4	23/4	16	241/4x28	508
30S	175.00	Vulcan	301/4	3	$21\frac{1}{2}$	30½x34	1056

Square Base Chucks have a flange on all sides for clamping to planer table.

See specifications on page 52.

SKINNER SHAPER AND PLANER VISE



Square Swivel Base

This Vise was designed more especially for use on shapers but will also give good service on planers and milling machines. It is very much stronger than the ordinary shaper vise and in fact is the best tool of its type on the market.

A hardened wrench, four bolts and nuts are furnished with

One or more ribs are cast on the bottom of the base according to the construction of the table. These can be machined to fit machine table.

In ordering be sure to send sketch showing location of slots in table to which the Vise is to be fitted.

Size Chucki No.	List Price	Code Word	Length of Jaw, Inches	Depth of Jaw, Inches	Jaws Will Open	Diman- sions of Base	Thick- ness of Base
6V		Vacuum	7	11/2	31/2	121/2	1
8V	57.00		9	17/8	5	141/2	11/8
10V		Valise	11	23/8	6	161/2	1 1/4
12V		Valley	13	23/8	8	191/2	1/4
15V	105.00		$15\frac{1}{2}$	21/2	$9\frac{1}{2}$	21	1 1 1 1 1 1 1 1
18V		Vampire	$18\frac{1}{2}$	23/4	111/4	23	13/8
24V	195.00	Vandal	$24\frac{1}{4}$	23/4	16	29	1 16

Specifications on page 52.

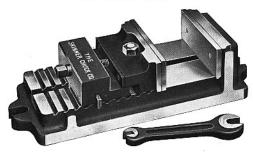
TOOL MAKERS' VISE



Described on Page 56.

SKINNER DRILL PRESS VISES

"The Handy Tool"



This Vise is designed for holding work on a drill table. It is similar in construction to the Skinner Planer Chuck, but more portable and convenient for use on a drill. It can also be used to advantage on Planers, Shapers, Milling Machines, etc.

It is a very handy tool to have in the machine shop.

Size No.	Width Jaw, Inches	Depth Jaw, Inches	Jaws Open, Inches	Approx. Ship. Weight, Lbs.	Space required Inches	Price Each	Code Word
$^{*2}\frac{1}{2}$ $^{3}\frac{1}{2}$ $^{4}\frac{1}{2}$ $^{5}\frac{1}{2}$ $^{7}\frac{1}{2}$	$2\frac{1}{2}$ $3\frac{1}{2}$ $4\frac{1}{2}$ $5\frac{1}{2}$ $7\frac{1}{2}$	1 1 ³ / ₈ 2 2 2 ¹ / ₂	$2\frac{1}{2}$ $4\frac{3}{4}$ 5 6 9	$ \begin{array}{c} 4\frac{1}{4} \\ 12 \\ 37 \\ 43 \\ 98 \end{array} $	6x2½ 95/8x4½ 14x5¼ 15x6 19¾x9	\$10.00 12.00 15.00 18.00 30.00	Vernon

SPECIFICATIONS

BODY—Carefully machined and highly finished casting, provided with lugs on side so vise may be used at right angles.

JAWS—Of good proportion with steel faces. "V" grooves can be cut in these jaws for holding round work. Instant adjustment can be made of jaws from 0 to greatest capacity. Either straight or taper work can be held.

SCREWS—Set screw and holding strip of crucible steel, and set screws and nuts hardened.

WRENCH—A case hardened forged steel wrench is furnished with each vise.

FITTING—Bolted to drill, planer, miller or shaper by ears at both ends of vise. Vise also has flange on all sides for clamping.

*Illustrated on page 55.

SKINNER EMERY WHEEL BUSHING CHUCK

21/2" diameter 36" inclusive. 2 With the machine we furnish arbors or mandrels from 14" diameter to This machine is adapted for bushing Emery Wheels from 3" We also furnish with the machine a Bushing Cleaner inclusive.

desired size the holes in such wheels as may be required with holes of different sizes than they advantage of Dealers who carry Emery Wheels in stock will appreciate the device of this kind as it will enable them to quickly rebush to any might have in

Write for circular illustrating and describing the machine in detail.

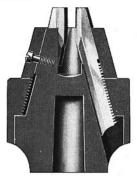
Price quoted upon application.

SKINNER DRILL CHUCKS

(Patented)

"NEW MODEL"





The Skinner "New Model" Drill Chuck is especially adapted for all light and rapid drilling, such as is done on sensitive Drills and hand Lathes, and where accuracy is required. The Chuck is operated by hand, and tightened by means of a spanner wrench.

The Chuck may be taken apart readily for cleaning and oiling by removing the three screws in the cap, taking that off, and revolving the nut enough to disengage the Jaws. In putting the Chuck together it is necessary to notice that the number of the Jaw corresponds with the number of the slot in the Chuck body.

A hole the full capacity may be drilled through the center without injury to the Chuck, making it convenient to use for holding rods, etc.

The Jaws are ground true in the Chuck after the Jaws are hardened.

Every Chuck is guaranteed to be accurate.

No.	Price List	Capacity Inch	Outside Diam., Inches	Lgth. of Body, Inches	Total Length Jaws Ext'd Inches	Code Word
11	\$5.50	0 to 7	13/8	$\frac{1\frac{9}{16}}{2\frac{1}{8}}$	21/8	Many More
$\frac{12}{13}$	$\frac{5.50}{9.00}$	0 to $\frac{3}{8}$ 0 to $\frac{17}{32}$	$2^{\frac{15}{16}}_{\frac{11}{16}}$	$3\frac{278}{16}$	$4\frac{16}{16}$	Most

Center Arbors for Drill Chucks are illustrated on page 62.

SKINNER DRILL CHUCKS

(Patented)

"GEARED PATTERN"





The Skinner "Geared Pattern" Drill Chuck is recommended for use on Drills and Lathes because of its Accuracy and Convenience. The Gears are all enclosed "beneath the surface" (patented) of the Chuck away from chips and dirt. The Chuck is hand operated save for final grip on drill, by means of a common wrench, which has no tendency to revolve the spindle of the lightest machine. It is made entirely of steel and of such grades as are best adapted for the different parts.

To get at the gearing of this Chuck take out the two small screws on opposite sides of nut, remove the sleeve, and the pinion gears can then be removed.

For instructions to take Chuck apart, cleaning, oiling, drilling hole through center, regarding accuracy, see last four paragraphs on opposite page, referring also to New Model Chuck.

No.	Price Each	Capacity, Inch,	Outside Diam., Inches	Lgth. of Body, Inches	Total Length Jaws Ext'ded, Inches	Code Word
21 22 23 24	\$7.00 8.00 11.00 20.00	0 to ½ 0 to ¾ 0 to ¾ 0 to ½ 1 to ¾	$\begin{array}{c} 1\frac{5}{8} \\ 2\frac{5}{32} \\ 2\frac{3}{4} \\ 3\frac{1}{2} \end{array}$	$\begin{array}{c} 1\frac{19}{32} \\ 2\frac{1}{8} \\ 3\frac{1}{16} \\ 3\frac{7}{8} \end{array}$	$\begin{array}{c} 2\frac{1}{8} \\ 2\frac{13}{16} \\ 4\frac{1}{16} \\ 5\frac{1}{8} \end{array}$	Bowers Baker Carter Kahms

Center Arbors for Drill Chucks illustrated on page 62.

SKINNER DRILL CHUCKS

"STANDARD"

(Improved Pattern)



The Body of this Chuck is made of a special grade of steel and will not break in service. The Face Plate adds to the strength of the body and also prevents larger work than the Chuck is designed for being used.

The Jaws are of tool steel, accurately machined, carefully tempered, and fitted to work smoothly in the body of the Chuck and on the screws. Observe that the Jaws do not project through the Face Plate.

The operating Screw—the vital part—is larger than that of any other Chuck of like capacity of this type, and is made of a special analysis tool steel of great tensile and torsional strength. The hole in the back of the Chuck is tapered to receive the Arbor, but can be bored out and threaded to customer's template at small additional cost.

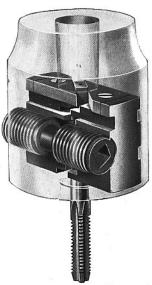
All parts are interchangeable.

No.	List Price Each	Capacity Inches	Diameter Inches	Length Inches	Code Word
41	\$6.00	0 to 1/4	13/8	$2\frac{3}{32}$	Obey
42	6.50	0 to 3/8	111	$2\frac{15}{32}$	Oblige
43	7.00	0 to $\frac{1}{2}$	$2\frac{3}{16}$	$2\frac{13}{16}$	Object
44	8.00	0 to 3/4	27/8	$3\frac{3}{8}$	Octave
45	10.00	0 to 1	376	41/4	Option

Center Arbors for Drill Chucks illustrated on page 62.

SKINNER DRILL CHUCKS

"POSITIVE DRIVE"



The Body, Jaws and operating Screw of this Chuck are made of the same carefully selected material as the Standard

Improved Chuck described on the preceding page.

The patented improvement in this Chuck consists in a set of adjustable Positive Drive Jaws for holding taps, drills and other tools. The positive driving section of these jaws adjust with the friction or centering jaws, so that the fastening of the tool is done in one operation. By the use of the Positive Drive Jaws it is not necessary to grip tightly with the friction jaws (just center the tool); this insures greater accuracy and long life of Chuck and does away with breaking of adjusting screws.

The shank of tool should be squared or flatted on two sides,

to engage the positive drive jaws.

These Chucks are used as regular equipment for tapping machines of the largest manufacturers of tapping machines in this country.

No.	List Price Each	Capacity Inches	Diameter Inches	Length Inches	Code Word
50	\$8.00	0 to 3/8	111	21/4	Flower
$\frac{51}{52}$	9.00	0 to $\frac{1}{2}$ 0 to $\frac{3}{4}$	$\frac{2\frac{3}{16}}{2\frac{7}{8}}$	$\frac{2\frac{7}{16}}{3}$	Friend Fever
53	12.00	0 to 1	$\frac{3\frac{7}{16}}{1}$	33/4	Felon

Center Arbors for Drill Chucks illustrated on page 62.

SKINNER CENTER ARBORS FOR DRILL CHUCKS

Made of Steel with Hardened Tang and Ground True to Gauges.

We carry a complete stock of all Standard Taper and Straight Shank Arbors to fit every make and size Drill Chuck on the market.



MORSE TAPER ARBORS

To Fit any size or make of Chuck.

	_								Li	st Price
Morse		Shanks		1,						\$1.00
"	"	"	"	2,		5000		00		1.00
"	"	"	44	3.	100	1020	100			1 25
"	"	44	"	4		22.5		18	- 10	2.00
44	"	"	**	5	*		69	*		2.00
117.	.l., f.,		_	Ε,	. 01	1.		•		0.00

We also furnish Morse Taper Shank Arbors with end for Chuck left blank, to be fitted by customer.



PLAIN ARBOR WITH BLANK SHANK

4½ inches long, and ¾ inch or 1 inch diameter.
List Price

Fitted to ¼ inch, ¾ inch and ½ inch Drill Chucks
Fitted to ¾ inch Drill Chucks

1.00

1.00

1 25

PLAIN ARBOR WITH NUT, BLANK SHANK 4½ inches long, and ¾ inch or 1 inch diameter.

Fitted to 1 inch Drill Chucks

Price on application.



ARBOR FOR BLACKSMITH DRILL PRESS with ½ inch, or ‡‡ inch shank.

Fitted to ¼ inch, ¾ inch, and ½ inch Chuck, Fitted to ¾ inch Chuck, Stated to ¾ inch Chuck,

Fitted to 1 inch Chuck, 1.25
We will be glad to quote prices on special arbors not listed above.

TELEGRAPHIC CODE

Cable Address, "SKINNER, NEW BRITAIN."

We use Lieber's Standard Code, and Lieber's 5 Letter American, the Western Union Code, New Business Code, and our own.

We have arranged a telegraph code for the convenience of our customers at a distance. In messages any words not found in codes will be read literally.

GENERAL INSTRUCTIONS

Enter our order and ship as soon,as	possib	ole,		Profuse
Enter our order, will send shipping by mail,	g instr	uction	ns 	Problem
Quote by mail lowest price on, .			• 1	Provide
Send tracer immediately for your s	hipme	nt of,		Proceed
Ship immediately as usual,	٠.			Pulley
Ship immediately via freight,	•			Public
Ship immediately via express,				Profit
Wire immediately how soon you ca	n ship	,		Process
Wire lowest price on,	٠	•		Produce

SHIPPING INSTRUCTIONS

When definite shipping instructions are not furnished, we will forward goods by cheapest route.

TELEGRAPH CODE SKINNER UNIVERSAL GEARED SCREW CHUCKS

Figure 300

Three-Jaw Universal Chucks

Price List, Pages 24 and 26

Rated Size of Chuck	Common Jaw Chuck, A	Chuck Style B Jaws with Outside Bite	Chuck Style C Jaws with Inside Bite only	Milling Machine Chuck, D	2-Piece Reversible Jaw Chuck, J
3-inch	Ale	Bid	Cat	Dame	Jump
4 "	Aid	Bed	Cane	Damp	Jeer
5 "	Abbe	Bad	Cab	Dance	Job
6 "	Ark	Bat	Cage	Dark	Jet
8 "	Ant	Bell	Case	Dash	Joke
9 "	Act	Bask	Cake	Dead	Jail
12 "	Ace	Burn	Cam	Deaf	Jamb
15 "	Ache	Bake			Jar
18 "	Add				Jean
21 "	Ax				Joy
24 "	Air				Jerk
27 "	Awl				Jade
30 "	Age				Jest
36 "	Aim				Jug
42 "	All				Junk



Figure 400

Four-Jaw Universal Chucks

Price List, Pages 25 and 26

Rated Size of Chuck	Common Jaw Chuck,	Chuck Style B Jaws with Outside Bite	Chuck Style C Jaws with Inside Bite only	Milling Machine Chuck, D	Reversible Jaw Chuck, J
4-inch 5 " 6 " 8 " 9 " 12 " 15 " 18 " 21 " 24 " 30 "	Abel Abner Albert Adam Allen Arthur Andrew Asa Amos Amzi Agnes Astoria Alice	Bessie Basil Brown Benton Banning Burritt Black	Carrol Chauncey Carleton Chadwick Chester Carleson	Damon Devitt Dante Desmond Daniel David	Jumbo John Jackson Juno James Jennie Justin Jefferson Julia Johnson Jenkins Joseph Joyce Jay

THE SKINNERTCHUCK CO.

SKINNER CHUCK CO.

TELEGRAPH CODE SKINNER COMBINATION GEARED SCREW CHUCKS

Figure 600

Three-Jaw Combination Chucks

Price List, Pages 24 and 26

Rated Size of Chuck	Common Jaw Chuck, A	Chuck Style B Jaws with Outside Bite	Chuck Style C Jaws with Inside Bite only	Milling Machine Chuck, D	Reversible Jaw Chuck, J
3-inch	Acorn	Baby	Cadet	Deny	Jelly
4 "	Active	Ballad	Calico	Depart	Jaded
5 "	Actor	Ballot	Canal	Depress	Jasmine
6 "	Acute	Bedim	Cancel	Deprive	Jury
8 "	Admire	Barber	Candle	Deride	Jasper
9 "	Admit	Barefoot	Candy	Deplore	Jolly
12 "	Adorn	Baron	Castle	Despair	Jackal
15 "	Adult	Basin		•	Jailer
18 "	Advent	**			Jealous
21 "	Adverb	35			Jesting
24 "	Advice				Jerkin
27 "	Action				Justice
30 "	Afford			82	Jockey
36 "	Afflict				Joyful
42 "	Agate				Juicy

TELEGRAPH CODE SKINNER COMBINATION GEARED SCREW CHUCKS

Figure 800

Four-Jaw Combination Chucks

Price List, Pages 25 and 26

Rated Size	Common Jaw	Chuck Style B	Chuck Style C	Milling Machine	Reversible Jaw
of	Chuck,	Jaws with	Jaws with	Chuck,	Chuck,
Chuck	A	Outside Bite	Inside Bite only	D	J
4-inch 5 " 6 " 8 " 9 " 12 " 15 " 18 " 21 " 24 " 27 " 30 " 36 " 42 "	Arctic Atlantic Africa Asia Azores America Alaska Austria Arabia Amazon Ansonia Austin Annapolis Andes	Behring Buffalo Boston Brooklyn Brunswick Bristol Berlin	Canton Crimea Cypress Cuba Corinth Corea	Dakota Danube Darien Detroit Delaware Dresden	Jena Judea Japan Johnstown Jamacia Judith Jura Jutland Jordan Jersey Java Juniata Joanes Jassy

TELEGRAPHIC CODE—TWO-JAW CHUCKS BOX BODY CHUCKS

With Reversible Jaws (Double Dove-Tailed)

List Price, Page 37

Universal, Figure No. 327 with face plate recess. Independent, Figure No. 328

Universal, Figure No. 325 Independent, Figure No. 326

Size Inch	Code Word for 327	Code Word for 328	Code Word for 325	Code Word for 326
7	Dispart	Disdain	District	Distyle
9	Dispirit	Disdanful	Distrain	Disfigure
12	Displace	Disease	Distraught	Disgrace
15	Discreet	Discuss	Distinction	Disgraceful
18	Discovery	Discrete	Distrait	Disgust
21	Disable	Disagree	Disappear	Disapprove
24	Disabuse	Disallow	Disappoint	Disarm

ROUND BODY CHUCK

With "V" Groove in Jaws

Universal, Figure No. 21 Independent, Figure No. 23

Price List, Page 34

Size, Inch	Style 21, V Jaws, Universal	Style 23, V Jaws, Independent
41/2	Dishorn Disinvite	Disgarnish Dishabit
7	Dislive	Dishonor
9	Dislodge	Disloyal
12	Dismal	Dismay
15	Disaster	Disavow

TELEGRAPHIC CODE—TWO-JAW CHUCKS BOX BODY CHUCK

With Slip Jaws

Universal, Figure No. 27 Independent, Figure No. 28 with face plate recess.

Universal, Figure No. 25 Independent, Figure No. 26 with hub.

Price List, Page 36

Size Inch		Style No. 28	Style No. 25	Style No. 26
7	Display	Dissuade	Dissipate	Distract
9	Displume	Distant	Dissonant	Distringas
12	Dispose	Distil	Distaste	Disvalve -
15	Disprove	Disunion	Distend	Disvouch
18	Disrupt	Disuse	Distinct	Distune
21	Disband	Disbelief	Discard	Disclose
24	Disbar	Disc	Discern	Disclaim

ROUND BODY CHUCK

With Slip Jaws

Price List, Page 35

Size, Inch	Style 22, Slip Jaws, Universal	Style 24, Slip Jaws, Independent	
4½	Displant	Disrange	
6	Disposal	Disorbed	
7	Disputant	Dispark	
9		Dispel	
2	Dissect	Dismiss	
5	Disjoin	Distort	
	4½ 6 7 9	nich Slip Jaws, Universal 4½ Displant 6 Disposal 7 Disputant 9 Disrepute 2 Dissect	nech Slip Jaws, Universal Slip Jaws, Independent 4½ Displant Disrange 6 Disposal Disorbed 7 Disputant Dispark 9 Disrepute Dispel 2 Dissect Dismiss

INDEX

	Page
Arbors for Drill Chucks	62
Boring Mill Jaws, Double Rib—Iron Body,	18
" " Steel Body,	18
Box Body Lathe Chucks, Two Jaws34	
Brass Workers' Chucks, Figure 200G	32
Castings, Face Plate	50
Combination Lathe Chucks, Geared Screw-Iron	
Body, Three Jaws, Figure 600 & Four	
Jaws 800	-25
Combination Lathe Chucks, Geared Scroll-Iron	
Body, Three Jaws, Figure 6500 & Four	
Jaws 850048	-49
Cutting-Off Machine Chucks, Figure 0300E	30
Directions for fitting Chucks to Machines	7
Drill Chucks	
New Model	58
Geared Pattern	59
Standard Improved	60
Positive Drive	61
Drill Press Vises	56
Emery Wheel Bushing Chucks	57
Face Plate Jaws, Single Rib-Iron Body, Figure 95	17
" " "—Steel Body, Figure 97	17
Grinding Machine Chucks	12
Independent Lathe Chucks, Four Jaws-Iron Body,	
Figure 900	8
Independent Lathe Chucks, Four Jaws-Steel Body,	
Figure 1900	10
Independent Lathe Chucks, Three Jaws-Iron Body,	
Figure 9200	15
Independent Lathe Chucks, Four Jaws-Iron Body,	
Figure 100-J	12
Independent Lathe Chucks, Light Pattern-Iron Body	
Figure 9300 & 9400	14
Milling Machine Chucks	27
Planer Chucks-Round, Square, and Square Swivel	25776
Base53-	-54
Reamer and Assembling Stands	29
December 1 Declared 1	0=

INDEX, Cont.

	i i	Page
	Special Chucks	5
	Repairs	5
	Telegraphic Code	-69
	Two-Jaw Lathe Chucks—Round Body	-37
	" " " —Box Body	-35
	Tool Makers' Vises	55
	Universal Lathe Chucks, "Geared Screw"—Iron Body	
	Three Jaws, Figure 300 & Four Jaws 400.24	-25
	Universal Lathe Chucks, "Geared Screw"-Heavy	
	Pattern, Figure 0300E	30
	Universal Lathe Chucks, "Geared Scroll"—Iron Body,	
	Three-Jaws—Figures 3100 to 3500	-42
	Four Jaws—Figures 4100 to 450039	3-42
	Universal Lathe Chucks, "Geared Scroll"—Steel Body	
	Three Jaws—Figures 3600 to 3800	
	Four Jaws—Figures 4600 to 480043	-45
8	Universal Lathe Chucks "Geared Scroll" Light Pat-	
	tern—Iron Body	
	Three Jaws—Figures 5100 to 540046	j-47
	Four Jaws—Figures 7100 to 740046	<u>-47</u>
	Vises for Drill Press	5–56
	Vises for Shapers55	5–56