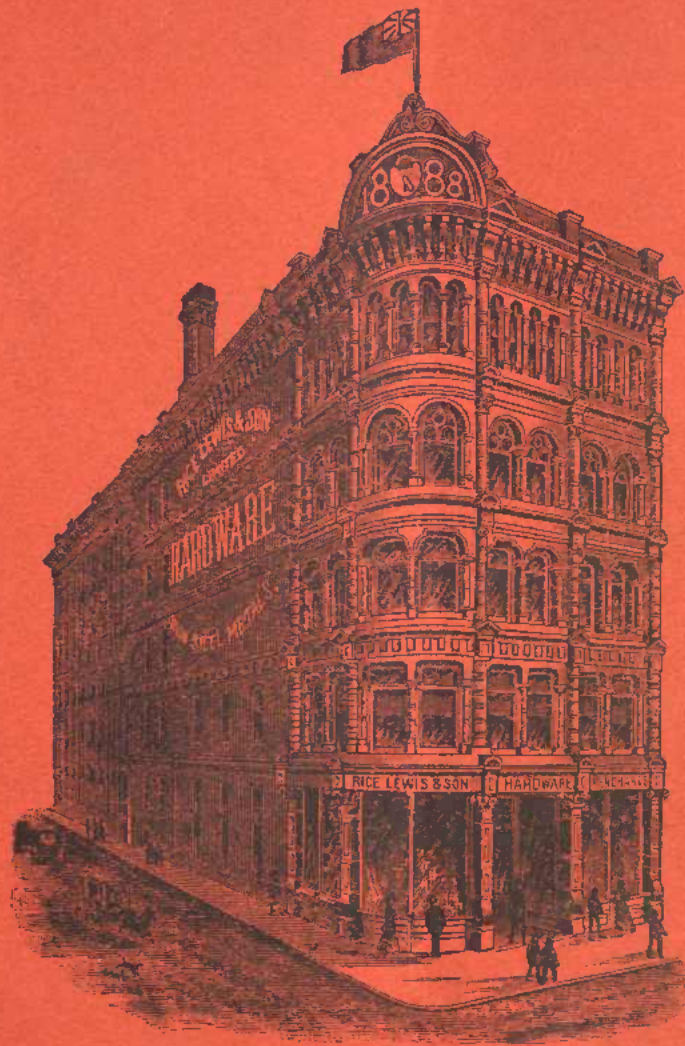


# Bicycle Accessories

1900



1900

# RICE LEWIS & SON

LIMITED

**TORONTO,**  
CANADA



# TO THE TRADE

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*In presenting this our SIXTH ANNUAL CATALOGUE of BICYCLE ACCESSORIES, COMPONENT PARTS, etc., issued for the benefit of BICYCLE DEALERS, MANUFACTURERS and REPAIR MEN, we beg to call special attention to the many new lines we are now handling, many of which we are SOLE AGENTS for.*

GUARANTEED GOODS are sold only on Maker's Guarantee; we assume no personal liability.

IN ORDERING give full particulars. It will often save correspondence and delay by referring to Figures and Numbers in Catalogue. Parties not having an account will please, remit with order, and if goods are to be sent by mail include sufficient for postage. GOODS OR SAMPLES ORDERED OR RETURNED BY MAIL ARE AT CUSTOMER'S RISK.

**TERMS: NET CASH.**

**RICE LEWIS & SON,**  
Limited.

TORONTO, February, 1900.

AR  
688.76602  
R37.2  
1900

# B. S. A. FITTINGS

NICKEL-PLATED POINTS. FULL MACHINED.



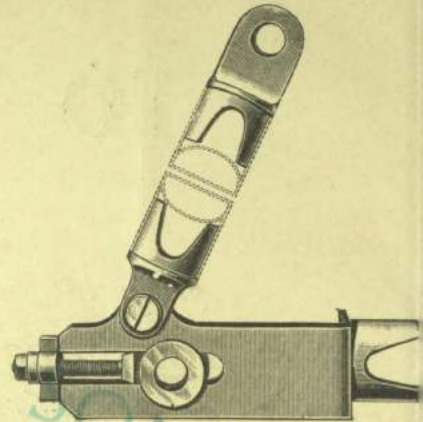
No. 1

Gents' Ball Head,  $1\frac{1}{8}$ " or  $1\frac{1}{4}$ "  
 Sizes  $7\frac{1}{2}$ " to  $9\frac{1}{2}$ ".  
 Each, \$6.30.



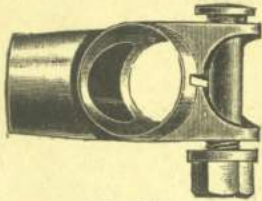
No. 2

Ladies' Ball Head,  $1\frac{1}{8}$ "  
 Sizes  $7\frac{1}{2}$ " to  $9\frac{1}{2}$ ".  
 Each, \$6.30.



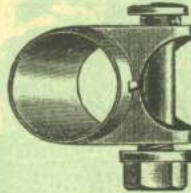
No. 9

Rear Fork and Back Stay Ends  
 for D tubes, and Chain adjusters.  
 Per set, \$2.15.



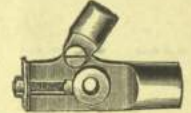
No. 3

Gents' Seat Post Lug and  
 N.P. Bolt,  $1\frac{1}{8}$ " x  $1\frac{1}{4}$ ".  
 Each, \$1.00.



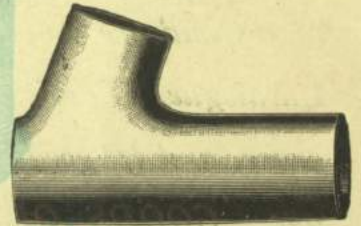
No. 4

Ladies' Seat Post Lug and  
 N.P. Bolt,  $1\frac{1}{8}$ ".  
 Each, \$1.00.



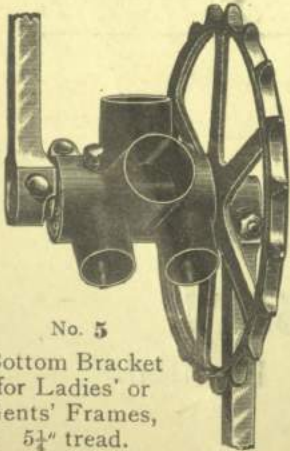
No. 10

Rear Fork and Lower Back Stay  
 End and Chain Adjusters.  
 Machined  $\frac{3}{8}$ " and  $\frac{5}{8}$ ", round tubes.  
 Per pair, \$1.20.



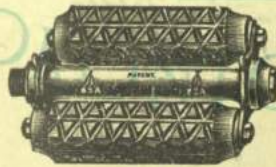
No. 11

Ladies' Top Tube Lug,  $1\frac{1}{8}$ " x  $1\frac{1}{8}$ ".  
 Each, \$1.00.



No. 5

Bottom Bracket  
 for Ladies' or  
 Gents' Frames,  
 $5\frac{1}{4}$ " tread.  
 16 to 20 teeth, each \$7.00;  
 sprockets over 20 teeth,  
 add 25c. tooth to list.



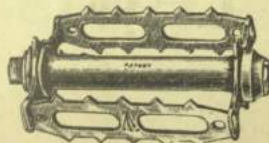
No. 6

Rubber Pedal.



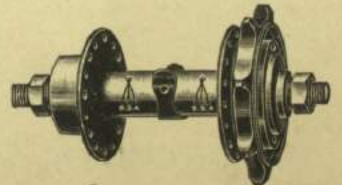
No. 12

Front Hub.



No. 7

Rat-trap Pedal.



No. 13

Rear Hub.

# SETS OF B. S. A. FITTINGS

MACHINED READY FOR TUBES WITH NICKEL-PLATED POINTS

## B. S. A. SET No. 1

Gents' or ladies' roadster frame, consisting of bottom bracket (No. 5), 16 to 20 teeth; ball head (No. 1), seat post lug with nickel-plated bolt (No. 3), D pattern rear fork ends with nickel-plated chain adjusters and D pattern back stay ends (No. 8), pair of hubs (Nos. 12 and 13), 7 or 8 teeth; D pattern weldless rear forks and back stay tubes (Nos. 85 and 86) .....PRICE PER SET, \$20.00

## B. S. A. SET No. 2

Gents' or ladies' roadster, frame for round rear tubes, consisting of bottom bracket (No. 5), 16 to 20 teeth; ball head (No. 1), seat post lug with nickel-plated bolt (No. 3), rear fork ends with nickel-plated chain adjusters and lower back stay end (No. 10); pair of hubs (Nos. 12 and 13).....PRICE PER SET, \$18.00.

## SIZE OF TUBING

For gents', 1" top, 1 1/8" lower and down tubes, 7/8" rear forks. For ladies', 1 1/8" top, lower and down tubes, 7/8" rear forks.

# B. S. A. SUNDRY PARTS

## FOR REPAIRS ONLY

Back hub cups .....	each, \$0 35	Fork end back stay screws .....	each, \$0 05
Front hub cups .....	" 25	Seat-lug bolt, complete with nut and washer .....	" 30
Back hub cones .....	" 40	Seat-lug nuts .....	" 10
Front hub cones .....	" 25	" washers .....	" 05
Back hub nuts .....	" 05	Ball head top lug .....	" 60
Front hub nuts .....	" 05	" bottom lug .....	" 75
Back hub spindle and cones complete .....	" 1 00	Ball head, inside rings .....	" 20
Front " " " .....	" 75	" bottom socket rings .....	" 30
Back hub lock nuts .....	" 20	Handle-bar clips complete .....	" 1 50
Hub chain wheel, 7 teeth .....	" 80	Ball head bolt, complete with nut .....	" 25
" " 8 " .....	" 80	" " nuts .....	" 10
" " 9 " .....	" 1 00	" lock nuts .....	" 25
" " 10 " .....	" 1 20	" lock washers and lamp brackets, combined .....	" 30
Bottom bracket wheels and cranks combined, 16 to 20 teeth .....	" 3 00	Chain adjusters, N.P. ....	per pair, 60
" " " " 21 teeth .....	" 3 25	" " nuts .....	each, 05
" " " " 22 " .....	" 3 50	" " caps .....	" 10
" " " " 23 " .....	" 3 80	Hub steps .....	" 40
" " " " 24 " .....	" 4 00	Bottom bracket oil cups .....	" 15
Plain cranks, 6 or 6 1/2 inches long .....	" 1 50	Pedal pins .....	" 60
Crank cotter pins and nuts .....	" 20	" centres .....	" 60
Crank end screws .....	" 10	" cones .....	" 30
Spindles for bottom brackets .....	" 90	" locking nuts .....	" 05
Bottom bracket body .....	" 1 50	" side plates .....	" 15
Bottom bracket locking pin and nut .....	" 20	" ends .....	" 50
Bottom bracket cups .....	" 45	" dust caps .....	" 05



None Genuine without this Trade Mark



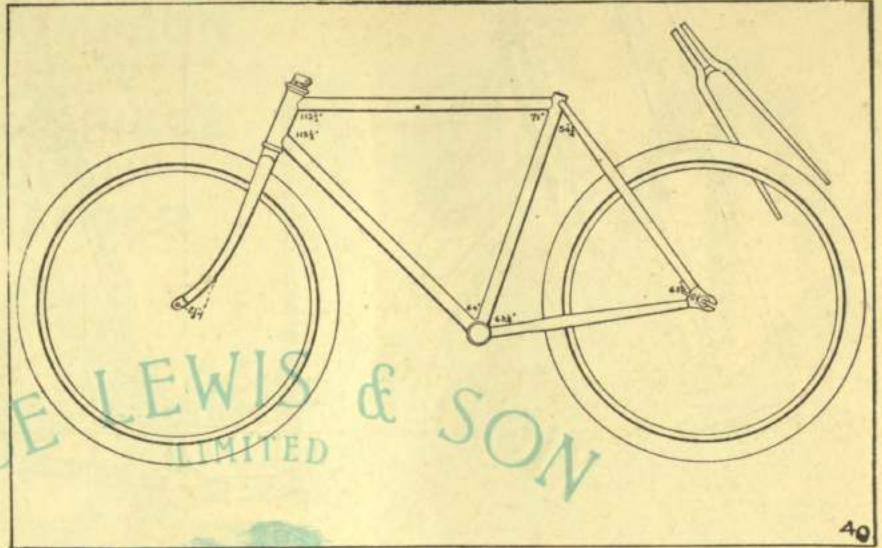


# SETS ELECTRICALLY WELDED STEEL FITTINGS

COMPLETE WITH SEAMLESS TUBES AND FORKS

**STOCK SIZES FOR FRAMES**  
22, 23½ and 26 inches.

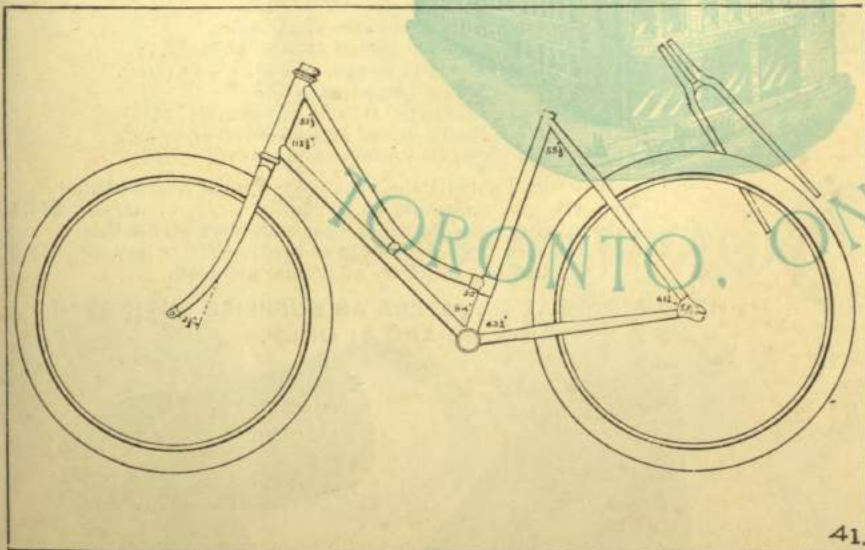
For 28" wheels, flush joint construction, with seat post cluster.  
Drop, 2¼", Wheel Base 45¾".  
Oval rear forks, 7/8", tapered to 3/4" at fork end.  
Oval rear stays 3/4", tapered to 5/8" at top end.  
Tread, 4¾".  
Tubing 1½" head, 1½" main frame, 7/8" forks, and 3/4" tapered rear stays.



## MODEL 40 FITTINGS

22-inch Frame. Gents' Shouldered Flush Joint. 28-inch Wheels.

- |      |   |      |  |
|------|---|------|--|
| No.  |   | No.  |  |
| W-21 | 112½°—flush head 1½ x 1½".                          | A-22 | Head locknut, tapped, 1"—24 pitch.           |
| E-26 | Seat post cluster—71" x 54¼"—1½ x 1½".              | A-31 | Head washer (check).                         |
| G-3  | Rear fork ends (pair), ¾"—18 gauge x ¾"—20 gauge.   | A-41 | Upper head cone, tapped, 1"—24 pitch.        |
| O-2  | Chain adjusters (pair), forged pattern.             | A-51 | Upper head cup for 22 3/16" balls.           |
| F-15 | Hanger Bracket—64" front x 63¼" rear—1½ x 1½ x 7/8" | A-61 | Lower head cups for 23 3/16" balls.          |
| B-4  | Hanger cups (pair), with 04 ball retainer.          | A-71 | Lower head cone and 45 steel balls 3/16".    |
| B-23 | Hanger cone (adj.), tapped, .875"—28 pitch (left).  | I-5  | Head stem, 16 gauge, thread, 1"—24 pitch.    |
| B-44 | Hanger cone (sta.), tapped, .875"—30 pitch (right). | J-7  | Arch crown, hollow, forged pattern.          |
| B-63 | Hanger locknut, tapped, .875"—28 pitch (left).      | K-4  | Forksides (pair), 1" x 19 gauge—2½" throw.   |
| B-84 | Hanger washer (check), and 26 steel balls 3/16"     | L-6  | Hubs (pair), drilled, 32 x 36—with sprocket. |
| A-3  | Handle-bar clamp.                                   | P-9  | 2 arch struts for forks and stays.           |
| A-11 | Bolt and nut for H. B. C.                           |      |  |



## MODEL 41 FITTINGS

**STOCK SIZES FOR FRAMES**  
21 and 23½ inches.

NOTE—MODEL No. 41 use same fittings as No. 40, substituting for W-21, head W-24; for E-26, lug E-29; and add flush centre thimble.

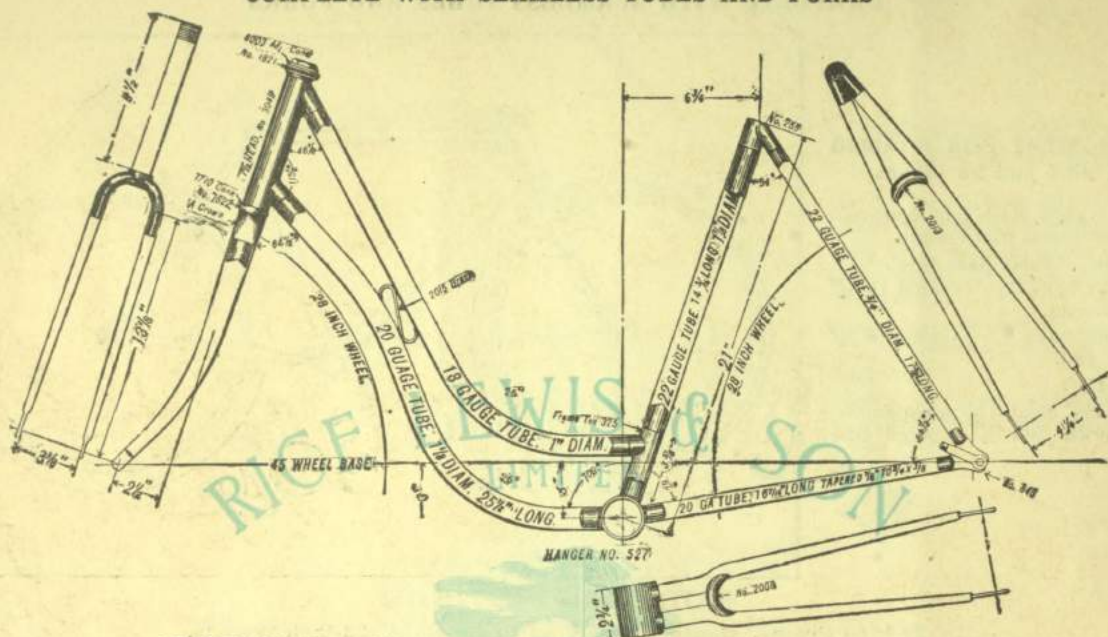
- |   |             |         |         |
|---|-------------|---------|---------|
| Sets as above with Thompson's No. 2 two-piece Crank Hanger, Nickel-Plated, sprockets up to 26-tooth | .....       | per set | \$12 00 |
| " " " Fauber Patent one-piece Special   | " " " " " " | "       | 13 50   |
| " " " Standard  | " " " " " " | "       | 14 50   |

Add 15c. for every additional two teeth.

See Page Six for Head and Seat Lugs, as used on above sets.

# SETS STEEL FITTINGS

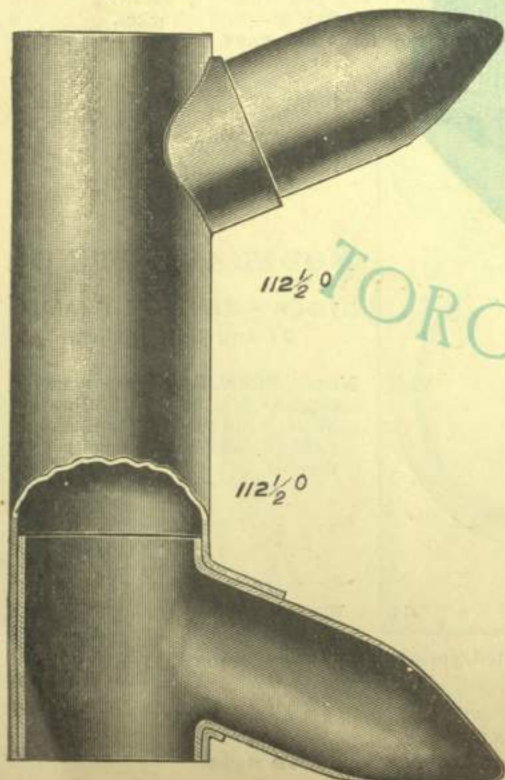
COMPLETE WITH SEAMLESS TUBES AND FORKS



**MODEL No. 51—Ladies' Shouldered Flush Joint—28-inch Wheels**  
 STOCK SIZES FOR FRAMES 21 and 23 1/2 inches.

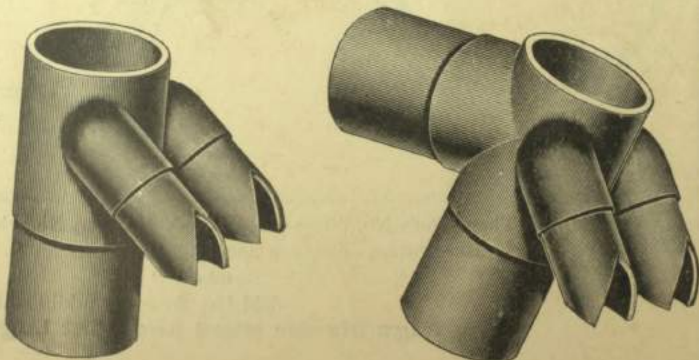
- No. 7-in. Ladies' Flush Head 116° x 48°—size 1 3/8 x 1 1/8".
- F E-13 Seat post cluster—55 1/4°—1 1/8".
- G-3 Rear fork ends (pair), 3/4"—18 gauge x 3/4"—20 gauge.
- O-2 Chain adjusters (pair), forged pattern.
- Fauber Special Crank Bracket—110° front x 63° rear—1 1/8 x 1 1/8 x 7/8".

- No. Fauber hanger cups (pair), with ball retainer,
- " hanger cone (adj.)
- " hanger cone (sta.)
- " hanger locknut, tapped.
- " hanger washer (check), steel balls 1/16".
- A-3 Handle-bar clamp.
- A-11 Bolt and nut for H. B. C.
- A-22 Head locknut, tapped, 1"—24 pitch.
- A-31 Head washer (check).
- A-41 Upper head cone, tapped, 1"—24 pitch.
- A-51 Upper head cup for 22 1/16" balls.
- A-61 Lower head cups for 23 1/16" balls.
- A-71 Lower head cone and 45 steel balls 1/16".
- I-5 Head stem, 16 gauge, thread, 1"—24 pitch.
- J-4 Arch crown, forged pattern.
- K-4 Forksides (pair), 1" x 19 gauge—2 1/2" throw.
- L-2 Hubs (pair), drilled 32 x 36—with sprocket.
- P-9 2 arch struts for forks and stays.



Sets as above with Fauber Patent one-piece **Special Nickel-Plated** Crank Hanger, sprockets up to 26-tooth ..... per set, \$14.50  
 Sets as above with Fauber Patent one-piece **Standard Nickel-Plated** Crank Hanger, sprockets up to 26-tooth ..... per set, \$15.50  
 Add 15c. for every additional two-teeth.

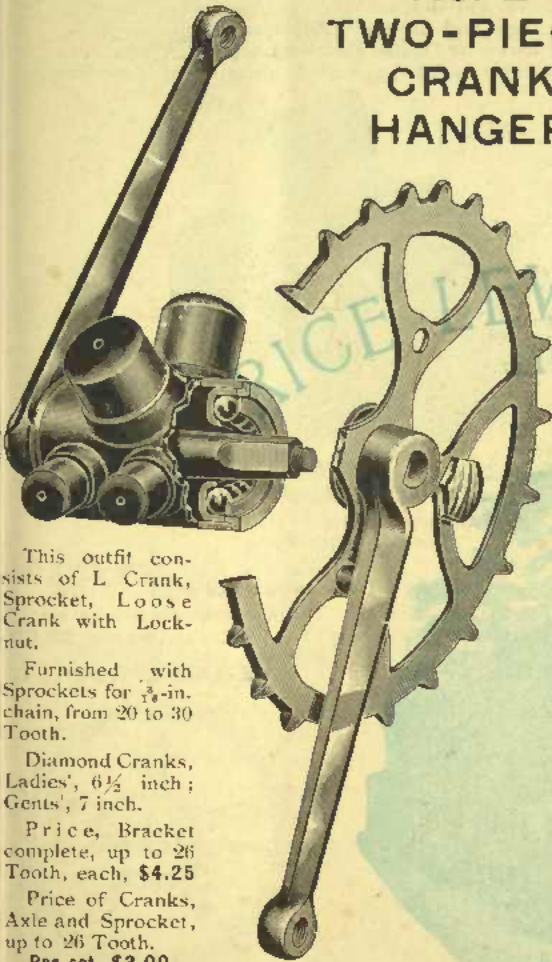
**HEAD AND SEAT CLUSTERS AS SUPPLIED WITH SETS**  
 Nos. 40 AND 41 ONLY.





# BRACKETS

## THOMPSON No. 2 TWO-PIECE CRANK HANGER



This outfit consists of L Crank, Sprocket, Loose Crank with Locknut.

Furnished with Sprockets for  $\frac{3}{8}$ -inch chain, from 20 to 30 Tooth.

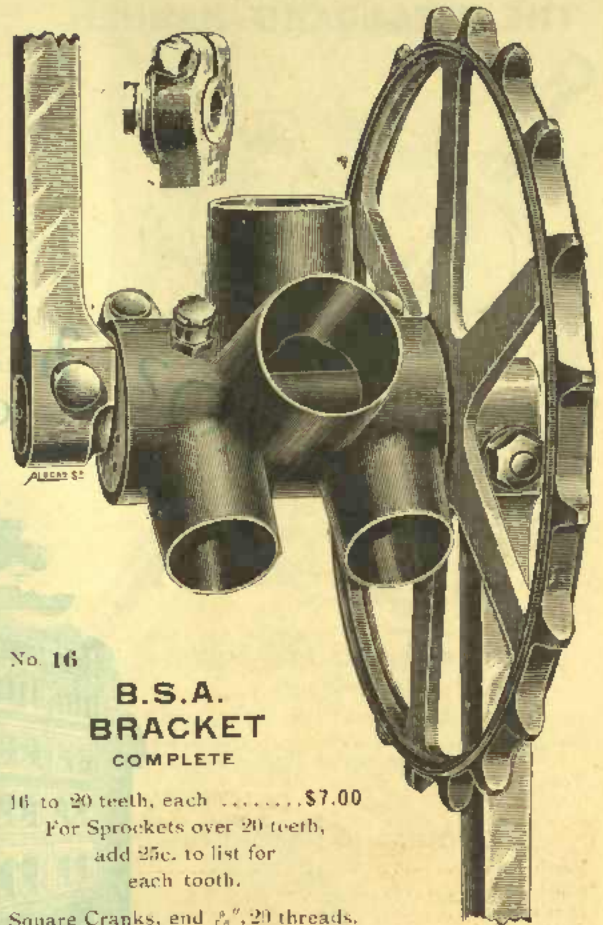
Diamond Cranks, Ladies',  $6\frac{1}{2}$  inch; Gents', 7 inch.

Price, Bracket complete, up to 26 Tooth, each, \$4.25

Price of Cranks, Axle and Sprocket, up to 26 Tooth.

Per set, \$3.00.

## B. S. A.



No. 16

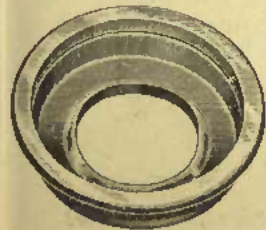
## B. S. A. BRACKET COMPLETE

16 to 20 teeth, each ..... \$7.00

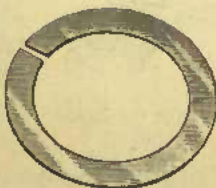
For Sprockets over 20 teeth,  
add 25c. to list for  
each tooth.

Square Cranks, end  $\frac{1}{8}$ " 20 threads.

## N.P. CRANK SHAFT FITTING



No. B-4 Hanger Cup  
for 13- $\frac{3}{8}$ " Balls.  
Each, 15c.



No. 04 Ball Retainer  
for No. B-4 Hanger  
Cup.



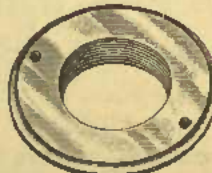
No. B-4 Hanger Cup  
and No. 04 Ball Retainer. Each, 15c.



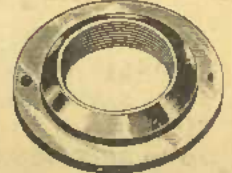
No. B-63 Locknut.  
Each, 6c.



No. B-84 Washer.  
Each, 3c.



No. B-23 Adjusting  
Cone. Each, 25c.



No. B-44 Stationary  
Cone. Each, 25c.

Sets Crank Shaft Fittings, 6 pieces, N.P., as above,  
per set, 85c.

Adjusting Cone and Lock-nut tapped .875" -23  
pitch (left), Stationary Cone tapped  
.870" -20 pitch (right).

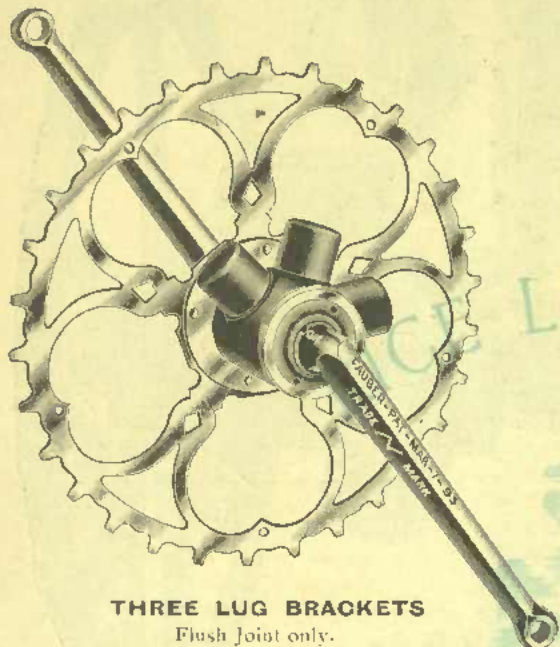
Only the Genuine Bear these Trade Marks

# W. H. FAUBER BICYCLE HANGERS

## THE STANDARD HANGER

## FAUBER ECCENTRIC HANGERS

Eccentric and Bracket made of Drawn Sheet Steel.  
Light and Strong. Adjustment Simple.  
Secured by Double Positive Locking Device.  
Lugs Adjustable to any Angle or Combination of Tube Sizes.



**THREE LUG BRACKETS**  
Flush Joint only.

Front and Middle Lugs	.....	1 1/8" and 1 1/4"
*Rear Lugs	.....	1 1/4" only.
(Rear Lugs match Fauber Forks)		
Tread	.....	4 1/2"      *Chain Line ..... 1 1/2"
Tread	.....	4 3/8"      Chain Line ..... 1 3/8"

### FOUR-LUG BRACKETS

Flush Joint	.....	1 1/4" x 7/8"
*Flush Joint	.....	1 1/8" x 3/8"
Flush Joint	.....	1" x 3/4"
Outside Joint	.....	1 1/4" x 3/4"
Outside Joint	.....	1 1/8" x 3/4"
Outside Joint	.....	1" x 3/4"

### SPECIAL FOUR-LUG FLUSH BRACKET

For Ladies' Frame with Curved Lower Bar.

Flush Joint	.....	1 1/8" x 7/8"
Tread, 1 1/4" or 1 1/8"	.....	4 7/8"
Tread, 1"	.....	4 1/2" or 4 1/4"
Chain Line, 1 1/4" or 1 3/8"	.....	1 5/8"
Chain Line, 1"	.....	1 3/8" or 1 1/2"

### ANGLES

Three and Four Lug Brackets.

		Front	Rear
2 1/2"	.....	Drop, 63°	63°
3"	.....	" 61°	61°
3 1/2" to 4", 30 in. wheels	.....	" 61°	59°

Special Ladies' Curved Lower Bar.

*2 1/2"	.....	Drop, 110°	63°
---------	-------	------------	-----

**Up to 26-Tooth Sprockets ..each, \$5.00**

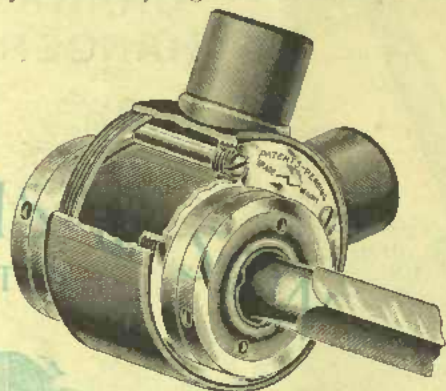
Add 15c. for every additional two teeth.

### SPECIAL TAPS

For Re-Tapping Brackets after Brazing.

Right and Left Hand, in pairs, with Mandrell.

\*\*\* Stock Sizes. \*\* All others to order.

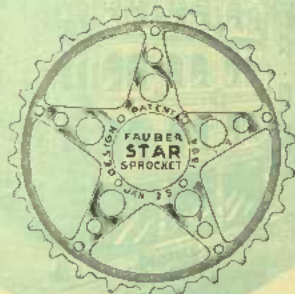


### SPECIFICATIONS.

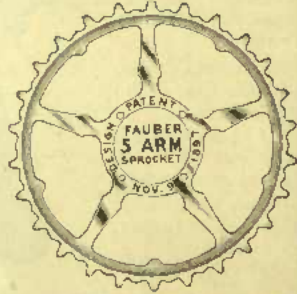
All Rear Lugs for 1 1/4"-16 Gauge Tube.  
(Match Fauber Forks).

Other Lugs	.....	{ For 1 1/8", 20 or 22 Gauge Tube.
	.....	" 1 1/4", 20 or 22 " "
Tread	.....	1 1/2" only.      Chain Line ..... 1 1/2"
<b>Up to 26-Tooth Sprockets</b>	.....	<b>each, \$8.00</b>

### \*STAR SPROCKET



### FIVE-ARM SPROCKET



### \*CROWN SPROCKET



Sizes Sprockets—20, 22, 24, 25, 26,  
28, 30 and 32.  
Thickness—1/8".



New Spanner Lock Nut furnished  
on all Fauber hangers.

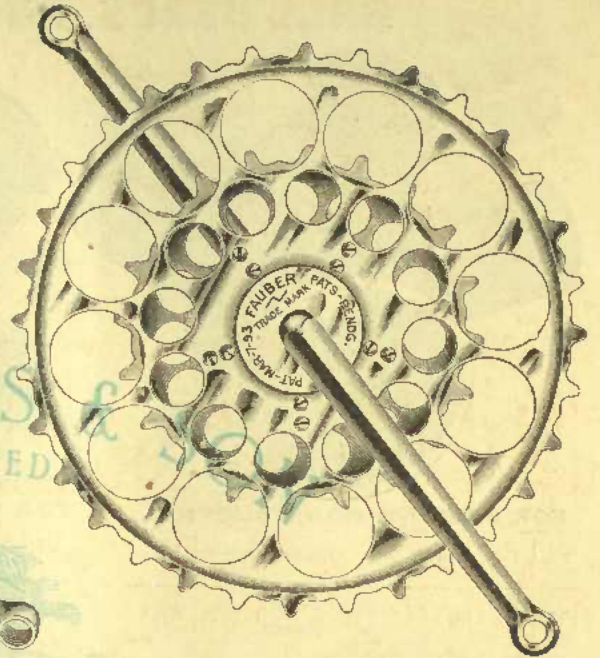
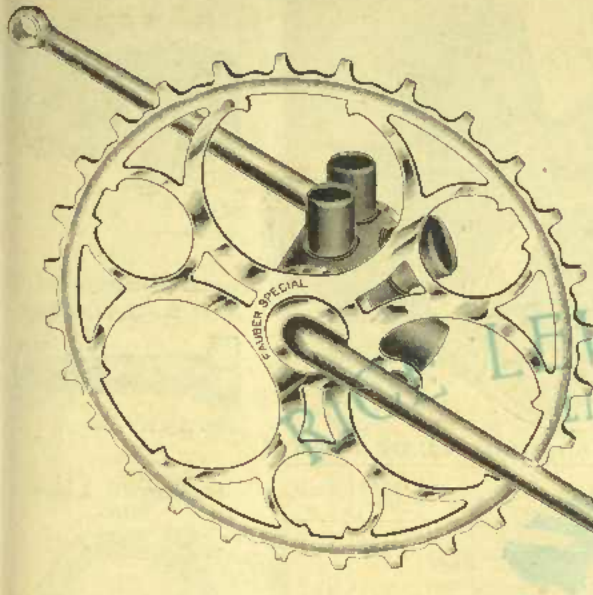
### DIAMOND CRANK (as on above Brackets)



\*Men's, 6 1/2, 7 and 7 1/2"    \*Ladies', 6 and 6 1/2"    \*Tread, 4 1/2 and 4 3/4"

# W. H. FAUBER BICYCLE HANGERS

## SPECIAL HANGER



### THREE ARM

\*Sizes Sprockets: . . . . .22, 24, 26 and 28 x  $\frac{3}{16}$ "

### THREE LUG BRACKETS

Flush Joint only.

Front and Middle Lugs . . . . .1  $\frac{1}{8}$ " and 1  $\frac{1}{4}$ "

Rear Lugs . . . . .1  $\frac{1}{4}$ " only

(Match Fauber Forks).

Tread . . . . .4  $\frac{1}{2}$ " \*Chain Line . . . 1  $\frac{1}{2}$ "

Tread . . . . .4  $\frac{3}{8}$ " \*Chain Line . . . 1  $\frac{1}{8}$ "

### FOUR-LUG BRACKETS

Flush Joint . . . . .1  $\frac{1}{4}$ " x  $\frac{7}{8}$ "

\*Flush Joint . . . . .1  $\frac{1}{8}$ " x  $\frac{7}{8}$ "

Flush Joint . . . . .1" x  $\frac{3}{4}$ "

Outside Joint . . . . .1  $\frac{1}{4}$ " x  $\frac{7}{8}$ "

Outside Joint . . . . .1  $\frac{1}{8}$ " x  $\frac{3}{4}$ "

Outside Joint . . . . .1" x  $\frac{3}{4}$ "

Tread for 1  $\frac{1}{4}$ " and 1  $\frac{1}{8}$ " . . . . .4  $\frac{7}{8}$ "

Chain Line for 1  $\frac{1}{4}$ " and 1  $\frac{1}{8}$ " . . . . .1  $\frac{3}{8}$ "

Tread for 1" . . . . .4  $\frac{7}{8}$ " or 4  $\frac{1}{2}$ "

Chain Line 1" . . . . .1  $\frac{5}{8}$ " or 1  $\frac{1}{2}$ "

### \*SPECIAL FOUR-LUG FLUSH BRACKET

For Ladies' Frame with Curved Lower Bar.

Flush Joint . . . . .1  $\frac{1}{8}$ " x  $\frac{7}{8}$ "

### ANGLES

Three and Four-Lug Brackets.

	Front	Rear
2 $\frac{1}{2}$ " . . . . .	Drop, 63°	63°
3" . . . . .	" 61°	61°
3 $\frac{1}{2}$ to 4", 30 in. wheels . . . . .	" 61°	59°
*2 $\frac{1}{2}$ " . . . . .	Special for Ladies'	
Curved Lower Bar . . . . .	" 110°	63°

**Up to 26-Tooth Sprockets, each, \$4.00.**

Add 15c. for every additional two Teeth.

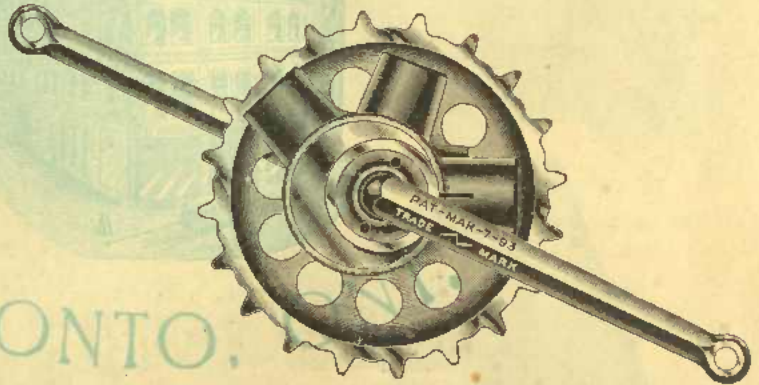
\*Stock Sizes All others to order.

### REAR HANGER

#### Tandems, Triplets and Quads.

Brackets for 1  $\frac{1}{4}$ " Tube. Cranks, Diamond Pattern, 6  $\frac{1}{2}$ " and 7".  
Rear Driving Sprockets, 36 and 32 x  $\frac{1}{4}$ ".

Middle Hanger for Triplets and Quads similar to Front, but fitted with two Sprockets and four Lugs on Brackets.



FRONT HANGER

## TANDEM HANGERS

Brackets for 1  $\frac{1}{4}$ " Tube only. Cranks, Diamond Pattern, 6  $\frac{1}{2}$ " and 7"

Front Sprocket, 20 x  $\frac{3}{8}$ ". Rear Driving Sprocket, 32 and 34 x  $\frac{1}{4}$ ".

Rear Driving Sprocket, Special Star, 32 x  $\frac{1}{4}$ ".

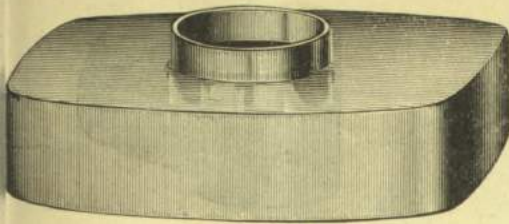


ROUND CRANK (as on Special Hanger)

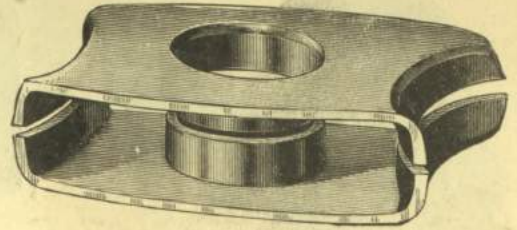
\*Men's—6  $\frac{1}{2}$ " and 7". \*Ladies'—6 and 6  $\frac{1}{2}$ ".



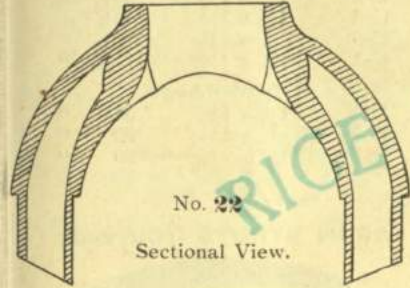
# CROWNS



No. 22  
**BOX  
CROWN**  
Showing  
Construction



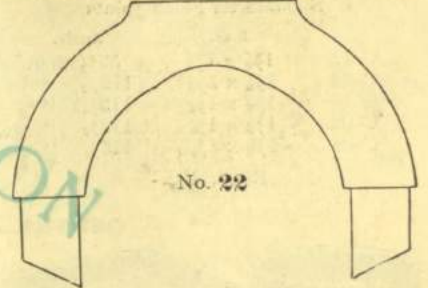
Stamping, for 1" Head Stem and Forksides.....each, 30c.  
Above Crown with pair Brazed Forks to match..... " 55c.



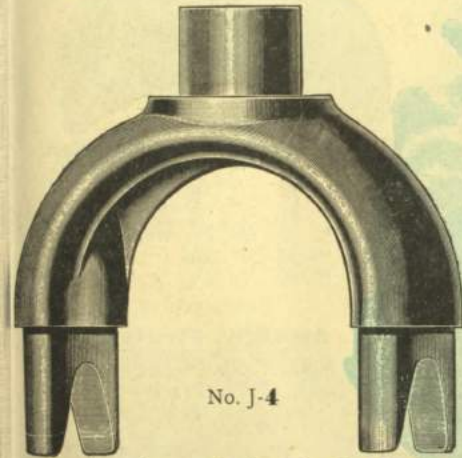
No. 22  
Sectional View.

## MACHINE DROP-FORGED HOLLOW-ARCHED CROWN

For 1" Stem and 1" Forksides.  
Each .....80c.



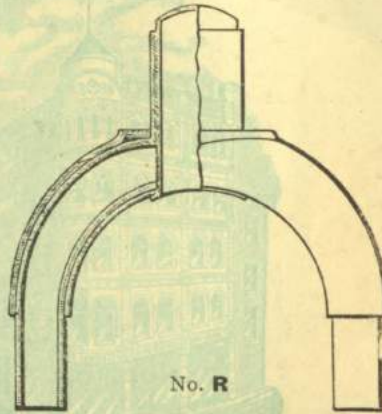
No. 22



No. J-4

Forging, latest design, for 1" Head  
Stem, and Forksides made  
of 1" tubing.  
Carefully and Accurately Machined.

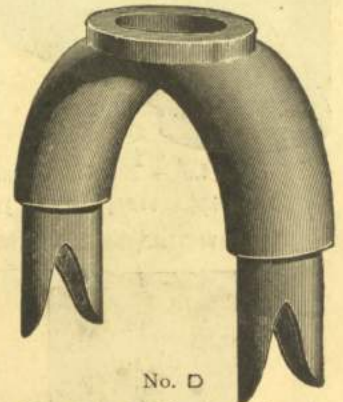
Each .....20c.



No. R

No. R, Stamping, for 1" Head  
Stem and Forksides.

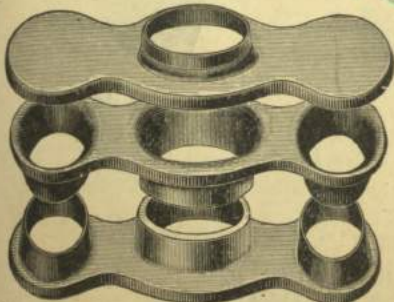
Each .....25c.



No. D

No. D, Malleable, for 1"  
Head Stem and  
Forksides.

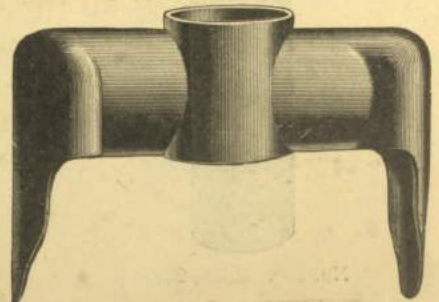
Each .....16c.



## ALUMINUM FORK CROWN TIPS

Assorted patterns.

Per pair.....15c.

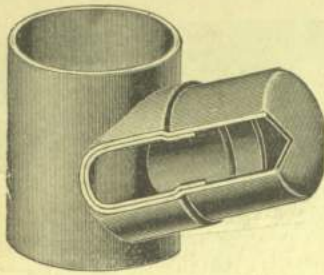


No. 45, Stamping, for 1" Head Stem  
and Forksides.

Each .....80c.

No. J-1, for 1" Stem and  $\frac{1}{8}$ " Forksides.  
" J-2, " 1" " " 1" "  
Cupped Crown Plate.  
With Crown Plate unless otherwise specified.  
Each.....20c.

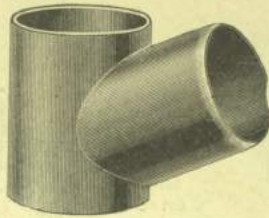
# HEAD LUGS



Seamless.  
Shouldered Flush Joints

	Size.	Angle.
C-15	1 3/8 x 1 1/8	53 1/2 deg.
C-12	1 3/8 x 1 1/8	112 1/2 "
C-18	1 3/8 x 1 1/8	113 1/4 "
C-22	1 3/8 x 1 1/4	112 1/2 "
C-21	1 3/8 x 1 1/4	115 1/4 "

Each, 18c.



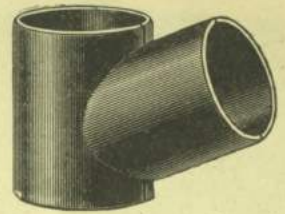
Outside—Seamless.

No.	Size.	Angle.
C-9	1 1/4 x 1 1/8	53 1/2 deg.
C-20	1 1/4 x 1 1/8	110 3/4 "
C-10	1 1/4 x 1 1/8	112 1/2 "
C-19	1 1/4 x 1 1/4	110 3/4 "
C-7	1 1/4 x 1 1/4	113 1/4 "
C-8	1 1/4 x 1 1/8	113 1/4 "

### Centre Lugs

D-4	1 1/8 x 1 1/8	59 "
D-5	1 1/8 x 1 1/8	90 "

Each, 18c.



Outside—Two Seams

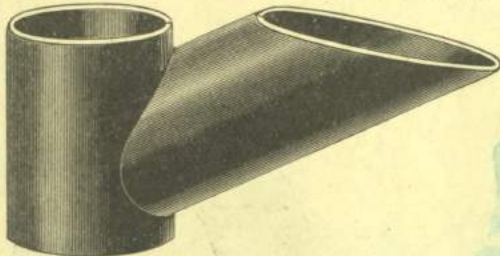
No.	Size.	Angle.
C-2	1 1/4 x 1 1/8	53 1/2 deg.
C-6	1 1/4 x 1 1/8	110 3/4 "
C-5	1 1/4 x 1 1/4	112 1/2 "
C-1	1 1/4 x 1 1/8	113 1/4 "

### Centre Lugs

D-1	1 1/8 x 1 1/8	59 "
D-3	1 1/8 x 1 1/8	90 "
D-2	1 1/4 x 1 1/8	90 "

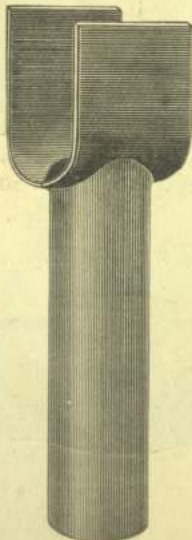
Each, 6c.

## CENTRE LUGS

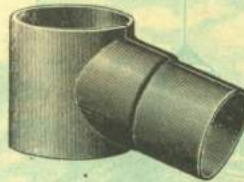


Head Lug—One Seam Long.  
1 1/4 x 1 1/8. 112 1/2° Each, 12c.

### HANDLE BAR STEM



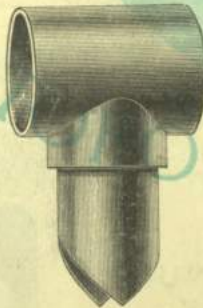
No. 100. Each, 20c.



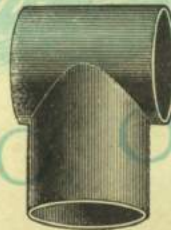
No. ( Mast, Outside, ... 1 1/8"  
8516 Down Tube Flush, 1 1/8"  
90°

Each, 8c.

## HANDLE BAR TEES



No. 110, 7/8" x 7/8"  
Each, 6c.



No. 051	..... 1	x 7/8
" 052	..... 1	x 3/4
" 053	..... 7/8	x 7/8
" 054	..... 7/8	x 1 1/8
" 055	..... 3/4	x 3/4

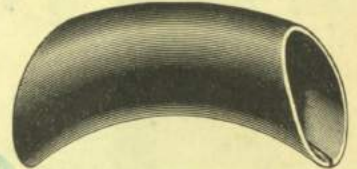
Each, 6c.

## CHAIN ADJUSTERS



No. 3410, Forged N.P.  
Per doz. pair, \$1.00.  
Per pair, 12c.  
No. 5027, Chain Adjusters for  
Fork Ends. No. G-3  
Per pair, 25c.

## ARCH STRUTS—(Curved)



No. 5202	size 3/4"	to fit 7/8" D Rear Forks
" 5203	" 3/4"	" 7/8" Rd. " "
" 5204	" 3/8"	" 3/4" " "
" 5205	" 5/8"	" 3/4" Curved Rear Stays
" 5502	" 3/8"	" 1 1/8" wide, for Stays
" 5503	" 3/8"	" 1 7/8" " " "
" 5504	" 5/8"	" 2 1/4" " " "

Each, 4c.

## Straight Struts

No. 5007	..... 3/4" x 1 3/4" wide
" 5008	..... 7/8" x 1 1/8" "

Each, 4c.

## SEAT POST TEES

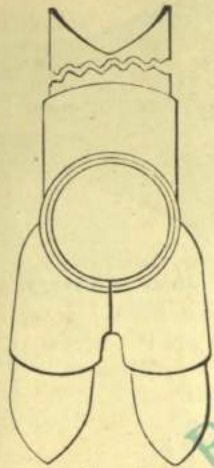


### Flush Joint

No. 4401, 1 1/8" x 5/8" 70°  
Each, 6c.

# SEAT POST LUGS

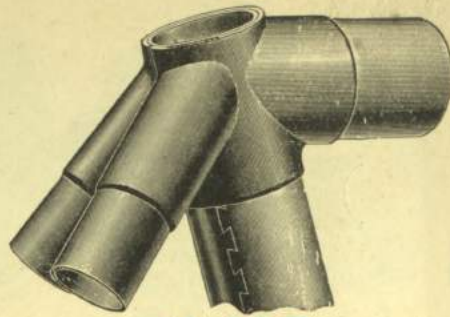
## CLUSTERS



Gents' Shouldered Flush Joint.

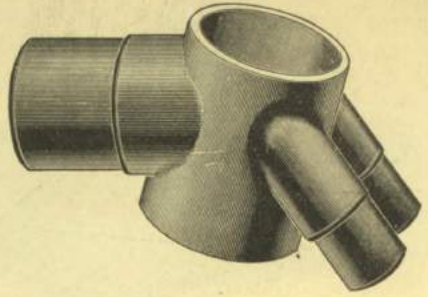
Size. Angle.

No. 254...  $1\frac{1}{8} \times 1\frac{1}{8} \times \frac{3}{4}$   $71^\circ \times 53^\circ$   
Each, 26c.



Gents' Cluster. Shouldered Flush Joint.

Size. Angle.  
No. 8617 .....  $1\frac{1}{8} \times 1\frac{1}{8} \times \frac{3}{4}$   $71^\circ \times 53^\circ$   
Each, 26c.



Gents' Cluster.

Shouldered Flush Joint. Outside on Mast.

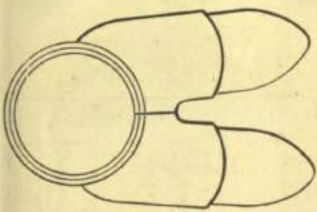
No.	Size.	Angle.	Size Frame.
E-10	$1\frac{1}{8} \times 1\frac{1}{8}$	$71 \times 53\frac{1}{4}^\circ$	22
E-11	$1\frac{1}{8} \times 1\frac{1}{8}$	$71 \times 58^\circ$	20
E-12	$1\frac{1}{8} \times 1\frac{1}{8}$	$71 \times 50\frac{1}{4}^\circ$	$23\frac{1}{2}$

Each, 26c.

### For Three-Crown Construction

No.	Size.	Angle.	Size Frame.
E-16	$1\frac{1}{4} \times 1\frac{1}{4} \times 1\frac{1}{8}$	$71 \times 53\frac{1}{2}^\circ$	$23\frac{1}{2}$

Each, 26c.



Ladies' Shouldered Flush Joint.

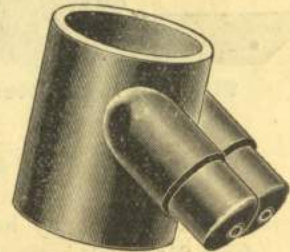
Size. Angle.

No. 221 .....  $1\frac{1}{8} \times \frac{3}{4}$   $55^\circ$   
Each, 26c.



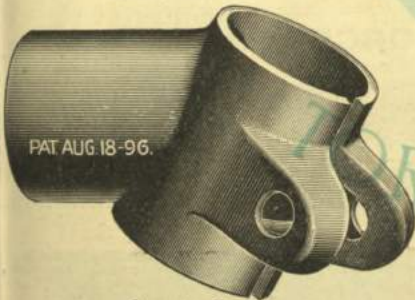
Ladies' Cluster Shouldered Flush Joint.

Size. Angle.  
No. 8618 .....  $1\frac{1}{8} \times \frac{3}{4}$   $55^\circ$   
Each, 26c.



Ladies' Cluster Shouldered Flush Joint.

No. E-13.  $1\frac{1}{8} \times 55\frac{1}{4}^\circ$  for 21" Frame.  
Each, 26c.



PAT AUG 18-96.

Gents'—Outside.

No.	Size.	Angle.
E-3	$1\frac{1}{8} \times 1\frac{1}{8}$	$71^\circ$
4800	$1\frac{1}{4} \times 1\frac{1}{8}$	$71^\circ$
4850	$1\frac{1}{4} \times 1\frac{1}{4}$	$71^\circ$

Each, 20c.

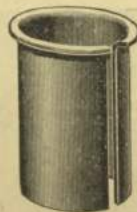


Gents' Shouldered Flush Joint.

E-7— $1\frac{1}{8} \times 1\frac{1}{8}$ — $71^\circ$

Shouldered on Top Bar, butt flush on Seat Top Mast.  
Each, 20c.

### "BUSHINGS" FOR OUTSIDE JOINT SEAT POST LUGS



Fits  $1\frac{1}{8}$ " Tubing. Each, 5c.

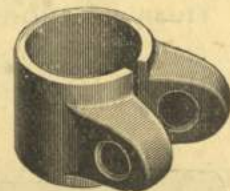
### N. P. BOLT AND NUT FOR SEAT POST LUGS



No.	Size.	Doz.	Each.
No. M-1	$\frac{5}{8} \times 1\frac{1}{8}$	90	8
" M-2	$\frac{5}{8} \times 1\frac{3}{4}$	90	8

Oval Head.

" 12	$\frac{1}{2} \times 2$	60	6
------	------------------------	----	---

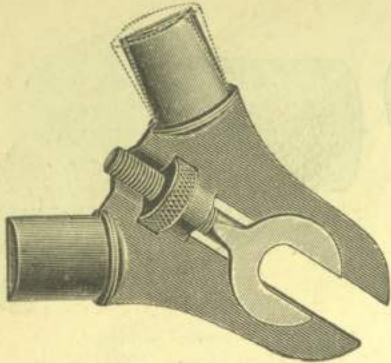


Outside Ladies'

No.	Size
E-1	$1\frac{1}{8}$
4808	$1\frac{1}{4}$
4810	$1\frac{1}{8}$

Each, 15c.

# REAR FORK ENDS



**Flush Joint Pattern**

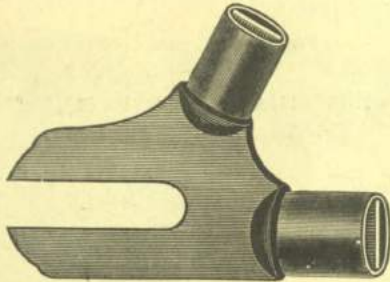
No. G-3.

$\frac{3}{4}$ "—18 ga. x  $\frac{3}{4}$ "—20 ga.

With N.P. Screw Chain Adjuster.

Diagonal Slot.

Per pair.....30c.



**Flush Joint Pattern**

No. G-4.

$\frac{3}{4}$ "—18 ga. x  $\frac{3}{4}$ "—20 ga.

Parallel Slot.

This is adjustable to any height frame from 21" to 26" inclusive.

Per pair.....20c.

## REAR STAY TIPS



**Flush Joint (Offset)**

No. 5110, for  $\frac{3}{4}$ " x 20 ga. Tube.

5111, for  $\frac{5}{8}$ " x 20 ga. Tube.

Per pair.....10c.

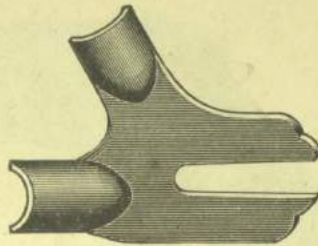


**Flush Joint (Central)**

No. 5112, for  $\frac{3}{4}$ " x 20 ga. Tube.

5113, for  $\frac{5}{8}$ " x 20 ga. Tube.

Per pair.....10c.



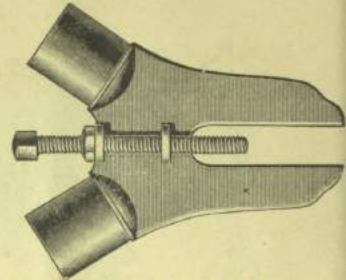
**D Pattern**

No. 53.

For D Tubes.

Per pair.....20c.

D Brace Tips.  
Per pair.....10c.



**Round, Oval or D Flush Joint Pattern**

No. 8634.  $\frac{3}{4}$  x  $\frac{3}{4}$ ."

With N.P. Screw Chain Adjuster.

Per pair.....30c.

## THIMBLES

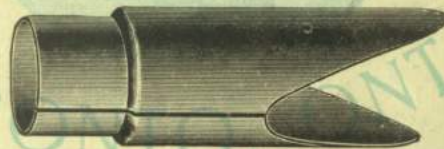


Per 100.....\$2 00.

Per doz.....30c.

No.	Style.	Width	Size.	Gauge	No.	Style.	Width	Size.	Gauge
5001	Oval	$\frac{3}{8}$	$\frac{3}{4}$	20	5008	Plain		$\frac{5}{8}$	20
5002	D		$\frac{3}{4}$	20	5009	"		$\frac{3}{4}$	20
5003	D		$\frac{3}{4}$	22	5010	"		$\frac{3}{4}$	22
5004	Shoulder		$\frac{3}{4}$	20	5011	"		$\frac{3}{4}$	20
5005	"		$\frac{3}{4}$	22	5012	"		$\frac{3}{4}$	22
5006	"		$\frac{7}{8}$	20	5013	Bug. B.		$\frac{3}{4}$	20
5007	"		$\frac{7}{8}$	22	5014	"		$\frac{3}{4}$	20

## REINFORCEMENTS



No. 8887.

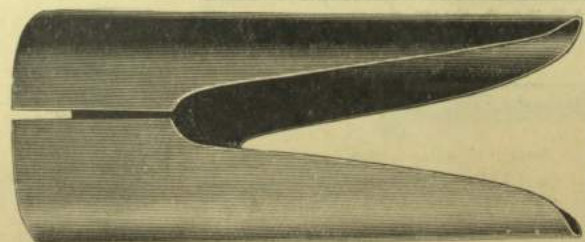
Round, for Flush Joint Connections,  $1\frac{1}{8}$ ."

Per doz.....32c.

No. 90.

Round,  $3\frac{1}{2}$ " long,  $\frac{3}{4}$  to  $1\frac{1}{4}$ "

Per doz.,32c.



No. 91.

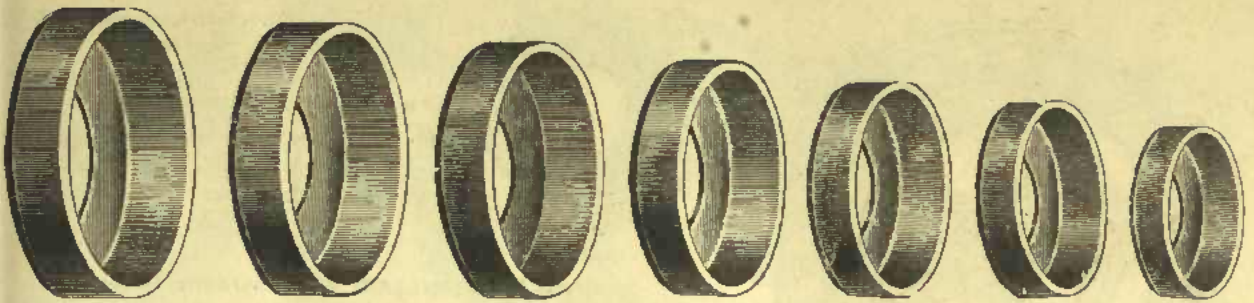
Forksides,  $3\frac{1}{2}$ " long, 1".

Per doz.,32c.



# Hardened Pressed Steel Ball Bearing Cups

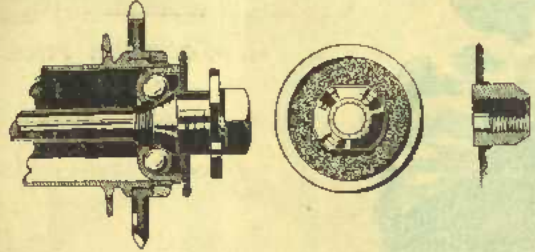
FULL SIZE



	No. 4	No. 5	No. 6	No. 7	No. 8	No. 9	No. 10	No. 11	No. 12	No. 13	No. 14
Number.....	1	2	3	4	5	6	7	8	9	10	11
Inside diameter...	1 1/2	1 7/8	1 3/4	1 5/8	1 3/4	1 7/8	1 1/2	1 1/4	1 1/8	1 1/4	1 1/2
Inside depth.....	1 3/8	1 5/8	1 3/4	1 1/2	1 1/4	1 1/2	1 1/4	1 1/2	1 1/4	1 1/2	1 1/2
Each .....	12c.	12c.	10c.	10c.	10c.	9c.	9c.	8c.	7c.	6c.	6c.

## HUB

Will fit 95 outside diam. balls.



## Round Head Machine Screws for Name-plates, Mud and Chain Guards, Etc.



Size .....	3/8	5/8	3/2
Thread.....	24, 26 or 28	24, 26 or 28	30
Per doz. ....	\$3.50	3.50	3.50
Each .....	0.30	0.30	0.30

Per Doz.



## N. P. WASHERS

Size.....	1/4	5/8	3/2
Per doz.....	10c.	10c.	10c.
Per 100 .....	75c.	75c.	75c.

No. ....	2 to 4	6	8	10	12	14
Length, 1/8 or 1/4.....	4c.	4c.	5c.	6c.	8c.	10c.
" 3/8.....	4c.	4c.	5c.	6c.	8c.	10c.
" 1/2.....	4c.	4c.	5c.	6c.	8c.	10c.
" 5/8.....	4c.	5c.	6c.	8c.	10c.	12c.
" 3/4.....	5c.	6c.	7c.	9c.	11c.	14c.
" 7/8.....	7c.	8c.	10c.	12c.	15c.	
" 1.....	8c.	9c.	11c.	14c.	16c.	

## NUTS

Nickel-Plated, Hexagon Forged



Size Bolt,	Threaded.	Blank, per 100	Threaded, per doz.
1/4"	32	\$2 00	30c.
3/8"	24 to 32	2 25	35c.
1/2"	24 to 32	2 50	40c.
3/4"	20 to 32	2 50	40c.
1"	20 to 32	2 75	40c.
1 1/8"	20 to 32	3 00	45c.
1 1/4"	20 to 32	3 00	45c.

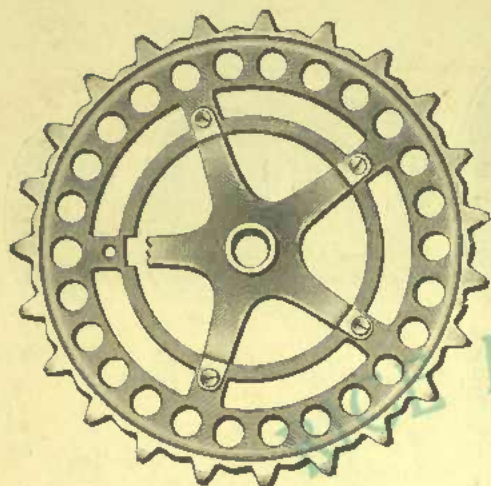
No. ....	2	3	4	6	8	10	12	14
Size.....	3/2	7/4	7/4	3/2	1 1/4	3/2	7/4	1
Thread .....	56	48	36	32	32	24	24	20
Size Drill ...	49	45	42	35	30	25	17	6

## SQUARE TAPPED NUTS For Machine Screws

No.....	2	3	4	6	8	10	12	14
Per doz.....	10c.	7c.	7c.	7c.	7c.	8c.	9c.	10c.

5/8, 3/4, 7/8, 1 and 1 1/8" Head or Bracket, Black...80c.

# MACHINED STEEL FITTINGS



No. 101



No. 40

No. 40--Rear Sprocket, teeth milled, bored  $1\frac{1}{8}$ " hole, not threaded.

7, 8, 9, and 10 teeth..... each, 20c.  
12 teeth ..... " 45c.

No. 60--Tempered, threaded and blued.

7 8 9 10 teeth.  
50c. 60c. 70c. 80c. each

## SPROCKETS—MILLED AND BORED, $\frac{1}{2}$ " Hole

	16	17	18	19	20	21 teeth.	
No. 113..				\$1.00	1.08	1.15 each.	
" 107..				1.25	1.30	1.40 "	
" 35..	60c.	60c.	60c.	70c.		"	
	22	23	24	26	28	30	32 teeth.
No. 113..	\$1.25	1.35	1.40	1.65	1.85	2.35	2.85 each.
" 107..	1.45	1.55	1.60	1.80	2.15	2.50	3.00 "

## N. P. CRANKS

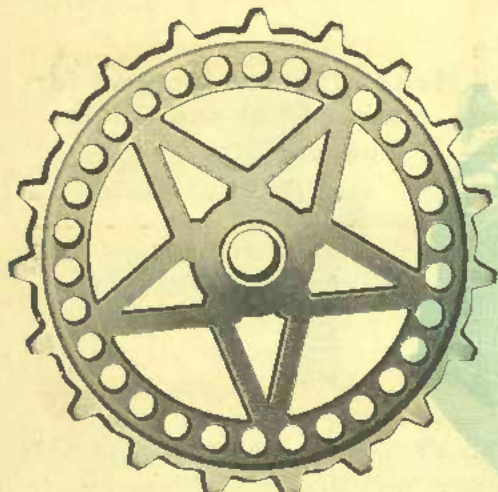


## N. P. COTTER PINS

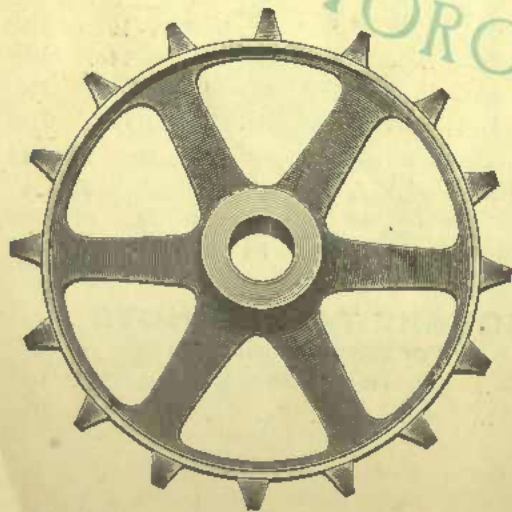
No. 140

Hardened Steel, with Nuts and Washer.

Per 100, \$3.40; doz., 50c.



No. 113



No. 35



No. 40

Threaded  $\frac{1}{2}$ " x 20  
\$1.50 per pair.



No. 41

Slotted.  
80c. per pair.



No. 42

Threaded  
 $\frac{1}{2}$ " x 20  
60c. per pair.



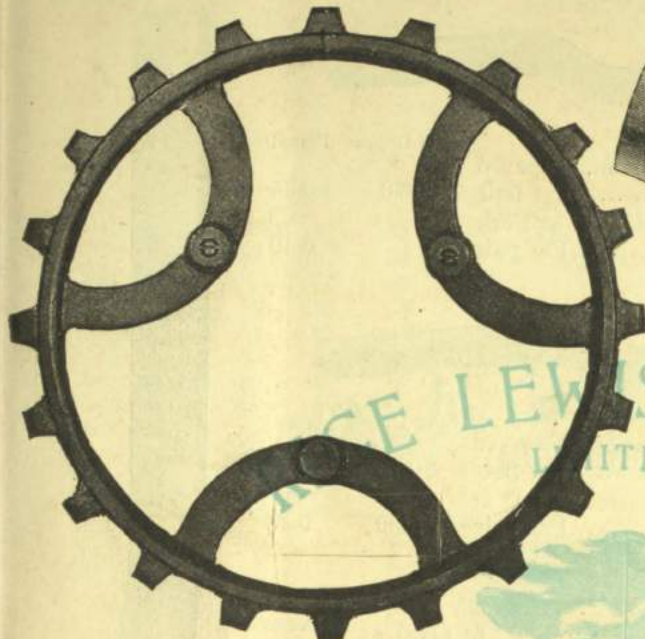
No. 43

Threaded  
 $\frac{1}{2}$ " x 20  
60c. per pair.

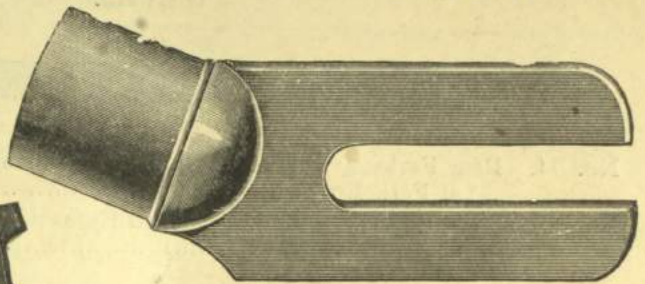
# STEEL DROP FORGINGS

THREE-ARM DETACHABLE SPROCKET WHEELS

REAR FORK ENDS



No. 22



No. 60

Per Pair

- No. 60. Rear Fork Ends for  $\frac{7}{8}$  in. Rear Fork ..... 10c.
- No. 61. " "  $\frac{3}{4}$  " ..... 10c.
- No. 62. " " D pattern, same as No. 31. .20c.
- No. 63. Rear Stay Ends,  $\frac{5}{8}$  or  $\frac{3}{4}$  in. .... 10c.
- No. 64. " " D pattern, same as No. 32. .10c.

PLAIN SPROCKET WHEELS

SPIDERS



No. 21

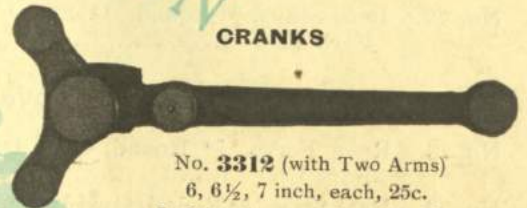


No. 3259. Ea. 12c.

HUB SPROCKET

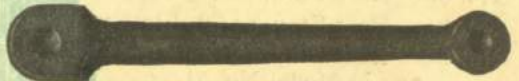


No. 24



CRANKS

- No. 3312 (with Two Arms)  
6, 6 $\frac{1}{2}$ , 7 inch, each, 25c.  
Left hand to match, each, 12c.



- No. 2163 (Round)  
Williams' Round, 6, 6 $\frac{1}{2}$ , 7 in., each, 12c.



- No. 2850 (Flat)  
Williams' Square, 6, 6 $\frac{1}{2}$ , 7 in., each, 15c.

ARCH CROWN

HEAD CLAMP



- No. 2844  
 $\frac{7}{8}$  to 1 $\frac{1}{8}$  inch.  
Each, 8c.



- No. 3640  
King of Arch Crowns.  
Each, 20c.

SEAT POST LUGS



- No. 2687. Ladies'  
1 $\frac{1}{2}$  in.  
Each, 18c.



- No. 2686. Gents'  
1 $\frac{1}{2}$  x 1 $\frac{1}{8}$  in., 1 $\frac{1}{8}$  x 1 in., 1 x 1 in.  
Each, 18c.

DOUBLE CROWN



- No. 2796  
Nos. 2797, 2796, for 1 inch forkside, per pair, . 20c.
- Nos. 2444, 2445, for  $\frac{7}{8}$  " " " .20c.
- Race for  $\frac{7}{8}$  inch forkside, " " " .20c.

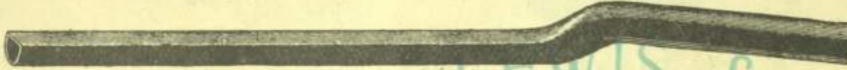
# FORKS AND STAYS

## D STYLE

## FRONT FORKS



		Solid Drawn	Brazed
No. 74.	Rear Forks, $\frac{7}{8}$ " Round, D Shaped Extension, Tapered $\frac{3}{4}$ " at Fork End .....	Per pair	\$0.70 \$0.35
No. 75.	Rear Stays, $\frac{3}{4}$ " Round, D Shaped Extension, $\frac{3}{4}$ " at Fork End .....	Per pair	0.40



		Solid Drawn	Brazed
No. 76.	Rear Forks, $\frac{7}{8}$ " Round, D Shaped Extension, Tapered $\frac{3}{4}$ " D at Fork End .....	Per pair	\$0.70 \$0.35
No. 77.	Rear Stays, $\frac{3}{4}$ " Round, D Shaped Extension, $\frac{3}{4}$ " D at Fork End .....	Per pair	0.80 0.40

## OVAL

		Solid Drawn	
No. 78.	Rear Forks, $\frac{7}{8}$ " Round, Oval Extension, Tapered, $\frac{3}{4}$ " Oval at Fork End .....	Per pair	70c.
No. 79.	Rear Stays, $\frac{3}{4}$ " Round, Oval Extension, $\frac{3}{4}$ " Oval at Fork End .....	"	80c.
No. 80.	Rear Fork, as 78, Flattened at Fork End .....	"	70c.
No. 81.	Rear Stay, as 79, Flattened at Fork End .....	"	80c.
No. 82.	Rear Stay, $\frac{3}{4}$ " Round, Oval Extension $\frac{3}{4}$ " at Fork End, Bend as in Model No. 51 .....	Per pair	80c.

## FAUBER'S PATENT REAR FORKS AND STAYS



		Drawn	Brazed
No. 00.	Rear Forks, Stem $1\frac{1}{4}$ ", 16 Ga., Sides 18 Ga., Tapered to $\frac{3}{4}$ " Round .....	Per set	\$2.00 \$1.85
No. 01.	Rear Stays, Stem $1\frac{1}{8}$ ", 22 Ga., Sides 20 Ga., Tapered to $\frac{3}{4}$ " Round .....	Per set	2.00 1.85



No. 86. Solid Drawn,  $\frac{7}{8}$ " Round, Cranked, Oval .....



No. 85. Solid Drawn,  $\frac{7}{8}$ " Round, Cranked, D Shaped.....



No. 87

Solid Drawn,  $\frac{3}{4}$ ,  $\frac{7}{8}$  or 1" per pair .....60c.  
Brazed,  $\frac{7}{8}$  or 1", pair 26c.  
Our Weldless forks are New Improved Pattern with swaged ends.

## FORK END TIP



Per doz., 40c.  
Each, 5c.

# WELDLESS STEEL TUBING

PRICE PER FOOT

English Standard Wire Gauge	Equivalent in Fraction of Inch	DIAMETER OF EXTERIOR IN INCHES														
		$\frac{1}{2}$	$\frac{9}{16}$	$\frac{5}{8}$	$\frac{11}{16}$	$\frac{3}{4}$	$\frac{13}{16}$	$\frac{7}{8}$	$\frac{15}{16}$	1	$1\frac{1}{16}$	$1\frac{1}{8}$	$1\frac{3}{16}$	$1\frac{1}{4}$	$1\frac{3}{8}$	$1\frac{1}{2}$
26	.018	30	32	33	35	36	37	38	39	40	41	42	43	...	...	...
25	.020	30	32	33	35	36	37	38	39	40	41	42	43	...	...	...
24	.022	30	32	33	35	36	37	38	39	40	41	42	43	44	...	...
23	.025	30	32	33	35	36	37	38	39	40	41	42	43	44	...	...
22	.028	30	32	33	35	36	37	38	39	40	41	42	43	44	48	50
21	.032	30	32	33	35	36	37	38	39	40	41	42	43	44	48	50
20	.035	31	33	34	36	38	38	39	40	41	42	43	45	46	49	52
19	.042	31	33	35	37	38	39	40	41	42	44	45	47	48	52	55
18	.049	32	34	36	38	39	41	42	43	44	46	48	50	51	55	60
17	.058	33	35	37	39	41	43	44	46	47	49	51	53	55	60	65
16	.065	35	37	39	41	43	45	47	49	50	53	55	58	60	65	70
15	.072	37	39	41	43	45	47	49	52	54	57	59	62	64	70	75
14	.083	38	41	43	46	48	50	52	55	57	60	63	66	69	75	81
13	.095	40	43	45	48	50	53	55	59	62	65	68	72	75	81	88
12	.109	42	45	48	50	54	57	59	63	66	70	73	77	81	88	95
11	.120	45	48	51	54	57	60	63	67	70	74	78	83	87	94	102
10	.134	...	51	54	57	60	64	67	71	74	79	84	89	94	102	110

FIG. 86. D PATTERN. 7-8 x 20 G.



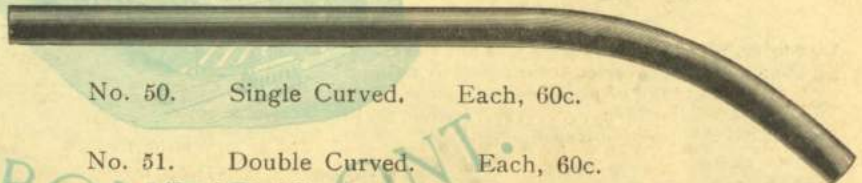
**HEAD STEMS**

(Machined)



1" x 16 W. G. 12" over all.  
Threaded 1" x 24 pitch.  
Each, 30c.

**BENT BARS**



No. 50. Single Curved. Each, 60c.

No. 51. Double Curved. Each, 60c.

(See Ladies' Frame, page 6).

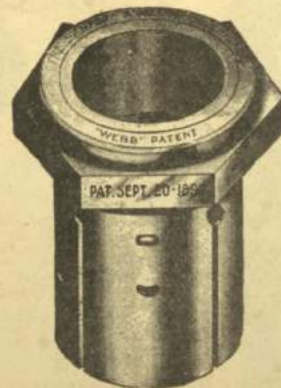


**SPRING SEAT POST.**

Each, \$2.00.

No. 3 Expanding Seat Post.

Sizes,  $\frac{1}{8}$ , 1,  $\frac{15}{16}$ ,  $\frac{7}{8}$ ".  
Each, 50c.



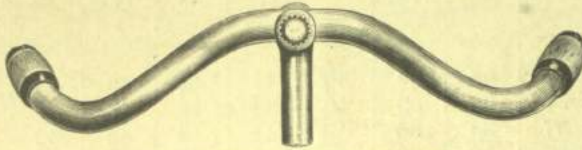
No. 4,  $\frac{7}{8}$  inside,  $1\frac{1}{16}$  outside for  $1\frac{1}{8}$  tubing.  
No. 4 Expander. Each, 28c.  
Other sizes to order.

# HANDLE BARS

HEAVILY NICKEL-PLATED ON COPPER, WITH  $\frac{7}{8}$ -in. POSTS, NO GRIPS

Special Sizes of Posts to Order.

## FREDRICK ADJUSTABLE

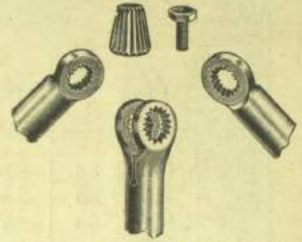


Adjustable to Every Position.

The side arms are supported both back and front. The corrugated ratchet plug works on the principle of a wedge, and should the rider fail to properly tighten up the bolt after he has made an adjustment, the corrugated plug will prevent the arms from falling down. **This is not so in any other bar.** The slits in the stem allow the head lugs to give a trifle, thus bringing pressure against bolt head, which absolutely prevents the bolt working loose. The expander is invisible.

No. 85—Adjustable.....each, \$2.10

No. 84—Adjustable, Expanding.....each, \$2.20

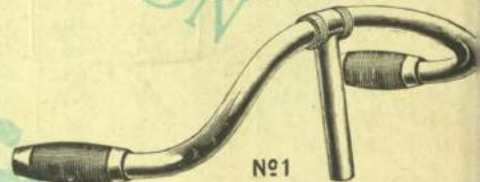


Construction of Clamp.



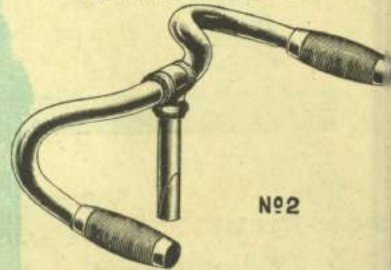
## THE CLAUS ADJUSTABLE.

No. 1  
Width, 18"  
Drop, 2"  
Forward, 3"



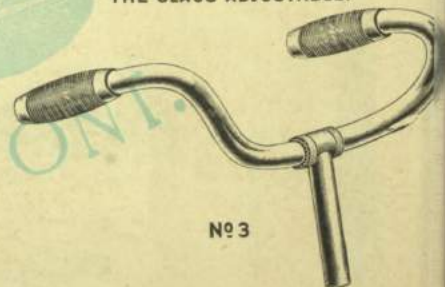
## THE CLAUS ADJUSTABLE.

No. 2  
Width, 18"  
Drop, 2"  
Forward, 3"



## THE CLAUS ADJUSTABLE.

No. 3  
Width, 16"  
Drop, 3"  
Forward, 2½"  
  
Width, 18"  
Drop, 4"  
Forward, 2"



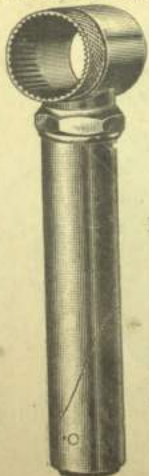
Adjustable, secure and simple; will not work or wear loose; may be converted from a drop to an upturn.

Has a range of adjustment 15 inches.

No. 87—Adjustable.....each, \$2.10

No. 86—Adjustable Expanding... " 2.20

## THE CLAUS EXPANSION STEM.



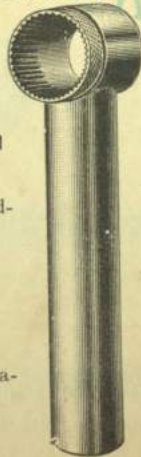
## EXPANSION STEM

No. 1, 2 or 3  
Bars with expanding adjustable stem.  
Each, \$2.20

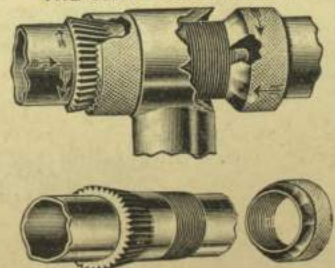
## PLAIN STEM

No. 1, 2 or 3  
Bars with adjustable stem.  
Each, \$1.90

## THE CLAUS PLAIN STEM



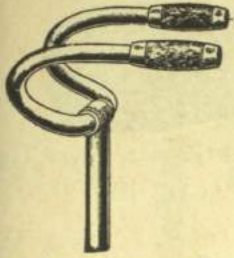
## THE CLAUS ADJUSTMENT.



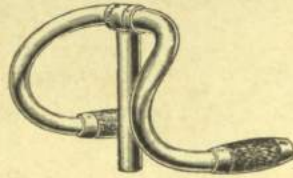
# STEEL HANDLE-BARS

HEAVILY NICKEL-PLATED ON COPPER, WITH  $\frac{7}{8}$ -in. POSTS, NO GRIPS

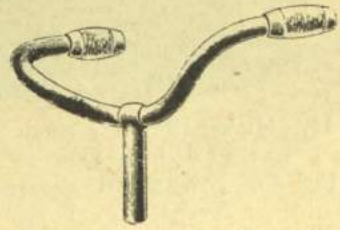
Special Sizes of Posts to Order



No. 7-A, Adjustable, 17 or 18".  
Each, \$1.85.



No. 7-B, Adjustable, 16".  
Each, \$1.85.



No. 7-D, Adjustable, 17 or 18".  
Each, \$1.85.

No. A, Up-turn, Stationary, 17 or 18".  
Each, \$0.85.

No. B, Down-turn, Stationary, 16".  
Each, \$1.05.

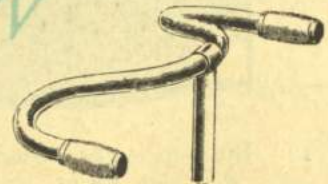
No. D, Up-turn, Stationary, 17 or 18".  
Each, \$0.85.



No. 88, Perfection, Adjustable,  
Expanding. Each, \$1.10.



No. D, Down-turn, Stationary, 17".  
Each, \$0.85.



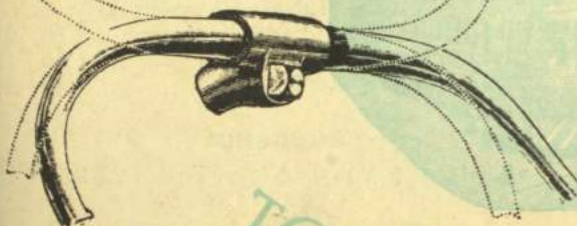
No. 7-E, Adjustable, 18".  
Each, \$1.85.

No. 87, Expanding Bolt and Clamp  
Black for above Bar. Each, 30c.

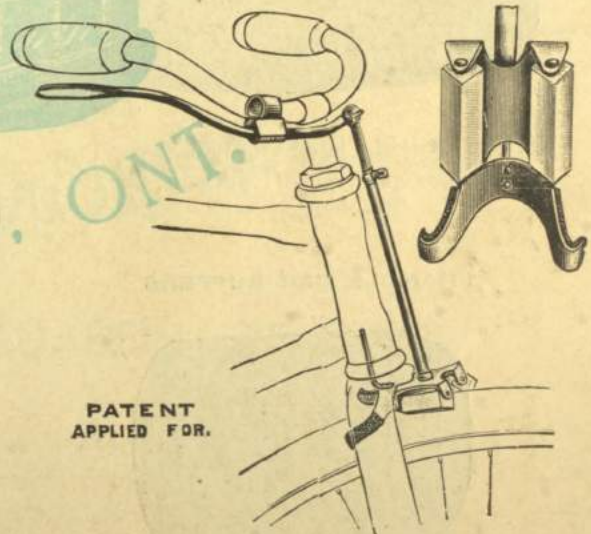
No. E, Down-turn, Stationary, 18".  
Each, \$0.85.

## THE "BALDWIN" BRAKE

Can be attached to any Bicycle in Two Minutes



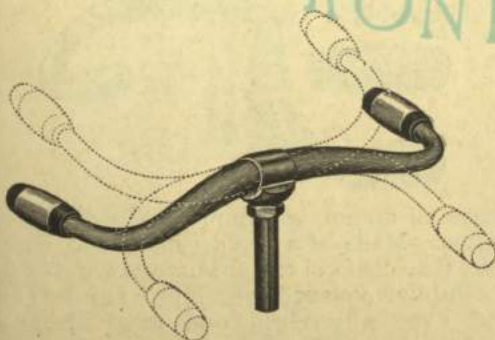
No. 89, Adjustable, Bent and Tapered, 1 to  $\frac{3}{8}$ ".  
Each, \$1.50.



PATENT  
APPLIED FOR.

No. 3

Complete. Each, \$2.00.



No. 90

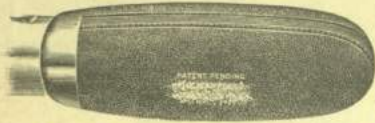
No. 90, Wood Bar, with Adjustable N. P. Clip with Grips.  
Each, \$1.00.

No. 90½, Ditto, Mahogany Finish. Each, \$1.00.

No. 91, Ditto, Adjustable, Ram's Horn. Each, \$1.50.

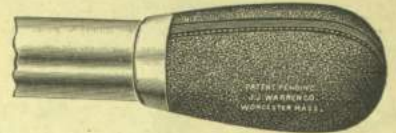
# GRIPS

## LEATHER



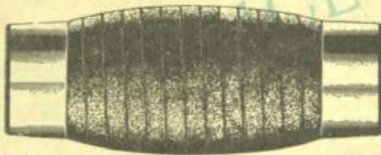
No. 11. Nickel-Plated German Silver Tips.  
3½ or 3" long.  
Per doz. pair, \$4.50; per pair, 40c.

## LEATHER



No. 7. Nickel-Plated German Silver Tips.  
Per doz. pair, \$4.80; per pair, 45c.

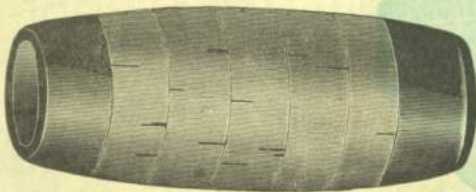
Made from selected grain leather, stitched on to wood grooved reinforcing, into which groove seam in leather is sunk, making grip perfectly smooth.



No. 12. Built-up leather, lined and reinforced, per  
doz. pair, \$2.40; per pair, 25c.

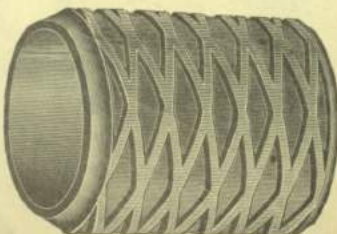
## SOLID WRAPPED CORK

Selected Quality



No. 30. Nickel-Plated German Silver Tips.  
Per doz. pair, \$3.20; per pair, 30c.

## HANDLE BAR BUFFERS



Rubber Buffers.  
Per doz., \$1.00; each, 12c.

## CORKALINE

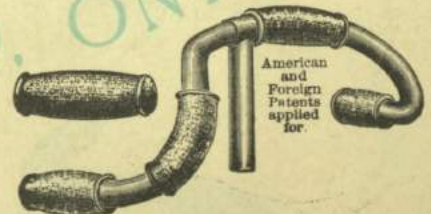


	Size.	Per doz. pair.	Per pair.
No. 14.	7/8" Square Nickered Tips.....	\$1.80	15c.
28.	1" Square Ger. Silver Nickered Tips ...	2.00	20c.
25.	7/8" Square Ger. Silver Nickered Tips, lined and reinforced...	2.00	20c.
26.	7/8" Square Black Composition Tips, lined and reinforced...	1.60	20c.
27.	7/8" Square Inlaid Composition Tips, lined and reinforced...	2.70	25c.
24.	Square White Celluloid .....	1.20	12c.
23.	Square Black Ebonite .....	1.20	12c.

## BUCKSKIN

No. 17. 1 1/8 or 3/4" Square Nickel Tips.....\$1.50 15c.

## THE PERFECTION GRIP



American  
and  
Foreign  
Patents  
applied  
for.

Stops all cramp and numbness of hands, wrists and arms. Made of sponge rubber and unusually flexible, they conform to ANY curve of bar and fit ANY size. Rubber covered "Reliefs" can be readily forced over any rigid end grip already on with powered soapstone and so slid into position.

Plain Rubber .....per pair, 75c.  
Soft leather covered ..... " 90c.



# WOOD RIMS

## BOWMANVILLE



**Dominion Dunlop**



**Single Piece Crescent**



**Sulky**



**Tandem**



**Crescent**



**Crescent, Deep Centre**



**G. & J.**



**Dunlop**

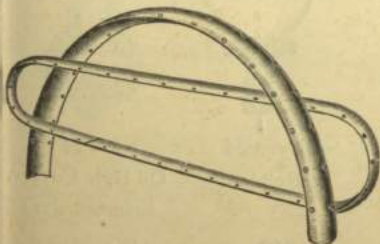
	Crescent Pattern		Dunlop or G. & J. Pattern	
	per doz.	per pair.	per doz.	per pair.
Bowmanville, 28-in. ....	\$12 00	\$1 15	\$13 60	\$1 25
Boston Laminated, 28-in. ....	12 80	1 20	14 50	1 35
“ Single-piece, 28-in.....	8 00	80		

Sulky, \$2 00 per pair.  
Tandem, 1 50 “

80-inch Rims, 15c. per pair extra on above prices. Other sizes, special prices on application.

We carry a Stock of **SECONDS SUITABLE FOR REPAIR WORK.** Price on application.

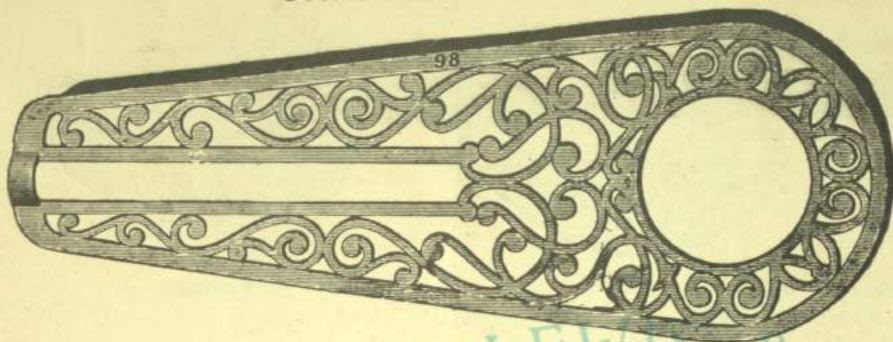
## MUD AND CHAIN GUARDS (EYELETED)



Natural Finish, open, per pair .....	90c.
Mahogany Finish, open, per pair .....	80c.
Natural Finish, continuous, per pair .....	85c.
Birdseye Maple, continuous, per pair ...	60c.
Quarter-cut Oak continuous, per pair.....	65c.

# CHAIN GUARDS

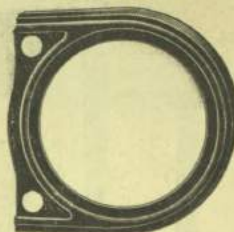
## CHAIN GUARD



No. 43

Aluminum, Polished Face, standard length for wheel.....Each \$2 00

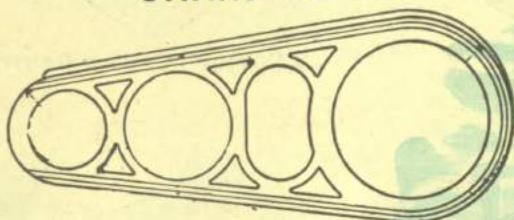
## SPROCKET SHIELD



No. 42

Sheet Steel, Smooth Finish.  
Can be used with 24 tooth and  
Smaller Front Sprockets.  
Ready for Enamelling. Ea. 25c.

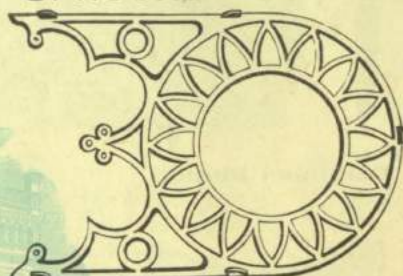
## CHAIN GUARD



No. 44

Sheet Steel, Smooth Finish, for 24 tooth and Smaller Sprockets.  
Ready for enamelling.....Each, 50c.

## SPROCKET GUARD



No. 41

Aluminum, Polished Face, can be used  
with 24 tooth and Smaller Sprockets.  
Each, 60

## STEEL BALLS



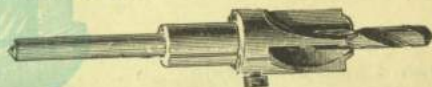
Made of the finest cast steel, best finish and most accurate;  
done up in 100 lots only; less quantities at list price net.

$\frac{1}{8}$   $\frac{3}{32}$   $\frac{1}{16}$   $\frac{7}{32}$   $\frac{1}{4}$   $\frac{5}{16}$   $\frac{3}{8}$  inch diam.  
\$0.15 0.18 0.20 0.30 0.30 0.38 0.65 per 100.

Prices on application for larger sizes and quantities.

Also for 2nds suitable for agricultural and machine work.

## RIM COUNTERSINK AND DRILL



No. 32

This will drill holes for any style wished,  
and is made of the highest grade steel.  
Each, 80c.

## OILERS



No. 123

No. 3

No. 2

No. 1

No. 6

No. 8

No. 10

No. 12

Spring Cap

Shanks Threaded

25c. doz.

$\frac{5}{32}$  x 40

$\frac{3}{16}$  x 32

$\frac{7}{32}$  x 28

$\frac{7}{32}$  x 28

$\frac{1}{4}$  x 26

$\frac{1}{4}$  x 26

$\frac{1}{4}$  x 26

50c.

50c.

50c.

80c.

35c.

40c.

40c.

No. 124

Helmet.

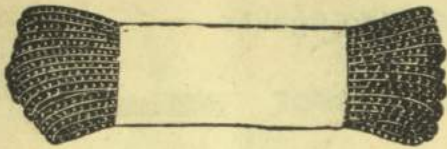
60c.

No. 121

Oil Hole Covers  
assorted sizes

15c. doz.

# LACING CORD



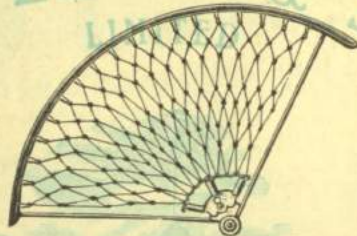
**Woven Mohair** in Hanks, 72 yards each, black, yellow, ruby, brown, or mixed black and yellow, black and ruby, ruby and yellow.  
Per Hank ..... 40c.

**3-ply Twisted Silk** in Hanks, 18 yards each, same colors... Per doz. hanks, \$2 50; per hank, 25c.

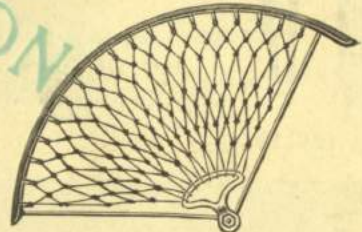
**3-ply Twisted Silk** in Hanks, 18 yards each, same colors... Per doz. hanks, \$1.50; per hank, 15c. **Woven Mohair** in Hanks, 18 yards each. Boxes of 12 hanks, assorted colors. Per box..... \$1.50.



No. 1



No. 2



No. 3

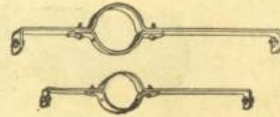
**Detachable Lacing Clip** allows dress guard to be taken off without removing axle nut.  
Per doz. pair ..... \$2.25  
Per pair ..... 0.25

**Dress Guard with Hooks at top** to fit into eyelets of mud guard, with detachable lacing clip  
No. 1. Silk, all colors.  
Per set.....70c.

**Dress Guard with Hooks at top** to fit into eyelets of mud guard with plain lacing clip. Mohair, all colors.  
Per set .....45c.



No. 4



Cut shows one complete set.

**Chain Guard Braces.** Bright steel, nicely nicked.

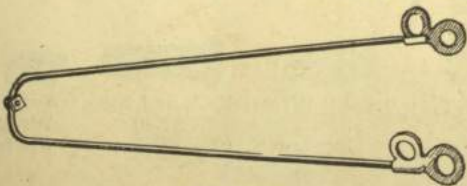
No. 11 ..... Per set, 25c.

No. 12 ..... " 25c.

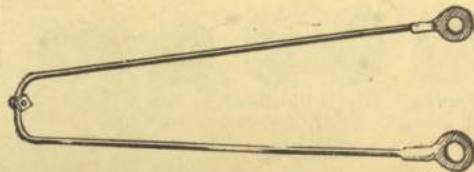
In set No. 11 the long brace is about 7 3/4" long. In set No. 12 the long brace is 8 1/2" long. In both sets the short, or rear brace is about 5 1/2" long. Every set is wrapped in a separate paper with screws and nuts in an envelope.

**Separate Lacing Loops.** Made from bright steel stamping, nicely nicked. Fits over a 3/8" axle.  
Per pair..... 6c.

## MUD GUARD BRACES



No. 111



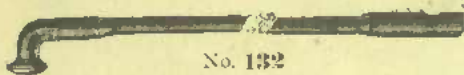
No. 112

Made from bright steel, all parts well nicked. This brace has two loops, one to go over axle, one for lacing cord, both loops in one piece. Our special design, and a favorite. Correct length for 28-inch wheels.  
Each .....25c.

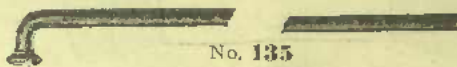
Made from bright steel, all parts nicked. The eyes of this brace can be unscrewed from the wire. Correct length for 28-inch wheels.  
Each .....20c.

# SPOKES

Excelsior Needle Company's Selling Agents

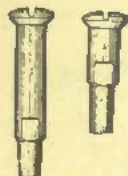


**No. 132**  
Double Butted.



**No. 135**  
Plain Even Gauge.

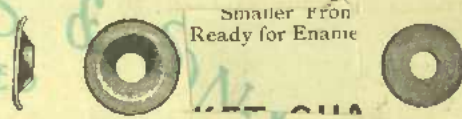
		Per 1000	Per 100
No. 132a.	Excelsior, double butted, bent, headed, nickel-plated and threaded, with nickel-plated nipples, 14-16 gauge	\$13 50	\$1 40
" 132b.	Best Excelsior, double butted, bent, headed, nickel-plated and threaded, with nickel plated nipples, 14-16, 15-17 or 16-18 gauge	16 00	1 80
" 132c.	Best Excelsior, double butted, bent, headed, double nickel-plated, 12-14, 13-15, 14-16 or 15-17 gauge.	12 00	1 40
" 135a.	Bent, headed, nickel-plated and threaded, 14 gauge, with nickel-plated nipples.	9 20	1 00
" 135b.	Bent, headed and nickel-plated, 13, 14, 15, 16, 17 gauge.	5 00	0 60
" 135c.	Best Excelsior Sulky, bent, headed, nickel-plated and threaded, with extra heavy nickel-plated nipples		1 75



Nos. 126, 127

## NIPPLES

	Per 1000	Per 100
Threaded, Nos. 12 <sup>aa</sup> , 14 <sup>ab</sup> , 15 <sup>bc</sup> , 16 <sup>cd</sup> , 17 <sup>de</sup> , plated	\$3 20	\$0 40
Sulky, 12 gauge, heavy		0 70



**No. 129** Per 1000 40c. **No. 130** Per 100 10c.  
**No. 129** Per 100 10c. **No. 130** Per 1000 40c.

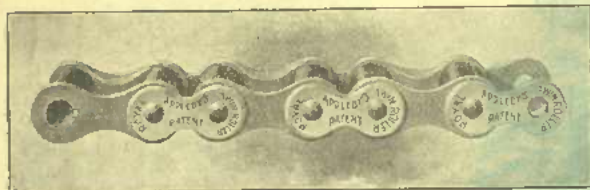
## APPLEBY'S "ROYAL TWIN" ROLLER CHAINS

TOP VIEW.

The side plates are prevented from catching upon the apex of the tooth of the wheel, which occurs with the ordinary form of Twin-Roller Chain when run too slack.

In addition to the above improvements the chains are fitted throughout with our celebrated patent, immovable, pen-steel bushes, which effectively prevent rotation of the rivets, thereby reducing elongation to a minimum.

No. 200. Sizes,  $\frac{3}{16}$  and  $\frac{1}{4}$  in., 57 in. long. . . . each, \$2 25



## INDIANAPOLIS CHAINS



No. 202.	$\frac{3}{16}$ in., with straw tempered B blocks, hard rivets, top polished blued B sides, 57 in. long	each, \$1 00
" 203.	$\frac{1}{4}$ in. "	" 1 20
" 204.	$\frac{1}{8}$ in., with straw tempered polished B blocks, hard rivets, all polished blued B sides, perforated and chamferd, 57 in. long	" 1 30
" 212.	$\frac{3}{16}$ in., with straw tempered polished B blocks, hard rivets, all polished blued B sides, perforated and chamfered, 57 in. long, silver steel	" 1 40
" 213.	$\frac{1}{4}$ in., with straw tempered polished B blocks, hard rivets, all polished blued B sides, perforated and chamfered, 57 in. long, silver steel	" 2 25

No. 105.  $\frac{1}{4}$  in. with bright No. 8 blocks, bright rivets and plain bright No. 8 sides, 57 in. long . . . . . each, 85c.



						
No. 8 Blocks. \$1.00 25	No. B Blocks. \$1.00 20	No. 8 Sides. 40c. 10c.	No. B Sides. 40c. 10c.	Nos. 8 and B Rivets. 30c. 10c.	Bolts and Nuts. \$1.40 .25	Nuts. 70c. per 100 10c. per doz.

## BALDWIN CHAIN-BOLT

Baldwin Chain-Bolt removes the only point at which a screw driver is necessary on a bicycle. It is easily turned round with the finger, and is secured by being snapped over the head of the other rivet.

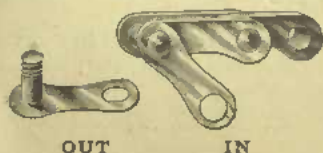
Per dozen . . . . . 60c.

## Patented Link and Lock Bolt.

Per doz. . . . . 75c.  
Each . . . . . 8c.

Screws for same and No. 202-204 Chains.

Per 100 . . . . . 75c.  
Per doz. . . . . 20c.

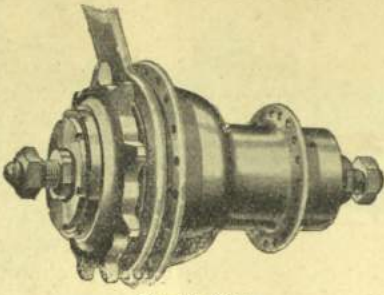


OUT

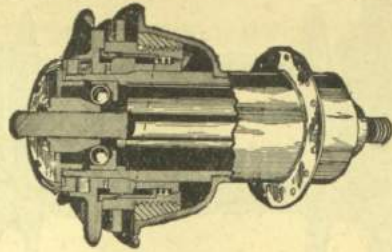
IN

# HUBS

## MORROW COASTER AND BRAKE



Outside View.

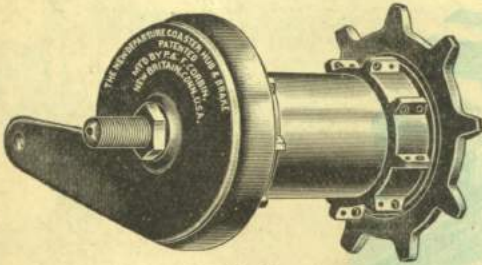


Interior View.

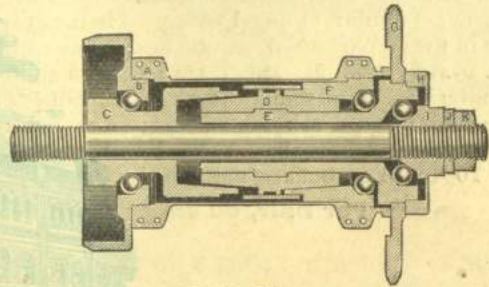
This Coaster and Brake is inside Hub, machine can be run back or forward when rider is off wheel, only light pressure is required to put on Brake, and no continuous strain after applied. Perfect control of wheel at all times.

Hub complete, 8 or 9 tooth sprocket with set spokes ..... Each \$9.00

## NEW DEPARTURE AUTOMATIC COASTER AND BRAKE



Outside View.



Interior View.

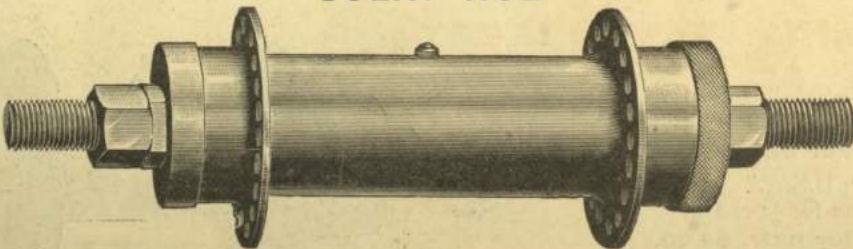
With this Coaster and Brake the rider has Perfect control of the wheel at all times—Consequent freedom from accidents—One third less pedaling—A tight pedal and a free wheel—No strain on himself or machine when braking—Sprocket, chain, and pedals at rest when coasting—No danger of losing pedals—Instant response in time of need—No trundling of wheel down any hill a horse can descend—Feet on the pedals at all times—No back-lash or lost motion.

### ITS OPERATION

The driver E carries the cone D. When the rider pedals ahead, the rear sprocket G turns the driver E, which, by means of a thread, forces the cone D into contact with the driving clutch F, which forms a part of the hub, and the wheel rotates. The connection is instantaneous and positive. In coasting the rider simply holds his feet still upon the pedals, and the cone D moves back along the driver to the center, when the wheel revolves freely, the driving mechanism being released. A slight backward pressure drives the cone into the braking clutch C, which is fastened to the frame by the arm shown in figure 1, and the friction of the cone in the clutch retards or stops the wheel as the rider desires, and with a very slight pressure.

Hub complete, all sizes of Sprocket, with set Spokes ..... Each \$9.00

## SULKY HUB

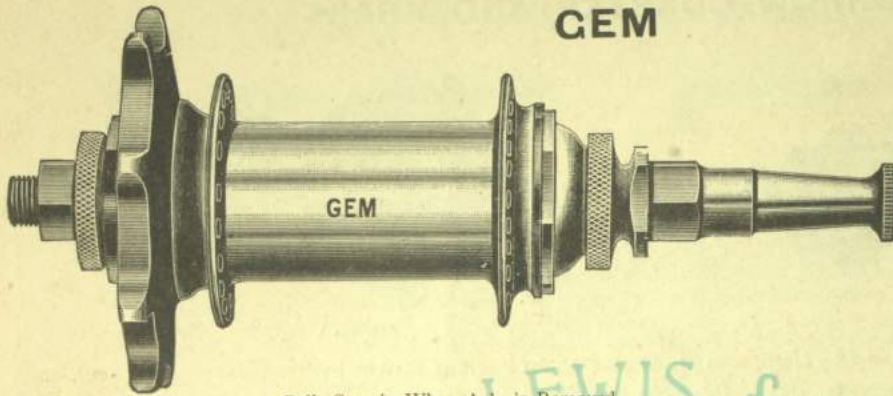


No. 1003.

Made from solid bar, cups and cones turned from best cast steel, and accurately ground. Latest improved pattern. Flanges over Bearings. Per pair, \$4.00.

# HUBS

## GEM



No. 999. "Gem," turned from solid bar, cups and cones dust proof and made from special cone steel, fitted with ball retainer, has a reservoir of oil, in which the balls constantly revolve, chain line  $1\frac{1}{2}$ " or  $1\frac{5}{8}$ ", sprockets 7 to 12 tooth for  $\frac{3}{16}$ " chain.

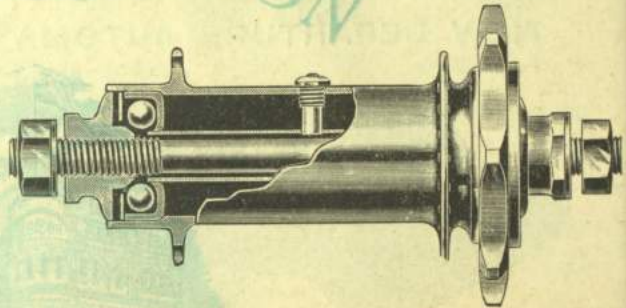
**Per pair, \$3.00.**

Balls Stay in When Axle is Removed.

## THOMPSON'S

No. L-6. "Thompson's" fitted with Ball Retainers and Tubular Oiling Device. Thoroughly up-to-date in every particular. Cups and cones carefully and accurately ground. Shell turned from solid bar. Best material. Handsomely plated. With  $9\frac{1}{4}$ " balls. Distance between Fork Ends,  $4\frac{5}{8}$ "; from centre of hub to centre of sprocket,  $1\frac{3}{8}$ ". Fitted with 7, 8, 9 and 10 tooth sprockets, suitable for  $\frac{3}{16}$ " chain.

**Per pair, \$2.00.**



## LEADER



No. 998. "Leader" made from bar steel, cups and cones turned from special cone steel, accurately ground, chain line  $1\frac{1}{2}$ " or  $1\frac{5}{8}$ ", sprockets 7 to 12 tooth for  $\frac{3}{16}$ " chain.

**Per pair, \$2.25.**

Balls Stay in When Axle is Removed.

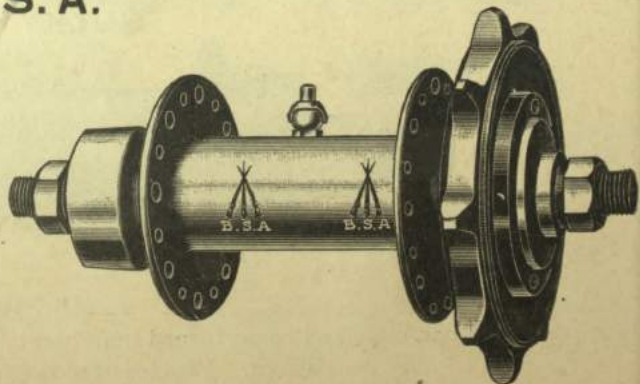
## B. S. A.

No. 99. "B.S.A." Standard Pattern, road or race hubs,  $1\frac{5}{8}$ " or  $1\frac{1}{2}$ " chain line for  $\frac{1}{4}$ " chain.

**Per pair, \$4.00.**

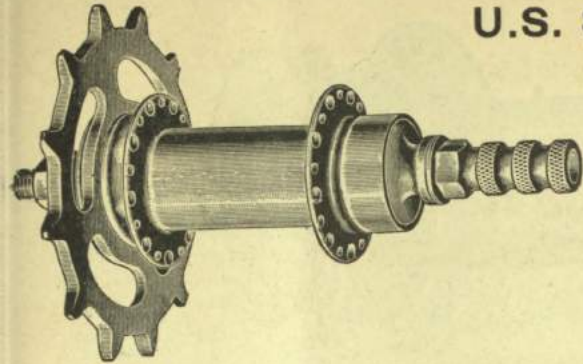
No. 100. "B.S.A." Barrel Pattern, road hubs,  $1\frac{5}{8}$ " chain line for  $\frac{1}{4}$ " chain.

**Per pair, \$6.00.**



# HUBS

## U.S. SPECIAL



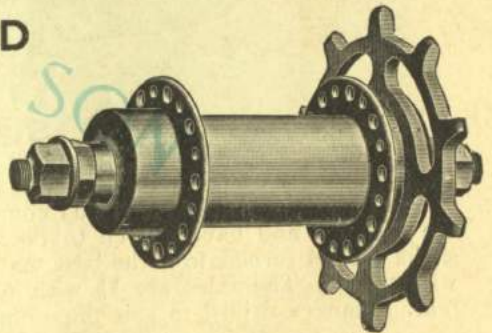
No. 996. "U.S. Standard" turned from bar, cups and cones turned, hardened and ground, dust proof bearings, finest grade nickel-plating, sprockets 7 to 12 tooth for  $\frac{3}{8}$ " chain.

Per per, \$2.20.

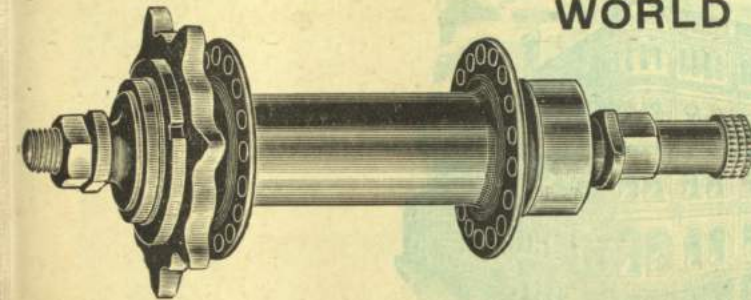
## U.S. STANDARD

No. 997. "U.S. Special," steel shell, pressed cups, cones turned, dust proof bearing, sprockets 7 to 12 tooth for  $\frac{3}{8}$ " chain.

Per pair, \$1.75.



## WORLD



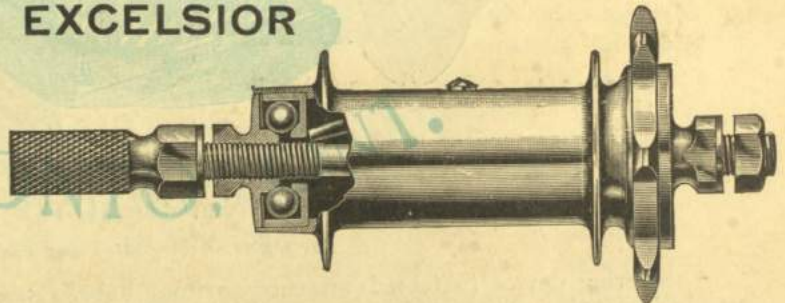
No. 1002. "World," made from solid bar. Good hub at low price.

Per pair, \$2.00.

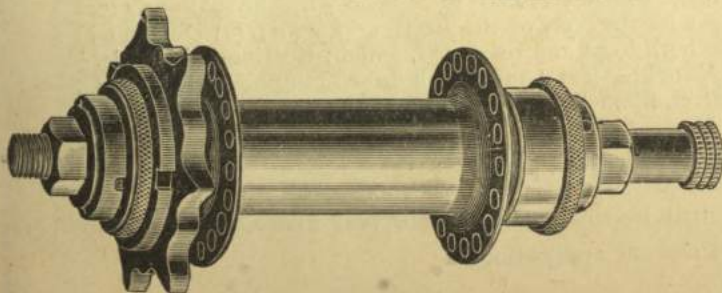
## EXCELSIOR

No. 1001. "Excelsior," made from solid bar, cups and cones turned from best cast steel and accurately ground, chain line  $1\frac{5}{8}$ ", sprockets 7, 8, 9 or 10 tooth for  $\frac{3}{8}$ " chain.

Per pair, \$2.35.



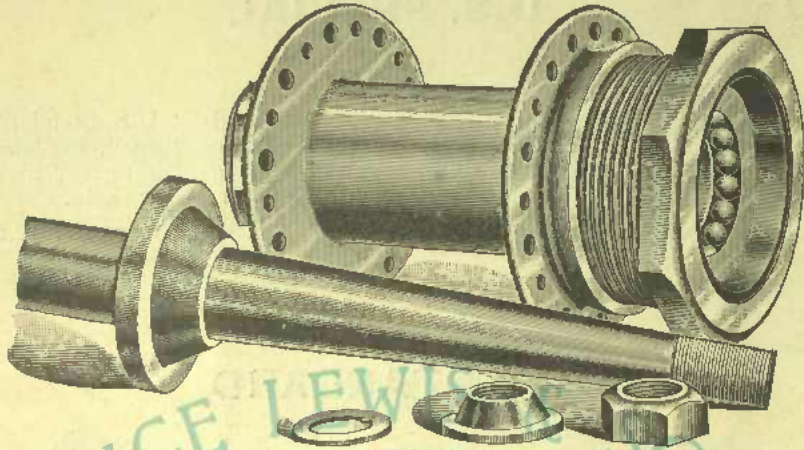
## BEATS ALL



No. 1000. "Beats All," made from solid bar, cups and cones turned from best Cast Steel and accurately ground, new device for oiling hubs at both ends, chain line  $1\frac{1}{2}$ " or  $1\frac{5}{8}$ ", sprockets 7, 8, 9 or 10 tooth for  $\frac{3}{8}$ " chain.

Per pair, \$2.65.

# AUTOMOBILE HUBS

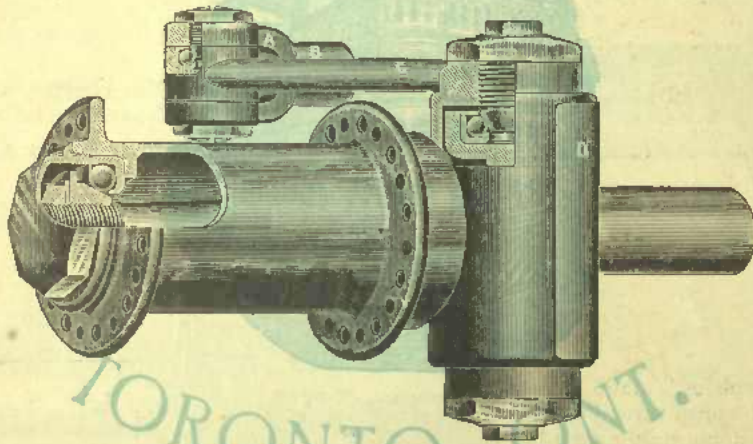


**Style No. 1-AUTO HUBS**

Designed for Phaetons or Light Delivery Wagons

The Wire Auto Wheel has come to stay, owing to the many advantages offered. Our Auto Hub are designed and have proven to be as easy running as any bicycle hub. The cups, cones, axles and shells are all turned from the best material obtainable. These hubs will carry a gross weight of 5,000 lbs with safety. The axles are  $1\frac{3}{8}$  with 6-inch stub. Distance between flanges 4 inches for both front and rear. Flanges drilled to suit requirements. We furnish hubs, less sprockets.

Can furnish sprockets extra if desired, cast of crucible steel.



**Style No. 2-AUTO HUBS**

For Light Automobiles and Runabouts

Steering device (patented) attached to front hubs. Rear hubs in either ball bearing or stationary attached to axle. These hubs are somewhat smaller in diameter than our No. 1 Hub.

DESCRIPTION—(a) Connecting link; (b) Boss to connect with the main or cross rod; (c) Steering lever, in one piece with the body of the steering knuckle; (d) Dust shield for the steering knuckle; Bearing in both front and rear hubs,  $\frac{3}{8}$  inch; Bearing in knuckle,  $\frac{1}{4}$  inch; Bearing in connecting link,  $\frac{3}{16}$  inch; Axles 1-inch, with 6-inch stub; Width C to C, flanges 4 inches; Diameter of barrel,  $2\frac{1}{2}$  inches; Diameter of flanges,  $3\frac{3}{4}$  inches.

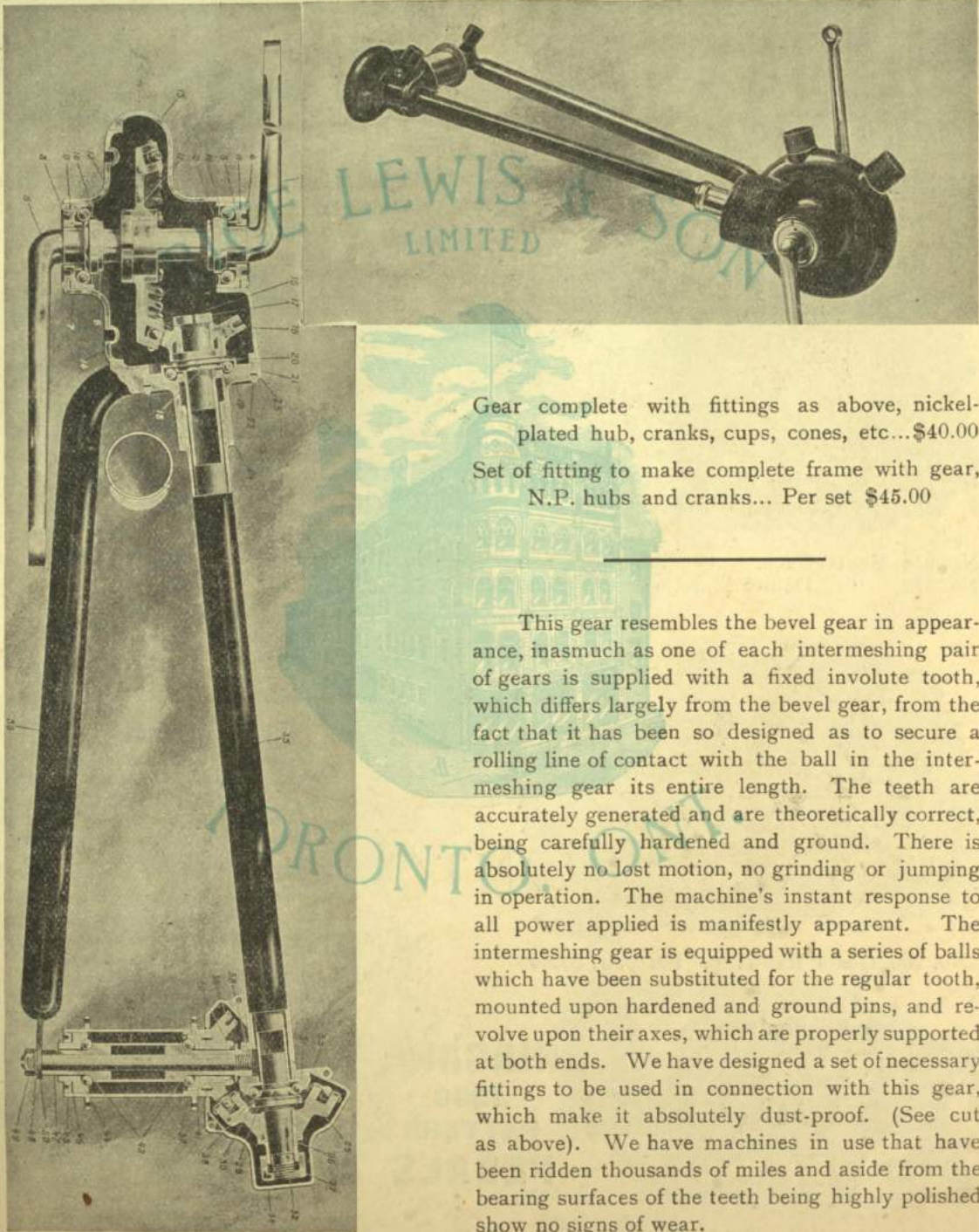
## CARRIAGE HUBS

Same diameter shell as No. 2 Auto Hub, ball bearing, axles 1-inch, best material, strictly high grade. Price on application.



# BULLIS BALL GEAR

CANADIAN SELLING AGENTS

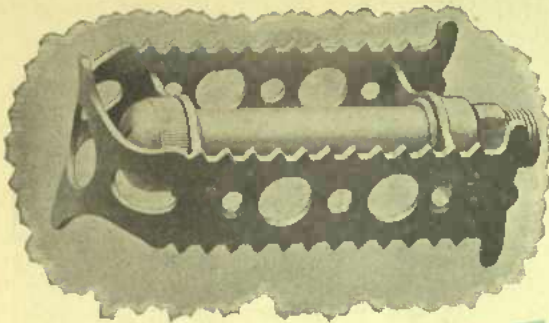


Gear complete with fittings as above, nickel-plated hub, cranks, cups, cones, etc...\$40.00

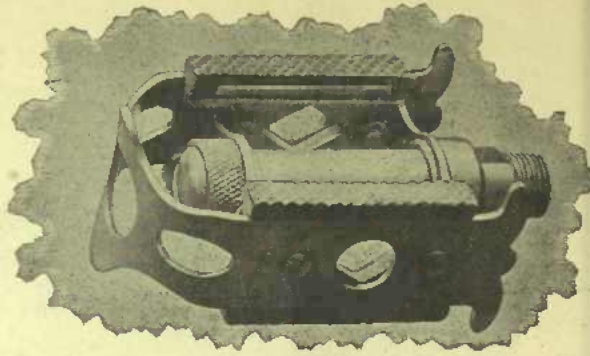
Set of fitting to make complete frame with gear, N.P. hubs and cranks... Per set \$45.00

This gear resembles the bevel gear in appearance, inasmuch as one of each intermeshing pair of gears is supplied with a fixed involute tooth, which differs largely from the bevel gear, from the fact that it has been so designed as to secure a rolling line of contact with the ball in the intermeshing gear its entire length. The teeth are accurately generated and are theoretically correct, being carefully hardened and ground. There is absolutely no lost motion, no grinding or jumping in operation. The machine's instant response to all power applied is manifestly apparent. The intermeshing gear is equipped with a series of balls which have been substituted for the regular tooth, mounted upon hardened and ground pins, and revolve upon their axes, which are properly supported at both ends. We have designed a set of necessary fittings to be used in connection with this gear, which make it absolutely dust-proof. (See cut as above). We have machines in use that have been ridden thousands of miles and aside from the bearing surfaces of the teeth being highly polished show no signs of wear.

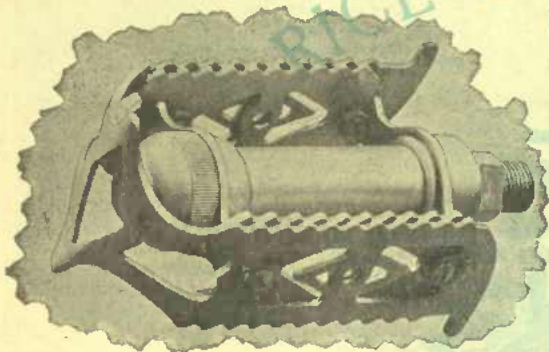
# DIAMOND PEDALS



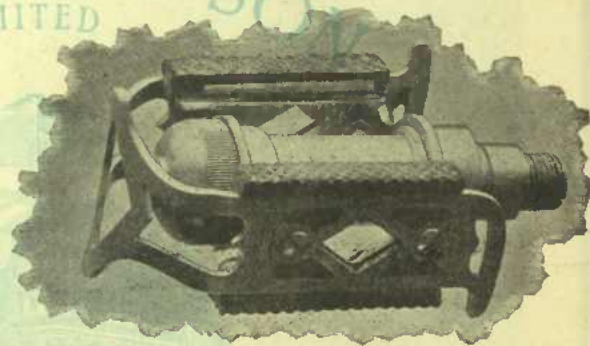
No. 220, Gents' Rat Trap. Per pair, \$1.00



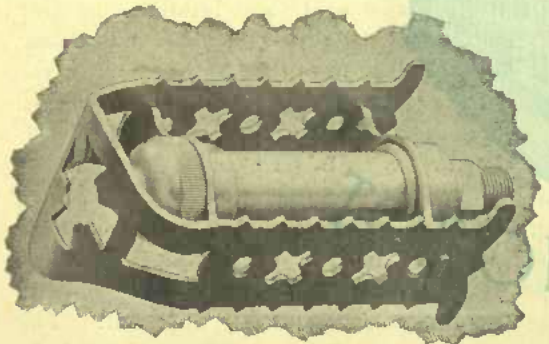
No. 221, Gents' Combination. Per pair, \$1.30  
No. 222, Ladies' " " 1.30



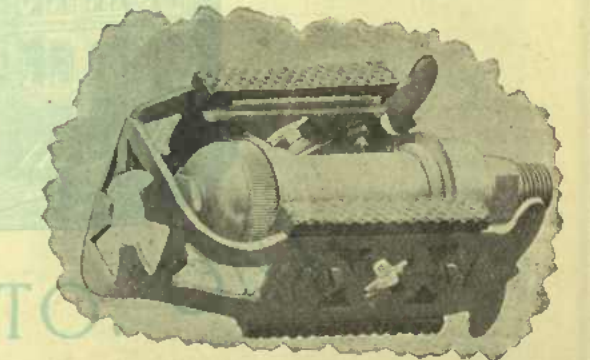
No. 214, Gents' Race. Per pair, \$1.80  
No. 212, " Double Plate. " 2.00



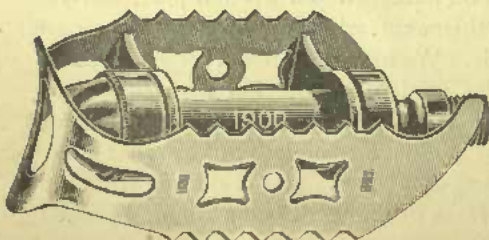
No. 210, Gents' Combination. Per pair, \$2.00  
No. 206, Ladies' " " 2.00



No. 208, Gents' Rat Trap. Per pair, \$1.80



No. 216, Gents' Combination. Per pair, \$2.00  
No. 218, Ladies' " " 2.00



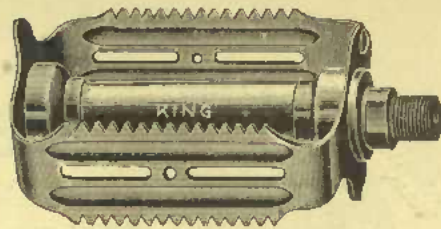
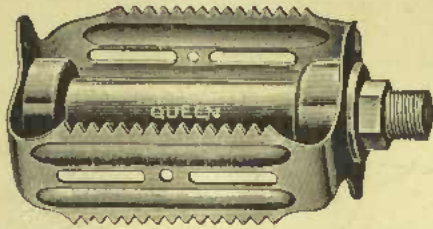
No. 223, Gents' Rat Trap. Per pair, \$0.90  
No. 224, " Combination. " 1.10

## NIAGARA 1900 PATTERN PEDALS



No. 225, Ladies' Combination. Per pair, \$1.10

# PEDALS

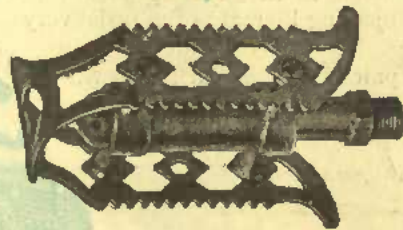


**Queen**—Gents' Rat-trap, wide continuous Band Frame, large Barrel, dust-proof Bearing with 10  $\frac{3}{8}$ " Balls in each end, easily adjusted ..... Per pair \$1.60

**King**—Gents' Rat-trap, same construction as Queen, only narrower Frame Band, Smaller Barrel, and 15  $\frac{1}{8}$ " Balls... Per pair \$1.50

**Queen**—Gents' Combination, with Interchangeable Rubber..... Per pair 1.85

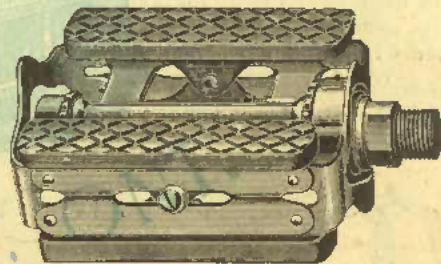
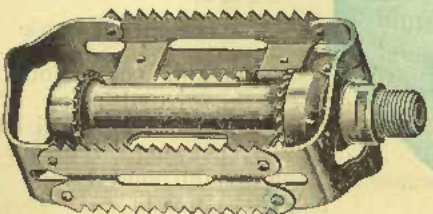
**King**—Gents' Combination, with Interchangeable Rubber ..... Per pair 1.75



**King**—Ladies' Combination, with Interchangeable Rubber ..... Per pair \$1.75

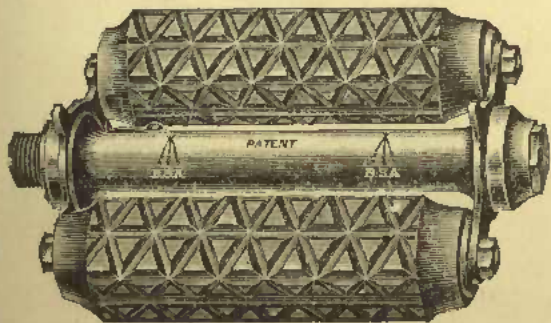
**Century**—Gents' Extra Heavy Side Plates, Rat Trap ..... Per pair \$1.10

**Century**—Gents' Extra Heavy Side Plates, Combination ..... Per pair 1.35



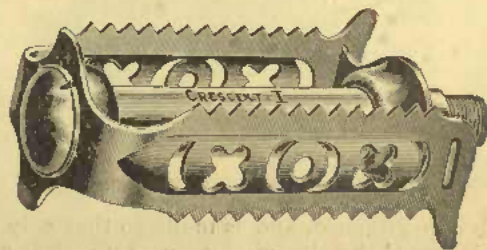
**Banner**—Gents' Rat-trap ..... Per pair \$1.10  
 " " Combination ..... " 1.35

**Banner**—Ladies' Combination ..... Per pair 1.35



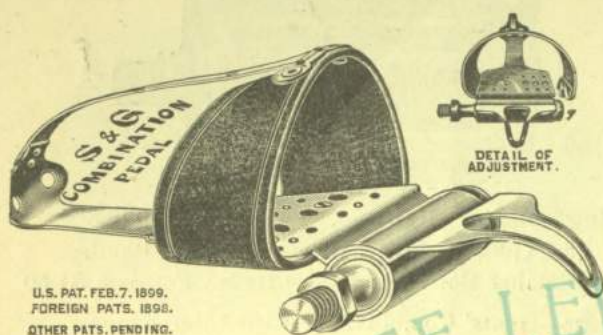
No. 108

**B.S.A.**—Ladies' or Gents' Rubber ... Per pair \$4.00  
 Pattern, Gents' Rat-trap..... " 1.00



**Crescent**—Gents' Rat-trap, End Bearing design,  $\frac{3}{8}$ " Balls ..... Per pair \$1.00  
 With Universal Rubber..... " 1.35

# PEDALS



U.S. PAT. FEB. 7, 1899.  
FOREIGN PATS. 1898.  
OTHER PATS. PENDING.

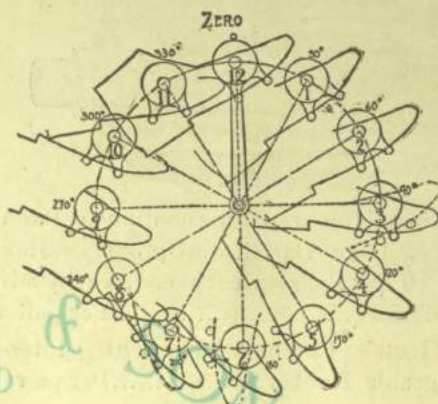
## S and G Combined Pedal and Toe Clip.

Has full, flat bearing for the foot, the leather top can be adjusted to fit any size shoe, the rear projecting lip makes the pedal very easy to catch.

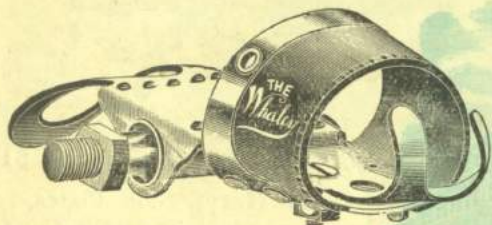
Per pair .....\$2.50



DETAIL OF ADJUSTMENT.



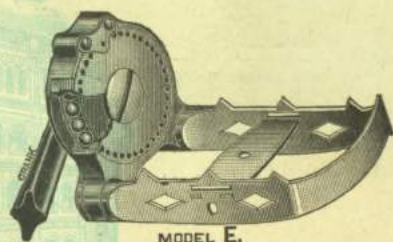
Clock Diagram, showing under swing, with perfect ankle motion obtained by use of Ramsey Swinging Pedals.



## Whaley Adjustable Stirrup Pedal

Pedal and base of clip in one piece; the leather top, which is held in shape by metal spring on face of clip, is adjustable to fit any size shoe; fitted with tripper, which enables pedal to be caught instantly.

Per pair .....\$2.50



MODEL E.

## No. E Ramsey Swinging Pedal

Has a forward or under swing (as per motion above). This is caused by the pivotal point being above the tread. The ordinary pedal has a backward or over swing. This is caused by the pivotal point being below the tread.

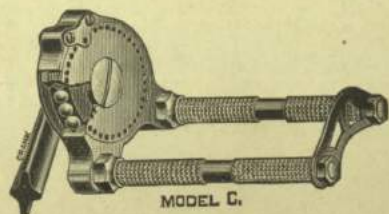
Per pair .....\$4.50  
Toe Clips for same, per pair ..... 0.50



## The "Professional" Pedal

Has toe clip attached, and is made so that only one side is used, thereby giving an extra clearing above the ground of nearly one inch more than ordinary pedals.

Per pair .....\$1.75



MODEL C.

## No. C Ramsey Swinging Pedal

Description as above, with round knurled bars.

Per pair .....\$4.50  
Toe Clips for same, per pair ..... 0.50

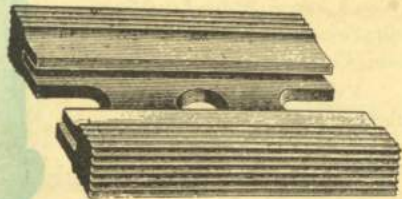
## Pedal Parts

No. 1. Large cup .....	each, \$0	12
" 2. Dust cap .....	"	18
" 3. Small cup .....	"	8
" 4. Centre washer, leather ...	per doz.	24
" 5. Inside plate.....	each,	7
" 6. Lock washer for cone ...	per doz.	44
" 7. Cone .....	each,	14
" 8. Rubbers .....	per set,	30
" 9. Axle washers .....	per doz.	20
" 10. Barrel and cross-bar .....	each,	42
" 11. Axle .....	"	40
" 12. Outside dust washers.....	"	9
" 13. Steel side plates.....	"	7
" 14. Inside dust washers .....	"	9
" 15. Front Stretcher .....	"	17
" 16. Frames.....	"	48
" 17. Small bolts for rubber ...	per doz.	14
" 18. Small bolt for nuts .....	"	10
" 19. Large check nuts .....	each,	9

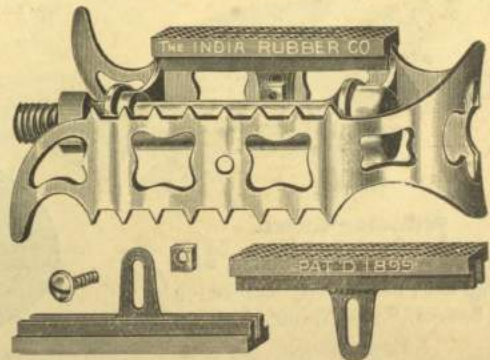
No. B 28 L



No. 20. Interchangeable Rubber Combination, to fit "King" and "Queen" pedals. Sizes for ladies' and gents' pedals, per set. \$0 25



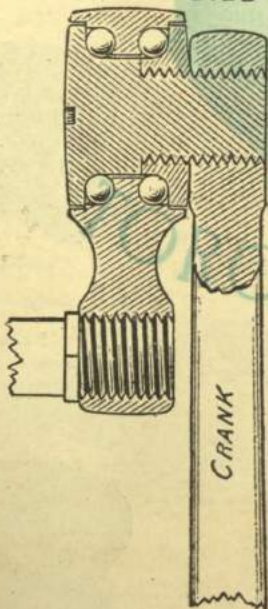
No. 21. Universal Combination Rubbers. Snaps on; no bolts or screws; will fit almost any pedal. Sizes for ladies' and gents' pedals, per set, \$0 25



No. 22. "India" Combination Rubbers, 8 pieces to set, with N.P. bolts. Per set, \$0.25.

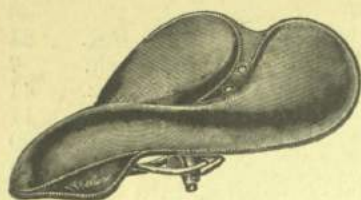
## Jointed Attachment for Cranks

EXACT SIZE



The best and most useful invention on bicycles ever made. Fits any bicycle. Weighs only 8 ounces. Far better than any swinging pedal. Much lighter. Do not look clumsy. Less cost. Strong, durable, well nickeled. Price.....per pair, \$1 20

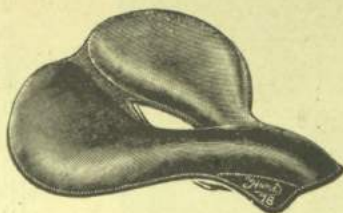
# AMERICAN SADDLES



No. 56

## Wheeler Special

Gents' Roadster, Wood base,  
Padded. Each, \$2.00.



No. 76

## Hunt

Gents', Wood base, Padded, best quality  
Leather top and bottom. Coil Spring.  
Each, \$1.60.

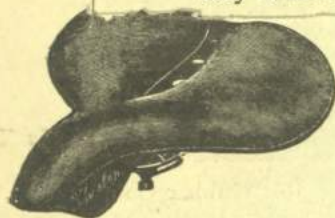


No. 77

## Hunt

Ladies', same material as No. 76.  
Each, \$1.60.

Projecting lip makes the pedal  
easy to catch.



No. 86

## Wheeler Extra

Gents', Wood base, Padded with  
curled hair, best quality Leather top  
and bottom, Coil Spring.

Each, \$2.30.

With Spiral Spring, each, \$2.50.



No. 46

Gents', Metal base, Padded, selected  
Leather top and bottom. Coil Spring.

Each, \$1.20.



No. 47

Ladies', same material as No. 46.  
Each, \$1.20.



No. 108

Gents', Metal base, Padded, good Leather  
top and bottom. Truss Spring.

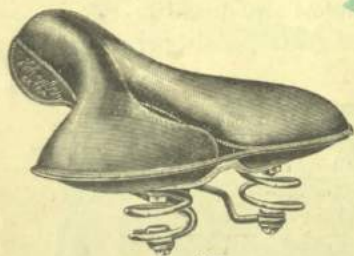
Each, \$1.00.



No. 107

Ladies', same material as No. 108.

Each, \$1.00.

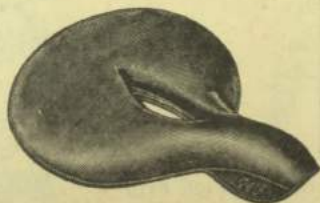


No. 87

## Wheeler Extra

Ladies', Wood base, Padded with  
curled hair, best quality leather top  
and bottom, Spiral Spring.

Each, \$2.50.



No. 98

Gents', Metal base, Padded, Truss Spring  
Each, 80c.

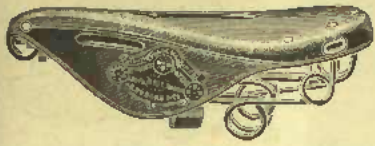


No. 97

Ladies', same material as No. 98.

Each, 80c.

# BROOKS' SADDLES



No. **B 10 L**

Ladies'.....each, \$2.80



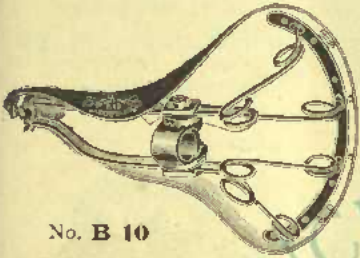
No. **B 17**

Track Racing.....each, \$2.40



No. **B 24 L**

Ladies' .....each, \$2.40



No. **B 10**

Road Racing.....each, \$2.80



No. **B 28**

Gents' Roadster.....each, \$3.25



No. **B 28 L**

Ladies'.....each, \$3.25



No. **B 11**

Track Racing.....each, \$2.80



No. **B 91**

Hammock Roadster, each, \$4.25



No. **B 93**

Ladies' or Gents, patent double action spring, each, \$4.00



No. **B 24-1**

Light Roadster ..each, \$2.40



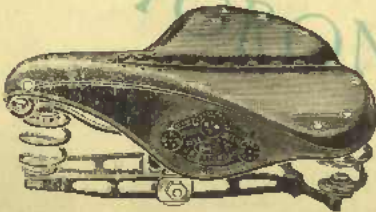
No. **B 90**

Hammock Roadster.....each, \$5.00



No. **B 302 L**

Ladies', with 3 coil springs, each, \$2.80



No. **B 40**

Each..... \$5.00



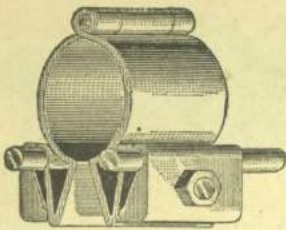
No. **B 45**

Each ..... \$5.00

Nos. B 40 and B 45 are broad saddles with patent tensioned leather under-seat by which the body is supported and the peak left soft and unrestrained.

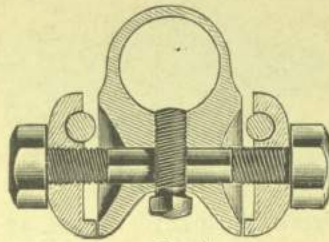
Springs for Brooks' Saddles, each, \$1.00; Spiral Springs for Brooks' Saddles, each, 40c.

# SADDLE CLAMPS



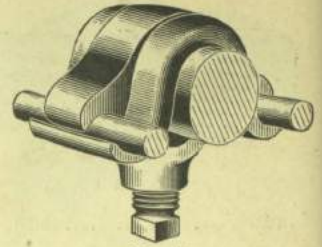
No. 9

Saddle Frame Clamp  
Each, 50c.



No. 5

For Upright T or L Posts,  
all wire springs.  
Per doz., \$4.00; Each, 40c.



No. 7

Per doz..... \$2.50  
Each ..... .25



No. 6

For  $\frac{1}{2}$  Flat Spring and  $\frac{5}{8}$  Seat  
Post.  
Per doz..... \$1.65  
Each ..... .20



No. 1

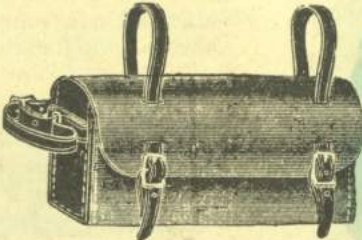
Per doz.....\$1.60  
Each ..... .20



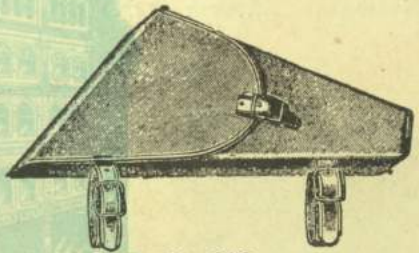
No. 3

Per doz..... \$1.35  
Each ..... .15

# TOOL BAGS



No. 572



No. 672

No. 572, size 1. Gents', square top, bevel riveted end, with patented clasp, per dozen..... \$4.00  
 " 572, " 2. " " " " sewed " round bottom, with patented clasp, per doz... 6.00  
 " 672, " 4. Ladies' Triangular, sewed, with patented clasp, per doz. .... 4.50  
 " 672, " 6. " " " " " " " " extra quality, per doz..... 6.25

# REPAIR KITS



No. 218

Dunlop Repair Kit.  
Per doz., \$1.35.



No. 217

Midget. Per doz., \$1.35.



No. 216

Morgan & Wright  
single or double tube  
tire, quick repair outfit  
Each, 10c.



# PARCEL AND BUNDLE CARRIERS

## PARCEL CARRIERS

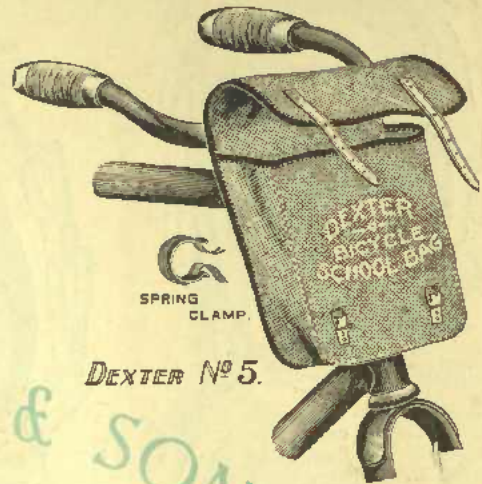
## SCHOOL BAG CARRIER

The elastic band forms a retracting spring and closes the mouth of the carrier, firmly gripping any article extending above, and adjusts itself to the numerous packages you can put in it. This carrier is made of black cotton netting.

No. 1, per doz. .... \$6.00  
 " each ..... .60

PAT. APPLIED FOR

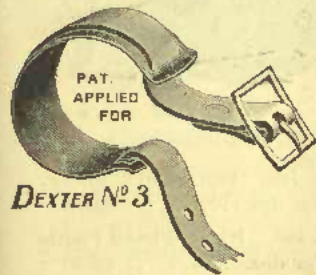
No. 1



SPRING CLAMP

DEXTER No. 5.

## POCKET CARRIERS



PAT. APPLIED FOR

DEXTER No. 3.

No. 3 clamps around the handle bars and holds the strap in place. Can be used on almost any part of bicycle. Springs are adjustable.

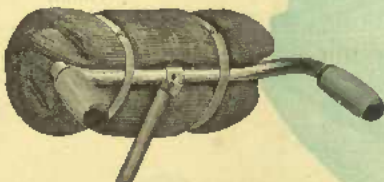
No. 3, per doz. pair, \$3.60  
 " per pair .... .35

This carrier is supplied with our spring clamp, same as on our No. 3 Carrier. The clamps prevent the bag from sliding together at the top, or slipping from side to side on bar. Leather straps with nickel-plated trimmings.

No. 5, heavy colored duck, size, 9x10x3 in. ....	Per doz.	Each.
" 6, " " " " 10x10x3 in. ....	\$5.00	50c.
	5.00	50c.

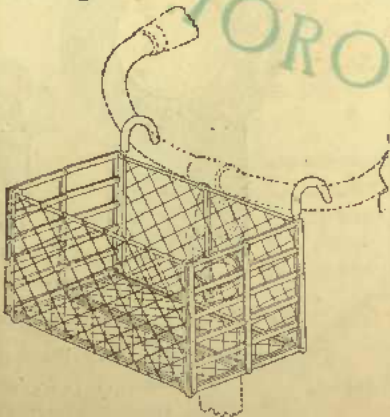
## REAR LUGGAGE CARRIER

## ELASTIC CARRIERS

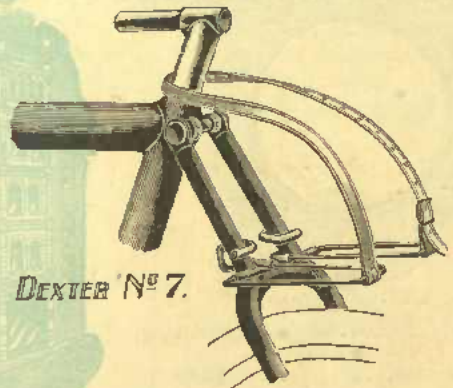


No. 162, per doz. pair, \$1.25; per pair, 15c.

## Folding Wire Parcel Carrier



No. 161, Size, 6x6x10" .... each, \$1.33  
 " 160, " 8x8x14" .... " 1.65



DEXTER No. 7.

This carrier adjusts itself and will fit in rear forks of all bicycles. It is supplied with proper length straps and nickeled buckle. Just the carrier for cameras or any package or coat.

No. 7, heavily nickel-plated, per doz., \$4.00; each, 40c.

## Canvas Waterproof Luggage Bag



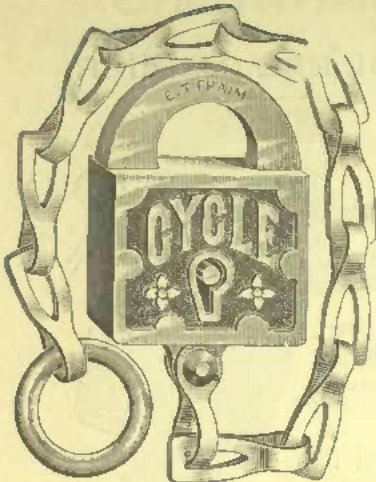
No. 159, Size, 8 x 10" each, \$3.00  
 " 158, " 10 x 14" " 4.00

## "Kozy" Child's Seat

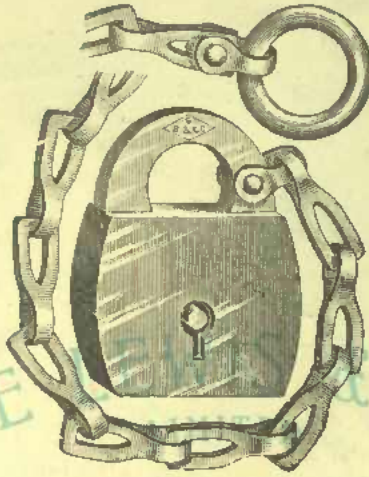


No. 163.  
 Each, \$2.25

# LOCKS



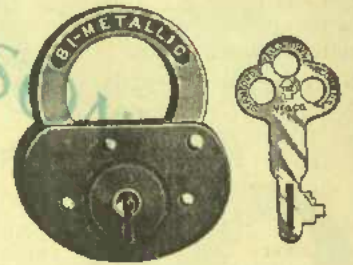
**No. 391**  
Aluminum Bronze, extra strong spring shackle, self-locking, 1 key, nickel-plated steel chain, solid steel ring.  
Per doz..... \$2.25



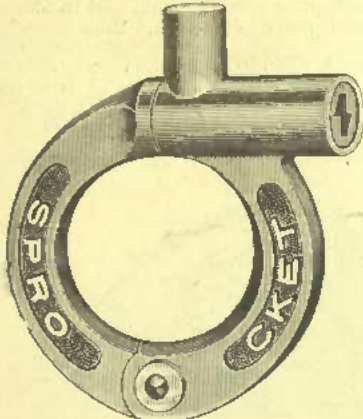
**No. 205**  
Bronze Metal, self-locking, one key, nickel-plated chain.  
Per doz..... \$2.90



**No. 8013 B**  
Yale, Bronze Metal, self-locking, two keys, all different, brass chain.  
Per doz..... \$16.00



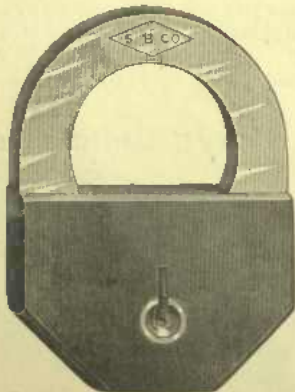
**No. 100**  
Yale Steel, self-locking, one key.  
No. 100. Ivory Black Finish.  
Per doz..... \$1.75  
No. 105. Nickel-Plated Finish.  
Per doz..... \$2.50  
No. 104. Same as No. 100, with chain.  
Per doz..... \$3.20  
No. 106. Same as No. 105, with chain.  
Per doz..... \$4.00



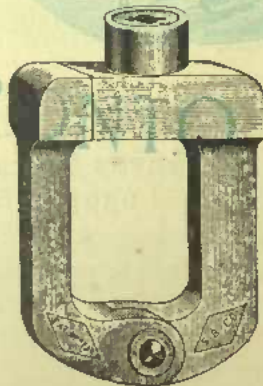
**No. 1000**  
Bronze Metal, 200 changes, self-locking, one key.  
Per doz..... \$3.80



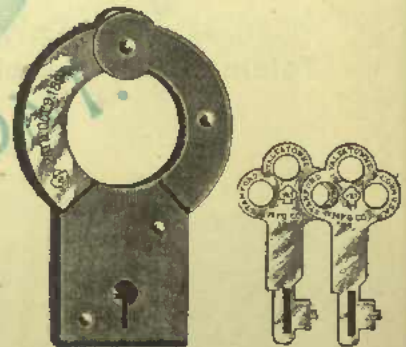
**No. 206**  
Security Lock, brass, nickel-plated, key fastens in lock when not in use.  
Per doz..... \$3.20



**No. 135**  
Pressed Metal, brass interior works, self-locking, one key.  
Per doz..... \$1.10

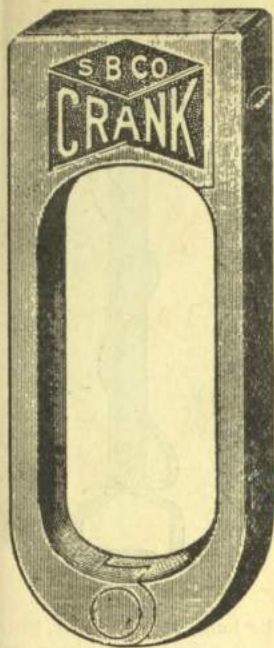


**No. 1300**  
Bronze Metal, twelve changes, self-locking, one key.  
Per doz..... \$2.90



**No. 102**  
Yale Steel, self-locking, two keys.  
No. 102. Ivory Black Finish.  
Per doz..... \$2.60  
No. 103. Bronze Finish.  
Per doz..... \$2.60

# LOCKS



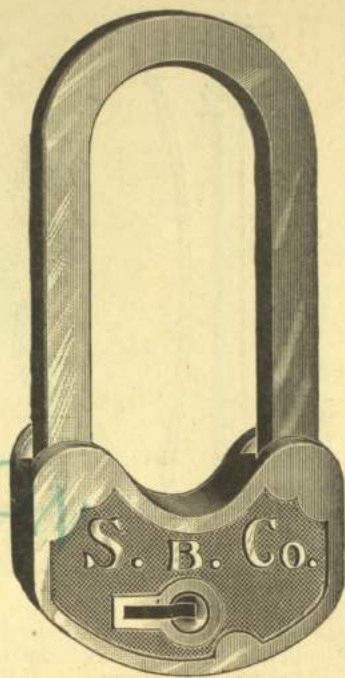
No. 1200

Bronze metal, plated, 200 changes, self-locking, one key.  
Per dozen, \$4.00



No. 37

Aluminum, spring shackle, self-locking, flat key, all different, weight  $\frac{7}{8}$  oz.  
Per doz., \$8.00



No. 1400

Acme Crank Lock, bronze metal, self-locking, one key.  
Per dozen, \$2.80

## CYCLIST'S KNIFE



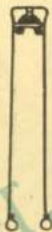
No. 95800

3½" Aluminum handle, large spear blade, turn screw and tire detacher.  
Per doz., \$10.00; Each, \$1.00

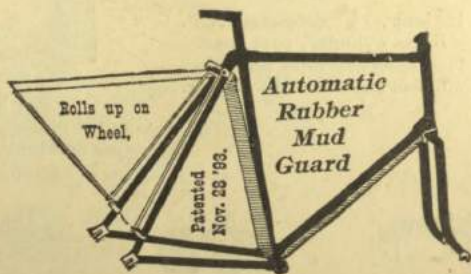
## MUD GUARDS

No. 182

Rubber band mud guard for front and rear wheel.  
Per pair, \$0.50

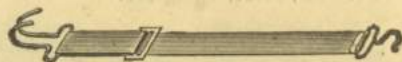


## MUD GUARDS



No. 187

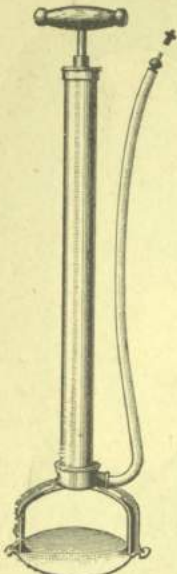
Each, \$1.00



No. 184

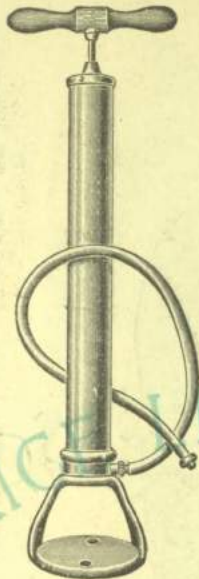
Ladies' Gem Strip  
Each, \$0.40

# PUMPS



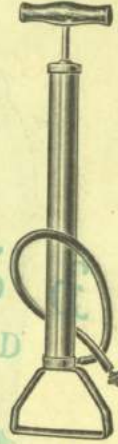
No. 255

22" long, 1½" diameter, Brass N.P. cylinder, cast stirrup.  
Each, \$2.10.



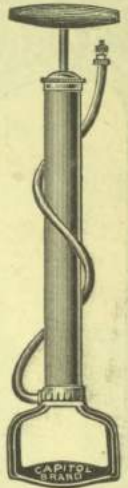
No. 250

20" long, 2" diameter, Brass N.P. cylinder, cast stirrup.  
Each, \$4.40.



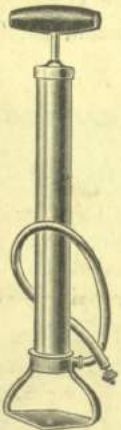
No. 249

12" long, 1¼" diameter, Brass N.P. cylinder, wrought stirrup.  
Per doz., \$5.20; each, 45c.



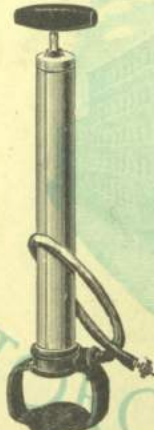
No. 265

12" long, 1¼" diameter, Brass N.P. cylinder, cast base, patented expander plunger.  
Per doz., \$6.40; each, 55c.



No. 256

12" long, 1½" diameter, drawn steel, N.P. cylinder, cast base  
Per doz., \$8.40; each, 75c.



No. 257

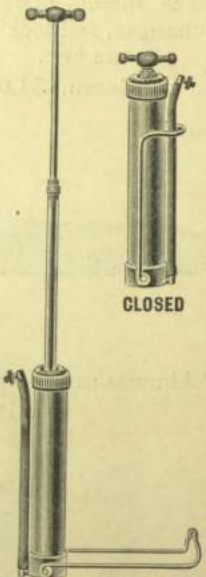
12" long, 1½" diameter, Brass N.P. cylinder, cast base.  
Each, 90c.



THE BANNER PUMP.  
Patented Jan. 10, 1899.

No. 264

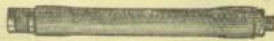
12" long, 1¼" diameter, N.P. Brass cylinder, cast base.  
Place spout over valve, press down with foot and connection is made.  
Each, 60c.



CLOSED

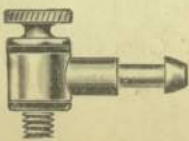
AS A FOOT PUMP  
No. 266

Giant Folding Pocket, Foot or Hand Pump.  
Each, 65c.



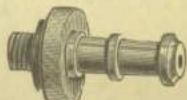
No. 264

Per doz., 76c.; each, 8c.



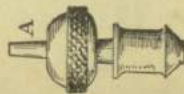
No. 264

Right Angle Pump Connection.  
Per doz., 90c.; ea., 10c.



No. 263

Swivel Nipple A and K combined.  
Per doz., 60c.; ea., 8c.



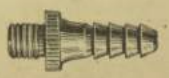
No. 260

A—Swivel.  
Per doz., 60c.; ea., 10c.



No. 259

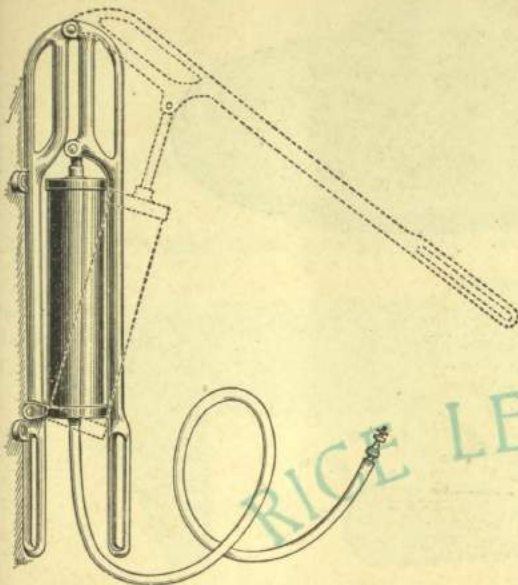
K—Nipple  
Per doz., 30c.; ea., 5c.



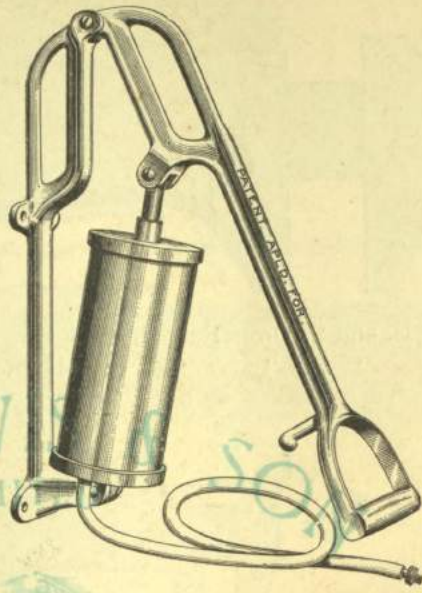
No. 262

Hand Pump Nipples.  
Per doz., 30c.; ea., 5c.

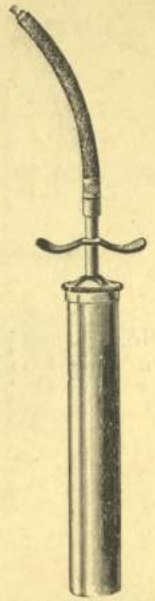
# PUMPS



Cylinder. Capacity.  
 No. 54 ..... 10x1 1/2 in. 17 cubic in... each, \$2.40  
 " 55..... 8x2 " 25 " " " 4.20



Cylinder. Capacity.  
 No. 56 ..... 6 1/4 x 3 in. 38 cubic in.  
 Each..... \$7.00



No. 258.  
 Hand Pump.  
 Per doz..... \$1.65  
 Each..... 0.16



Rubber Pump Tubing.  
 Per foot..... 8c.



Pump Suckers.  
 Hand pumps, per doz .. 12c.  
 Foot pumps. 1 1/4 1 1/2 2"  
 Per doz.... 30c. 35c. \$1.00



Steel Pump Clips.  
 Per pair ..... 10c.

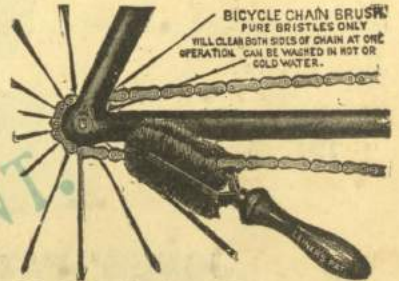


Automatic Cut-off Valve.  
 Each, 60c.

## CHAIN CLEANING BRUSHES

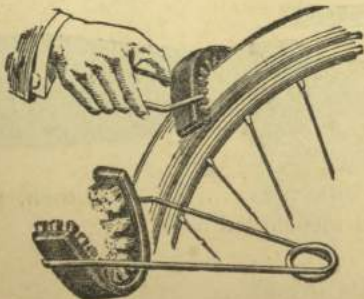


No. 140. Single row ..... per doz., \$1.35  
 " 141. Double row..... " 2.50



No. 142. Per doz., \$2.00; each, 20c.

BICYCLE CHAIN BRUSH!  
 PURE BRISTLES ONLY  
 WILL CLEAN BOTH SIDES OF CHAIN AT ONE  
 OPERATION. CAN BE WASHED IN HOT OR  
 COLD WATER.



No. 143. Per doz., \$3.00; each, 30c.

## TIRE CLEANING BRUSHES



No. 144. Per doz., \$4.00; each 40c.

LEWERS PAT. BICYCLE TIRE BRUSH!  
 WILL CLEAN AND POLISH TIRE AND  
 RIM AT THE SAME TIME WITHOUT  
 TROUBLE OR SOILING THE HANDS.  
 FITS ANY SIZE.

MADE OF RUSSIAN BRISTLES  
 AND CAN BE WASHED OUT IN  
 HOT OR COLD WATER AND  
 ARE GUARANTEED IN EVERY  
 OTHER RESPECT.

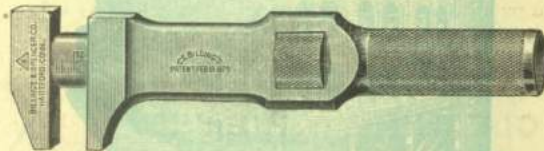
# WRENCHES



No. 194.	4 1/4-inch, B. and S. Drop Forged, black.....	Per Doz.	\$10.10	Each.	\$1.00
" 491.	4 1/4 " " " " " nickel-plated.....		11.25		1.15

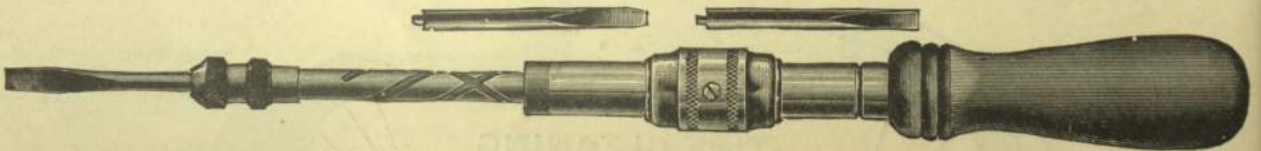


No. 195.	5-inch, B. and S. Drop Forged, black.....	Per Doz.	\$10.10	Each.	\$1.00
" 196.	6 " " " " " ".....		13.50		1.35
" 591.	5 " " " " " nickel-plated.....		11.25		1.15
" 691.	6 " " " " " ".....		16.80		1.65



No. 197.	5-inch, B. and S. Drop Forged, black.....	Per Doz.	\$10.10	Each.	\$1.00
" 791.	5 " " " " " nickel-plated.....		11.25		1.15

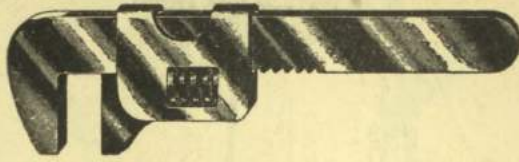
## JONES' PATENT REVERSIBLE SCREW DRIVER



No. 1.	Length, closed, 11-inch; open, 17-inch, with three forged steel bits .....	each,	\$2.60
" 2.	" " " 10 " " 15 " " two plain bits and one slotted bit.....	"	2.30

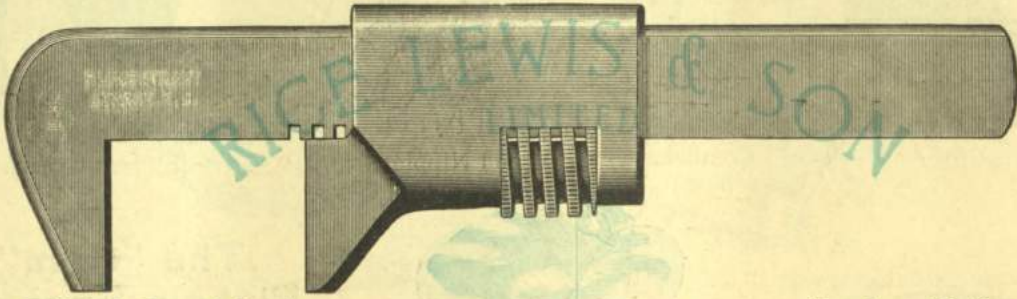
The No. 2 is suitable for use on the Spoke Nipples of bicycles.

# WRENCHES



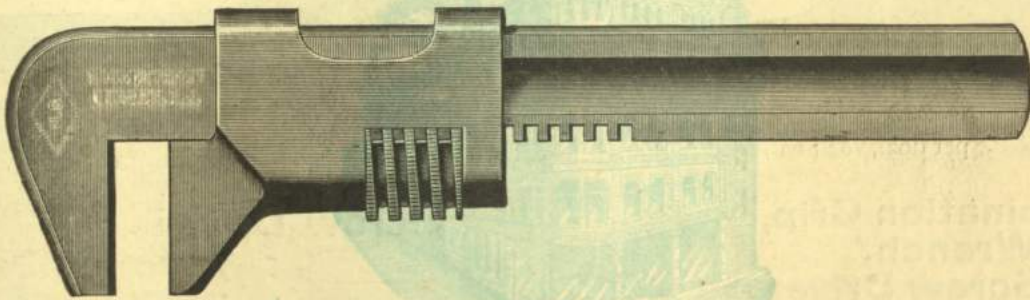
No. 290. Nickel-plated (special pattern), all Wrought Steel .....Per doz., \$2.40; each, 25c.

**Drop Forged from a high grade of Steel, carefully tempered and highly finished.**

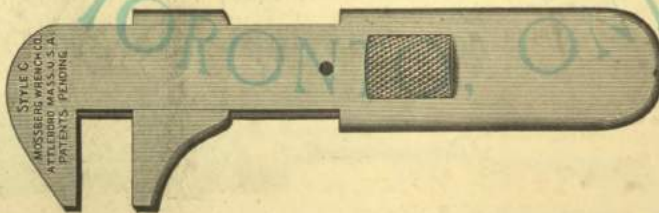


No. 191. Polished, Forged Steel.....Per doz., \$2.30; each, 25c.

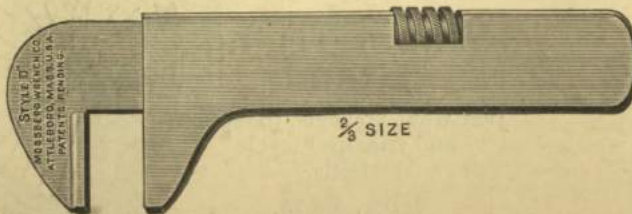
" 192. Nickel-plated, Forged Steel ..... " 2.75; " 30c.



No. 193. Nickel-plated, Fluted .....Per doz., \$3.20; each, 35c.

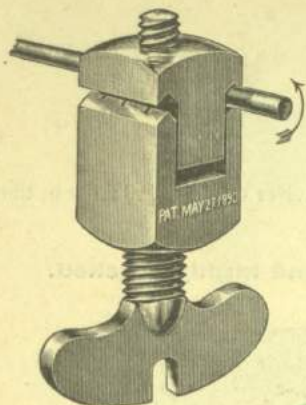


No. 201. Mossberg C, Nickel-plated .....Per doz., \$3.50; each, 35c.



No. 199. Mossberg D, Nickel-plated.....Per doz., \$3.50; each, 35c.

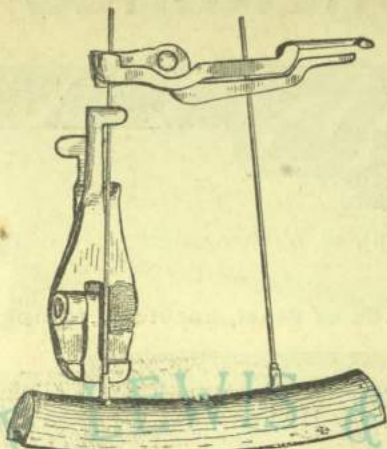
## Spoke Grips



No. 205

Double.....each, 80c.

## Nipple Grips



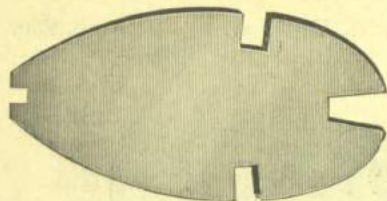
No. 206

Combination Spoke and Nipple Grip,  
blued...per doz., \$3.50 ; each, 35c.



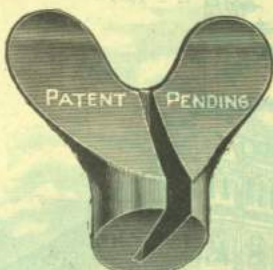
No. 204

"Perfect," blued..... each, 70c.



No. 203

"Pony," N.P., per doz., 75c.; ea., 10c.



No. 202

Plated.....each, 15c.

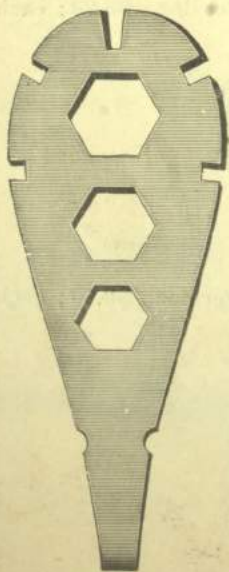
## The "Gem" Pinhole Spanner



No. 201

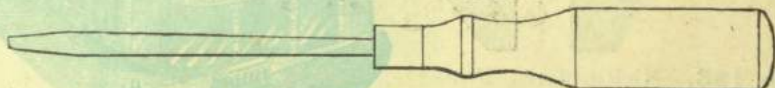
Blued.....each, 35c.

## Combination Grip, Wrench, and Screw Driver



Plated, per doz., \$1.80; ea., 20c.

## Screw Driver



No. 3

Standard, Mahogany handle, 2" blade.....per doz., \$1.00

## Nipple Screw Driver



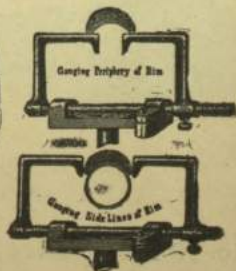
No. 200

5" over all.....per doz., \$2.50; each, 25c.

## Wheel Truing Stand

Just what you need to repair  
and true up bicycle  
wheels.

Each, \$6.75.

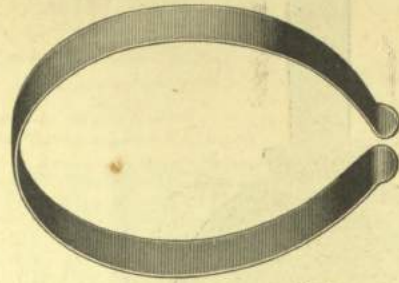




# TROUBLE BELLS

CORRUGATED

PLAIN



No. 228. Japanned.....per gross, \$2.60; per doz., 25c. No. 229. Japanned.....per gross, \$2.60; per doz., 25c.



No. 230. Soliel, or French Clip, blued.....per gross, \$6.50; per doz., \$0.70  
 " 231. " " " " nickel-plated ..... " 8.00; " 0.90

## CYCLOMETERS



### The "Jockey"

Geared throughout. Action positive. No springs nor eccentric parts. The registering is absolute. It cannot be re-set.

What is the good of a cyclometer whose mileage can be changed at will? You want one whose record you can bank on.

Made and warranted by the New England Watch Co.

No. 167, each..... \$0.80  
 Per doz..... 8.50



### The New Departure

Non-corrosive, dust-proof, water-proof, simple, strong mechanism, giving direct and positive motion; without springs, ratchets, pawls or other cumbersome and intricate parts, thus forming the smallest, lightest, and at the same time the most durable Cyclometer in existence. No soft metals employed in its construction, every part being made either from hard brass or best nickel silver, which insures durability with lightness. Records 10,000 miles and repeats. Guaranteed by the New Departure Bell Company.

No. 166, each, 80c.; per doz., \$9.00

EXACT SIZE

### U. S. Trip

Registers 100 miles by tenths, and can easily be set to "0" at any time to record any journey.

The total registers up to 10,000 miles, and keeps a perfect record of the season's mileage.

The new spoke stud will not move on the spoke, but will always remain in its place.

**OUR GUARANTEE.**—Should the meter be damaged send to maker, with stamps, and he will return it in good order.

THE U.S. MFG. CO.,



READS:  
 TOTAL 2486 MILES.  
 TRIP 75 <sup>7</sup>/<sub>10</sub> MILES.

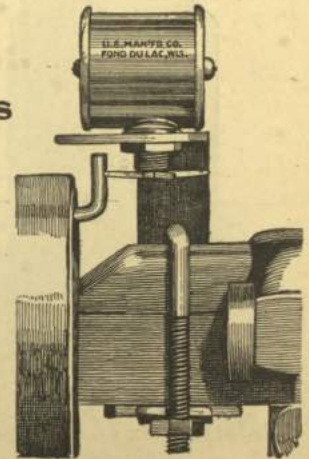
Trip Feature, with Improved Set-Back.

No. 169, each..... \$1.00

### U.S. Odometer for Carriages

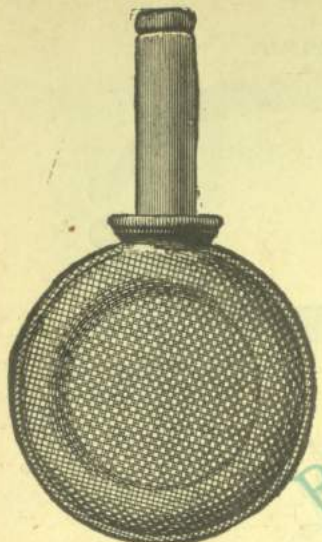
Registers 10,000 miles by tenths. The U.S. Odometer registers the distance traveled by a horse. Everyone who has a horse and carriage will be interested in this instrument. Liverymen, physicians, "speeders," etc., will find the "U.S." of great practical value. No one can guess with accuracy how far a horse has traveled. The "U.S." does no guessing. It tells the truth. In ordering state size of wheel.

No. 170, each, \$2.50



As it looks when Attached

Nipr



No. 224

Perfect. Corrugated.

Per doz. .... \$0.70  
Each ..... 0.10



No. 223

Zenith. With stand, plated.

Per doz. .... \$1.10  
Each ..... 0.10



No. 221

Star. Plated.

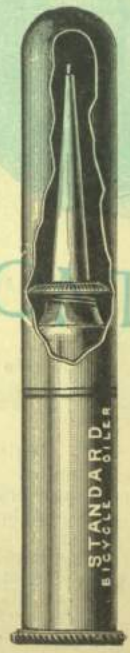
Per doz ..... \$0.70  
Each ..... 0.10



No. 225

Safety. Extension Spout, plated.

Per doz. .... \$2.00  
Each ..... 0.20



No. 219

Standard. Plated, small or large.

Per doz. .... \$2.40  
Each ..... 0.25



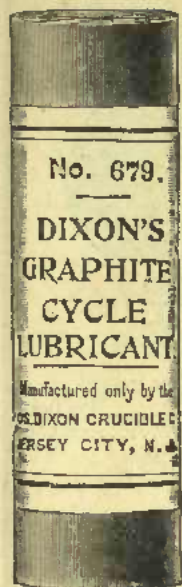
No. 220

Magic. Plated.

Per doz. .... \$1.00  
Each ..... 0.10

TORONTO, ONT.

# BELLS



No. 679  
Per gross, \$10.00  
" doz., 1.00



No. 691  
Per gross, \$5.00  
" doz., 0.50



No. 692  
Per gross, \$10.00  
" doz., 1.00



No. 267  
Per gross, \$4.00  
" doz., 0.40



No. 254  
Per gross, \$9.00  
" doz., 0.80



No. 52  
Brush and Graphite ..... each, 20c.  
Brush and Repair Kit ..... " 30c.

## ECLIPSE CHAIN LUBRICANT

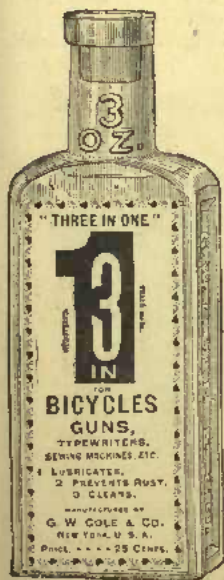


No. 160. Graphite, 2-oz. sticks in tin foil.

Per gross, \$2.75; per doz., 25c.

No. 161. Glass Mica, 2-oz. sticks in tin foil.

Per gross, \$3.20; per doz., 35c.



No. 3  
3-oz. bottles.  
Per doz., \$2.40  
" bottle, 0.25



No. 265  
Gross lots only ..... \$4.80  
Per doz., ..... 0.45  
" gallon, ..... 1.00



REDUCED CUT  
No. 4  
Per doz., ..... \$2.20  
Each ..... 0.25



Metal Polish.  
Per doz., 50c.; each, 5c.



**Electric Stroke**

	Per Doz.
No. E 9½. 1¾" Gong	\$5.00
" E 7½. 2" "	6.00
" E 5½. 2½" "	10.00



**Electric Stroke**

	Per Doz.
No. E 3½. 2¾" Gong	\$12.00



**Electric Stroke**

	Per Doz.
No. E 6½. 2¾" Gong	\$9.50



**Electric Stroke**

	Per Doz.
No. E 9. 1¾" Gong	\$5.60
" E 7. 2" "	6.50

**Double Stroke**

" D 8. 1¾" Gong	4.70
" D 6. 2" "	5.35



**Double Stroke**

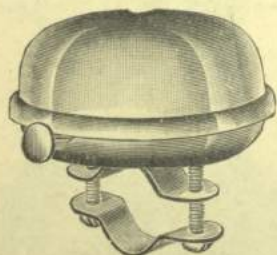
	Per Doz.
No. D 8½. 1¾" Gong	\$4.25
" D 6½. 2" "	5.10



**Fleur De Lis**

	Per Doz.
No. 1126. Electric Stroke, 2" Gong	\$ 8.00
" 1125. Push button, continuous ring 2" Gong	15.00

**CONTINUOUS RING**



**Push Button**

	Per Doz.
No. 415. 2" Gong	\$11.00
" 413. 2¼" "	11.00



**Push Button**

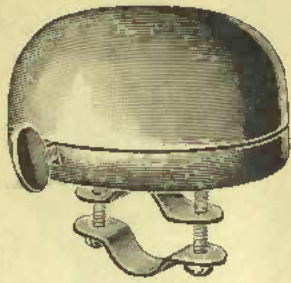
	Per Doz.
No. 425. 2" Gong	\$12.00
" 423. 2¼" "	12.00



**Push Button**

	Per Doz.
(Rotary Movement Non-Revolving Gong)	
No. 150. Screw Clamp, 1¾" Gong	\$10.80
" 152. Band Clamp, 1¾" Gong	11.50

# BELLS



**Electric Stroke**

No. 211.	1 3/4" Gong.....	Per Doz. \$2.40
" 212.	2" " .....	3.00

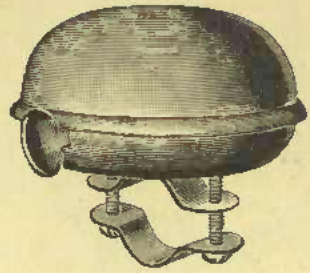
**Double Stroke**

" 111.	1 3/4" Gong.....	2.50
" 112.	2" " .....	2.70



**Electric Stroke**

No. 311.	1 3/4" Gong.....	Per Doz. \$3.00
" 312.	2 1/8" " .....	3.60



**Electric Stroke**

No. 311 B.	1 3/4" Gong.....	Per Doz. \$3.20
" 312 B.	2 1/8" " .....	3.80



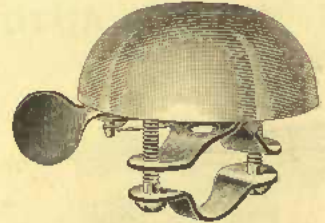
**Electric Stroke**

No. 321.	1 3/4" Gong.....	Per Doz. \$3.50
" 322.	2 1/8" " .....	4.00



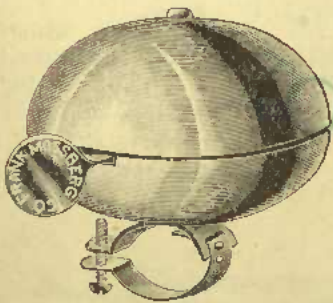
**Electric Stroke**

No. 321 B.	1 3/4" Gong.....	Per Doz. \$3.70
" 322 B.	2 1/8" " .....	4.20



**Single Stroke**

No. S 4 .....	Per Doz. \$1.60
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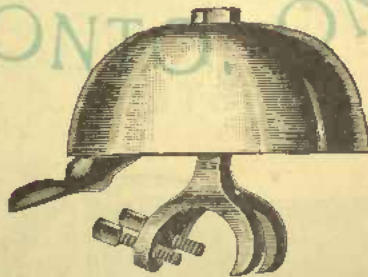


This bell is entirely new in principle and design and has less number of parts than any chime bell made.

Action is reversible for either right or left hand.

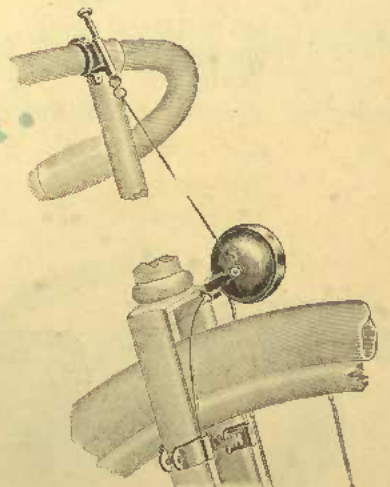
Each stroke produces two clear and distinct tones.

No. 10.	Double stroke, 2 1/2" Gong .....	Per Doz. \$6.50
" 12.	Electric stroke 2 1/2" Gong .....	11.50



**Single Stroke**

No. 14 1/2,	2 1/2" and 2 3/4" Gong	Per Doz. \$1.20
-------------	------------------------	-----------------



**Tire Bell, Continuous Ring**

No. T 9.	2" Double Gong with spring push .....	Per Doz. \$6.00
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# BELLS

## DECORATED



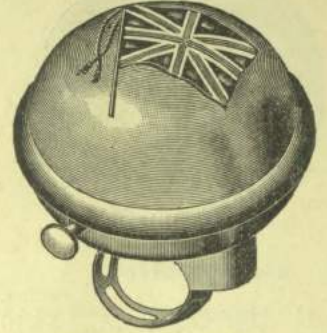
**Electric Stroke**

No. 223. 2" Gong.  
Per doz. .... \$6.00.



**Continuous Ring**

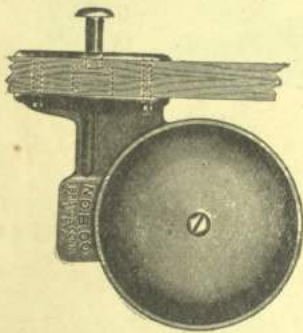
No. 514. 2" Gong.  
Per doz. .... \$12.50.



**Continuous Ring**

No. 524. 2" Gong.  
Per doz. .... \$13.00.

## AUTOMOBILE BELLS



**Rotary**

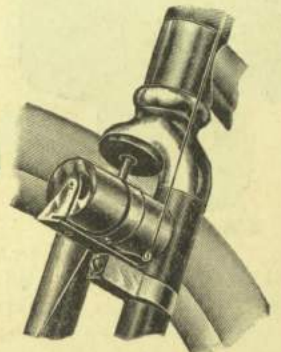
No. F-63. 3½" Bell Metal Gong,  
nickel trimmings, enameled  
case.  
Each ... \$3.75.



**Double Stroke Chime**

No. F-95. 3½" Bell Metal Double  
Gong of different tone, all  
nickel plated.  
Each ... \$9.00.

## TIRE WHISTLE



**Cycle Whistle**

No. 228. Double action, whistling at each end. Can be attached to any bicycle. 1¼" diameter, 2½" long. Each ... \$1.33.

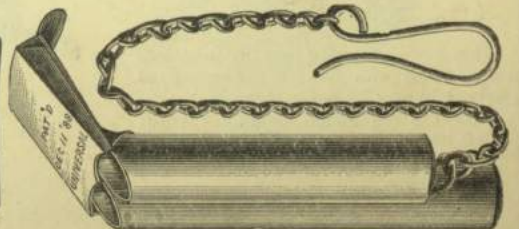
## WHISTLES



No. 225. Echo Call.  
Per doz., \$2.20.

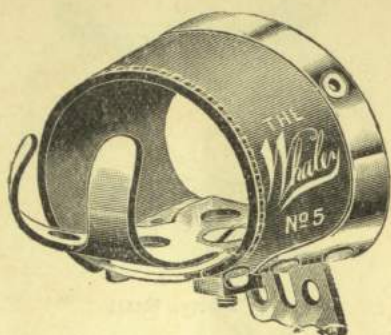


No. 216. The Develine Whistle.  
Per doz., \$1.50.



No. 227. Universal Whistle.  
Per doz, \$2.40.

# TOE CLIPS



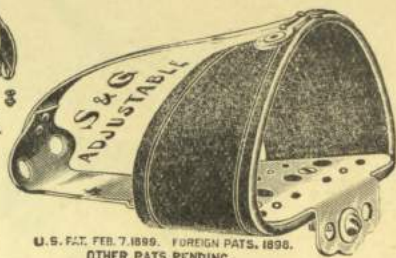
## THE WHALEY ADJUSTABLE BICYCLE STIRRUP

No. 417. Is adjustable to all sizes of shoes without losing shape or strength. Will not mar the shoe or bruise the foot. Made of water-proof strap leather, Russet finish. The metal parts are spring steel polished nickel-plated finish.

Per doz. pairs, \$4.80. Per pair, 50c.



DETAIL OF  
ADJUSTMENT.



U. S. PAT. FEB. 7, 1899. FOREIGN PATS. 1896.  
OTHER PATS. PENDING.

## THE S. & G. ADJUSTABLE TOE CLIP

No. 406. The S. & G. Adjustable has a one-piece cover, and can be quickly changed to fit a large or small foot. The cover spring is the strongest form that can be made, and will stand without injury any ordinary usage. Will not injure the finest shoes.

Per doz. pairs, \$4.80. Per pair, 45c.

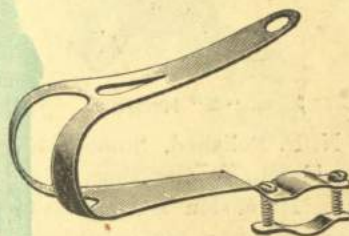


PATENT APPLIED FOR.

## HANDY FOOT GUIDE OR CLIP TRIPPER

Makes it doubly easy to insert the feet into any toe clip. Made of spring steel, nickel-plated.

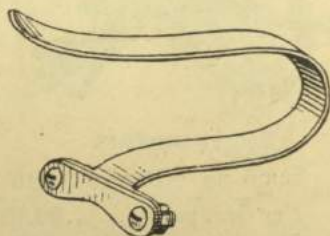
Per doz. pairs, \$1.65. Per pair, 15c.



## UNITY

No. 419. Nickel-plated, polished, hardened steel, round edge. Attaches to centre-bar of pedal.

Per doz. pairs, \$2.00. Per pair, 25c.



No. 410. Nickel-plated, polished, two bolts.

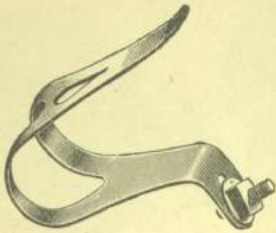
Per doz. pairs, 80c. Per pair, 10c.



No. 418. Nickel-plated, polished.

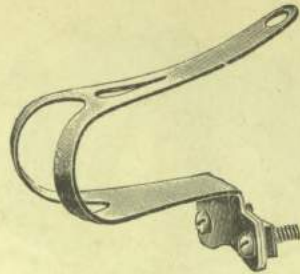
Per doz. pairs, \$1.50. Per pair, 15c.

# TOE CLIPS



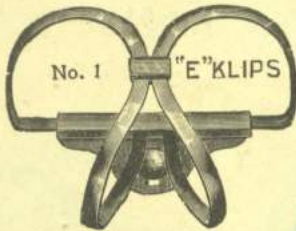
**Holdfast**

No. 411. N. P. Polished Hardened Spring Steel.  
 Per doz. pair..... \$1.90  
 Per pair ..... .15



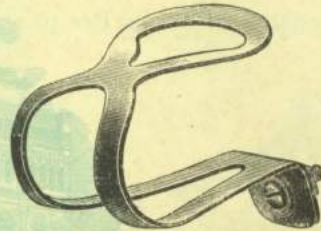
**John Bull**

No. 412. N. P. Hardened Steel, Round Edge,  
 two bolts.  
 Per doz. pair..... \$1.90  
 Per pair..... .25



**"E" Klips**

No. 408. N. P. Polished, Smooth Edge, adjust-  
 able in width to fit any shoe, will not mar  
 shoe. Extension over pedal plate  
 keeps clip from turning sideways.  
 Per doz. pair.....\$3.00  
 Per pair ..... .30



**Scorcher**

No. 415. N. P. Polished, Hardened Steel, Round  
 Edge. Fits any shoe.  
 Per doz. pair..... \$1.75  
 Per pair ..... .20



**Pacer**

No. 418. N. P. Polished, Hardened Steel. Top  
 piece curved to conform with shape  
 of shoe.  
 Per doz. pair..... \$2.00  
 Per pair ..... .25

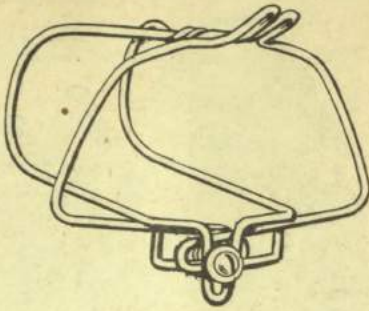


**Kumfurt**

No. 404. Same as "Pacer," with two bolts.  
 Per doz. pairs.....\$2.50  
 Per pair ..... .30



# TOE CLIPS

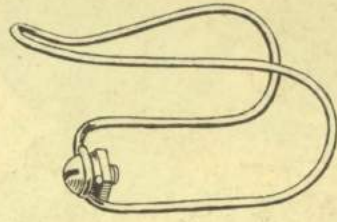


Design Registered

## Adjustable Wire Basket Clip

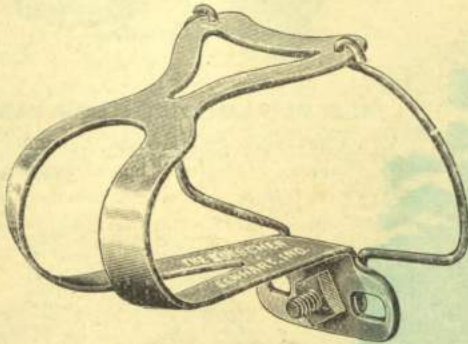
This Clip presents a flat surface for the foot, and bolted on the inside of the pedal, does not roll.

No. 204. N. P., per doz. pair, \$1.80; per pair, 20c.



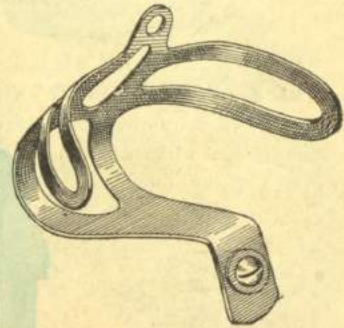
## Single Bolt

No. 205. N. P., Wire Clip, per dozen pair, \$1.00; per pair, 12c.



No. 407. N. P., Polished Hardened Steel, with wire side guard.

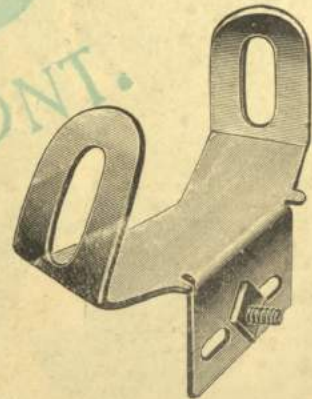
Per doz. pair... .. \$1.86  
Per pair ..... .20



No. 416. N. P., Polished, per dozen pair, \$2.80; per pair, 30c.



No. 414. N. P., Polished, 2½ or 3" wide, per doz. pair, \$2.50; per pair, 25c.

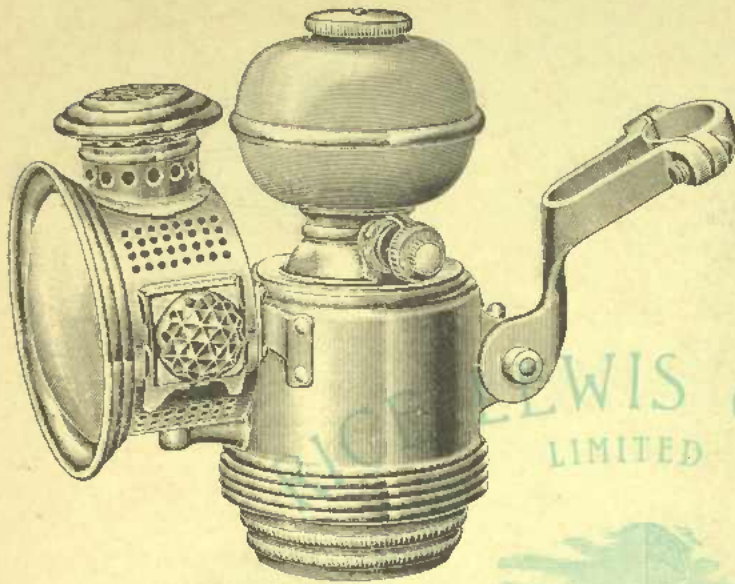


No. 409, A, for ladies, 2½",  
B, small men's, 3",  
C, medium men's, 3¼",  
D, large men's, 3½".

Per doz. pair..... \$2.40  
Per pair ..... .25

# ACETYLENE GAS LAMPS

NO SMOKE, GREASE OR ODOR

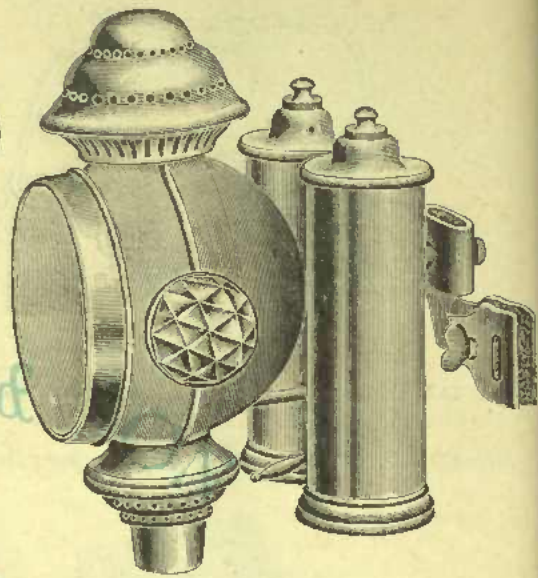


No. 11

## "M. & W. IMPROVED" GAS LAMP

IMPROVED AND BROUGHT UP-TO-DATE. New in everything but design. And with our new "Duplex Bracket" it has few equals as a medium priced lamp.

Price, each, \$3.00.

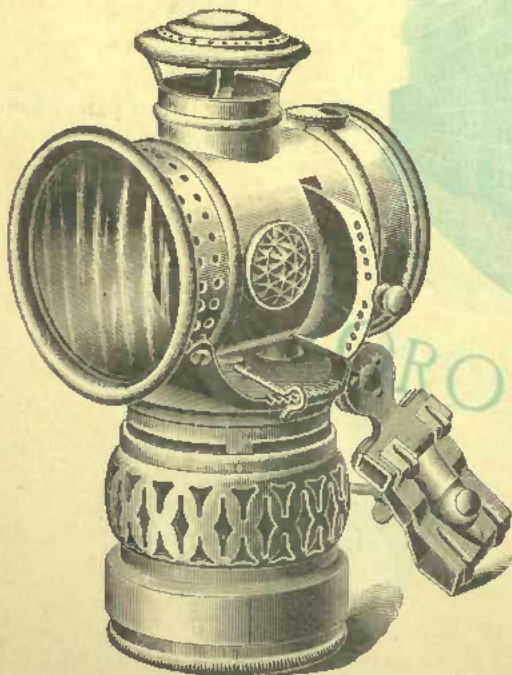


No. 7

## M. & W. "LOCOMO" GAS LAMP

FOR CARRIAGES AND MOTOR VEHICLES. Built like our famous "Duplex," but of larger capacity, with half-foot burner. It works precisely the same as the "Duplex," and is the most satisfactory gas lamp for vehicles ever introduced.

Price, each, \$10.00.

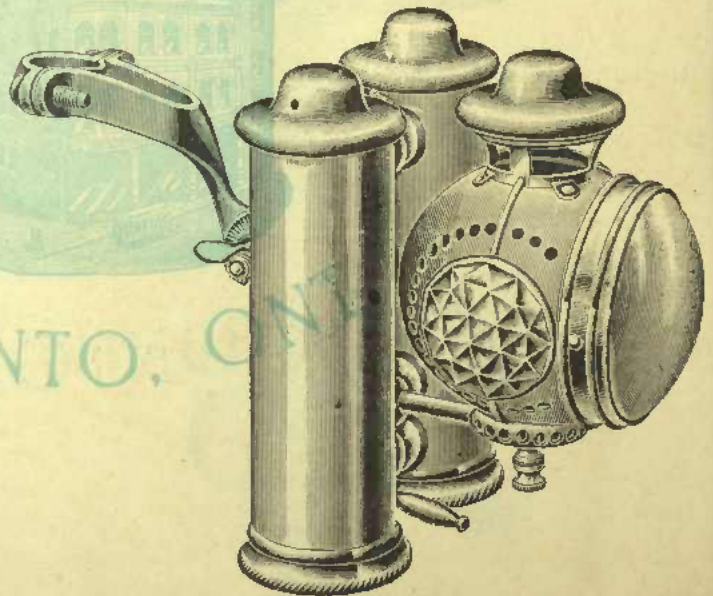


No. 8

## "DAYLIGHT"

Has rocker bottom carbide holder which makes it easy to remove same. Perfectly focused lens and reflector. Use loose carbide.

Price, each, \$3.50.



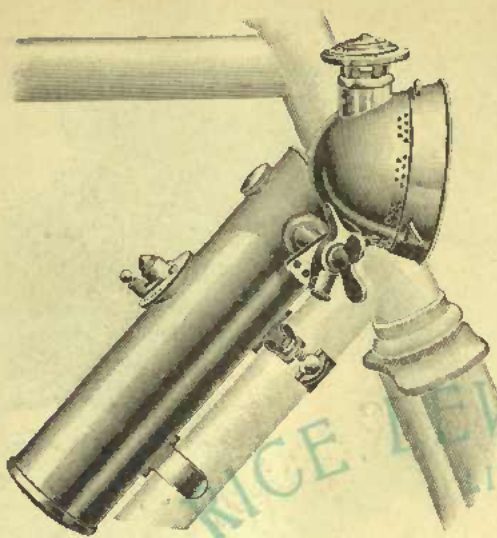
No. 13

## M. & W. "DUPLEX" GAS LAMP

IT'S DIFFERENT—New and Novel. Made on gas lines. Candle power, 175. Turns up or down, on or off. Automatic and mechanical. A cool lamp but a hot seller, in fact the very best gas lamp on the market at any price.

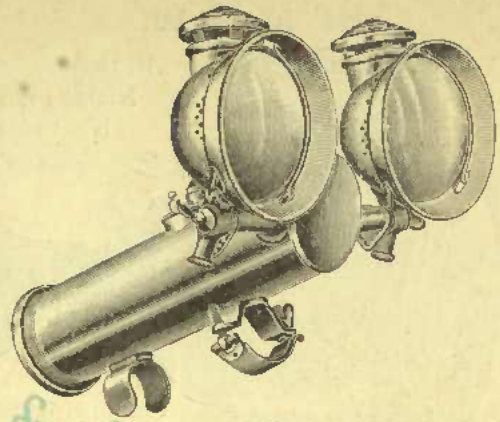
Price, each, \$3.75.

# ACETYLENE GAS LAMPS



No. 10  
**NEW DEPARTURE**

Each .....\$3.60

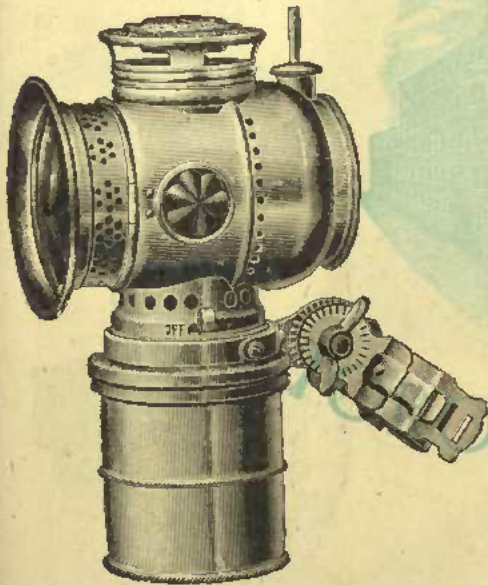


No. 9  
**NEW DEPARTURE TWIN HEAD LIGHT**

Has two burners, giving the most powerful light obtainable by any means. Each lamp is adjustable independently, so that any area or angle of light may be obtained.

Each.....\$5.40

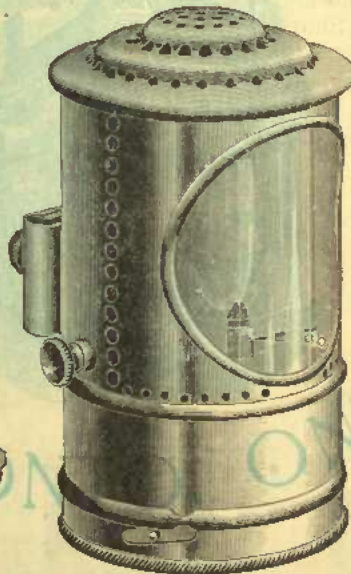
New Departure Lamps have automatic generator feed. Use loose carbide. No special form of charge required. Flame may be regulated while riding. Lamp may be adjusted to throw light at any desired angle. Lamp and generator separate, thus making a small lamp and insuring against explosions. Lamp finished in full nickel plate.



No. 6  
**BRECKENRIDGE**  
(New Model)

Special design. Non-carbonizing burner. Use loose carbide. Water, which is supplied at bottom of lamp, causes gas to ascend through the dry carbide, thus taking all moisture from gas. Has 2½-inch double convex lens, perfectly focused.

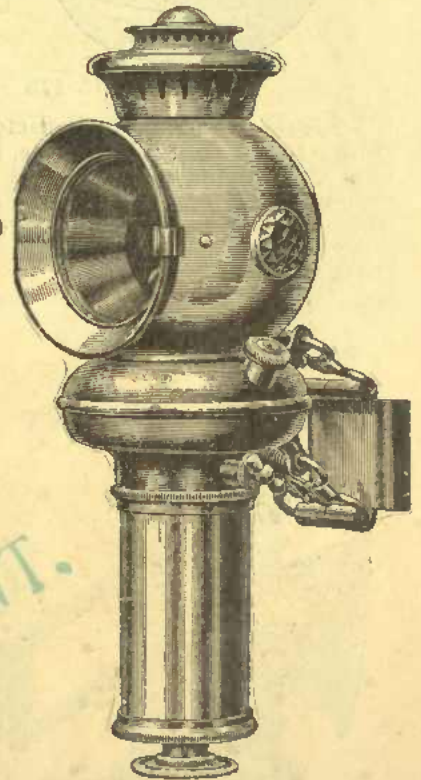
Each .....\$3.50



No. 5  
**M. & W. "RAINBOW"**

Without exception the best low-priced gas lamp. It is our leader. Turn valve on full, the lamp runs itself—enough said.

Retail price, each....\$1.60



No. 12. Acetylene Lamp.  
**THE SCHUMACHER**

Is loaded with a cartridge like a breech-loading gun. Every cartridge guaranteed to burn with a clear, even flame. Safest, cleanest and quickest lamp to operate on the market. A combination of simplicity and perfect action.

No. 12. Lamps, with 3 cartridges.  
Each .....\$1.50

No. 14. Cartridges for No. 12 Lamp.  
Per doz.....75c.

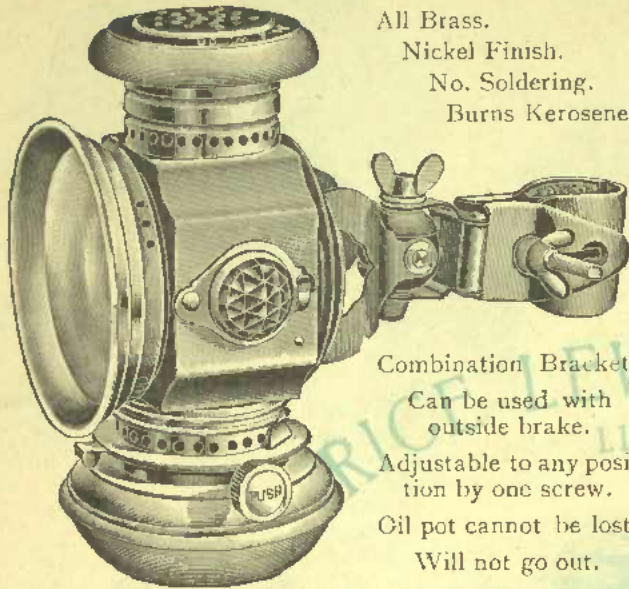
## CARBIDE IN SEALED TINS

1¼ lb. tins.....each, 20c.  
2½ " " " " " 30c.

Price on application for cases of 2 dozen tins or bulk.

# OIL LAMPS

## THE M. & W.



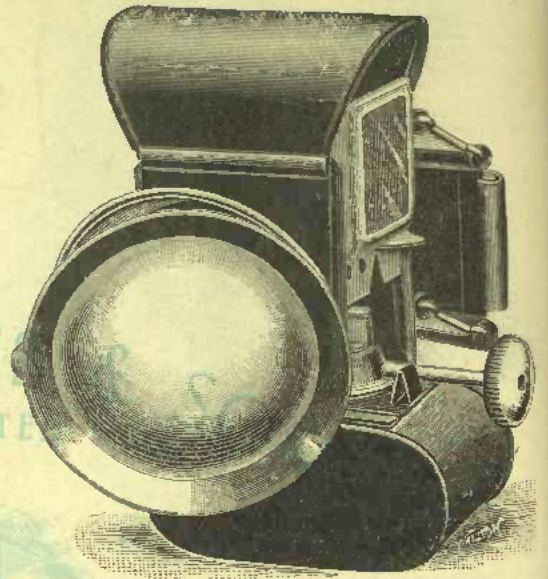
All Brass.  
Nickel Finish.  
No. Soldering.  
Burns Kerosene.

Combination Bracket.  
Can be used with  
outside brake.  
Adjustable to any position  
by one screw.  
Oil pot cannot be lost.  
Will not go out.

No. 178

The M. & W. Patent Reflector is the only reflector which can be removed complete, for cleaning or polishing, through the lens opening. Simple construction, air-tight and secure. No springs or wires. The double convex lens is large and powerful, throwing a white, bright, steady light over 100 feet.

Each ..... \$2.25



No. 186

Has 2 1/4" Double Convex Lens, Plated Cone Front and Reflector, Detachable Oil Reservoir, Nickel-plated Wind-up Burner, etc.

Japanned, each ..... \$1.00

## LIGHT WEIGHT



No. 177

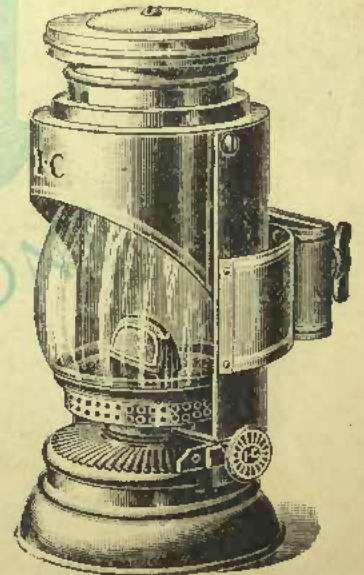
Spring Back, Improved Design, Side Lights, Burns Kerosene Oil only, Nickel-plated.

Each ..... \$1.20



Standard Lamp Oil.

Per doz ..... \$1.70



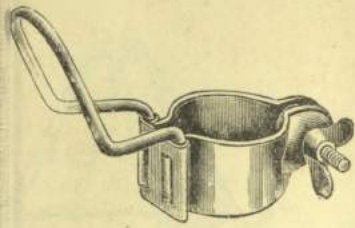
No. 179

(One-Half Actual Size).

All Brass, Nickel-plated, no Soldering, all parts riveted, won't blow or jar out.

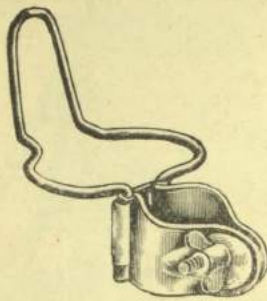
Each ..... \$1.00

# LAMP BRACKETS



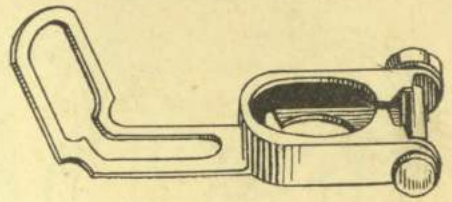
No. 179  
**Standard**

Bracket for Head, lined and N.P.  
Per doz., \$1.35; each, 15c.



No. 185  
**Brake Bracket**

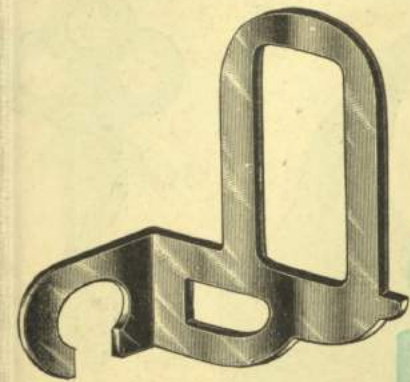
For Head, lined and N.P.  
Per doz., \$1.50; each, 20c.



No. 76

Head Lamp Bracket and Bolt  
N. P.

Per doz., \$1.00; each, 10c.



No. 177

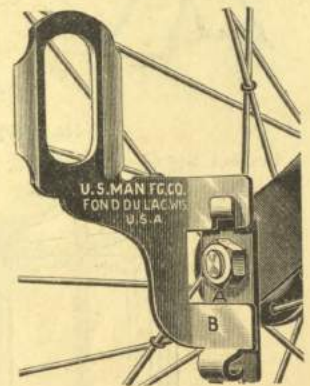
Nickel-plated sheet steel Bracket  
for Axle,  
Per doz., 40c.; each, 5c.



No. 178

**Fork Bracket**

Reversible. Fits any Fork, N.P.  
Per doz., \$1.80; each, 20c.

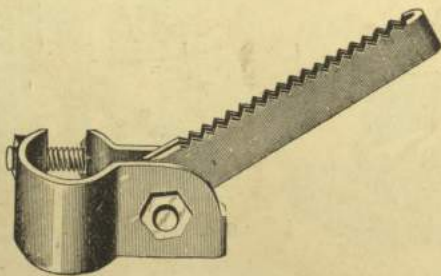


No. 180

U. S. Detachable Bracket, for  
Axle, N. P.

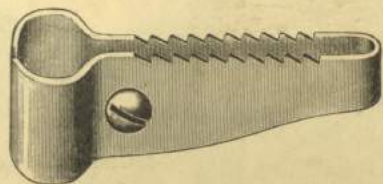
Per doz., \$1.00; each, 10c.

## COASTERS



No. 318

Folding Coaster, N. P., per doz. pair, \$3.00;  
per pair, 25c.

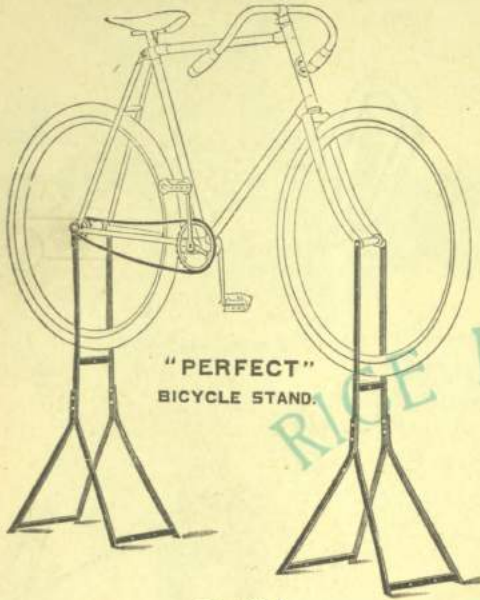


No. 319

Hercules Coaster, N.P., per doz. pair, \$1.80;  
per pair, 20c.

# BICYCLE STANDS

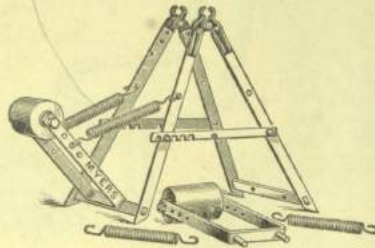
MYERS'—THE ONLY PRACTICAL EXHIBITION STANDS ON THE MARKET. ALLOWS THE PURCHASER TO MOUNT THE WHEEL



"PERFECT"  
BICYCLE STAND.

No. 767

Perfect Stand ..... Per pair, \$3.40



No. 703

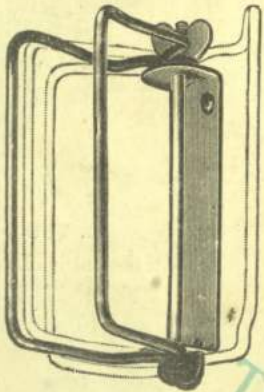
Home Trainers, complete, each, \$1.70



No. 697

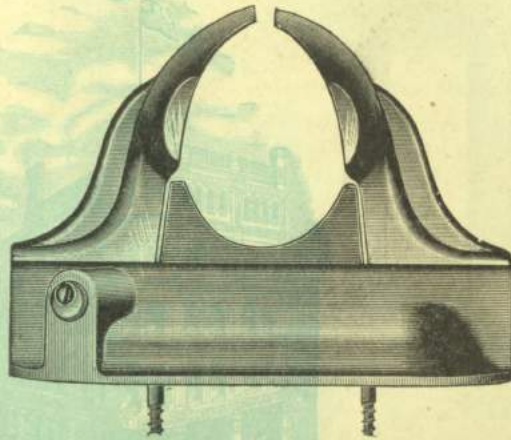
Stands .....each, 85c.

Wheel Truing Attachment for Myers' Stands, each, 60c.



IDEAL WALL STAND—Patented.

Adjusts at any angle by using thumb screw.  
Each, 25c.



No. 740

One-half size Cut of Bicycle Locking Stand.

Each..... \$1.80



Full size Cut of Key.

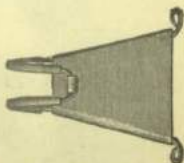


No. 274

Simplex Stand.  
Screws on wall.  
Drops down when  
not in use.  
Each..... 20c.



FLOOR.



Gem Top, Plain.



Gem Top, with Brace.



Gem Bottom.

Covered with rubber. Covered with leather.

	Per Doz.	Each.	Per Doz.	Each.
GEM Tops, plain.....	\$1.00	\$0.13	\$1.20	\$0.13
“ with Brace.....	1.33	.16	1.46	.16
“ Wire bottom, per doz., 33c.; each, 6c.				

# RUBBER SOL TIRES D



## RUBBER PATCHING SOLUTION

No.	0	1	2	3	4	5
	TUBES		TINS			
	2 1/2 x 1/2"	4 x 3/4"	1/4 pt.	1/2 pt.	pint.	qrt.
per doz.	20c.	35c.	12c.	20c.	35c.	60c.
each						

## HEAVY CANVAS SOLUTION

No.	10	11	12	13
	1/4 pint.	1/2 pint.	pint.	quart.
Each	25c.	40c.	70c.	\$1.00

NOTE—Our Solution is done up in IMPERIAL MEASURE TINS

## WOOD RIM CEMENT (for Cementing Tires to Rims)

No.	14	20	21	22	23	24	25	28
	Bottles with Swab.		TUBES		United States Wine Measure—TINS			
			2 1/2 x 1/2"	4 x 3/4"	1/4 pint.	1/2 pint.	pint.	quart.
per doz.			\$1.00	0.30	0.50	1.00	3.00	.....
each			.10	.05	.05	.10	.18	.30
							.60	2.00

NOTE—Our Wood Rim Cement is American make and is done up in Tins of U.S. Standard Wine Measure

## JIFIOD PLUGGING CEMENT

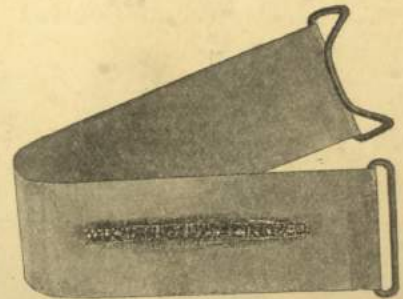
No.	7	8
	2 1/2 x 1/2"	4 x 3/4"
per doz.	\$0.60	1.00

## PURE GUM SHEET RUBBER



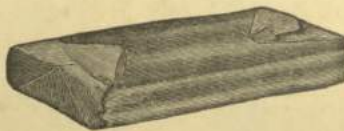
1st Grade	Per lb.,	\$3.00
2nd "	"	2.20
2nd " Squares, 4 x 4"	Per doz.,	.50

## EMERGENCY BANDS



## HARD TIRE CEMENT

BEST RED



1 lb. packages ..... per lb., \$0.40  
No. 0, Telescope boxes, per doz. 1.35

Made of good quality rubber. Can be placed around tires and rim, securely binding and holding air in the tires until repairs are effected.

Per doz., \$1.50. Each, 15c.

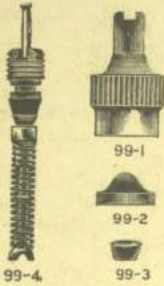


per doz. .... \$1.35  
each ..... .15

# BICYCLE STA

IN STANDS ON THE MARKET. AT

## SCHRADER UNIVERSAL



Valve Parts

No. 1, Caps.....	per doz.,	\$0.58
" 2, Cap Washers, per 100,		.75
" 3, Plunger " "		.40
" 4, Inside Parts per doz.		.67
" 5, Plungers.....	"	.35
" 6, Plugs.....	"	.15
" 8, Springs .....	"	.10



No. 8

Valve.....	per 100,	\$9.00
" .....	per doz.,	1.18
" .....	each,	0.18

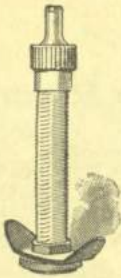


5/16" STYLE

No. 9

Metal Base.

Per doz.....	\$2.00
Each.....	0.17



No. 10

Dunlop Metal Base.

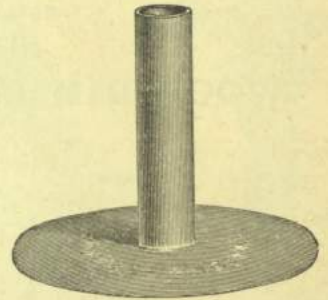
Per doz.....	\$1.67
Each .....	0.17



No. 11

Valve and Stem complete.

Per 100 .....	\$15.00
Per doz. ....	1.67
Each .....	0.20



No. 12

Valve Stems

Per 100.....	\$3.50
Per doz.....	0.50

Valve Tubing.....per foot, 8c.

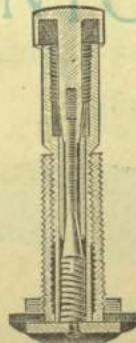
## WOODS BROS.'

All Metal. No Rubber or Leather used in Construction of Valve Parts



No. 13  
Valve.

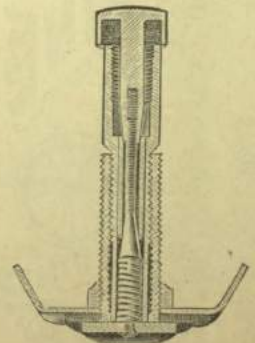
Per 100.....	\$9.00
Per doz.....	1.18
Each .....	0.18



No. 14

Metal Base.

Per doz.....	\$2.00
Each .....	0.17



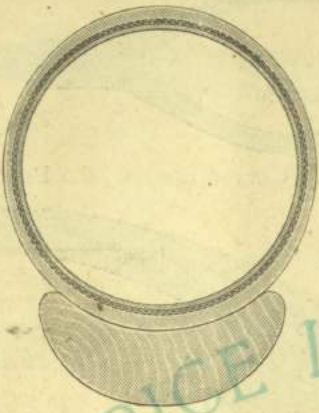
No. 15

Metal Base.

Per doz.....	\$2.00
Each.....	0.17



# TIRES



**C. R. CO.**—Double or Single Tube

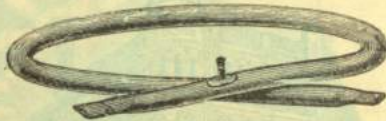


**DUNLOP DETACHABLE**

Per pair..... \$8.00

Per pair ..... \$10.00

## INNER TUBES



**MADE OF BEST STOCK**

Butt End or Continuous Pattern, X Quality.....	per doz., \$10.50	each, \$1.00
“ “ “ XXX Quality .....	“ 13.35	“ 1.33
Vulcanized Butted Ends for repairing Inner Tubes .....	“ 2.20	“ .25

## TREAD BANDS

Corrugated Protection Strips, for 28" wheels.....each, 90c.

## BICYCLE GEAR TABLE

### For 28-inch Wheels

Teeth on front chain wheel.	Teeth on back chain wheel.			
	7	8	9	10
16.....	64	56	49½	44½
17.....	68	59½	52½	47½
18.....	72	63	56	50½
19.....	76	66½	59½	53½
20.....	80	70	62½	56
21.....	84	73½	65½	58½
22.....	88	77	68½	61½
23.....	92	80½	71½	64½
24.....	96	84	74½	67½
26.....	104	91	80½	72½
28.....	112	98	87½	78½
30.....	120	105	93½	84
32.....	128	112	95½	89½

### For 30-inch Wheels

Teeth on front chain wheel.	Teeth on back chain wheel.			
	7	8	9	10
1 Trimming Knife, 1, 30c. ....	68½	60	53½	48
18.....	73	63½	56½	51
19.....	77	67½	60	54
20.....	81½	71½	63½	57
21.....	85½	75	*66½	60
22.....	90	78½	70	63
23.....	94½	82½	73½	66
24.....	98½	86½	76½	69
26.....	103	90	80	72
28.....	111½	97½	86½	78
30.....	120	105	93	84
32.....	128	112	100	90
32.....	137	120	106	96

# TIRE REPAIRS

## PLUGS



These plugs have oval stems and conform more easily to ordinary cuts.

Assorted ..... per doz. 25c.

## UMBRELLA PLUGS



Nos. 1, 2, 3, assorted ..... per doz. 15c.

## LATEST INVENTION IN PLUGS

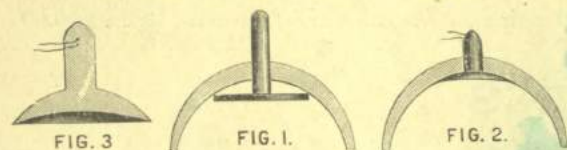


Fig. 3. The Strauss Curved Plugs are made in three sizes:  $\frac{3}{4}$ ", 1", 1 $\frac{1}{4}$ ", and come in strips of one dozen each. The special feature of this plug is that it conforms to the shape of the tire and is bound to adhere to it. They are provided with a string, and are inserted in the usual way. These plugs will supersede all plugs at present on the market, and are the only plugs that will repair a cheap tire. Figure 1 shows the old style, and Figure 2 our Curved Plug with the natural position in the tire.

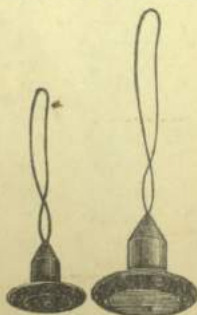
Assorted ..... per doz., 30c.

## FLAT PLUGS



Nos. ....	1	2	3
Per doz. ....	15c.	20c.	30c.

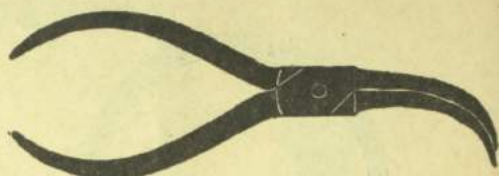
## PLUGS WITH STRING



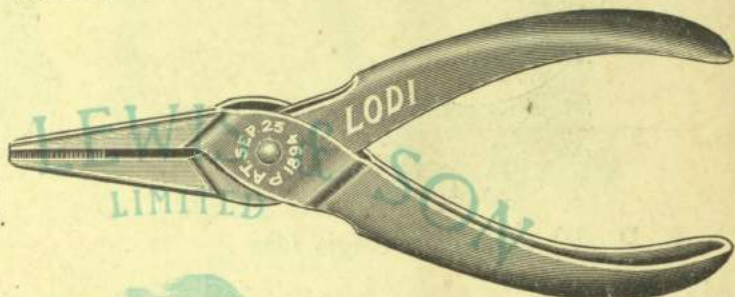
$\frac{1}{2}$ oz. rolls .....	per doz.,	\$0.25
$\frac{1}{4}$ oz. " .....	per gross,	2.50
$\frac{1}{2}$ lb. " .....	per lb.,	0.60

Small, 10c., Large, 20c. doz.

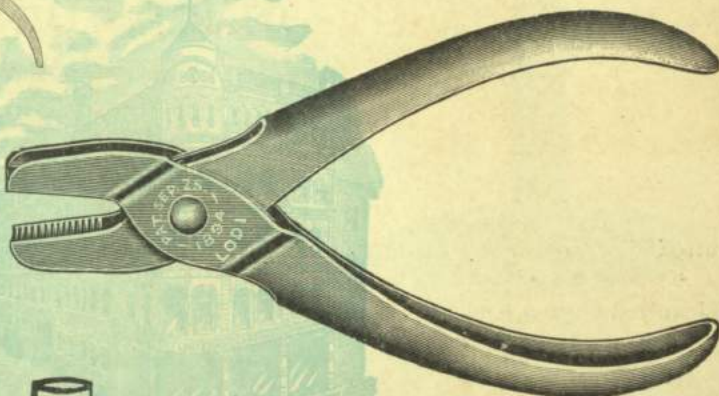
## PLUGGING PLIERS



No. 87. Curved nose ..... Per pair, 60c.



No. 88. Flat nose ..... per doz., \$1.00; each, 12c.



No. 89. Valve Pliers (as cut) ..... each, 25c.  
 " 90. " " forged ..... " 50c.

## TIRE LACING



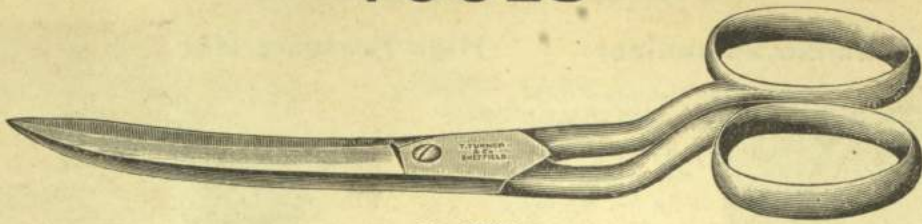
Waxed Linen



Hemp

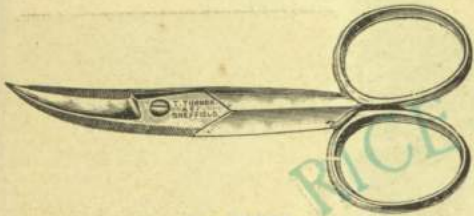
Cards, waxed linen .....	per doz.,	\$1.20
$\frac{1}{4}$ lb. balls waxed linen .....	each,	.5
$\frac{1}{4}$ lb. " hemp .....	"	.20

# TOOLS



No. 6621

Bent Handle Trimmers, Saw Tooth for Canvas work..... Each, 85c.



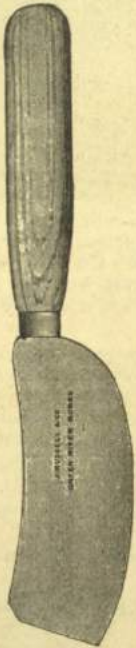
No. 6361

Bent Nose Trimmer for Patch work...Each, 45c.



No. 100

Pointed Trimmer for Patch work...Each, 80c.



No. 5

Pointed Trimming Knife.  
Each, 80c.



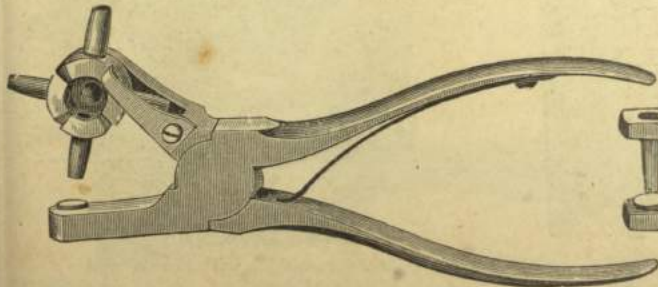
No. 15

Round Pointed Trimming Knife.  
Each, 30c.



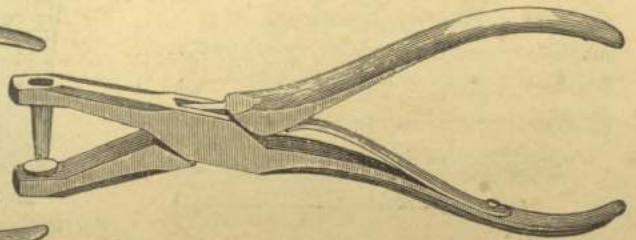
No. 25

Straight Pointed Trimming  
Knife. Each, 15c.



No. 24

Revolving Tire Punch...Each, \$1.20.

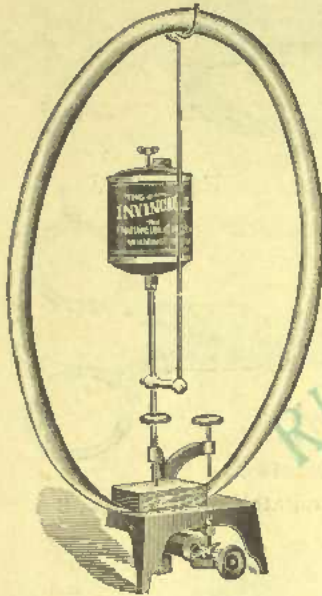


No. 10

Single Tube Tire Punch...Each, 45c.

# VULCANIZERS

## The Invincible Vulcanizer



This Vulcanizer is the least complicated, easiest operated, and most effective on the market. It takes only a few minutes to heat up, and the burner is so adjusted that it cannot be heated too hot. Common stove gasoline is the fuel used.

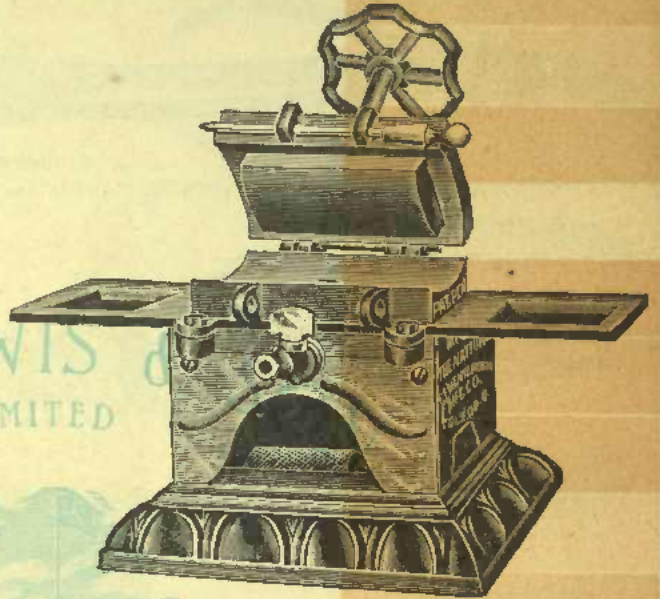
Each Vulcanizer is carefully tested.

Full directions for operating and instructions for vulcanizing are sent with it.

Invincible Vulcanizer, including material for twenty-five or more repairs.

Each .....\$7.00

## High Pressure Hot Water Vulcanizer



(Patent pending)

### No Extra Valve Stem Core

This Vulcanizer is constructed with a hot water jacket lying underneath the Thermal or Heating Plate, and acts as a sheet of water through which the heat passes before reaching tire, obviating the danger of unequal vulcanization. The lower plate is extended for the purpose of protecting the tire from any heat that may possibly come from below. On either end of this plate is provided indentations to hold water, keeping the ends of the plate and tire cool. The tire is held carefully in place by the upper plate and pressure screw.

The Burner is located in the base of the Vulcanizer. The Improved '99 Burner for this Vulcanizer is raised free from the base and burns freely with an even heat. This burner is supplied with a specified quantity of alcohol sufficient to generate the amount of heat necessary to properly vulcanize a tire.

The Vulcanizer is automatic, as the vulcanization is complete when the alcohol is consumed. It is economical, and by following directions carefully we can assure the operator ultimate success.

Full directions for operating, and a small amount of supplies accompany each Vulcanizer.

No. 2 Hot Water Vulcanizer, complete, each.....\$9.00

## High Pressure Unvulcanized Patches with Strings



(One-third size)

Small size, per doz.....	30c.
Medium " " .....	40c.
Large " " .....	50c.
Extra large " " .....	60c.

### Vulcanizer Supplies

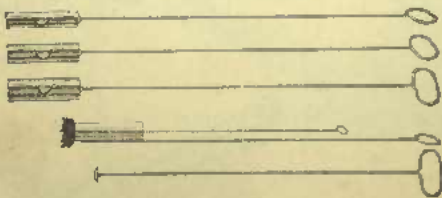
	Single Tubes	Pieces	
Stuff No. A. For first coat.....	10c.	\$0.30	
" B. " second coat .....	30c.	1.50	
	Per sq. foot	Sq. yard	
Stuff No. C. Canvas to apply inside .....	30c.	\$1.85	
" D. Unvulcanized Rubber to apply outside .....		Per lb.	\$1.35

Hardwood Pegs .....	Each	10c.
Rubber Forms .....	10c.	
Sheet Metal Forms.....	10c.	
Soft Metal Forms .....	10c.	
Hardwood Forms .....	10c.	

### Soapstone

Powdered, per lb.....10c.

### Casing Tools



For patching casings inside.

Set of 5 pieces.....\$3.00

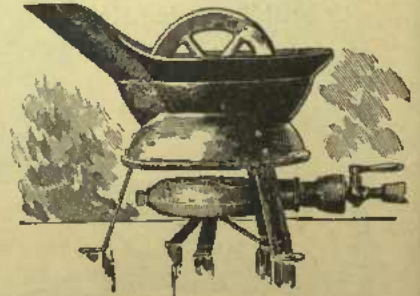
### Tube Horn



For Directing Tubes into Casings.

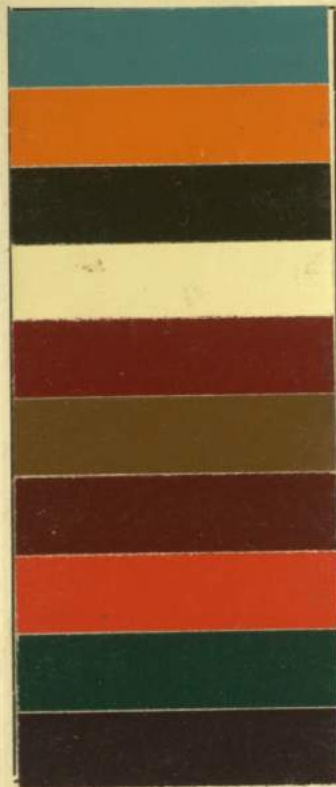
Each .....12c.

### Cement Kettle



Kettle complete with burner and Gas Tube .....\$3.20  
Kettle only, each ..... 1.60

# CYCLE ENAMEL



CYCLE BLUE

ORANGE

BRONZE GREEN

WHITE

ROSE

SNUFF

WINE

VERMILION

DEEP GREEN

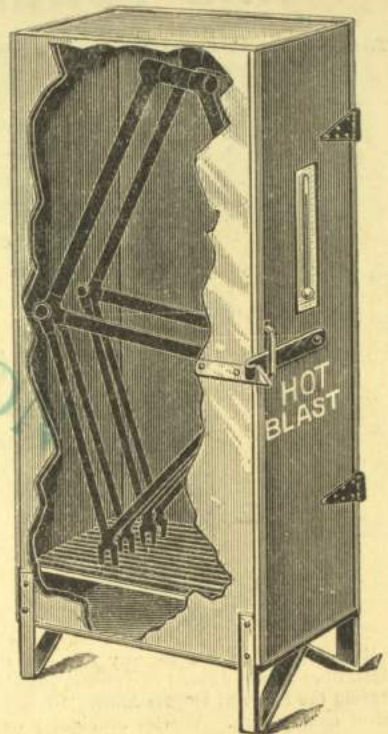
ROYAL PURPLE

## ENAMEL OVEN THERMOMETER



Each, \$2.50

## ENAMELING OVEN



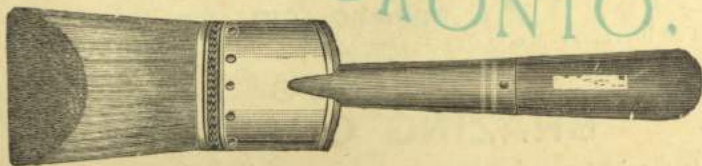
### AIR DRYING

	Gals.	Qts.	Pts.	½ pts.	Large Tins.	Small Tins.
Black.....	\$1.50	0.45	0.25	0.20	0.18	0.15 each.
".....				2.00	1.60	1.35 doz.
Colors.....					.30	.20 each.
".....					3.20	2.00 doz.

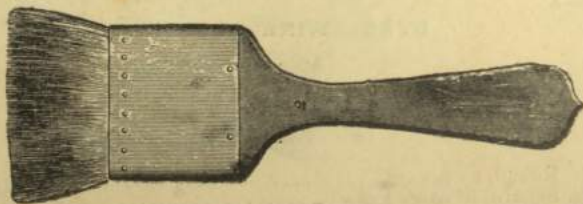
### BAKING

Black.....	\$1.50	0.50	0.30	0.20	.....	..... each.
Colors.....	5.50	1.40	0.75	0.40	.....	..... "
Varnish.....	5.50	1.50	0.80	0.45	.....	..... "

### ENAMEL BRUSHES



Ox Hair, 1-inch, Tin Handles and Caps.....per doz., \$4.50



Bear Hair, 1-inch.....per doz., \$1.75

### This is the Torch included with Oven



Holds 1 gallon; will burn 8 hours.  
Also used for burning enamel off frames.  
Each, \$5.00

No. 1.—Perfection Hot Blast, made of heavy galvanized iron, double walls, 16 inches wide, 28 inches deep, 4 feet 9 inches high. Holds 2 frames, including forks.

With Thermometer and Burner, each, \$24.00

No. 2.—34½ inches wide, 28 inches deep, 4 feet 9 inches high. Holds 5 single frames and forks, weight 150 lbs.

With Thermometer and Burner, each, \$36.00

No. 3.—Electric Hot Blast, galvanized iron, single walls, 15 inches wide, 28 inches deep, 3 feet 9 inches high.

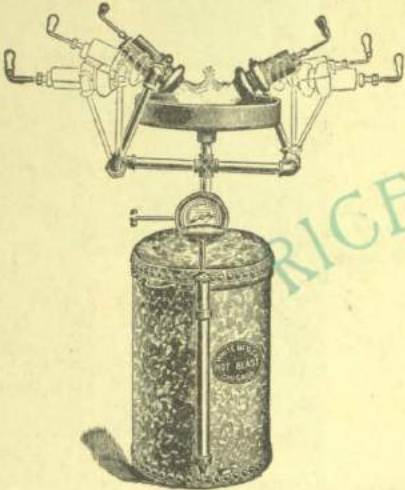
With Thermometer and Burner, each, \$18.00

Above also supplied for gas.

# GASOLINE BRAZER AND FORGE

Tanks Tested to 200 lbs. Pressure to the Square Inch.

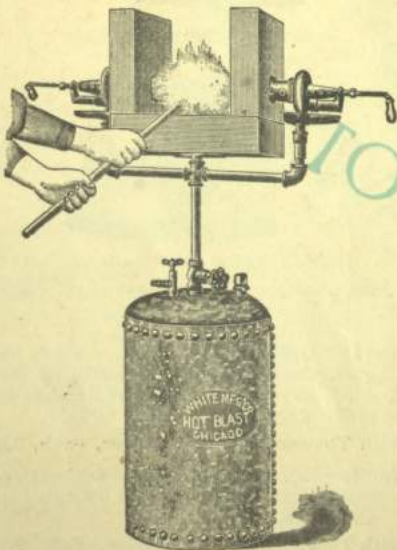
## SWIVEL BURNER—Mammoth



Burners adjustable to any angle. Powerful hot blast, blue flame, devoid of smoke, capable of quickly brazing the heaviest bicycle joint. Flame easily regulated to any size. Works efficiently with air pressure of 35 to 75 lbs. It is safe, portable, easily operated.

Complete, with gauge and pump, each, \$30.00

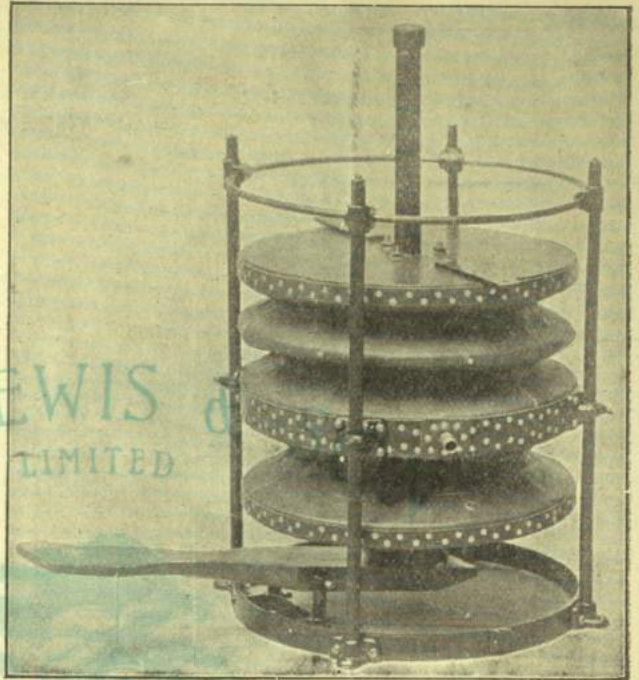
## COMBINATION HOT BLAST



Works with pressure of 35 to 75 lbs. Indicator registers 100 lbs. pressure. Generators of special bronze. Burners can be operated independently. Flame easily regulated to any size blast.

Complete with gauge, no pump, each, \$25.00

## BRAZING BELLOWS



No. 278. Brazing Bellows.....each, \$24.00

## BLOWPIPE



No. 276. Fitted with self-acting and regulating valves and continuous lighting jet. By releasing lever gas valve closes. Quantity of gas consumed can be regulated to suit description of work to be brazed. Each, \$7.50.

## BRAZING SPELTER

We keep only the very highest grade procurable.

Grain.....per lb., 40c. Strip.....per lb., 40c.

## BORAX

Lump.....per lb., 11c. Powdered.....per lb., 13c.

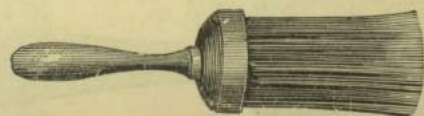
## BORACIC ACID

Per lb.....20c.

## DIXON'S BRAZING GRAPHITE

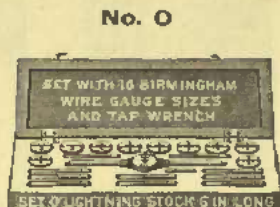
Is the best anti-flux known. It prevents the spelter or brass from sticking to the work, and saves time and money. No filing is necessary where this is used. Send for sample. Per lb., 50c.

## STEEL WIRE BRUSH



No. 1. Round, as per cut.....each, 50c.  
 " 2. Square, 5" wire, 4 row....." 50c.  
 " 3. Oblong, 3 row, with long bent handle....." 40c.

# WILEY & RUSSELL BICYCLE SCREW PLATES



				Per Case
No. 150,	Case containing 5 sizes, with Stock, Tap Wrench (fitting in stock),	No. 0 Dies, Guides and Taps		\$8.25
" 152,	" " 7 " " " " " " " " " "	" 0 " " " " " " " " " "	"	10.50
" 154,	" " 10 " " " " " " " " " "	" 0 " " " " " " " " " "	"	14.65
" 158,	" " 15 " " " " " " " " " "	" 0 " " " " " " " " " "	"	20.65
" 143,	" " 21 " with 2 Stocks, " " " " " " " " " "	" 0 " " " " " " " " " "	"	
	consisting of 10 wire gauge sizes and fractional sizes. $\frac{5}{64}$ , $\frac{7}{64}$ , $\frac{1}{8}$ , $\frac{9}{64}$ , $\frac{5}{32}$ , $\frac{3}{16}$ , $\frac{7}{32}$ , $\frac{1}{2}$ , $\frac{5}{8}$ , $\frac{3}{4}$ , $\frac{7}{8}$ , $1$ , outside diameter of Dies $\frac{5}{16}$ and over, $2\frac{3}{8}$ "			
" 133,	Case containing Stock 10" long and 7 sizes of Taps, Dies and Guides, $\frac{1}{4}$ , $\frac{5}{16}$ , $\frac{3}{8}$ , $\frac{7}{8}$ , $1$ , outside diameter of Dies, $1\frac{5}{8}$ "			40.15
" 350,	Case containing 5 sizes, with Stock, Tap Wrench (fitting in stock), No. X Dies and Taps, outside diameter of Dies $\frac{3}{8}$ "			6.60
" 352,	Case containing 7 sizes, with Stock, Tap Wrench fitting in stock), No. X Dies and Taps, outside diameter of Dies, $\frac{5}{8}$ "			8.90
" 354,	Case containing 10 sizes, with Stock, Tap Wrench (fitting in stock), No. X Dies and Taps, outside diameter of Dies, $\frac{5}{8}$ "			11.65

## REGULAR SIZES OF DIES AND TAPS CARRIED IN STOCK

Wire Gauge sizes	Nos. 11 <sup>56</sup> , 12 <sup>48</sup> , 13 <sup>56</sup> , 13 <sup>48</sup> , 13 <sup>56</sup> , 14 <sup>56</sup> , 15 <sup>56</sup> , 16 <sup>56</sup> , 17 <sup>56</sup>
Machine Screw sizes	Nos. 2 <sup>56</sup> , 3 <sup>48</sup> , 4 <sup>56</sup> , 6 <sup>56</sup> , 8 <sup>56</sup> , 10 <sup>56</sup> , 12 <sup>56</sup> , 14 <sup>56</sup> , 16 <sup>56</sup> , 16 <sup>20</sup>
Fractional sizes	Nos. $\frac{5}{64}$ , $\frac{7}{64}$ , $\frac{1}{8}$ , $\frac{9}{64}$ , $\frac{5}{32}$ , $\frac{3}{16}$ , $\frac{7}{32}$ , $\frac{1}{2}$ , $\frac{5}{8}$ , $\frac{3}{4}$ , $\frac{7}{8}$ , $1$



Patent Elastic Stocks, 6" long	each, \$1.15
Dies, 1" diameter	" .90
Guides	" .25
Taps	" .40
Cases, 5 sizes, each, 55c.; 7 and 10 sizes.	" .65

Explanation of Dies and Guides supplied in No. 0 Bicycle Screw Plates—The cut shows a Die and Guide complete; also a Die taken apart to show the mechanism. The cup-headed screw on the right holds the halves together as a hinge, while the size is regulated by the wedge-shaped screw on the left, the Die being clamped in the Elastic Stock. It is readily adjusted without danger of breakage common to Dies open only on one side and solid on the other.

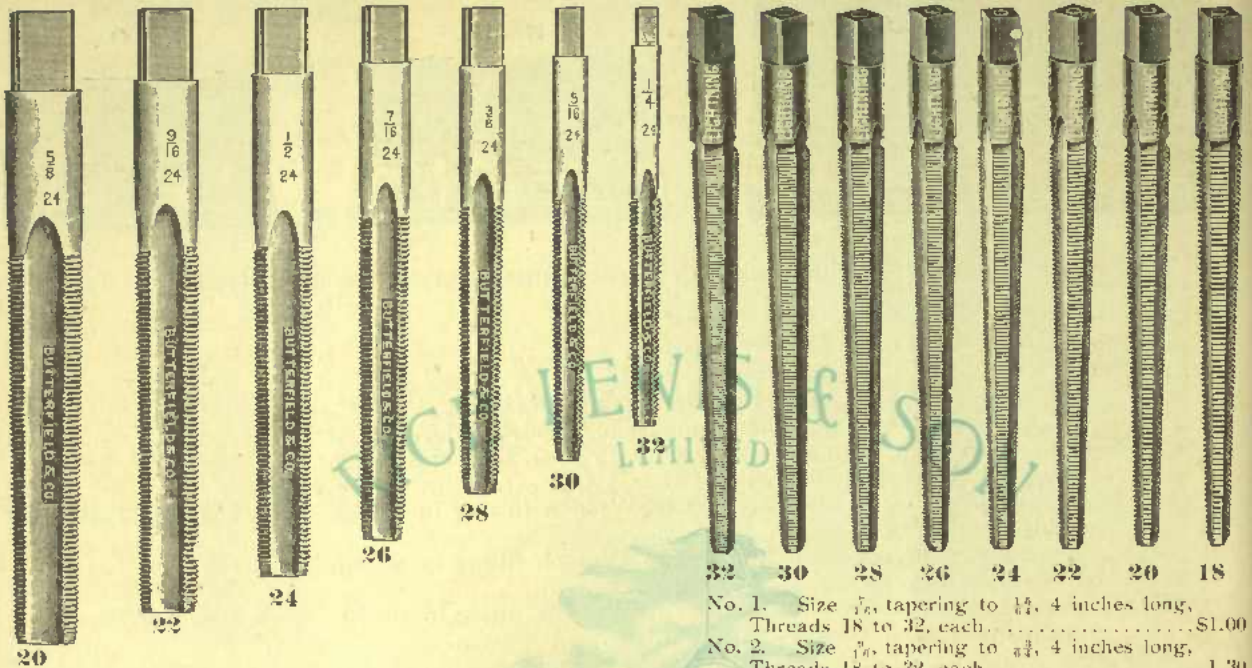


PRICES OF SINGLE PARTS	
Stock, 5 1/4" long	each, \$0.60
Dies, 3/8" diameter	" .60
Taps	" .40
Tap Wrench	" .60
Cases, 5 sizes, 55c.; 7 and 10 sizes	" .65

# BICYCLE TAPER TAPS FOR REPAIRERS

Butterfield & Co.'s

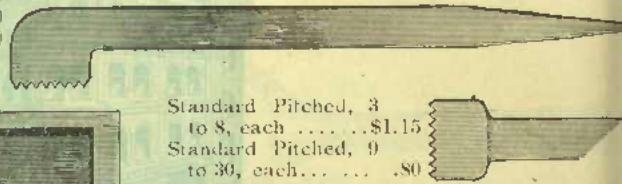
The Wiley & Russell Mfg. Co.'s



Diameter	$\frac{1}{4}$	Threads 20 to 32	each	.....	\$0.45
"	$\frac{5}{16}$	"	"	.....	0.50
"	$\frac{3}{8}$	"	"	.....	0.55
"	$\frac{7}{16}$	"	"	.....	0.60
"	$\frac{1}{2}$	"	"	.....	0.70
"	$\frac{5}{8}$	"	"	.....	0.80
"	$\frac{3}{4}$	"	"	.....	0.90

- No. 1. Size  $\frac{1}{8}$ , tapering to  $\frac{1}{16}$ , 4 inches long, Threads 18 to 32, each.....\$1.00
- No. 2. Size  $\frac{1}{16}$ , tapering to  $\frac{1}{32}$ , 4 inches long, Threads 18 to 32, each..... 1.30
- No. 3. Size,  $\frac{1}{16}$ , tapering to  $\frac{1}{32}$ , 4 inches long, Threads 18 to 32, each..... 1.65

## INSIDE AND OUTSIDE CHASERS



Standard Pitched, 8 to 8, each .....\$1.15  
Standard Pitched, 9 to 30, each..... .80

## B. & CO. BICYCLE SCREW PLATES



No. 99. Case containing stock 12 inches long, with 14 pairs Dies,  $\frac{1}{4}$  x 24, 32;  $\frac{5}{16}$  x 18, 20, 22, 24, 26, 28, 32;  $\frac{1}{2}$  x 20, 24, Right Hand.  $\frac{1}{2}$  x 20, 24, Left Hand. 22 Bicycle Taper Taps  $\frac{1}{4}$  x 20, 22, 24, 26, 28, 32;  $\frac{5}{16}$  x 20, 22, 24, 26, 28, 32;  $\frac{3}{8}$  x 18, 20, 22, 24, 26, 28;  $\frac{1}{2}$  x 20, 24, Right Hand;  $\frac{1}{2}$  x 20, 24, Left Hand. Including one pair of Tap Wrench Dies, per case .....\$20.00

No. 151. Case containing 5 sizes Taps, Dies and Guide, with Adjustable Tap Wrench, per case. \$6.30  
No. 153. Case containing 6 sizes Taps, Dies and Guide, with Adjustable Tap Wrench, per case... 7.10  
No. 157. Case containing 10 sizes Taps, Dies and Guide, with Adjustable Tap Wrench, per case... 10.20

## Prices of Single Parts for Sets Nos. 151, 153 and 157

Stock, 6 inches long, each.....	\$1.00	Taps, each.....	\$0.35
Dies, $\frac{3}{8}$ diameter, each.....	0.40	Tap Wrench No. 0, each.....	1.50
Guides for Dies, each.....	0.20	Cases, each.....	0.40



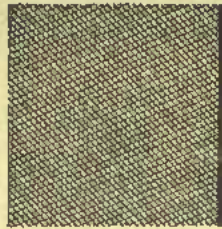
Sectional View of Die and Guide.



# FILES



**BASTARD.**



**SECOND CUT.**



**SMOOTH.**



**MILL FILE**

## JOWITT'S FILE LIST

Size in inches	4	4½	5	6	7	8	9	10	11	12
Flat, half-round, round, square and mill saw bastard	\$1.15	1.25	1.40	1.70	2.10	2.60	3.00	3.60	4.35	5.20
Flat and half-round, second-cut and second-cut mill saw	1.35	1.45	1.60	2.00	2.40	2.90	3.25	4.10	4.80	5.75
Flat and half-round, round and square-smooth, cabinet files and rasps	1.65	1.80	2.00	2.30	2.80	3.30	3.75	4.60	5.55	6.40
Flat and half-round dead smooth	2.50	2.70	3.00	3.50	4.20	4.80	5.70	6.85	8.40	9.60
Hand bastard and warding	1.25	1.40	1.50	2.10	2.55	2.90	3.60	4.35	5.20	6.00
Hand smooth	1.80	2.00	2.15	2.75	3.25	3.75	4.60	5.55	6.40	7.20
Knife files, bastard	2.00	2.30	2.55							
Half-round wood rasps						2.60	3.00	3.60	4.35	5.20
Round wood rasps							3.25			
Size in inches	3½	4	4½	5	5½	6	7	8	9	10
Taper saw files	0.95	1.10	1.20	1.35	1.55	1.80	2.30	2.90	3.75	4.70
Band saw files	1.55	1.80	2.05	2.30	2.55	2.90				
Pit or frame saw files			1.40	1.55	1.80	2.05	2.55	3.25	3.85	4.80

### EMERY WHEELS



No. 283.

### FELT BUFFING WHEELS



Hard, medium or soft grades.

6x1 8x1 8x1½ 10x1½ inches.  
\$1.15 2.30 2.85 4.50 each

### EMERY CLOTH

Nos. .... 0 ½ 1 1½ 2 2½ 3  
Per quire .. \$1.00 1.10 1.30 1.40

### EMERY POWDER

Corn, Nos. 54 to 120 ..... per lb., 10c.  
Flour..... " 6c

### STEEL WOOL

For polishing frames.

Polishing Rubbing Scouring

Nos. .... 0 1 2 3  
Per lb. .... 80c. 66c. 53c. 40c.

Diam.	¾	1	1½	2 in. face.
3	\$0.80	0.95	1.10	1.40 each
4	1.10	1.35	1.60	2.10 "
6	1.75	2.40	3.00	4.35 "
8	2.60	3.60	4.60	6.00 "
10	3.60	5.10	6.60	9.50 "
12	4.00	5.75	7.35	10.70 "



**THOMPSON'S HACK SAWS**

N.P. extension (8-12 ins.) frame, with one blade..... each, 1.50  
Extra blades, 8", 96c.; 9", \$1; 10", \$1.07 per doz.

### EMERY WHEEL DRESSERS



No. 3. Steel Bushing and Arbor..... each, \$1.25  
Extra Wheels and Washers ..... per set, .70

### FILE CLEANERS



No. 1. Mounted Cards, 4 x 1½ inches..... each, 20c.

WE ALSO CARRY A STOCK OF BLACK DIAMOND, GLOBE, STUBBS' and "GROBET'S SWISS" MAKES OF FILES.

# TWIST DRILLS



No. 105—STRAIGHT SHANK

Diameter.....	$\frac{1}{16}$	$\frac{5}{64}$	$\frac{3}{32}$	$\frac{7}{64}$	$\frac{1}{8}$	$\frac{9}{64}$	$\frac{5}{32}$	$\frac{11}{64}$	$\frac{3}{16}$	$\frac{13}{64}$	$\frac{7}{32}$	$\frac{15}{64}$	$\frac{1}{4}$	$\frac{17}{64}$	$\frac{9}{32}$	inch
Length .....	$2\frac{1}{2}$	$2\frac{5}{8}$	$2\frac{3}{4}$	$2\frac{7}{8}$	3	$3\frac{1}{8}$	$3\frac{1}{4}$	$3\frac{3}{8}$	$3\frac{1}{2}$	$3\frac{5}{8}$	$3\frac{3}{4}$	$3\frac{7}{8}$	4	$4\frac{1}{8}$	$4\frac{1}{4}$	"
Price, per doz..	\$1.00	1.10	1.20	1.30	1.45	1.60	1.80	2.00	2.20	2.40	2.65	2.90	3.15	3.40	3.65	
Price, each....	\$0.09	0.10	0.11	0.12	0.13	0.15	0.16	0.18	0.20	0.21	0.23	0.26	0.28	0.30	0.32	

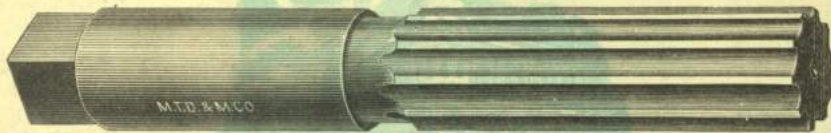
Diameter .....	$\frac{19}{64}$	$\frac{9}{16}$	$\frac{21}{64}$	$\frac{11}{32}$	$\frac{23}{64}$	$\frac{3}{8}$	$\frac{25}{64}$	$\frac{13}{32}$	$\frac{27}{64}$	$\frac{7}{16}$	$\frac{29}{64}$	$\frac{15}{32}$	$\frac{31}{64}$	$\frac{1}{2}$	inch
Length.....	$4\frac{3}{8}$	$4\frac{1}{2}$	$4\frac{5}{8}$	$4\frac{3}{4}$	$4\frac{7}{8}$	5	$5\frac{1}{8}$	$5\frac{1}{4}$	$5\frac{3}{8}$	$5\frac{1}{2}$	$5\frac{5}{8}$	$5\frac{3}{4}$	$5\frac{7}{8}$	6	"
Price, per doz.....	\$3.90	4.20	4.50	4.80	5.10	5.40	5.70	6.00	6.40	6.80	7.20	7.50	7.75	8.00	
Price, each .....	\$0.35	0.37	0.40	0.42	0.45	0.48	0.50	0.53	0.55	0.59	0.63	0.65	0.67	0.70	



No. 109—BIT STOCK

Diameter.....	$\frac{1}{16}$	$\frac{3}{32}$	$\frac{1}{8}$	$\frac{5}{32}$	$\frac{3}{16}$	$\frac{7}{32}$	$\frac{1}{4}$	$\frac{9}{32}$	$\frac{5}{16}$	$\frac{11}{32}$	$\frac{3}{8}$	$\frac{13}{32}$	$\frac{7}{16}$	$\frac{15}{32}$	$\frac{1}{2}$	$\frac{5}{8}$	inch
Price, per doz..	\$1.50	1.65	2.10	2.60	3.10	3.60	4.10	4.70	5.40	6.30	7.20	8.00	8.80	9.60	10.30	16.20	
Price, each....	.14	.16	.20	.24	.29	.33	.38	.43	.48	.54	.62	.68	.75	.82	.87	1.35	

# SOLID REAMERS



No. 116

Diameter.....	$\frac{1}{4}$	$\frac{5}{16}$	$\frac{3}{8}$	$\frac{7}{16}$	$\frac{1}{2}$	$\frac{9}{16}$	$\frac{5}{8}$	$\frac{11}{16}$	$\frac{3}{4}$	$\frac{13}{16}$	$\frac{7}{8}$	$\frac{15}{16}$	1	$1\frac{1}{16}$	inch
Flute, length.	$2\frac{3}{16}$	$2\frac{1}{4}$	$2\frac{3}{8}$	$2\frac{7}{16}$	$2\frac{9}{16}$	$2\frac{5}{8}$	$2\frac{3}{4}$	$2\frac{3}{4}$	3	$3\frac{1}{8}$	$3\frac{1}{4}$	$3\frac{7}{16}$	$3\frac{5}{8}$	$3\frac{3}{4}$	"
Price, each ..	\$1.95	2.10	2.25	2.40	2.55	2.70	2.85	3.10	3.30	3.50	3.75	4.05	4.35	4.65	

## Lightning Taper Reamers



The sizes are arranged to follow each other from the smallest to the largest, so that with a set of these useful tools any size from  $\frac{3}{16}$  to  $1\frac{1}{4}$  inch may be accurately made. Each Reamer leaves a round, true cut hole.

Sizes ...	$\frac{1}{4}$	$\frac{5}{16}$	$\frac{3}{8}$	$\frac{7}{16}$	$\frac{1}{2}$	$\frac{9}{16}$	$\frac{5}{8}$	$\frac{11}{16}$
Each... \$	0.68	0.75	0.78	0.90	1.05	1.20	1.35	1.58
Sizes ...	$\frac{3}{4}$	$\frac{13}{16}$	$\frac{7}{8}$	$1\frac{1}{16}$	1	$1\frac{1}{8}$	$1\frac{1}{4}$	
Each... \$	1.80	2.10	2.40	2.75	3.00	3.38	3.90	

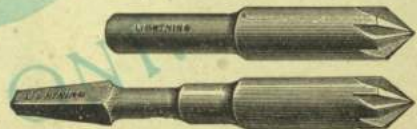
## Centre Punches



No. 14.  $\frac{3}{8}$ ,  $\frac{10}{32}$ ,  $\frac{12}{32}$ , assorted, per dozen..... \$1.85

## Lightning Countersinks

Round Shanks,  $\frac{1}{2}$  and  $\frac{3}{8}$  inch in diameter.



60 or 80 Degrees for Bolt or Screw Heads.

No. 500. Regular size, $\frac{5}{8}$ " diam., $\frac{5}{8}$ " cut .....	Each \$0.75
No. 510. Large size, $\frac{3}{4}$ " diam., $\frac{3}{4}$ " cut .....	1.13

Give style of shank and degrees wanted.

## New Centre Reamer

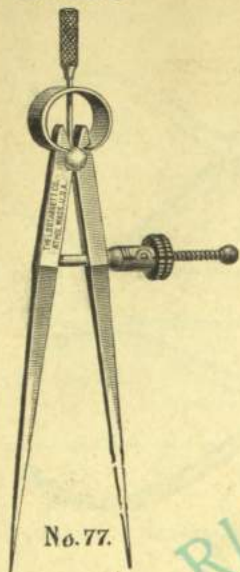


Accurately made of the best steel, and of the most approved form.

No. 530. $\frac{1}{4}$ " Shank, cuts $\frac{3}{8}$ , each .....	\$0.38
" 531. $\frac{3}{8}$ " " " $\frac{1}{2}$ , " .....	0.45
" 532. $\frac{1}{2}$ " " " $\frac{5}{8}$ , " .....	0.90

# CALIPERS

Dividers

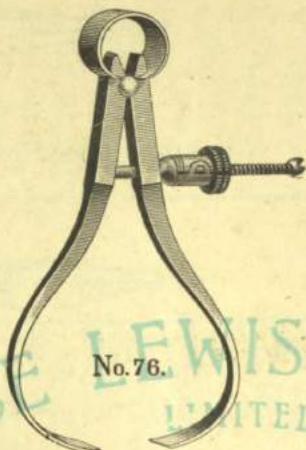


No. 77.

Solid Nut. Spring Nut.

3"...	\$1.25	1.45
4"...	1.55	1.75
5"...	1.55	1.75
6"...	1.90	2.20

Thread



No. 76.

Solid. Spring.

\$1.25	1.45
1.40	1.55
1.40	1.55

Outside

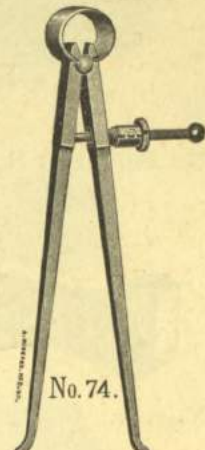


No. 75.

Solid. Spring.

\$1.25	1.45
1.40	1.55
1.40	1.55
1.70	1.90

Inside



No. 74.

Solid. Spring.

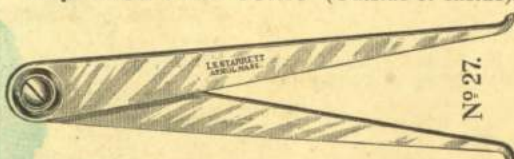
\$1.25	1.45
1.40	1.55
1.40	1.55
1.70	1.90

Firm-Joint (Outside or Inside).



Each ... 3", 25c.; 4", 30c.; 6", 50c.

Improved Firm-Joint (Outside or Inside).



No. 27.

Each .....3", 50c.; 4", 65c.; 5", 70c.; 6", 80c.

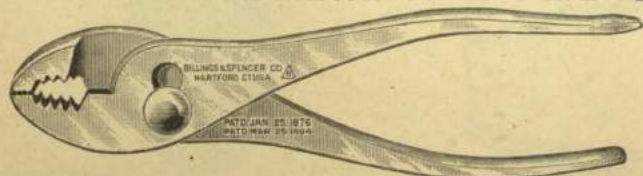
## SPEED INDICATOR



No. 106

Nickel-plated, each, \$2.25

## IMPROVED COMBINATION PLIERS



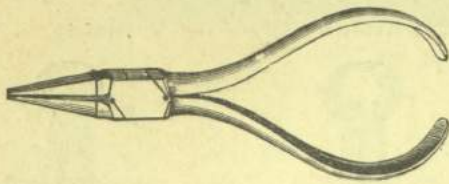
No. 22.	6", Black, per dozen.....	\$20.25
" 23.	6", per dozen .....	22.50

## SPOKE CUTTING NIPPERS COMPOUND LEVER

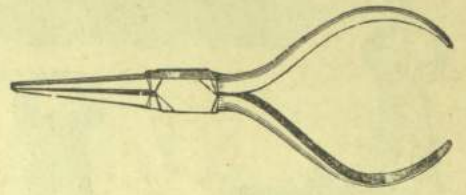
Each.....\$1.60



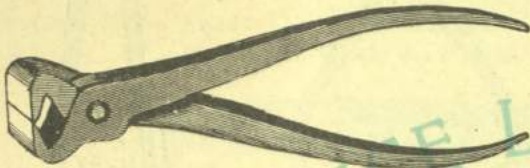
# TOOLS



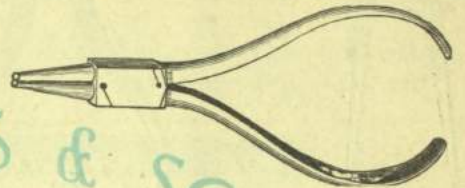
No. 160 Flat Nose Pliers, 6" ..... each, \$1.00



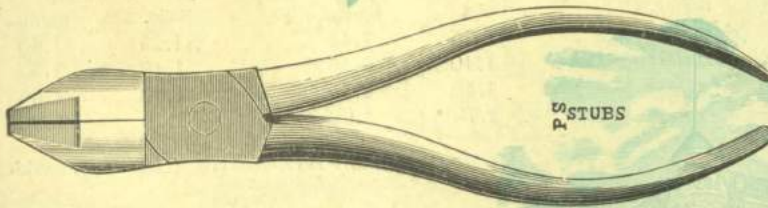
No. 156. Long Nose Patch Pliers, 5 $\frac{3}{4}$ " each, 85c.



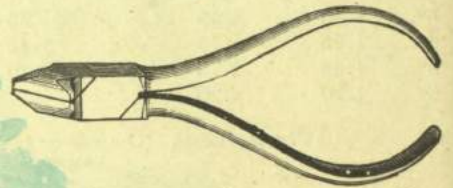
No. 154. Face Cutting Pliers, 6" .....each, \$1.45



No. 162. Round Nose Pliers, 6".....each, \$1.00



No. 153. Side Cutting Pliers, 6" .....each, \$1.20

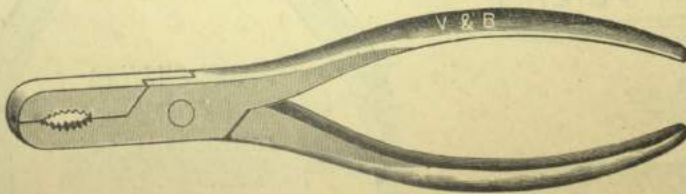


No. 149. Bevelled Face Cutting Pliers, 6", each, \$1.45



## BARNARD PLIERS

- |         |                                 |       |       |        |
|---------|---------------------------------|-------|-------|--------|
| No. 100 | Flat Nose, 5 $\frac{1}{2}$ "    | ..... | each. | \$1.20 |
| " 200.  | Round " 5 $\frac{1}{2}$ "       | ..... | "     | 1 20   |
| " 300.  | Side Cutting, 5 $\frac{1}{2}$ " | ..... | "     | 1.80   |



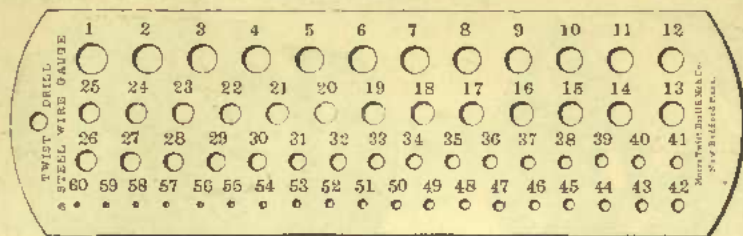
No. 161. Cone Pliers, 6" .....each, \$0.55



No. 2. Boss Hand Vice, Hardened Steel Jaws, 1 $\frac{1}{4}$ " wide. each, \$1.15

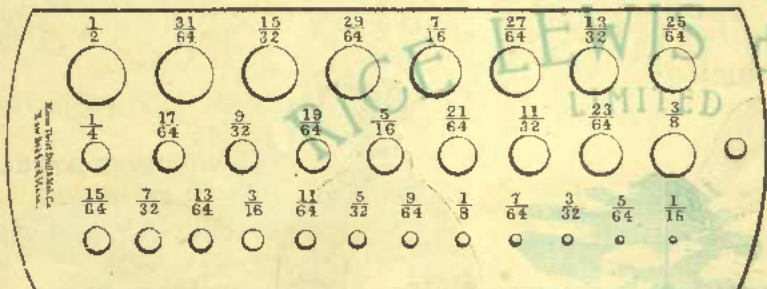
# GAUGES

## DRILL GAUGES



No. 774

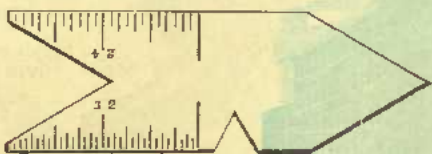
Gauge numbers from 1 to 60 ..... each, \$2.25  
 This gauge is used for measuring Twist Drills and Stub's Steel Rods.



No. 775

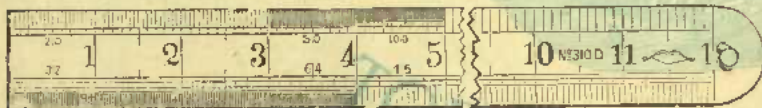
Jobbers' Drill Gauge, sizes from  $\frac{1}{16}$  to  $\frac{1}{2}$  inch ..... each, \$4.00

## GRADUATED CENTRE GAUGE

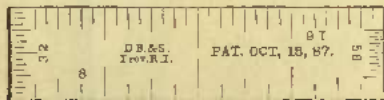


Each ..... .60c.

## STEEL RULES



Size.....	3"	4"	6"	12"
No. 300 D. Graduated on one side... per doz.,	\$3.20	3.20	3.60	6.00
No. 326 D. " both sides... " "	4.80	5.60	8.00	



With End Graduations.

Size.....	3"	4"	6"	9"	12"
Each.....	\$0.55	0.70	1.00	1.50	1.90

In this Rule the ends are graduated on one side to 48ths and 100ths, and on the other side, as shown in cut, to 32nds and 50ths of an inch. The 32nds extend entirely across the rule.

The 3-in. Rules are graduated to 40ths instead of 100ths on the end.

## WIRE GAUGES



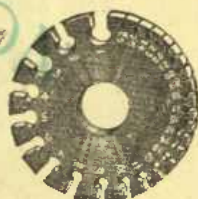
No. 1110

Each ..... \$3.00



No. 848

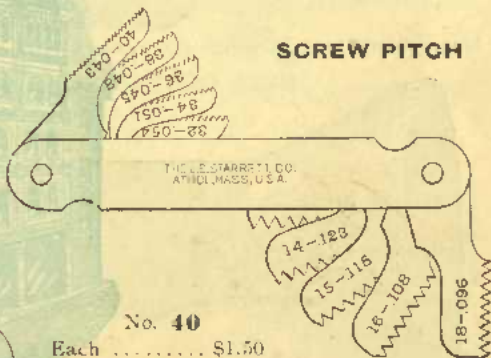
Each ..... \$3.50



No. 611

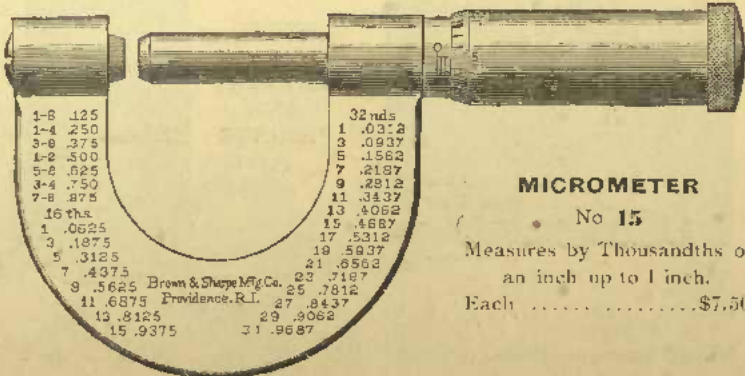
Each ..... \$3.00

## SCREW PITCH



No. 40

Each ..... \$1.50



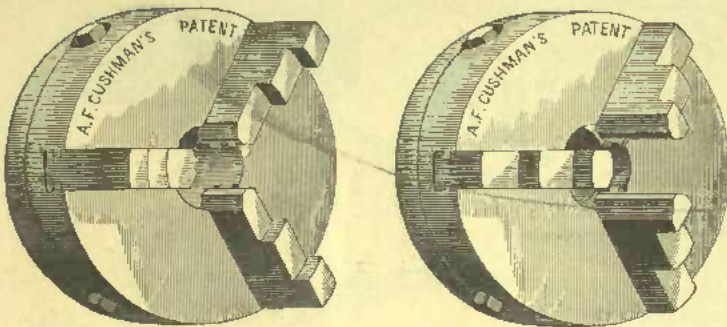
## MICROMETER

No. 15

Measures by Thousandths of an inch up to 1 inch.  
 Each ..... \$7.50

# TOOLS

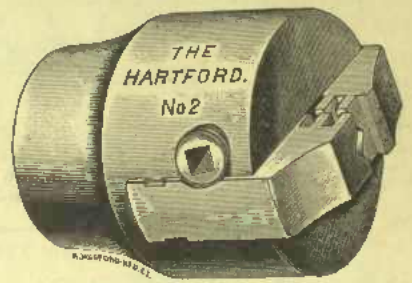
## GEARED SCROLL CHUCK



No. 290. With No. 1 Jaws.  
 With 1 set Jaws.....each, 3", \$12.50; 4", \$15.00; 5", \$18.75; 6", \$22.50  
 " 2 sets " ..... " 3", 15.00; 4", 18.00; 5", 22.50; 6", 27.00

No. 291. With No 2 Jaws.

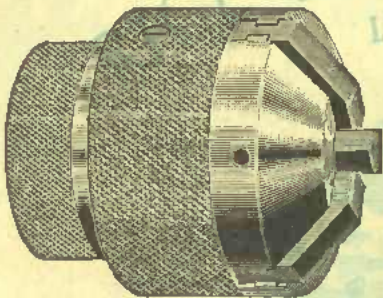
## THE HARTFORD DRILL CHUCK



No. 2. Diameter, 2 3/4".

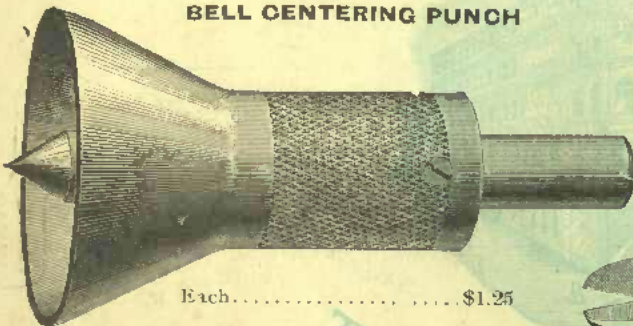
No. 0. Holds from 0 to 1/4".....each, \$7.50  
 " 1. " 0 to 1/2"..... " 8.75  
 " 2. " 0 to 3/4"..... " 10.00

## THE ACME DRILL CHUCK



Holds from 0 to 1/2" self-tightening, three jaws .....each, \$5.00

## BELL CENTERING PUNCH



Each.....\$1.25

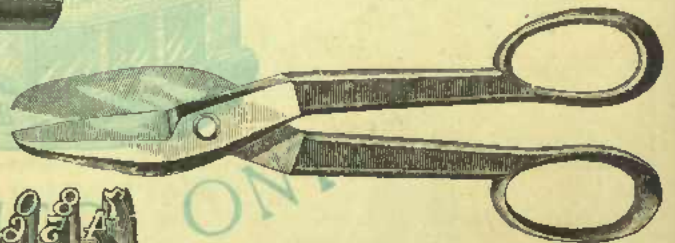


## IMPROVED STEEL LATHE DOG

No. 1, 3/8"....each, \$0.35  
 " 2, 1/2".... " .35  
 " 3, 3/4".... " .50  
 " 4, 1".... " .60  
 " 5, 1 1/4".... " .75  
 " 6, 1 1/2".... " .85  
 " 7, 1 3/4".... " 1.00  
 " 8, 2".... " 1.10

Small set of 8 Dogs, from 3/8 to 2"..... 5.50

## METAL SHEARS



No. 8, Straight cut, 3 1/2", each, \$2.20  
 No. 9, Straight cut, 3", each, \$1.65

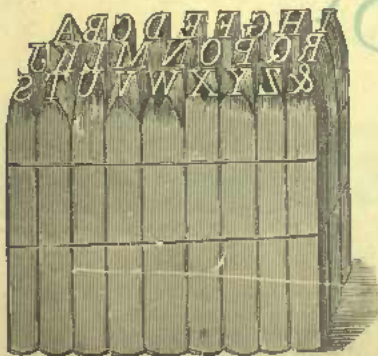
## OIL CAN

No. 13

Copper-plated, 3 3/8" dia., 3" spout.  
 Each.....40c.

No. 14

Copper-plated, 3 3/8" dia., 9" spout.  
 Each.....50c.



No. 284

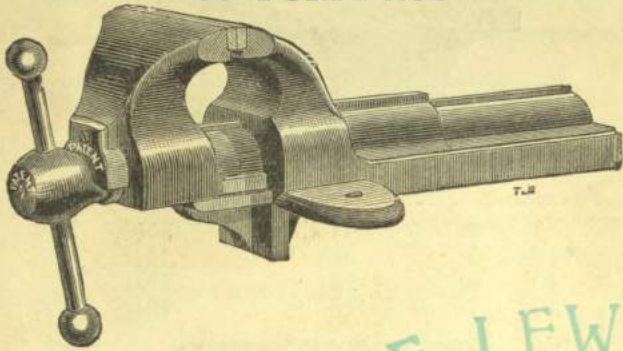
No. 284. Letters ..... 1/8", \$4.40 1/4", \$4.40 3/8", \$5.40 1/2", \$6.75  
 " 285. Figures..... 1/8", 1.50 1/4", 1.50 3/8", 1.80 1/2", 2.25  
 Name Stamps, per letter, 1/8", .20 1/4", .20 3/8", .30 1/2", .35



No. 285

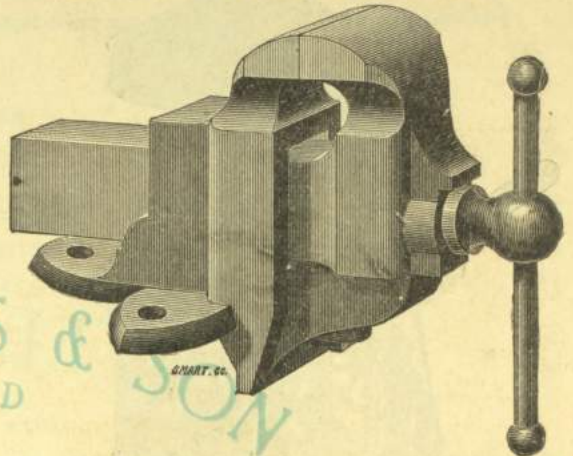
# TOOLS

**OVAL SLIDE VICE**



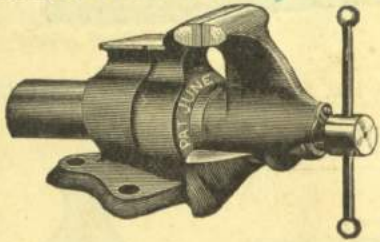
No. 72. Jaws 3" ..... each, \$3.20  
 " 73. " 3½" ..... " 4.00

**SIMPSON STATIONARY VICE**



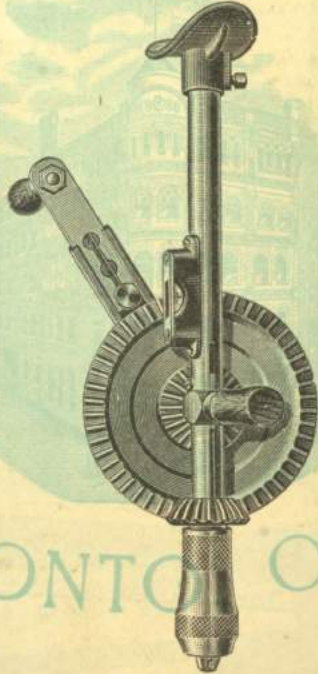
No. 31. Jaws 4" ..... each, \$9.60

**MECHANICS' BENCH VICE**



No. 24. Jaws 3" ..... each, \$4.65  
 " 29. " 3½" ..... " 7.30

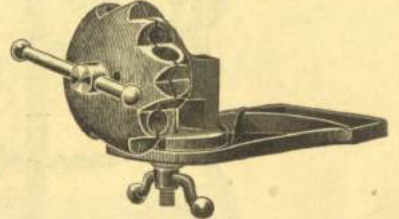
**BREAST DRILL**



No. 10

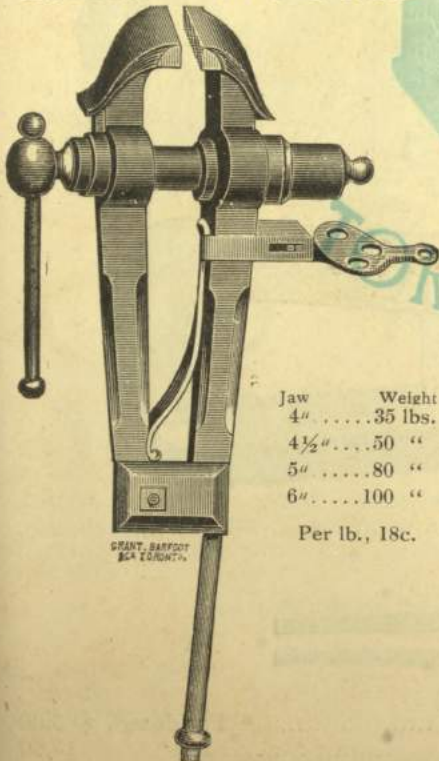
BALL BEARING, nickel-plated Stock and Chuck, will hold both round and square Shank Drills. The Gears are cut, and are changeable from even to 3 to 1. Each, \$4.95.

**TUBE VICE**



Holds Tubing at any angle.  
 Each ..... \$7.67

**WROUGHT IRON LEG VICE**



Jaw ..... Weight  
 4" ..... 35 lbs.  
 4½" ..... 50 "  
 5" ..... 80 "  
 6" ..... 100 "  
 Per lb., 18c.

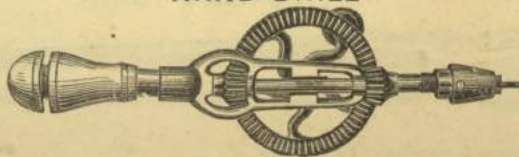
**POST DRILL**



No. 731 x 1

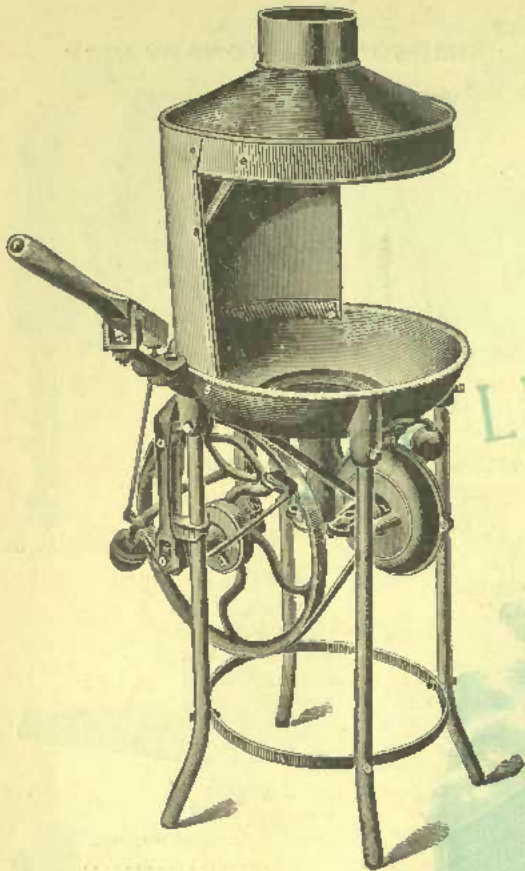
Each ..... \$9.50

**HAND DRILL**



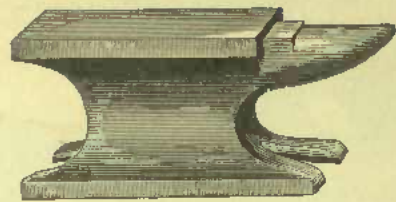
No. 1, with 6 Drill Points ..... each, \$2.10  
 " 2, " 6 " " large size ..... " 4.15

# TOOLS



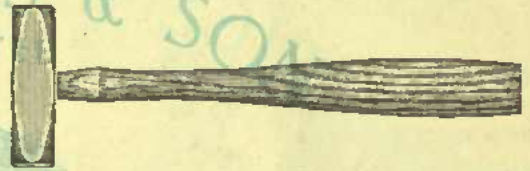
No. 7. Forge, hearth, 18" ; height, 30"  
Weight, 75 lbs. Half hood.  
Each, \$23.00.

## ANVIL



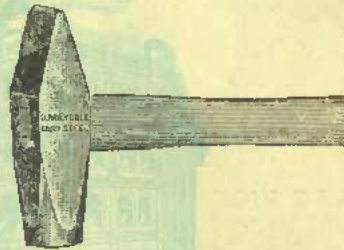
Face Measure.	Weight.	Price per lb.
8½ x 3"	41 lbs.	15½c.
10 x 3"	55 "	15½c.
10 x 3½"	78 "	15½c.
13 x 4"	136 "	13½c.

## SOFT COPPER HAMMER



1 lb., each \$1.15; 1½ lbs. ea., \$1.35; 2 lbs. ea., \$1.65.

## RIVETING HAMMER



## BALL PEIN



Riveting Hammers, weights,	7 oz.,	13 oz.,	1½ lb.
Per doz.....	\$5.50.	\$6.50.	\$7.50.
Machinists' Hammers, weight,	½ lb.	¾ lb.	1 lb.
Per lb.....	45c.	30c.	30c.
			1½ to 3 lbs.
			25c.



No. 1. Alligator Cone Wrench, 5¼ inches long..... Each, 35c.

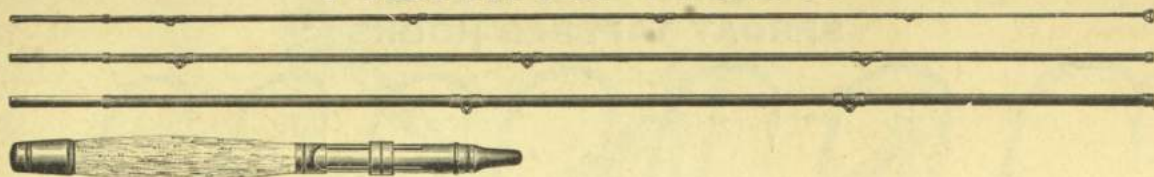
## FORGING TONGS



Heller Bros., Forging Tongs (see cut), 12 to 17"	Per dozen, \$ 5.00
No. 1 Stearns, Straight, Swivel Jaw Blacksmith Tongs 16"	" 15.00
No. 2 " " " " " 18"	" 15.00



# FISHING RODS



## STEEL RODS

No. 4.	Brass Rod, 10 feet in length, Nickel Mountings, Cork Grip.....	each, \$8.50
" 4A.	" 10 " " " " " Celluloid Grip.....	" 7.70
" 8.	Fly Rod, 10 " " " " " " Cork Grip.....	" 8.50
" 17.	Bait Casting Rod, 7 feet in length, Nickel Mountings, Cork or Cane Wound Grip.....	" 10.00

## BAMBOO RODS

No. D12.	Fly Rod, Six Strip Rod, Nickel Mountings, Solid Reel Seat, Cork Grip, 9½ to 10 feet.....	each, \$4.65
" D15.	Bait " " " " " " " 9½ " 10 " .....	" 4.65
" N12.	Fly " " " " " " " 9½ " 10 " .....	" 2.75
" N15.	Bait " " " " " " " 9½ " 10 " .....	" 2.75
" 12.	Fly " " " " " " " 9½ " 10 " .....	" 1.75
" 15.	Bait " " " " " " " 9½ " 10 " .....	" 1.75

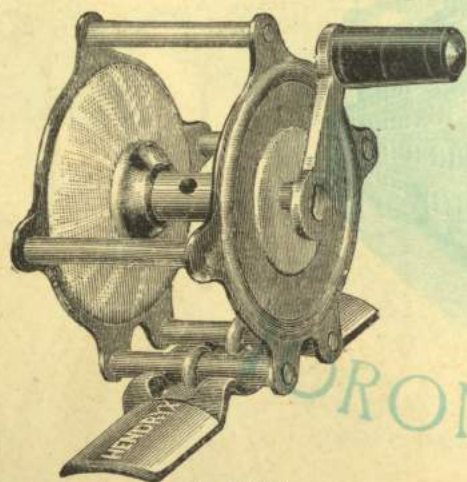
## GREENHEART RODS

No. 36¼.	Fly Rod, Solid Reel Seat, Improved Shouldered Ferrules, Silk Wrappings, Scored Wood Grip, 10 feet, each, \$3.50
" 46¼.	Bait " " " " " " " 10 " " " 3.50

## LANCEWOOD RODS

No. X85.	Fly Rod, Full Nickel Mounted, Raised Ferrules, Silk Whippings, Scored Grip, 10 feet.....	each, \$2.05
" X95.	Bait " " " " " " " 10 " .....	" 2.05
" 495.	Combination Rod, 3-Joint Heavy Bait Rod, 10½ feet, weight 15 ounces, or a 2-Joint Trolling Rod, 7 feet, weight 13 ounces, Full Nickel Mountings, Solid Reel Seat, Silk Wound Tee Guides, Celluloid Grip above and below Reel Seat.....	" 4.05

# FISHING REELS



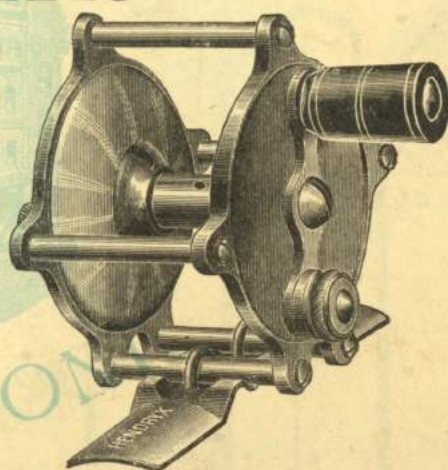
No. 102P.

Single Action, Raised Pillar, Rivet Brass Reel.

No. 102P.	Capacity 25 yds.....	per doz., \$1.70
" 106P.	" 60 " .....	" 2.25

Single Action, Raised Pillar, Riveted Brass Reel, with Click, Nickel-Plated.

No. 204PN.	Capacity, 40 yds .....	per doz., \$3.40
" 206PN.	" 60 " .....	" 3.70



No. 00304

Single Action, Raised Pillar, Screwed Brass Reels, with Flush Balance Handle and Back Sliding Click, Nickel-plated.

No. 00304PN.	Capacity 40 yds.....	per doz., \$6.85
" 00306PN.	" 60 " .....	" 7.45
" 00307PN.	" 80 " .....	" 8.00

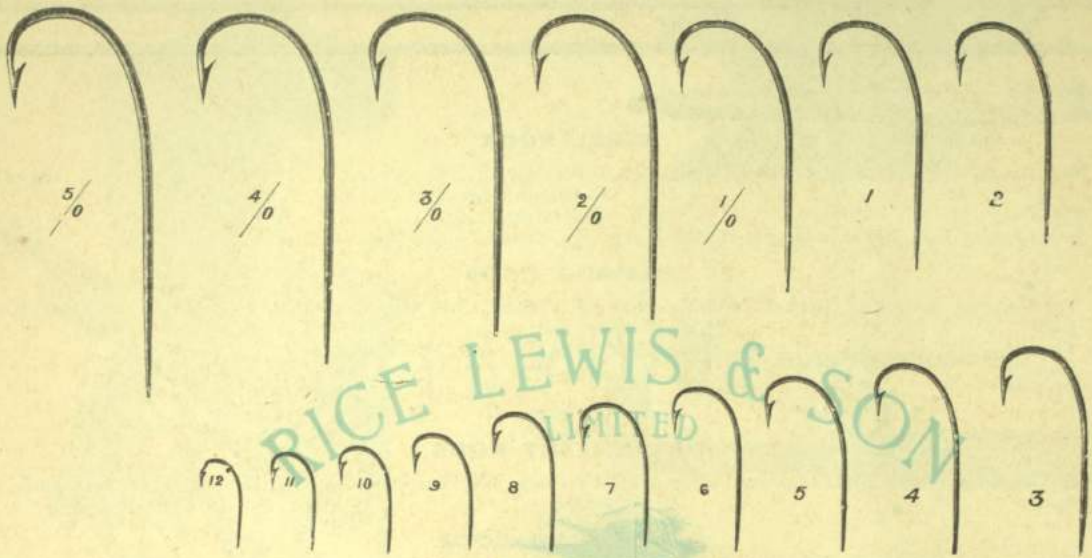
Double Multiplying, Raised Pillar, Balance Handle, Screwed Brass Reel, with Patent Adjustable Slide Drag, and Back Sliding Click.

No. 2904PN.	40 yds., N.P.....	Per dozen \$9.60	No. 002904PN.	40 yds., N.P., with Rubber Cap..	Per dozen \$12.00
" 2906PN.	60 " " .....	10.50	" 002906PN.	60 " " " " " " " " " " " "	" 13.00
" 2907PN.	80 " " .....	11.40	" 002907PN.	80 " " " " " " " " " " " "	" 14.00
			" 002908PN.	100 " " " " " " " " " " " "	" 15.50

If you deal in above, write for our Sporting Goods Catalogue.

# FISH HOOKS

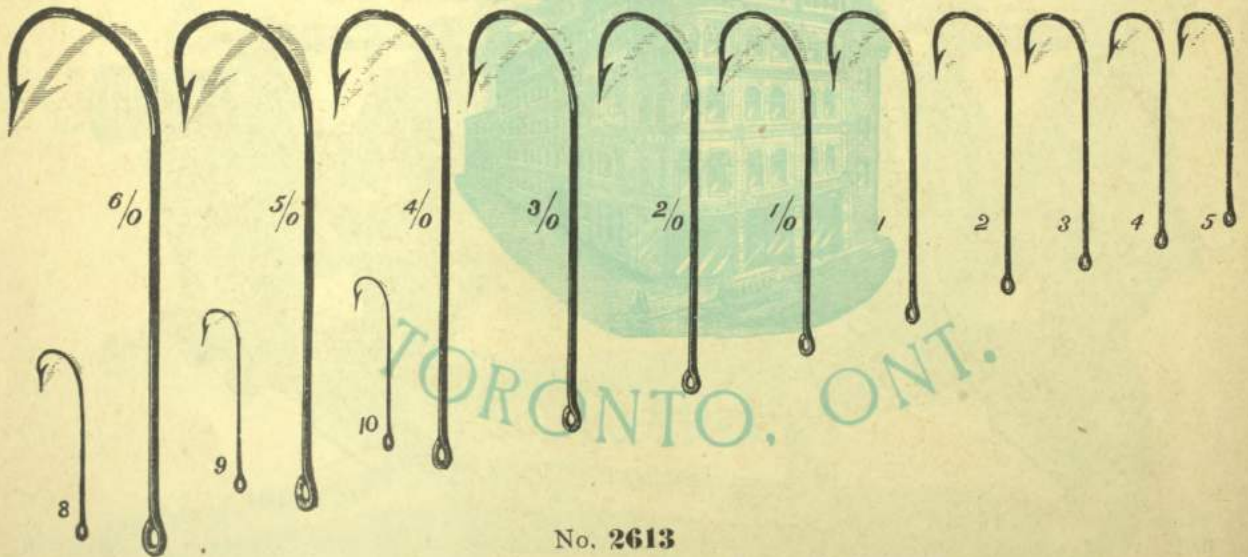
## SPROAT TAPERED HOOKS



No. 2544

Size Nos .....	12 to 1	1-0	2-0	3-0
No. 2544 .....	per 1000	\$1.15	1.45	1.65
			1.90	

## CARLISLE FISH HOOKS



No. 2613

Size Nos. ....	12 to 1	1 0	2 0	3 0	4-0	5-0	6-0
No. 2613 —Ringed .....	per 1000	\$1.00	1.25	1.45	1.70	1.95	2.25
“ 2614½—Marked.....	“	1.00	1.25	1.45	1.70	.....	.....

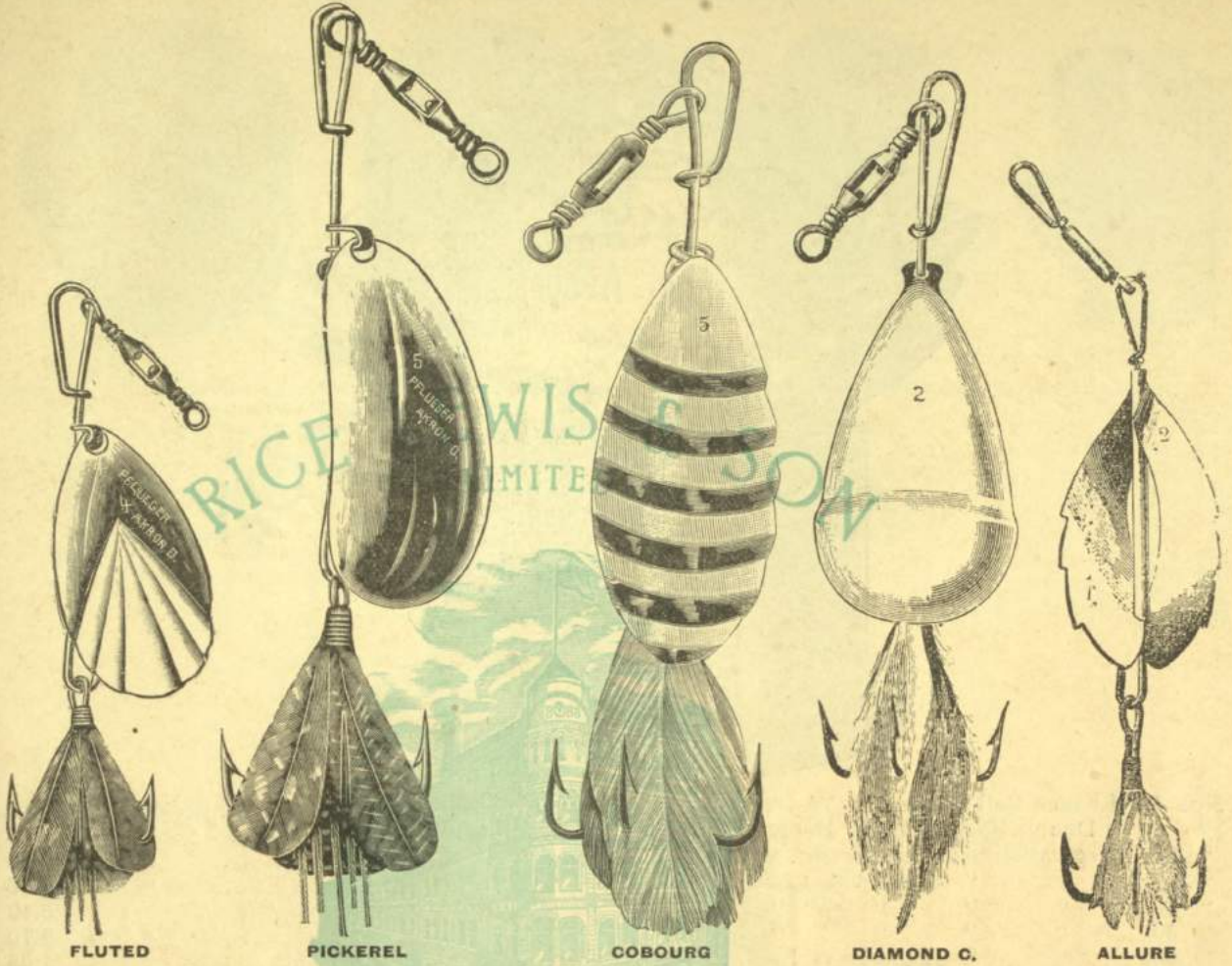
## KIRBY AND LIMERICK FISH HOOKS, RINGED

Size Nos.....	12 to 1	1-0	2 0	3-0	4-0	5-0	6-0	7 0	8-0	9-0	10-0
No. 1989—Kirby bend....	per 1000	\$0.68	0.80	1.00	1.15	1.30	1.50	1.90	2.45	3.20	4.15
“ 1987—Limerick.....	“	0.63	0.80	1.00	1.15	1.30	1.50	1.90	.....	.....	.....

One hundred in a box.

**If you deal in above, write for our Sporting Goods Catalogue.**

# TROLLING BAIT



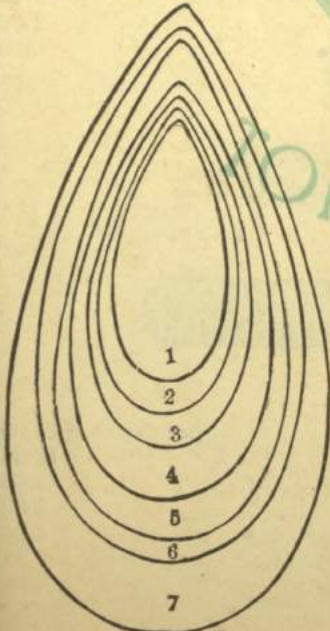
FLUTED

PICKEREL

COBOURG

DIAMOND C.

ALLURE



Scale for sizes of Spoons

## FLUTED

Size Nos.....	4	4 $\frac{1}{2}$	5	6	7	8
Fluted Bait, nickel-plated, per doz.,	\$1.15	1.15	1.15	1.15	1.15	1.15

## PICKEREL

Size Nos.....	4	5	6	7
Pickerel Bait, nickel-plated .....per doz.,	\$1.05	1.05	1.05	1.05

## COBOURG

Size Nos.....	3	4	5	6	7	8
Cobourg Bait, nickel-plated, per doz.,	\$1.25	1.25	1.25	1.25	1.25	1.25

## DIAMOND C.

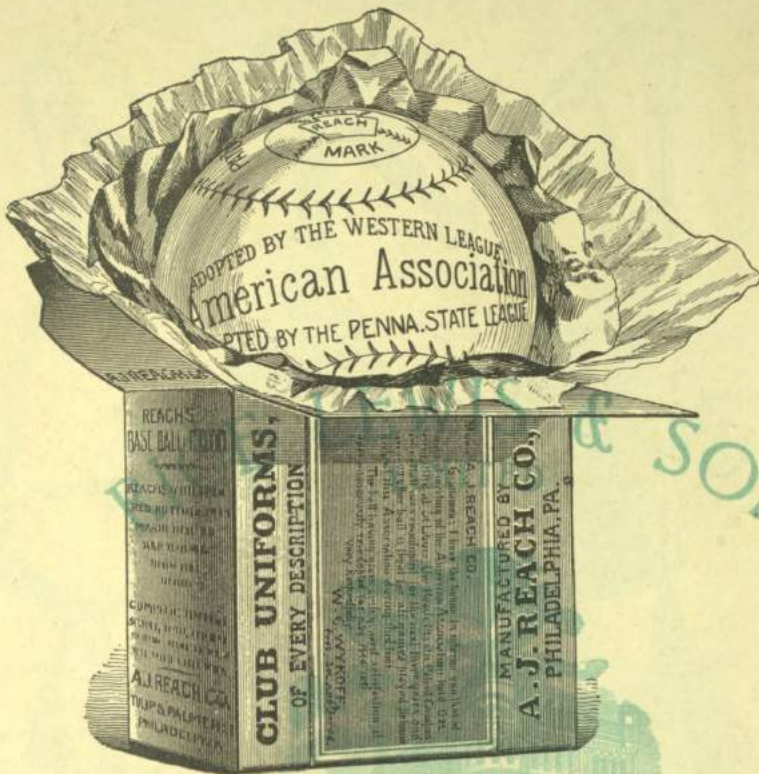
Size Nos.....	3	2	1	1-0
Diamond C., nickel-plated, gold end.....per doz.,	\$4.00	4.00	4.00	4.70

## ALLURE

Size Nos .....	3	2	1	1-0	2-0
Allure Bait, nickel and brass .....per doz.,	\$7.40	7.40	7.40	8.10	8.10

If you deal in above write for our Sporting Goods Catalogue.

# BASE BALLS



No. 1.	League Ball adopted by Western Association .....	per dozen, \$20.60
" 0.	" "Double Seamed Ball," Double Stitched, warranted to last a full game.....	" 20.60
" 20.	Regulation Size and Weight, a first-class ball .....	" 10.80
" 30.	" "Horsehide Cover .....	" 8.10
" 40.	" " " " and well made.....	" 5.40
" 50.	" " " " " .....	" 2.70
" 60.	" " "good Boys' ball .....	" 1.65
" 70.	" "Rattler," Boys' ball.....	" 1.05
" 80.	" "Boss," " .....	" 0.60

## BASEBALL BATS



No. 3A



LOUISVILLE SLUGGER

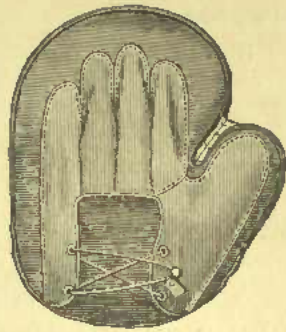
Louisville Slugger, best selected Ash, well balanced and finished .....	per dozen, \$14.00
No. 3-O. Highest grade Ash, thoroughly seasoned, well balanced and finished.....	" 12.85
" 1A. Extra quality Ash, Antique Finish, highly polished .....	" 7.00
" 1C. Finest selected English Willow, highly finished .....	" 7.00
" 2A. Excellent quality Ash, carefully selected, highly polished.....	" 3.85
" 3A. Extra " " Antique Finish, best Boys' bat made .....	" 3.85
" 7. Ash, highly polished, red end, length 30 inch .....	" 1.50
" 9. " " " " 26 " .....	" 0.80

If you deal in above, write for our Sporting Goods Catalogue.

# BASEBALL MITTS



No. 99



No. 92



No. 32X



No. 99.	Professional Catchers' Mitts, with patent rubber finger guard, padded with best asbestos padding, patent lacing, best coltskin.....	each, \$8.00
" 98.	Same as No. 99, but a little smaller.....	" 6.00
" 91.	" " 98, but made of asbestos calfskin.....	" 5.35
" 100.	" " 98, with reinforced patch in palm, without the patent finger protector.....	" 2.70
" 92.	Mouse color coltskin, with patent lacing.....	" 2.00
" 93.	" " " without lacing.....	" 1.60
" 80.	Gold tan leather back, "Youths' large size".....	" .70
" 101.	" canvas back, "Boys' large size".....	" .40
" 45.	Baseball's Mitts, drab colored coltskin, very flexible.....	" 2.70
" 43.	" " " palm, red leather back.....	" 2.00
" 42.	" " Craven tanned leather.....	" 1.00
" 41.	" " yellow leather.....	" .80
" 32X.	Gloves, mouse colored buckskin, padded palm.....	" 4.00
" 7X.	" " drab colored coltskin.....	" 2.70
" 29.	" " " ".....	" 1.60
" 3X.	" " drab chrome tanned leather.....	" 1.00

## INFLATED BODY PROTECTOR

No. 1.	League Catchers' Protector.....	each, \$15.15
" 1A.	Amateur " ".....	" 9.50
" 1B.	Boys' " ".....	" 8.20

## CRICKET BATS



No. A1.	Patent Double-spliced, Spring-Handle Bat, thoroughly seasoned, hand hammered, edges and face hardened in such a manner that the wood is still in possession of its natural elasticity, accurate in balance, specially selected and stamped "Arthur Shrewsbury".....	each, \$7.80
" 1.	" Specially Selected," Match Bat, are made with very best rattan canes, the joints are fitted in an improved manner which gives them enormous strength and a splendid spring, while "jarring" is entirely obviated, and the hardest hit can be made without feeling the slightest sting.....	each, \$5.95
" 2A.	All Cane Handle Club Bat, selected, special line for club use.....	" 3.75
" 4.	Men's All Cane Handle Bats, not stamped.....	" 2.50
" 3.	Youths' " ".....	" 2.20
" 6.	" " " selected.....	" 2.60

## YOUTHS' POLISHED BATS

Nos.....	01	04	05	66	07
Each.....	\$0.50	0.85	1.00	1.15	1.30

## CRICKET BALLS

No. 1A.	" Specially Selected," Treble-Sewn, Match Balls, warranted hand-made, regulation size and weight, as used in all matches played by the Earl of Sheffield's team in Australia, also the great matches in England, including England and Australia. Highly recommended by Dr. W. G. Grace and the leading English bowlers.....	each, \$2.50
" 3.	Treble sewn, hand made, strongly recommended, a really first-rate practice ball.....	" 2.10
" 5.	Double seam, hand made, regulation size and weight, a good sound ball, will stand a lot of wear.....	" 1.90
" 9.	Youths' two-seamed, hand made, small red, halves.....	" .95
" 10.	Youths' three-seamed, hand made, large red, halves.....	" 1.40
" 05.	Composition, regulation size, good practice ball.....	" .40

If you deal in above write for our Sporting Goods Catalogue

# GOLF STICKS

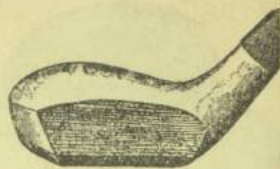
SIMPSON'S

## WOOD CLUBS

Bulger Drivers	each, \$2.40
Bulger Driver Brassies	" 5.00
Drivers	" 2.20
Mid Spoons	" 2.20
Brassie Niblics	" 2.75
Brassie Spoons	" 2.75

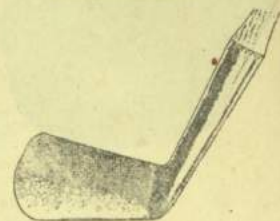
## IRON CLUBS

Cleeks	each, \$2.75
Putting Cleeks	" 2.75
Irons	" 2.75
Mashies	" 2.75
Gun Metal Putters	" 3.00



## EXTRA HEADS AND SHAFTS

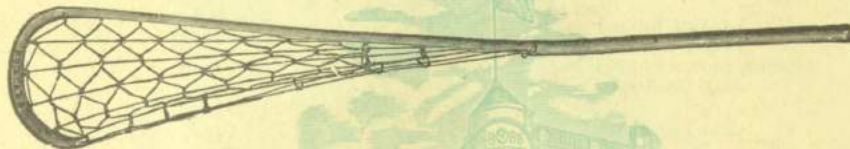
Heads for Bulger Drivers	each, \$1.45
" " Brassies	" 2.00
Heads for Cleeks	" 1.75
Shafts for any style of Head	" 1.00



We also keep in stock a nice assortment of Clubs, made specially for Ladies' use, at same prices as above.

"The Edinburgh," Regulation size. This Ball is used by all the leading Clubs ..... per dozen, \$5.25

# LACROSSE STICKS

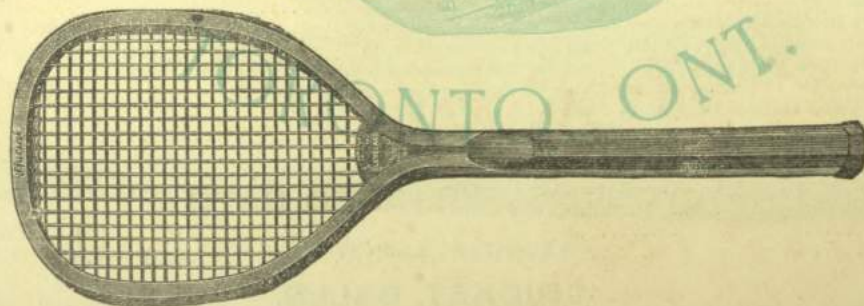


Nos. 4 to 7

No. 1.	3 ft. 10 in. in length, Best White Hickory and Finest Line Strings	per doz., \$8.45
No. 2.	4 ft., same as No. 1	" 9.85
No. 4.	4 ft. 6 in., Practice Stick, 16ths to the dozen, made of the Best White Hickory and Fine Line Strings	" 16.90
No. 6.	4 ft. 4 in., Home Stick, same in every way as No. 4.	" 15.50
No. 6 $\frac{1}{2}$ .	Same as No. 6, only Left Hand	" 15.50
No. 12.	4 ft. 6 in., Professional Stick, Best Selected Hickory, and strung with Best Syor Strings	" 21.10
No. 13.	Same as No. 12, only Left Hand	" 21.10
No. 14.	4 ft. 6 in., C.L.C. Stick, Choicest White Hickory, strung with Syor Strings, with Clock Cord in	" 28.15
Wearing Parts		" 28.15
No. 15.	Same as No. 14, only Left Hand	" 4.30

LACROSSE BALLS, made of Best Soft Pure Rubber.

# LAWN TENNIS RACKETS



Assorted Weights, 10 $\frac{1}{2}$  to 15 ounces.

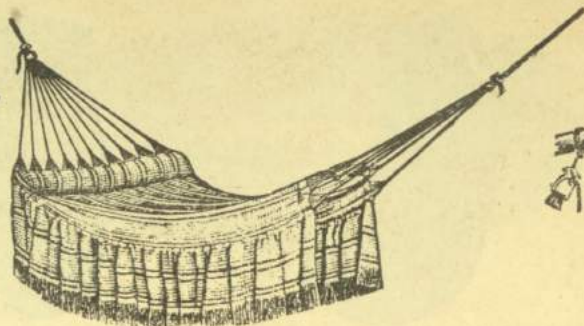
Bristol, White Ash Frames, strung with Oriental Gut	each, 1.85
Cleveland,	" 2.45
Standard,	" 3.25
" Full Size, High Grade	" 4.00
Eclipse, Best	" 5.00
Horseman, Best	" 5.00
Ladies' Special, Best White Ash Frames, strung with Oriental Gut, Scored Handle	" 5.00
LAWN TENNIS BALLS. No. 1, College Championship, Regulation Size	per doz., 4.25

If you deal in above, write for our Sporting Goods Catalogue

# HAMMOCKS



WITH PILLOW



WITH VALANCE

No.	Description	PER DOZ.
A1.	Quarter Color, 34 x 70", Open Weave	\$11.70
B2.	" " 36 x 76", " one Patent Wood Spreader	14.50
B4.	" " 36 x 76", " Spreader and Pillow	18.00
B5.	Full " 36 x 76", " and Valance	30.00
E4.	" 36 x 76", Combination Weave Spreader and Pillow	25.00
E5.	" 36 x 76", " " Pillow and Valance	37.00
G5.	" 40 x 78", Twilled " " " "	51.00
K4.	" 41 x 78", Open " " and Pillow	29.50
NE4.	" 36 x 76", Corded " " Stretcher and Pillow	28.00
NE5.	" 36 x 76", " " " Pillow and Valance	40.00
P5.	" 40 x 78", " " " Pillow and Valance	50.00

## QUOITS



W & C. WYNN & CO.  
4 lbs

London Pattern, Superior Wrought Steel, Hardened and Polished.

Weight per pair	4	5	6	7	8	10	12	14	16 lbs.
Per pair	\$1.90	2.35	2.75	3.20	3.60	4.90	7.00	8.50	10.20

### MALLEABLE IRON QUOITS

Weights, 3, 4, 5, 6, 7, 8, 10 lbs. each .....per lb., \$0.12

## DUMB-BELLS



### IRON

Weights, 1½, 2, 3, 3½, 4, 4½, 5, 6, 7, 8, 9, 10, 12, 14 lbs.  
Per lb. ....\$0.08

### WOOD

Made of Selected Maple, Oiled, Lathe Polished.

Weights... ½ ¾ 1 1½ 2 2½ 3 lbs.  
Per pair...\$0.20 0.28 0.30 0.40 0.50 0.60 0.70

## PITCHING SHOT



Weights, 10 to 50 lbs.....per lb., \$0.08

## INDIAN CLUBS

Made of Selected Maple, Oiled, Lathe Polished,  
well shaped and balanced.

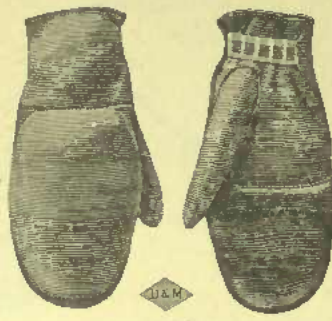
Weights... ¾ 1 1½ 2 3 4 5 6 lbs.  
Per pair \$0.25 0.35 0.40 0.50 0.60 0.90 1.00 1.15

If you deal in above, write for our Sporting Goods Catalogue.

# BOXING GLOVES



No. 020



No. 032



No. 024

No.	Description	Per set.	No.	Description	Per set
No. 02	Boys' Boxing Gloves, made of Gold Tan Kid, Elastic Wrist, and filled with Curled Hair. Style as 024.	\$1.75	No. 013X	Men's Boxing Gloves, made of Benton Tan Kid, Laced, and filled with superior quality Curled Hair. Style as 020.	\$6.00
" 07	Boys' Boxing Gloves, made of White Kid, Elastic Wrist, filled with Curled Hair. Style as 024.	1.90	" 020	Men's Boxing Gloves, made of fine imported Colored Kid, fac-smile in style of the gloves used at the Corbett-Mitchell contest at Jacksonville. Laced, and filled with the finest quality of Curled Hair.	8.00
" 02X	Boys' Boxing Gloves, made of Gold Tan Kid, Elastic Wrist, and filled with Curled Hair. Style as 020.	2.40	" 024	Men's Boxing Gloves, made of Benton Tan Kid, Gold Tan Palm, California Thumb, Padded Wrist, Laced, and filled with a superior quality Curled Hair.	5.35
" 03	Boys' Boxing Gloves, made of Wine Colored Kid, Elastic Wrist, and filled with good quality Curled Hair. Style as 024.	2.40	" 026	Men's Boxing Gloves, made of White Kid, Elastic Wrist, and filled with good quality Curled Hair. Style as 020.	3.35
" 03X	Boys' Boxing Gloves, made of Wine Colored Kid, Elastic Wrist, and filled with good quality Curled Hair. Style as 020.	2.70	" 027	Men's Boxing Gloves, made of White Kid, Elastic Wrist, and filled with good quality Curled Hair. Style as 024.	2.40
" 04	Men's Boxing Gloves, made of Wine Colored Kid, Elastic Wrist, and filled with good quality Curled Hair. Style as 020.	4.00	" 030	Men's Boxing Gloves, made of Gold Tan Kid, Elastic Wrist, and filled with Curled Hair. Style as 024.	2.40
" 07X	Boys' Boxing Gloves, made of White Kid, Elastic Wrist, and filled with Curled Hair. Style as 020.	2.40	" 030X	Men's Boxing Gloves, made of Gold Tan Kid, Laced, and filled with superior quality Curled Hair. Style as 024.	5.35
" 013	Men's Boxing Gloves, made of Benton Tan Kid, Laced, and filled with superior quality Curled Hair. Style as 024.	5.35			

The better quality of Gloves are stocked in 6 and 8 ounces. 8 ounces will be sent unless weight is specified.

## STRIKING BAG GLOVES

No. 034	Oil Tan, Padding in Back.	per pair, \$0.80
" 032	Wine Color Padding in Back, with Hand Bar in Palm.	" 1.35

## STRIKING BAGS

Complete with Bladders. Double Loop and Rubber Cord.

No. 81XB	Oil Tan Yellow Bag, 27 inch	each, \$2.30
" 81X	" " " 30 "	" 2.50
" 81	Lined Oil Tan Yellow Bag, 30 inch	" 2.90
" 84	" " " 30 " Double Seamed	" 3.10
" 65	Lined Craven Tan Dark Bag, 30 "	" 3.75
" 82X	" " " 30 " Double "	" 4.45
" 86	Lined Green Tan " 32 " Welt	" 5.15
" C	Best Grained Leather Bag, 30 " Hand Sewed	" 3.40
" C	" " " 32 " "	" 4.40

Single Loop, for using with Platform.

No. 81	Lined Oiled Tan Yellow Bag, 30 inch	each, \$2.25
" 25	" Craven Tan Dark " 30 " with Seam	" 3.10
" 86	" Green Tan " 32 "	" 4.50
" 83	" " " 32 " Double Seam	" 6.20
" C	Best Grained Leather " 30 " Hand Sewed	" 2.75
" C	" " " 32 " "	" 3.75



DOUBLE LOOP

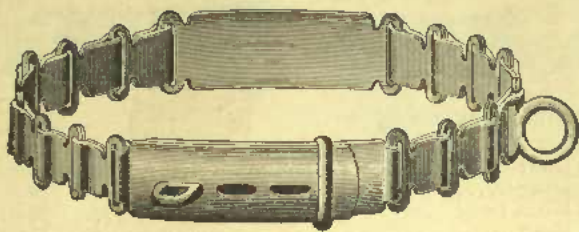


SINGLE LOOP

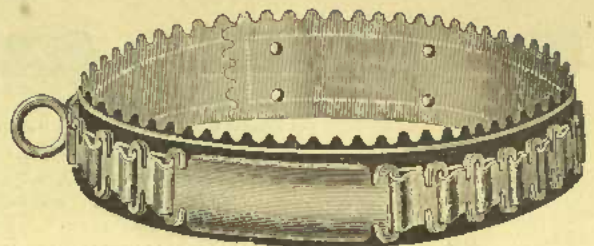
If you deal in above write for our Sporting Goods Catalogue



# DOG COLLARS



UNLINED



LINED

## UNLINED

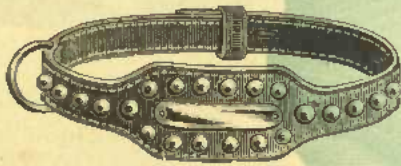
No. 260.	1/2 inch wide, lengths assorted	9 to 13 inches, Brass, Nickel-plated	per dozen, \$2.00
" 261.	3/4 " " " "	13 to 17 " " " "	" " 2.55

## WITH HARD LEATHER LININGS

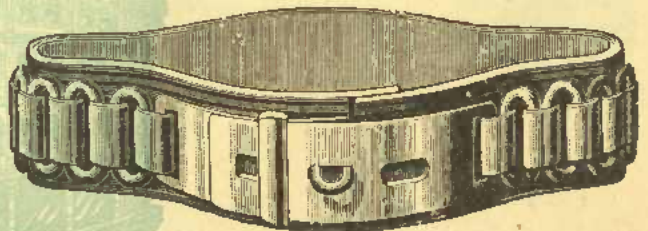
No. 250S.	1/2 inch wide, lengths assorted	9 to 13 inches, Brass, Polished	per dozen, \$2.70
" 251S.	3/4 " " " "	13 to 17 " " " "	" " 3.55
" 260S.	1 1/2 " " " "	9 to 13 " " Nickel-plated	" " 3.05
" 261S.	3/4 " " " "	13 to 17 " " " "	" " 3.75
" 282S.	1 " " " "	17 to 21 " " " "	" " 5.20

## WITH CHAMOIS LINED LININGS

No. 250C.	1/2 inch wide, lengths assorted	9 to 13 inches, Brass, Polished	per dozen, \$4.50
" 251C.	3/4 " " " "	13 to 17 " " " "	" " 5.15
" 260C.	1 1/2 " " " "	9 to 13 " " Nickel-plated	" " 4.65
" 261C.	3/4 " " " "	13 to 17 " " " "	" " 5.40

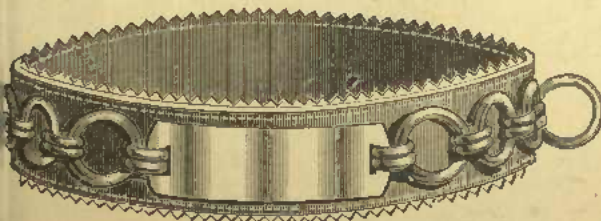


No. 427

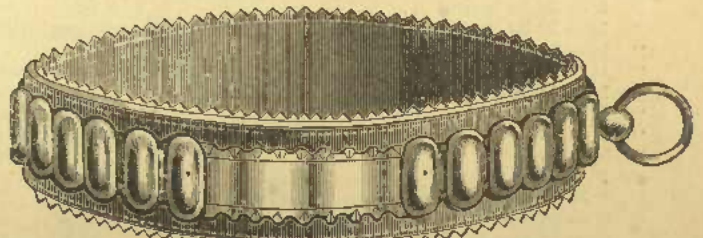


Nos. 915 and 925

No. 427.	Lengths assorted	13 to 17 inches, Black Leather, Nickel-plated Trimmings and Studs	per doz., \$18.00
" 406.	3/4 inch wide, lengths assorted	13 to 17 inches, Russet Leather, Nickel-plated Trimmings and Studs	" " 8.65
" 407.	1 " " " "	16 to 20 " " " "	" " 10.00
" 415.	1 1/4 " " " "	18 to 22 " " " "	" " 13.00
" 465.	2 " " " "	25 to 29 " " " "	" " 16.60
" 605.	1/2 " " " "	9 to 13 " " Chamois Lined, Nickel-plated Trimmings	" " 5.75
" 915.	3/8 " " " "	9 to 13 " " " "	" " 6.50
" 925.	3/4 " " " "	11 to 15 " " " "	" " 7.25
" 935.	1 1/4 " " " "	14 to 20 " " " "	" " 10.00



No. 945

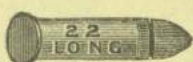


No. 954

No. 945.	3/8 inch wide, lengths assorted	13 to 17 inches, Russet Leather, Chamois Lined, Nickel-plated Trimmings	per doz., \$8.65
" 954.	3/4 " " " "	15 to 19 " " " "	" " 13.00

# CARTRIDGES

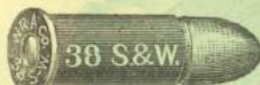
## RIM FIRE



Blank Cartridges same list as Ball Cartridges, except .22 and .32.

	Per 1000		Per 1000
B.B. Caps	\$4.00	.38 Short	\$16.00
C.B. "	4.50	.38 Long	18.00
.22 Short, 50 in a box	5.00	.38 Extra Long	25.00
.22 " 100 "	5.00	.41 Short	15.00
.22 " Mushroom, 50 in a box	5.50	.41 Long	17.50
.22 " " 100 "	5.50	.42 Calibre, No. 64, Forehand & W.	30.00
.22 Long, 50 in a box	6.00	.44 Short	23.00
.22 " 100 "	6.00	.44 Long	25.00
.22 Colt's M.R. Short, 50 in a box	5.00	.44 Henry, Flat	24.00
.22 " " 100 "	5.00	.44 " Pointed	25.00
.22 " " Long, 50 "	6.00	.44 C. & W.	25.00
.22 " " 100 "	6.00	.44 Howard Long	27.00
.22 Long Rifle, 50 in a box	6.00	.44 Extra Long	36.00
.22 " " 100 "	6.00	.44 Short Pistol	25.00
.22 Extra Long	9.00	.46 Long Rifle	33.00
.22 Winchester	9.00	.46 Extra Long	46.00
.25 Short	8.50	.56-46 Spencer Sporting	40.00
.25 Stevens	14.00	.56-50 " Carbine	40.00
.30 Short	9.00	.56-52 " Rifle	40.00
.30 Long	10.50	.56-56 " Carbine	40.00
.32 Extra Short	10.00	<b>SHOT CARTRIDGES, .22 Long</b>	11.00
.32 Short	10.00	" " .32 "	22.00
.32 Long	11.50	<b>BLANKS, .22 Short</b>	5.00
.32 Long Rifle	11.50	" .32 "	10.00
.32 Extra Long	16.50		

## CENTRAL FIRE PISTOL SIZES



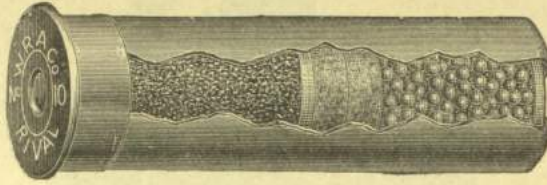
Blank Cartridges same List as Ball Cartridges.

Primer	Per 1000	Primer	Per 1000
No. 1 —.22 Extra Long	\$13.00	No. 1 —.38-40 Marlin	\$19.00
" 1 —.22 Winchester	15.00	" 1 —.38 Extra Long	23.00
" 1 —.25-20 Grs. Stevens' and Winchester Single Shot	18.00	" 0 —.41 Short, Colt's Single Action	15.00
" 1 —.25-20 Marlin and Winchester	16.00	" 0 —.41 " Double "	15.00
" 1 —.300 Rook	15.00	" 1 —.41 Long " "	17.50
" 1 —.32 Protector	9.00	" 0 —.44 S. & W. No. 3 American	19.00
" 1 —.32 Ideal	20.00	" 2 —.44 " " 3 Russian	20.00
" 0 —.32 Short Colt's	11.00	" 2 —.44 " Russian Gallery, Round Ball	22.00
" 0 —.32 Long	12.00	" 2 —.44 " Grooved	25.00
" 1 —.32 " Colt's Inside Lubricant	12.00	" 1 —.44 Merwin, Hulbert & Co.	20.00
" 1 —.32 " Rifle	12.00	" 2 —.44 Colt's	20.00
" 0 —.32 Smith & Wesson Gallery, Round Ball	10.00	" 1 —.44 Long Ballard	22.00
" 0 —.32 " "	11.00	" 1 —.44 Extra Long Wesson	30.00
" 0 —.32 H. & R. or M. H. & Co.	14.00	" 1 —.44 " Ballard	30.00
" 1 —.32 Winchester	16.00	" 1 —.44 Winchester	19.00
" 1 —.32 Colt's M.R. for Colt's Lightning Rifle	16.00	" 1 —.44 Colt's M. R. for Colt's Lightning Rifle	19.00
" 1 —.32-20 Marlin	16.00	" 1 —.44-40 Marlin	19.00
" 1 —.32-30 Remington Grooved	25.00	" 2 —.44 Evans' New Model	26.00
" 1 —.32 Extra Long Ballard	18.00	" 1 —.44 " Old "	22.00
" 1 —.32 " Smith & Wesson Rifle	20.00	" 1 —.44 Webley	16.50
" 1 —.32-44 S. & W. Gallery, Round Ball	18.00	" 1 —.44 Bull Dog	14.50
" 1 —.32-44 " Target, Grooved	19.00	" 1 —.45 Smith & Wesson	25.00
" 0 —.38 " Gallery, Round Ball	12.50	" 1 —.45 Webley	20.00
" 0 —.38 " "	13.50	" 2 —.45 Colt's U.S.A.	22.00
" 1 —.38-44 " Target, Grooved	23.00	" 2 —.45 " " 28 Grs.	22.00
" 1 —.38-44 " Gallery, Round Ball	19.00	" 2 —.45 " Round Ball	22.00
" 0 —.38 Merwin, Hulbert & Co.	13.50	" 1 —.450 Revolver	15.00
" 0 —.38 Short	13.50	" A —.50 Pistol	28.00
" 1 —.38 Long, for Colt's D.A. Pistols, etc.	14.50	<b>SHOT CARTRIDGES, .38 W.C.F and .44 W.C.F.</b>	20.00
" 1 —.38 Winchester	19.00	<b>BLANKS, .32 Smith &amp; Wesson</b>	11.00
" 1 —.38 Colt's M.R. for Colt's Lightning Rifle	19.00	" .38 "	13.50

We Stock all sizes and sorts of Cartridges.

# LOADED SHOT SHELLS

AMERICAN



## 12 GAUGE

Load No.	Weight of Powder.	Weight of Shot.	Size of Shot.	Price per 1000.
100	3 Drs.	1 Oz.	10	\$25.00
106	3 "	1 "	6	25.00
96	3 "	1 1/8 "	6	26.00
98	3 "	1 1/8 "	8	26.00
122	3 1/4 "	1 1/8 "	2	26.50
123	3 1/4 "	1 1/8 "	3	26.50
124	3 1/4 "	1 1/8 "	4	26.50
125	3 1/4 "	1 1/8 "	5	26.50
126	3 1/4 "	1 1/8 "	6	26.50
127	3 1/4 "	1 1/8 "	7	26.50
128	3 1/4 "	1 1/8 "	8	26.50
134	3 1/2 "	1 1/8 "	4	27.00
135	3 1/2 "	1 1/8 "	5	27.00
136	3 1/2 "	1 1/8 "	6	27.00
191	3 3/4 "	1 1/8 "	BB	29.50

## 10 GAUGE

Load No.	Weight of Powder.	Weight of Shot.	Size of Shot.	Price per 1000.
240	4 Drs.	1 1/4 Oz.	10	\$29.00
244	4 "	1 1/8 "	4	29.00
246	4 "	1 1/8 "	6	29.00
247	4 "	1 1/8 "	7	29.00
256	4 "	1 1/8 "	6	30.00
258	4 "	1 1/8 "	8	30.00
274	4 1/4 "	1 1/8 "	4	30.50
275	4 1/4 "	1 1/8 "	5	30.50
276	4 1/4 "	1 1/8 "	6	30.50
277	4 1/4 "	1 1/8 "	7	30.50
278	4 1/4 "	1 1/8 "	8	30.50
282	4 1/2 "	1 1/8 "	2	30.00
283	4 1/2 "	1 1/8 "	3	30.00
296	4 1/2 "	1 1/8 "	6	31.00
298	4 1/2 "	1 1/8 "	8	31.00

## DOMINION TRAP, 12 GAUGE

Load No.	Weight of Powder.	Weight of Shot.	Size of Shot.	Price per 1000.
D	3 Drs.	1 1/8 Oz.	4	\$20.50
D	3 "	1 1/8 "	5	20.50
D	3 "	1 1/8 "	6	20.50
D	3 "	1 1/8 "	7	20.50
D	3 "	1 1/8 "	8	20.50
D	3 "	1 1/8 "	10	20.50
G	3 1/4 "	1 1/8 "	3	21.00
G	3 1/4 "	1 1/8 "	4	21.00
G	3 1/4 "	1 1/8 "	5	21.00
G	3 1/4 "	1 1/8 "	6	21.00
G	3 1/4 "	1 1/8 "	7	21.00
G	3 1/4 "	1 1/8 "	8	21.00
G	3 1/4 "	1 1/8 "	10	21.00
J	3 1/2 "	1 1/8 "	3	21.50
J	3 1/2 "	1 1/8 "	4	21.50
J	3 1/2 "	1 1/8 "	5	21.50
J	3 1/2 "	1 1/8 "	6	21.50
J	3 1/2 "	1 1/8 "	8	21.50
J	3 1/2 "	1 1/8 "	10	21.50

## DOMINION TRAP, 10 GAUGE

Load No.	Weight of Powder.	Weight of Shot.	Size of Shot.	Price per 1000.
O	4 Drs.	1 1/4 Oz.	3	\$23.50
O	4 "	1 1/8 "	4	23.50
O	4 "	1 1/8 "	5	23.50
O	4 "	1 1/8 "	6	23.50
O	4 "	1 1/8 "	8	23.50
O	4 "	1 1/8 "	10	23.50
U	4 1/4 "	1 1/8 "	3	24.00
U	4 1/4 "	1 1/8 "	4	24.00
U	4 1/4 "	1 1/8 "	5	24.00
U	4 1/4 "	1 1/8 "	6	24.00
U	4 1/4 "	1 1/8 "	8	24.00
U	4 1/4 "	1 1/8 "	10	24.00

## HAND LOADED SMOKELESS SHOT SHELLS

Loaded with C. & H. Amberite Powder.

### 12 GAUGE

Weight of Powder.	Weight of Shot.	Size of Shot.	Price per 1000.
3 Drs.	1 1/8 Oz.	Any number 1 to 10	\$47.75

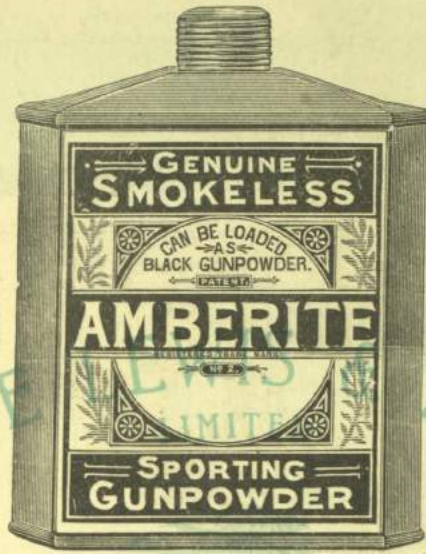
### 10 GAUGE

Weight of Powder.	Weight of Shot.	Size of Shot.	Price per 1000.
3 1/2 Drs.	1 1/4 Oz.	Any number 1 to 10	\$52.50

Price on application of any Special Loads.

# POWDER

SOLE AGENTS FOR CURTIS'S & HARVEY'S BLACK AND NITRO POWDERS



### C. & H. Black Powder

	F	FF	FFF	TP
25 lb. Kegs. . . . . per keg,	\$5.30	5.65	5.95	9.40

### C. & H. "Honker" Ducking Powder

Coarse or Medium Grain.

Pounds . . . . .	25	12½	6¼	1
Per Tin . . . . .	\$12.50	6.50	3.30	0.55

### C. & H. Celebrated "Diamond Grain"

Nos. . . . .	4	6
25 lb. Kegs. . . . . per keg,	\$18.75	18.75
12½ " . . . . . " . . . . .	10.15	10.15
1 lb. Tins. . . . . per doz.,	11.25	11.25
½ " . . . . . " . . . . .	6.25	6.25

### Hamilton Blasting Powder

25 lb. Kegs . . . . . per keg,	\$2.50
--------------------------------	--------

### C. & H. Amberite Smokeless Powder

Tins . . . . .	½	1	5 lb.
Per lb. . . . .	\$2.20	2.05	2.00

Amberite Smokeless Powder contains no Nitro-Glycerine, gives a high muzzle velocity with low pressure, and is quick in ignition. It is a hard, clean grain, and practically unaffected by cold, heat or moisture. It is a safe and pleasant powder to shoot with, and loads measure for measure with Black Powder.

### Savage Smokeless Powder

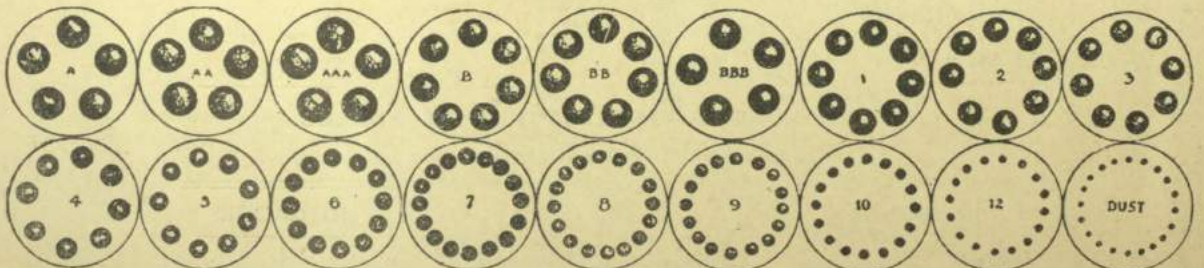
No. 1. . . . .	For High Pressure Savage Cartridges
2 " . . . . .	For Miniature " "
In Tins (about 1 lb) . . . . .	per tin, \$1.85

### Dynamite

30%	40%	50%	60%	75%
Price on application.				

**Detonators** . . . . . per 1000, \$11.25

# SHOT



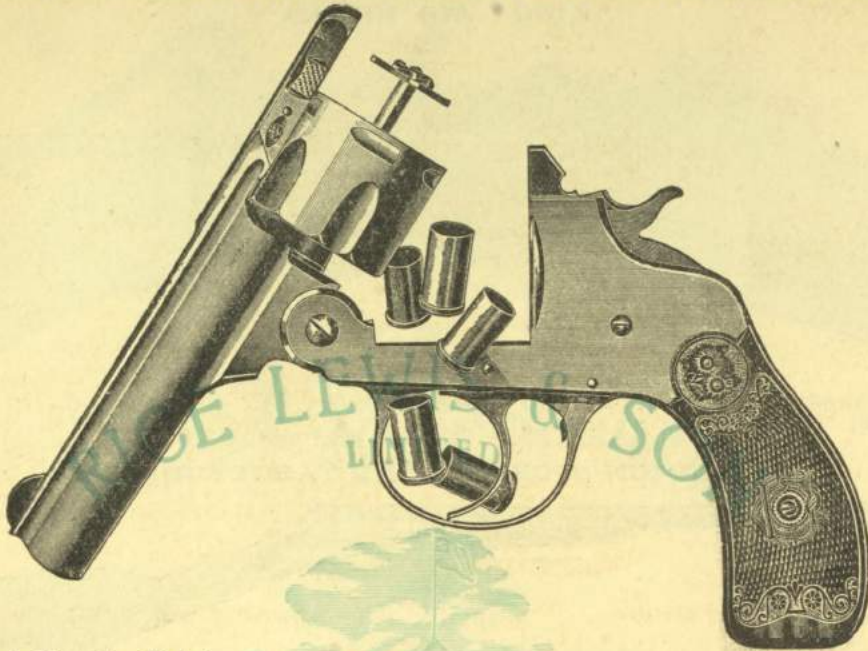
Soft Shot, Dust to No. 3A . . . . .	per lb.,	\$0.06
" 4A, S, SG, and SSG (Buck Shot) . . . . .	"	0.07
Chilled Shot, Dust to No. 3A . . . . .	"	0.06½

### Approximate Number of Pellets to the Ounce.

Dust, or No. 12	10	9	8	7	6	5	4	3	2	1	B	BB	BBB	A	AA	AAA	AAAA	SS	SG	SSG
982	882	560	375	278	209	166	121	98	92	69	58	49	44	38	32	27	24	15	11	10

# REVOLVERS

## IVER JOHNSON SAFETY HAMMER AUTOMATIC REVOLVERS



.32	Calibre, 3-inch Barrels, Nickel	.....	each, \$5.50
.32	" 3 " Blued	.....	" 6.15
.32	" 6 " Nickel	.....	" 7.85
.38	" 3 1/4 " Nickel	.....	" 5.50
.38	" 3 1/4 " Blued	.....	" 6.15
.38	" 6 " Nickel	.....	" 7.35

## IVER JOHNSON SAFETY HAMMERLESS AUTOMATIC REVOLVERS



.32	Calibre, 3-inch Barrels, Nickel	.....	each, \$6.75
.32	" 3 " Blued	.....	" 7.85
.32	" 6 " Nickel	.....	" 8.60
.38	" 3 1/4 " Nickel	.....	" 6.75
.38	" 3 1/4 " Blued	.....	" 7.35
.38	" 6 " Nickel	.....	" 8.60

**We have a large assortment of Revolvers.**

# RIFLES

## "KING" AIR RIFLES



"King" Repeater, Varnished Wood Stock; holds 150 BB Shot ..... per doz., \$14.30  
 " Single Shot, " " " shoots BB Shot ..... " 12.00

## REMINGTON SPORTING AND TARGET RIFLES



No. 4—Remington, Walnut Stock and Fore-Arm, Rifle Butt, Octagon Steel Blue  
 Barrels, 22½ in., .22 Calibre. This Rifle is very accurate, each, \$9.30  
 " 4—.32 Calibre, same as .22, only 24-inch Barrel..... " 9.30

## WINCHESTER REPEATING RIFLES



### SPORTING RIFLE, MODEL 1892

.32, .38 and .44 Calibre.

24-inch Round Barrel, Full Magazine, Plain Trigger, Weight about 6¼ lbs., Number of Shots, 15..... each, \$18.00  
 24 " Octagon " " " " " " " " 6¼ " " " 15..... " 19.50

### SPORTING RIFLE, MODEL 1894

26-inch Round Barrel, Full Magazine, 10 Shots, Weight 7½ lbs., .32 - 40 and .38 - 55 Calibre..... each, \$18.00  
 26 " Octagon " " " " " " " " 7¼ " " .32 - 40 " .38 - 55 " " " 19.50

### SPORTING RIFLE, MODEL 1886

.45 - 70, .45 - 90, .40 - 70, .40 - 82, .40 - 65, and .38 - 56 Calibre.

26-inch Round Barrel ..... each, \$19.50 26-inch Octagon Barrel..... each, \$21.00

## SAVAGE HAMMERLESS SPORTING RIFLES



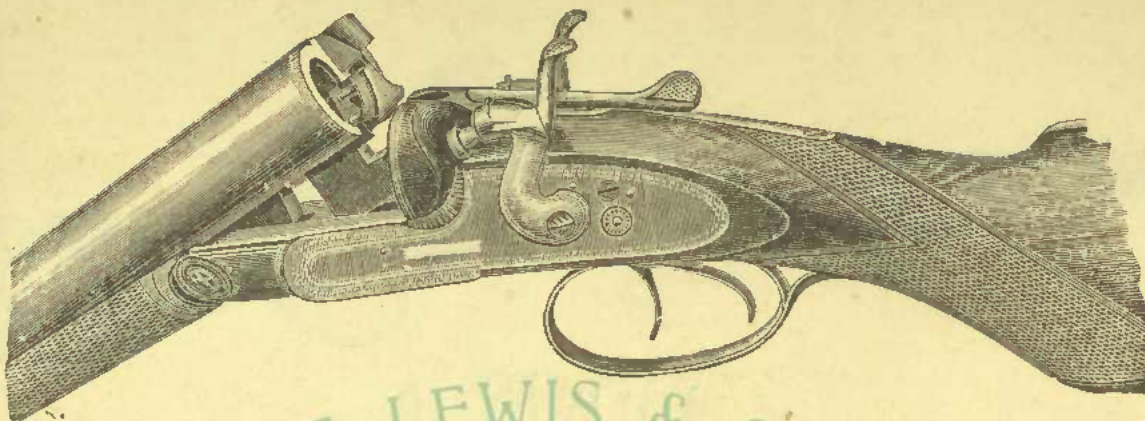
### .303 CALIBRE, FOR SMOKELESS POWDER

26-inch Round Barrel, holds 6 Cartridges, Weight 7½ lbs..... each, \$25.00  
 26 " Half Octagon Barrel, holds 6 Cartridges, Weight, 7¾ lbs..... " 26.50  
 26 " Full " " " " 6 " " " 7¾ " " " 26.50

Can also supply Carbine same make as this Rifle.

**We can supply any Style or Make of Rifle**

# DOUBLE BARREL BREECH LOADING GUNS

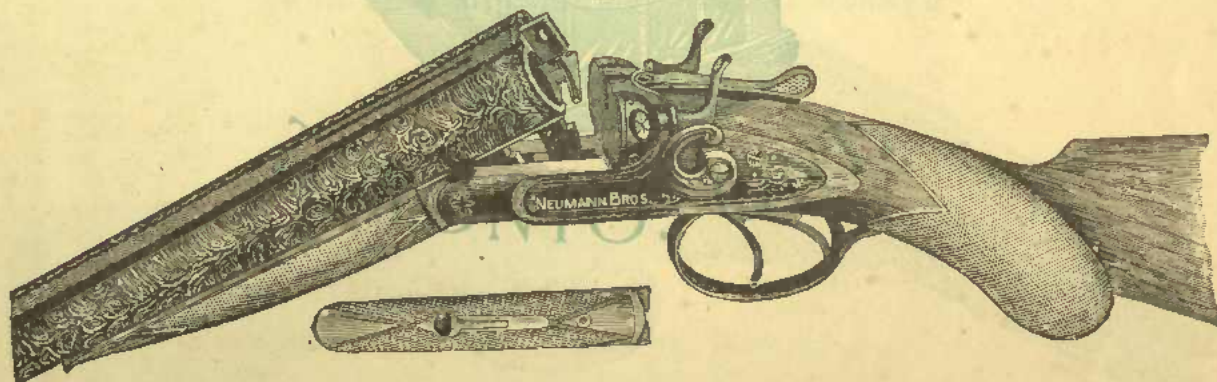


GENUINE BAR LOCKS, EXTENSION RIBS

LIMITED

RICE LEWIS & SON

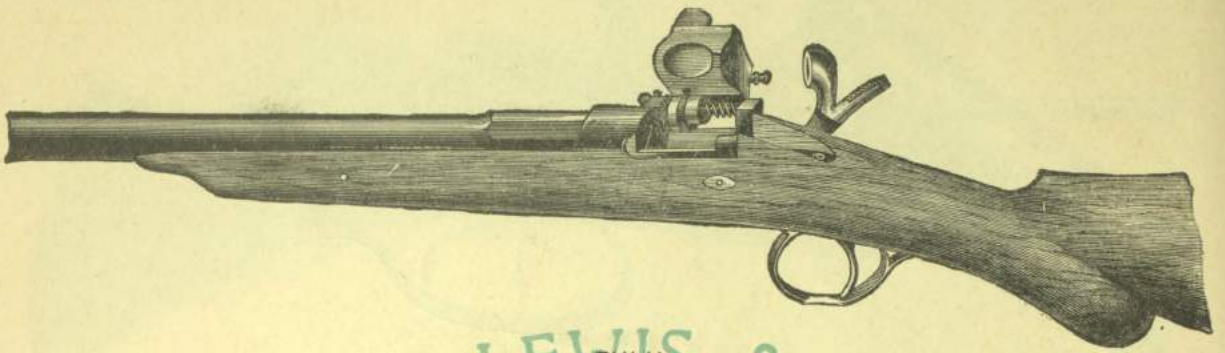
No. C—Fine Imitation Twist, Rebounding Locks, Pistol Grip, Checkered Butt, 12 Bore.....	each, \$12.75
“ C— “ “ “ “ “ “ “ “ “ 10 “ .....	“ 13.25
“ D—Imitation Boston Damascus, Rebounding Locks, Pistol Grip, Checkered Butt, Double Bolt, Matted Rib, 12 Bore .....	“ 14.25
“ D—Imitation Boston Damascus, Rebounding Locks, Pistol Grip, Checkered Butt, Double Bolt, Matted Rib, 10 Bore .....	“ 15.00
“ J—Genuine Twist, Rebounding Locks, Deeley & Edge Fore End, Matted Rib, Fine Engraving, Full Pistol Grip with Plate, Extra Fine Polished Barrels, Left Barrel Choked, 12 and 16 Bore.....	“ 17.25
“ J—The same, 10 Bore .....	“ 18.00



No. E—Imitation Fine Damascus, Full Pistol Grip with Shield, Greener Bolt, Deeley & Edge Fore End, Matted Rib, 12 Bore .....	each, \$17.75
“ L—Boston Damascus Barrels, Best Quality Bar Lock, Rubber Butt, Rebounding Lock, Pistol Grip, Greener Bolt, 12 Bore .....	“ 25.25
“ L—The same, 10 Bore .....	“ 26.00

**We have in stock a number of high-grade Guns.**

# BREECH LOADING GUNS



Zulu Single Breech Loading Guns, 12 Bore .....each, \$6.00

## REMINGTON SINGLE BREECH LOADING GUNS



No. 3—Top Lever, Blued Steel Barrel, Rebounding Lock, Side-Cocking Lever, Pistol Grip, Choke Bore, 12 or 16 Bore.....each, \$13.25

## BREECH LOADING DOUBLE BARREL GUNS



TOP SNAP ACTION

No. A—Fine Imitation Twist, Rebounding Locks, Pistol Grip, Checkered, 12 Bore.....each, \$11.00  
 “ B— “ “ “ “ “ “ “ Matted Rib, Engraved, 12 and 16 Bore, “ 11.50

**We keep all kinds of Guns and Rifles**



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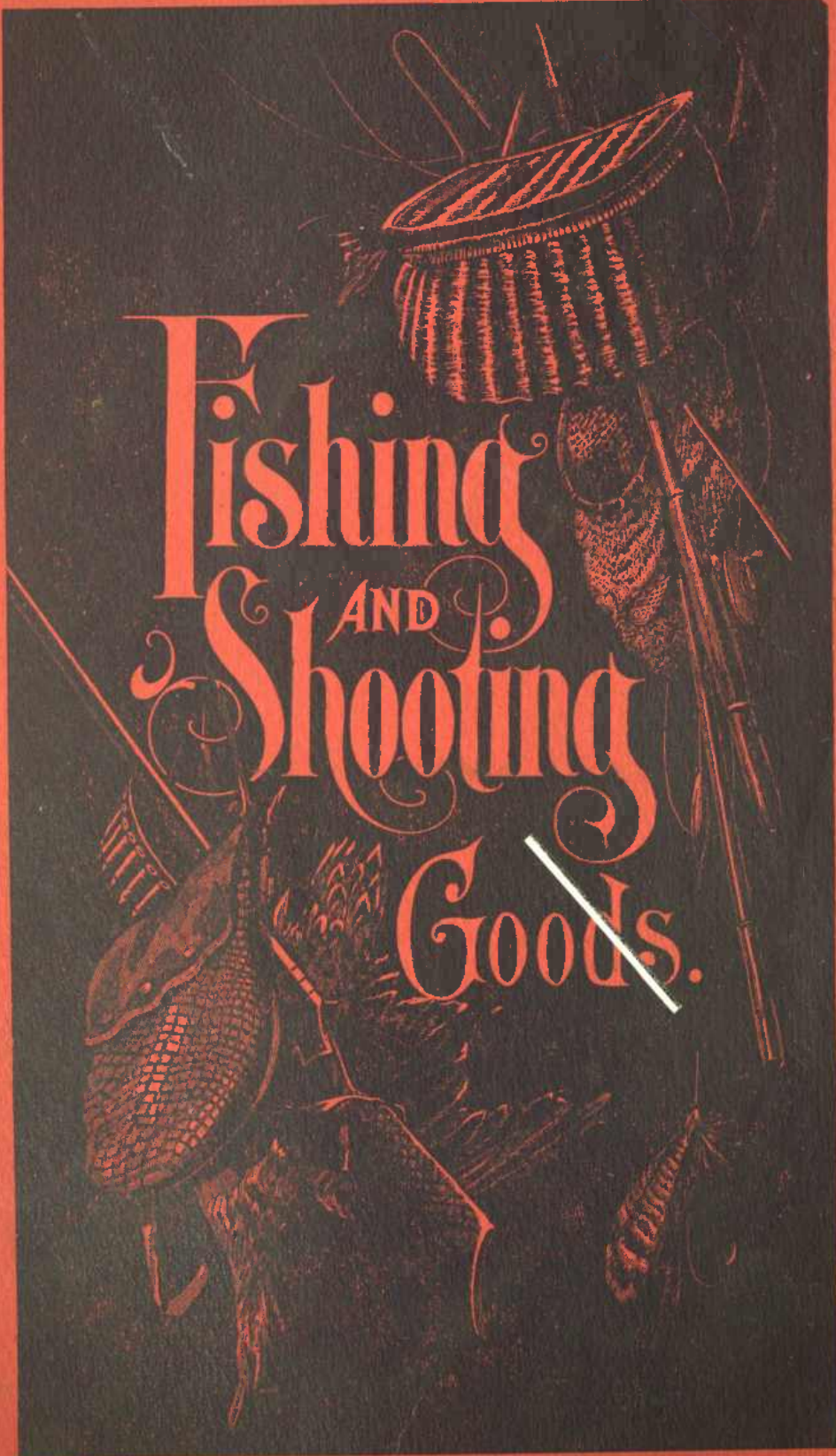
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