GEORGE GILLIES

CARRIAGE HARDWARE

DROP FORGINGS,
BOLTS, NUTS, &c.

GANANOQUE, ONT.

57

ILLUSTRATED CATALOGUE

AND

PRICE LIST

OF

CARRIAGE HARDWARE

DROP FORGINGS, BOLTS, NUTS, ETC.

GEORGE GILLIES,

GANANOQUE, ONT.

1894.

TO THE TRADE.

GENTLEMEN,—I have pleasure in placing before you my new ILLUSTRATED CATALOGUE of Carriage Hardware, Drop Forgings, Bolts, Nuts, &c. My former extensive lines have been still further increased. Many new and improved machines have been added, and my premises greatly enlarged, thus putting me in the foremost position for getting out goods quickly and of superior quality and finish. I call your attention particularly to my lines of Bolts and Nuts. These have gained for themselves a reputation which is gratifying to me, in as much as they are taking the lead wherever they have been introduced.

Thanking you for past favors, and hoping for a continuance of the same,

I am, yours respectfully,

GEORGE GILLIES.

GANANOQUE, January 1st, 1894.

BOW SOCKETS.

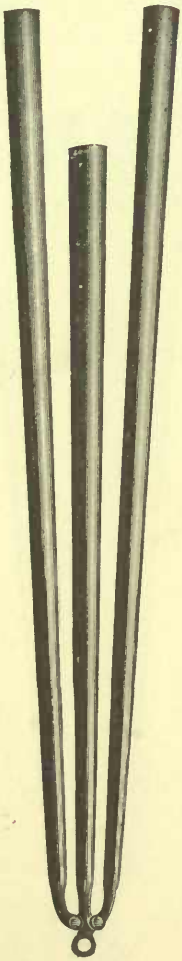
THE following Cuts show the different styles of Bow Sockets in most common use, and which we carry in stock.

I, however, furnish all other styles made, or used, and will be pleased to quote prices for such upon application.

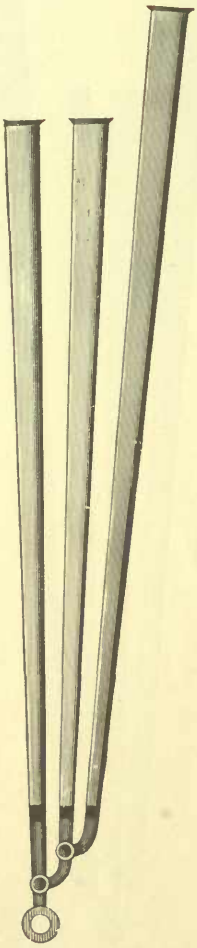
Bow Sockets are packed 3 sets in a box, and when an order is not for an even number of boxes, we increase it sufficiently to make it so.

We measure Bow Sockets from centre of pivot hole in slat iron to the top of the middle or shortest tube, and make the front and back tubes four inches longer on four bow, and five inches longer on three and five bow for REGULAR sizes. We keep the following regular sizes in stock: 27, 28, 29, 30, 31 and 32 inch

When it is desired to have the front bow shorter than the back, or any other change made in dimensions given above, the Bow Sockets are a SPECIAL SIZE, and have to be made to order.

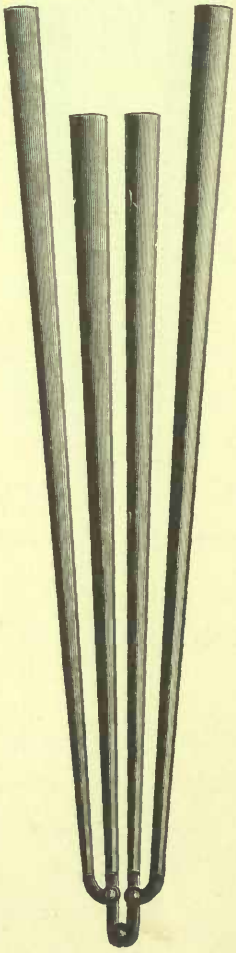


3-Bow Bruce.

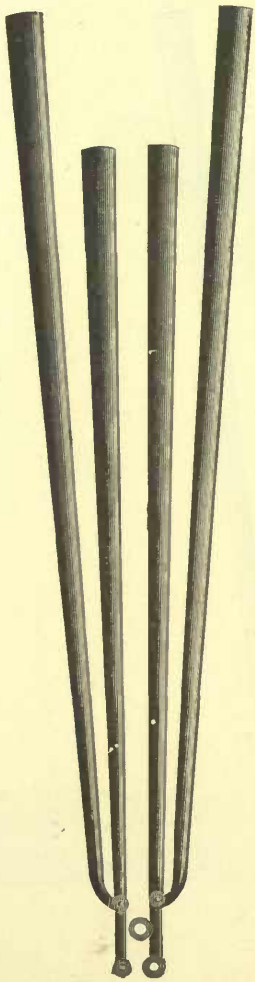


3-Bow Ellis.

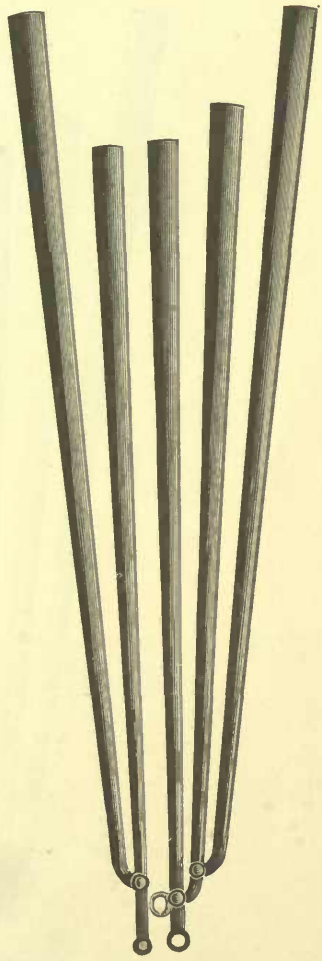
4-Bow Philadelphia.



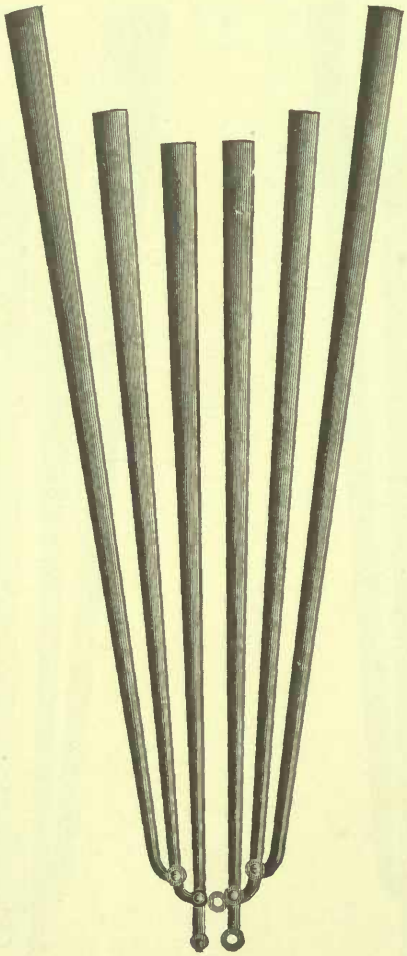
4-Bow New York.



4-Bow Extension.



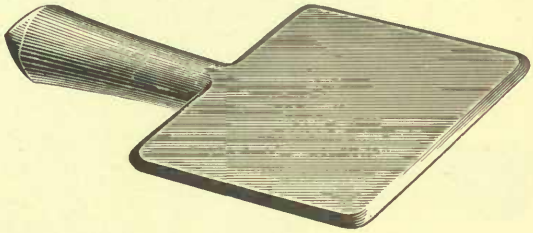
5-Bow Extension.



6-Bow Extension.

WROUGHT IRON STEP PADS.

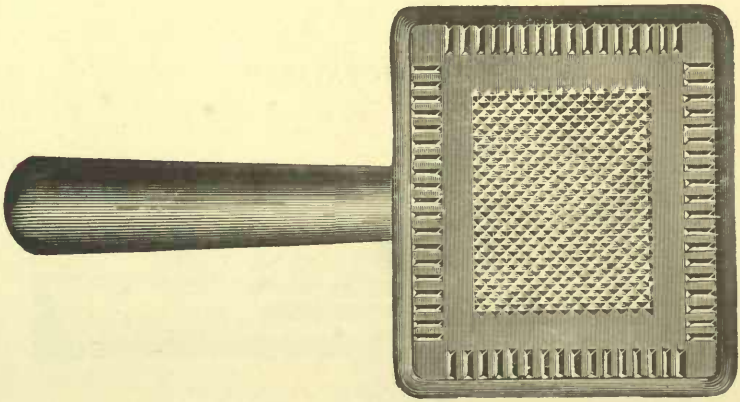
PLAIN PATTERN.



REFINED IRON.

No. 1, 3	x 3½	inches,	per	dozen	pairs	.....	$2 35
No. 2, 3¼	x 4	"	"	"	"	.....	2 60
No. 3, 4	x 4½	"	"	"	"	.....	3 35

DIAMOND PATTERN.

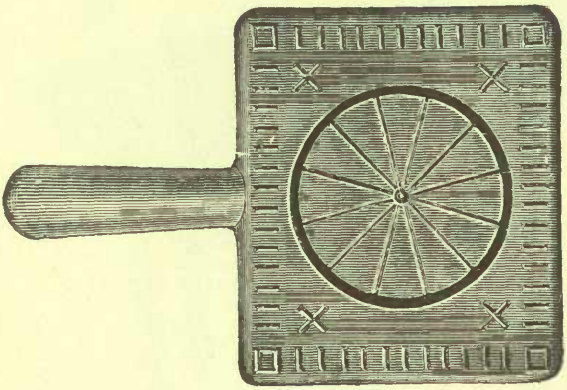


REFINED IRON.

No. 1, 3	x 3½	inches,	per	dozen	pairs	.....	$3 15
No. 2, 3½	x 4	"	"	"	"	.....	3 50
No. 3, 4	x 4½	"	"	"	"	.....	5 40

WROUGHT IRON STEP PADS.

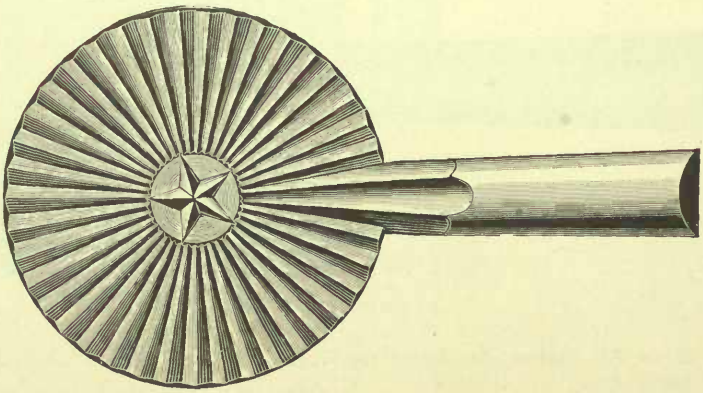
WHEEL PATTERN.



REFINED IRON.

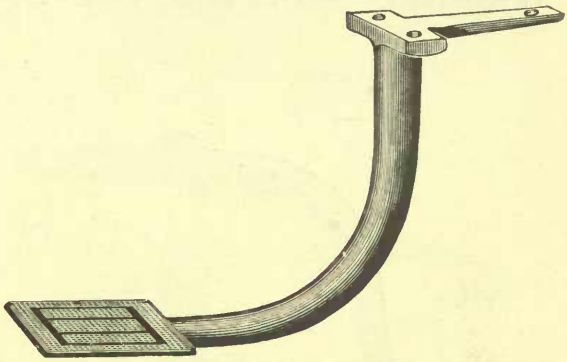
No. 2, 4 x 3½ inches, per dozen pairs $3 50
No. 3, 4 x 4½ " " " " 4 40

RISING SUN PATTERN.



Five inches diameter, per dozen pairs..... $4 40

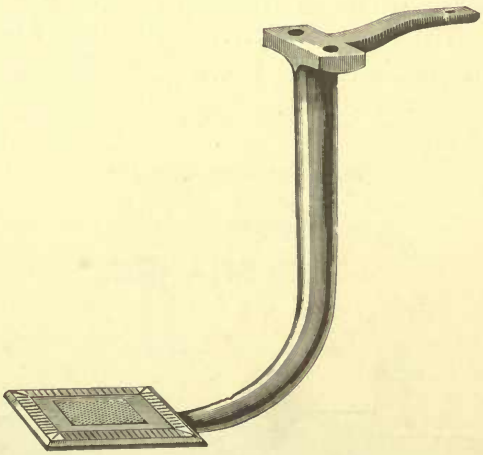
WROUGHT BODY STEPS.



BREWSTER PATTERN.

Nos. 1, 2, 3—Plain	$ 9 00	per dozen	pairs.
Nos. 1, 2, 3—Figured	12 00	"	"
5 inches Diameter Round	15 00	"	"

Drop 6 inches. Projection, 7 inches.
" 6½ " " 7½ "
" 7 " " 7 "



END SPRING PATTERN.

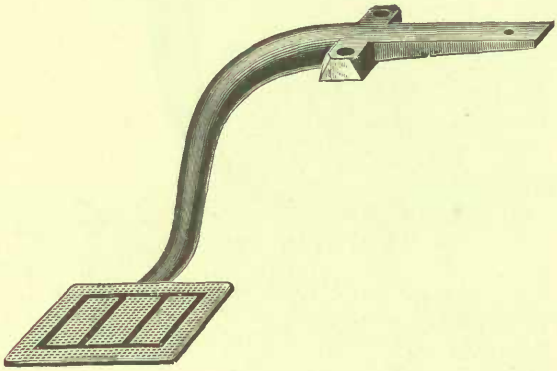
Nos. 1, 2, 3—Plain	$ 9 00	per dozen	pairs.
Nos. 1, 2, 3—Figured	12 00	"	"
5 inches Diameter Round	15 00	"	"

Drop 7 inches. Projection, 6 inches.
" 7½ " " 6½ "
" 8 " " 6 "

Special sizes made to order when sufficient quantities are wanted. Prices given on application.

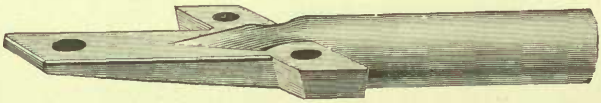
To get the drop of a Step, measure, in a *perpendicular line*, from top of front end of yoke to the level of top of the pad, and the projection is the entire clearance required beyond the body.

WROUGHT SIDE BAR STEPS.



Nos. 1, 2, 3—Plain	$6 00	per	dozen	pairs.
Nos. 1, 2, 3—Fancy	7 50	"	"	"
5 inches Diameter, Round	7 50	"	"	"

STEP SHANKS.

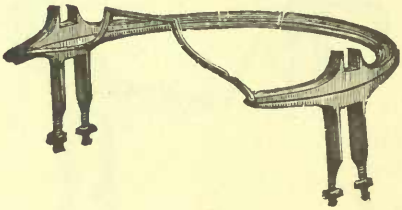


Per dozen pairs, not drilled	$2 00
" " drilled	2 20

If ordered to be drilled give size of side bar or the distance between holes.

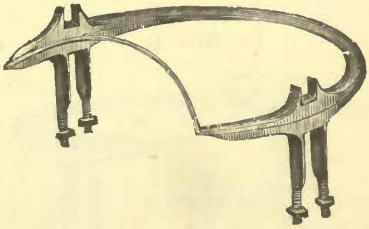
DERBY FIFTH WHEEL.

No. 1.



						PER DOZ.
⅝	iron,	12 to 16 in.	diameter,	⅞ to 1¼	axle	$10 25
¾	"	12 to 16 in.	"	1, 1⅛, 1¼, 1⅜	axle	11 50
⅞	"	14 to 18 in.	"	1⅛, 1¼, 1⅜, 1½	axle	16 75
1	"	14 to 18 in.	"	1¼, 1⅜, 1½	axles	26 00
	Add for Flat Centre Spots					1 00

No. 2.



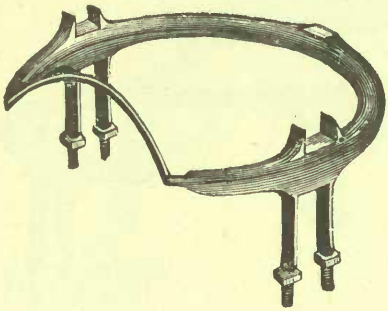
⅝	iron,	12 to 16 in.	diameter,	⅞ to 1¼	axle	$10 00
¾	"	12 to 16 in.	"	1, 1⅛, 1¼, 1⅜	axle	11 25
⅞	"	14 to 18 in.	"	1⅛, 1¼, 1⅜, 1½	axle	16 00
1	"	14 to 18 in.	"	1¼, 1⅜, 1½	axle	25 00
	Add for Flat Centre Spots					1 00

N. B.—In ordeiing Fifth Wheel be particular to give number of Wheel, outside diameter, size of iron and width of axle.

DERBY FIFTH WHEEL.

No. 3.

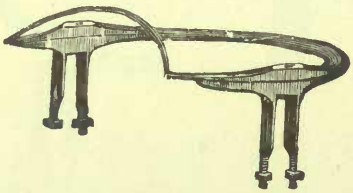
Showing Flat Centre Spots for Perch.



					PER DOZ.
⅝ iron,	12 to 16 in.	diameter,	⅞ to 1¼	axle	$11 00
¾ "	12 to 16 in.	"	1, 1⅛, 1¼, 1⅜	axle	12 25
⅞ "	14 to 18 in.	"	1⅛, 1¼, 1⅜, 1½	axle	17 00
1 "	14 to 18 in.	"	1¼, 1⅜, 1½	axle	26 00

CINCINNATI FIFTH WHEEL.

No. 4.

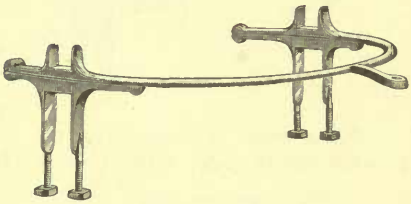


					PER DOZ.
⅝ iron,	12 to 16 in.	diameter,	⅞ to 1¼	axle	$ 9 50
¾ "	12 to 16 in.	"	1, 1⅛, 1¼, 1⅜	axle	10 50
⅞ "	14 to 18 in.	"	1⅛, 1¼, 1⅜, 1½	axle	15 50
1 "	14 to 18 in.	"	1¼, 1⅜, 1½	axle	22 00
Add for Flat Centre Spot					1 00

N. B.—In ordering Fifth Wheels be particular to give number of Wheel outside diameter, size of iron and width of axle.

BREWSTER.—CINCINNATI LUG.

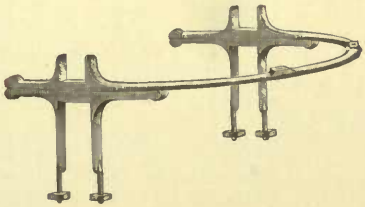
No. 5.



	PER DOZ.
⅝ in. iron, 12 to 14 in. diameter	$12 00
¾ " 12 to 15 in. "	14 00

PHÆTON.

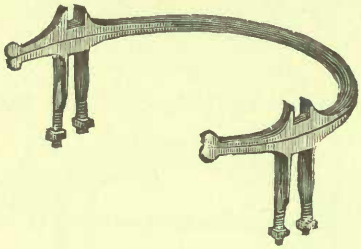
No. 6.



	PER DOZ.
⅝ in. iron 12 to 14 in. diameter	$12 00
¾ in. iron 12 to 15 in. "	14 00

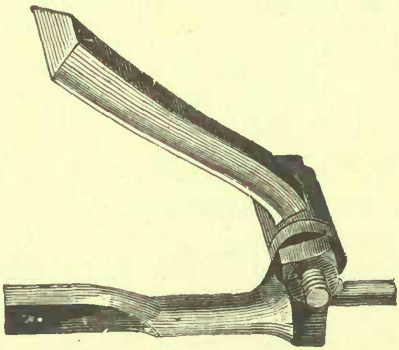
DERBY FIFTH WHEEL.

No. 7.



Same price as Derby No. 1.
No. 6, No. 4, with scroll ends, same price as Derby No. 2.

SHAFT COUPLINGS.



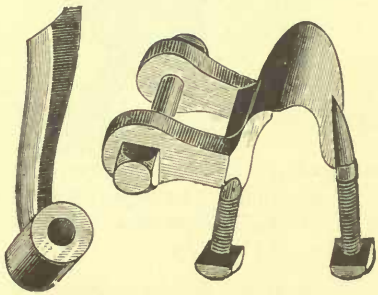
MADE OF THE BEST NORWAY IRON.

	Width.	Diameter.	Bolts.	PER DOZEN PAIRS.	
				Black.	Bright.
Extra Light Pattern.....	⅞ in.	¾ in.	5/16 in.	$11 25	$13 25
Boston Pattern	1 in.	¾ in.	⅜ in.	11 25	13 25
New York Pattern.....	1 in.	⅞ in.	7/16 in.	11 75	13 75
Canada Pattern.....	1 in.	⅞ in.	7/16 in.	11 75	13 75
Baltimore Pattern No. 1.....	1⅛ in.	⅞ in.	7/16 in.	12 50	14 50
Baltimore Pat. No. 2, flat part ½ in. longer, ⅜ Shank & ¼ longer	1⅛ in.	⅞ in.	7/16 in.	12 50	14 50
Philadelphia No. 2.....	1¼ in.	1 in.	7/16 in.	14 50	16 50
Philadelphia No. 1.....	1½ in.	1 in.	7/16 in.	17 00	19 00
.....	1¾ in.	1⅛ in.	½ in.	20 00	22 00

These couplings are uniformly fitted up with milled bolts, and particular attention is paid to the drilling and reaming of the holes in the eyes, so as to make perfect fitting joints when affixed to the shackle part. Packed in paper boxes of one-half dozen pairs each.

FINISHED COUPLINGS.

WITHOUT THREAD IN THE EAR.



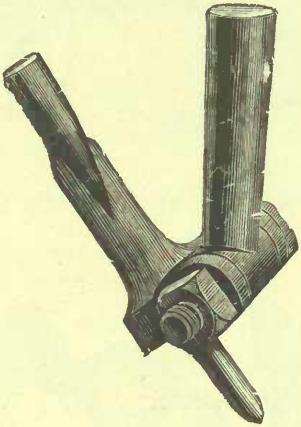
Made of the best Norway Iron.

	Width.	Diameter.	Bolts.	PER DOZEN PAIRS. Black.
Extra Light Pattern	⅞ in.	¾ in.	⅜ in.	$13 25
Boston or Inch, Light	1 in.	¾ in.	⅜ in.	13 25
Canada	1 in.	⅞ in.	7/16 in.	13 75
New York	1 in.	⅞ in.	7/16 in.	13 75
Baltimore No. 1	1⅛ in.	⅞ in.	7/16 in.	14 50
Baltimore No. 2, flat part ½ inch longer, Shanks ⅜ round and ¼ longer	1⅛ in.	⅞ in.	7/16 in.	14 50
Philadelphia No. 2	1¼ in.	1 in.	7/16 in.	16 50
Philadelphia No. 1	1½ in.	1 in.	7/16 in.	17 50
	1¾ in.	⅛ in.	½ in.	22 50

Packed in boxes of one-half dozen pairs each.

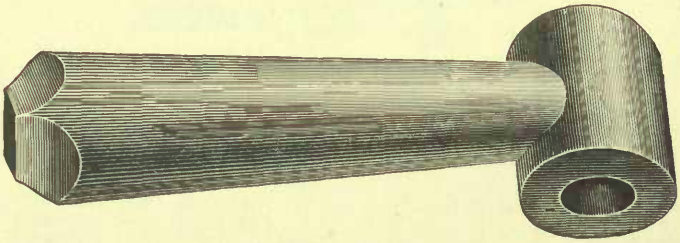
The difference between the Canada and New York is that the former is one-quarter inch shorter on the clip part than the latter.

POLE COUPLINGS.



These Couplings are made in the same manner as the Shaft Couplings. Same price list as Shaft Couplings. Packed in boxes of one-half dozen pairs each.

POLE EYES.



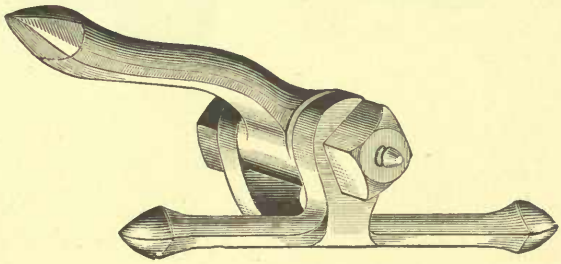
	BLACK.	BRIGHT.
⅞ inch, light, per dozen pairs	$6 50	$ 7 50
1 " " " "	6 50	7 50
1 " heavy " "	6 50	7 50
1⅛ " " " "	6 50	7 50
1¼ " " " "	8 00	9 00
1½ " " " "	9 00	10 00

In ordering please say whether ⅜ or 7/16 inch hole.

The Carriage Shaft and Pole Couplings are all made from Norway Iron.

SLEIGH SHAFT COUPLINGS.

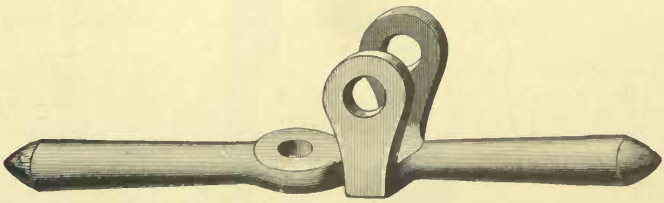
PLAIN PATTERN.



List Price.

1 inch, per dozen pairs.....$11 25

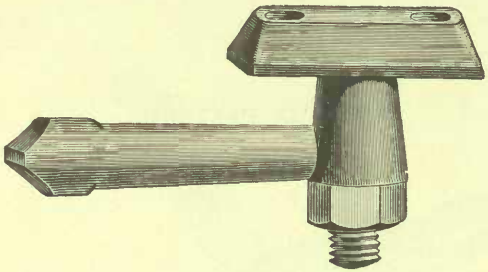
ALBANY PATTERN.



List Price.

1 inch, per dozen pairs.....$11 25

KING BOLT YOKE AND BRACE.



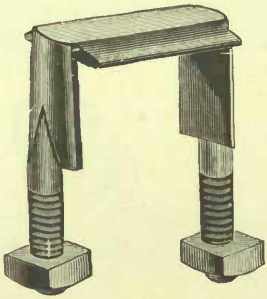
Holes Drilled.

SIZE.	PER DOZ.
For ⅞ inch Axle	$3.00
" 1 " "	3 00
" 1⅛ " "	3.00
" 1¼ " "	3 00
" 1⅜ " "	3.00
" ⅞ to 1⅜ inch Axle (without holes)	3.00

Packed two dozen in a box.

SHORT SPRING CLIPS.

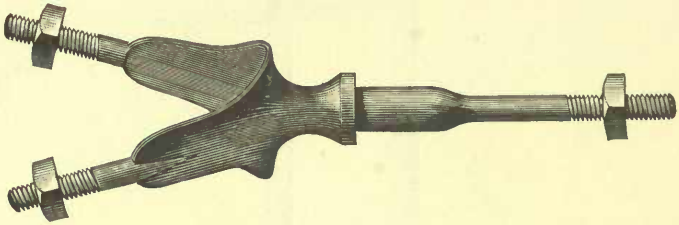
FLANGED PATTERN.



Made From Best Norway Iron.

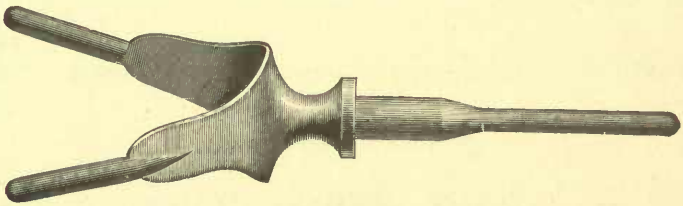
Price, per dozen $2.00

CLIP KING BOLTS.



FINISHED.

No. 1—Size for Light Buggies, ½ inch at Collar, per dozen	$4 00
No. 2—Size for Ordinary Buggies, 9-16 inch at Collar, per dozen	4 00
No. 3—Size for Heavy Wagons, ⅝ inch at Collar, per dozen	4 50
No. 4—Size for Extra Heavy Wagons, ¾ inch at Collar, per dozen	5 50



PLAIN.

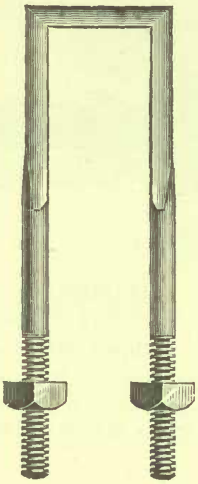
No. 1—Size for Light Buggies, ½ inch at Collar, per dozen	$3 50
No. 2—Size for Ordinary Buggies, 9-16 inch at Collar, per dozen	3 50
No. 3—Size for Heavy Wagons, ⅝ inch at Collar, per dozen	4 25
No. 4—Size for Extra Heavy Wagons, ¾ inch at Collar, per dozen	5 25

All the King Bolts of my make have a rib between the clips, as shown in the cut above, which forms an improvement over the ordinary kind, as it prevents the bolt from slipping when affixed to the axle and makes a better and more secure fastening.

They are forged solid from one piece, of the best Norway Iron ; are made of a uniform size and taper, and are finished in a smooth and superior manner.

The flanges on each side of the bolt form a broad bearing and prevent it from wearing into the wood.

TIMKEN SADDLE CLIPS.

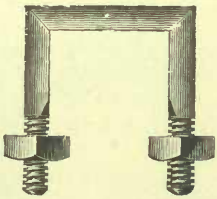


Norway Iron.—Shanks 2½ inches long.

PER DOZ.

No. 1—Flat Part 2 inch., Shank 5/16 inch., for 1 inch Spring.....$1 00

SHORT SPRING CLIPS.

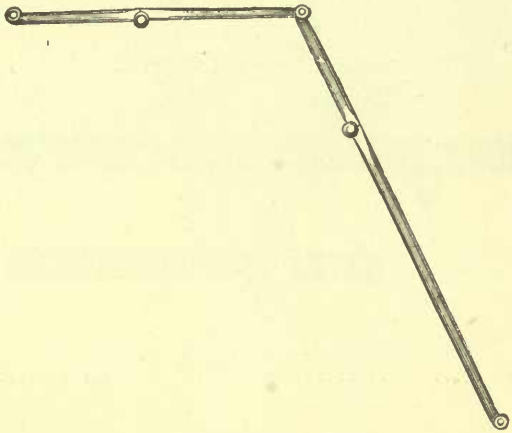


PER DOZ.

No. 1—Flat Part ¾ inch, Shank 5/16 inch, for 1 inch Spring $1 00
No. 2—Flat Part ¾ inch, Shank 5/16 inch, for 1¼ inch Spring..... 1 00
No. 3—Flat Part 1 inch, Shank 5/16 inch, for 1¼ inch Spring..... 1 00
No. 4—Flat Part 1 inch, Shank 5/16 inch, for 1½ inch Spring..... 1 33
No. 5—Flat Part 1¾ inch, Shank 5/16 inch, for 1½ inch Spring..... 1 50

N.B.—Other lengths of these Clips will be made when ordered in sufficient quantities to warrant.

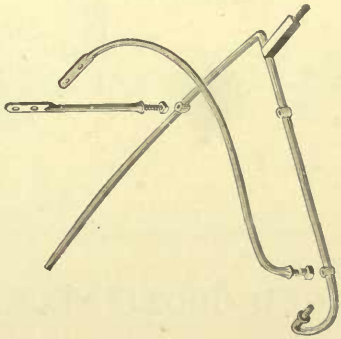
FINISHED TOP BRACES.



These Braces are furnished with or without Norway Bevel Head Rivets as desired, and made to any size ordered in black, polished or Japanned. Give dimensions from centre hole to centre hole.

Price, per set $1 20

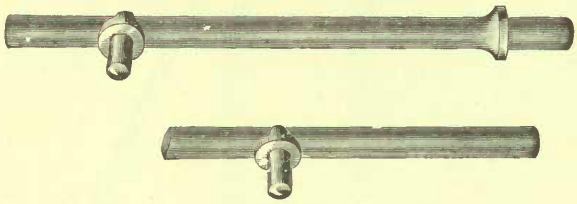
FORGED SHIFTING RAILS.



Price Per Set complete, welded or in halves.....$1 50
Price Per Set without Arm Rails and Back Irons..... 1 00

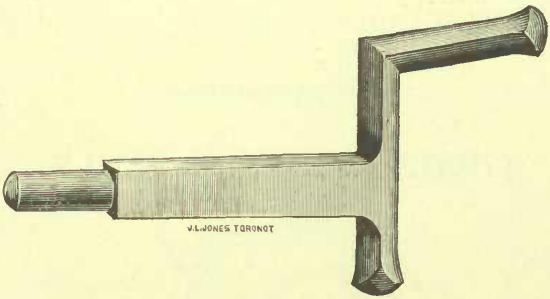
SHIFTING RAIL FORGINGS.

SOLID NIBS OR BOLTS.



Per set, 4 pieces $0 30

FORGED CORNER IRONS FOR SHIFTING RAILS.



List Price.

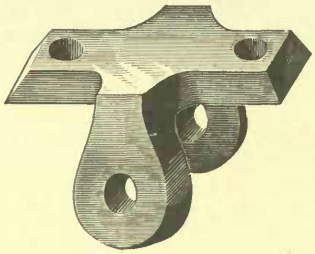
Per dozen pairs $2 00

FORGED GOOSE NECKS.

List Price.

Per dozen pairs $1 00

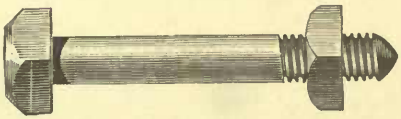
SIDE BAR SPRING SHACKLES.



NORWAY IRON. FINISHED.

For 1¼ inch Spring and 1⅛ inch Bar, per dozen pairs	$3 00
For 1⅜ " " " 1¼ " " " "	3 00
For 1½ " " " 1¼ " " " "	3 50
Add for Bolts	0 60

ROUND HOLE COUPLING BOLTS.



⅜ inch, milled, per hundred	$6 50
7-16 " " "	6 50
½ " " "	7 50
⅜ " not milled, per hundred	4 50
7-16 " " "	4 50
½ " " "	5 50

Put up in boxes of 50 each.

EXTRA LIGHT NORWAY AXLE CLIPS.

1-4 Inch Shank and Nut.

No. 0—Flat Part 2 inches long, ⅝ inch wide..... $1 00
No. 1—Flat Part 2½ inches long, ⅝ inch wide..... 1 00
No. 2—Flat Part 3 inches long, ⅝ inch wide..... 1 00
No. 3—Flat Part 3½ inches long, ⅝ inch wide..... 1 10

BREWSTER SIDE BAR CLIPS.

ONE LONG SHANK.

Best Norway Iron. 5-16 Inch Shank and Nut.

PER DOZ.

No. 1—Flat Part 3 inches long, ⅞ inch wide..... $0 90
No. 2—Flat Part 3⅞ inches long, ⅞ inch wide..... 1 00
No. 3—Flat Part 4⅜ inches long, ⅞ inch wide..... 1 15

These Clips are made with one shank regular length, and the other 2 inches long

TIMKEN AXLE CLIPS.

TWO LONG SHANKS.

Best Norway Iron. 5-16 Inch Shank and Nut.

PER DOZ.

No. 0—Flat Part 2¼ inches long, ⅞ inch wide..... $1 00
No. 1—Flat Part 3 inches long, ⅞ inch wide..... 1 10
No. 2—Flat Part 3½ inches long, ⅞ inch wide..... 1 20

NORWAY IRON AXLE CLIPS.

FOR BUGGIES. BEVEL EDGES.

No.	Width of Flat Part.	Length of Flat Part.	Size of Shank.	Per Doz.
00	⅞ inch	2¼ inches	5-16 inch	$0 80
0	"	2¾ "	"	0 80
0½	"	3 "	"	0 80
1	"	3¼ "	"	0 80
1½	"	3½ "	"	0 80
2	"	3¾ "	"	0 85
2½	"	4 "	"	0 85
3	"	4¼ "	"	0 90
4	"	4¾ "	"	1 00
5	"	5¼ "	"	1 15
6	"	6 "	"	1 35

Packed in boxes of four dozen each.

HEAVY.--Same Pattern as Above.

No.	Size of Shank.	Width of Flat Part.	Length of Flat Part.	Per Doz.
0	⅜ inch	1⅛ inch	4 inch	$1 00
1	⅜ "	1⅛ "	4½ "	1 00
2	⅜ "	1⅛ "	5 "	1 15
3	⅜ "	1⅛ "	5½ "	1 25
4	⅜ "	1⅛ "	6 "	1 40
5	⅜ "	1⅛ "	6½ "	1 75
6	⅜ "	1⅛ "	7 "	2 00
7	⅜ "	1⅛ "	7½ "	2 28

Put up in boxes of four dozen each. In ordering axle clips give the page.

SUPERIOR.--Same Pattern as Norway Iron Axle Clips.

No.	Width of Flat Part.	Length of Flat Part.	Size of Shank.	Per Doz.
0	⅞ inch	2¾ inches	5-16 inch	$0 70
1	⅞ "	3¼ "	5-16 "	0 70
2	⅞ "	3¾ "	5-16 "	0 75
3	⅞ "	4¼ "	5-16 "	0 78
4	⅞ "	4¾ "	5-16 "	0 97
5	⅞ "	5¼ "	5-16 "	1 20
6	⅞ "	6 "	5-16 "	1 50

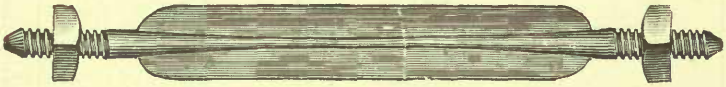
HEAVY SUPERIOR AXLE CLIPS.

Same Pattern as on Page 25.

No.	Size of Shank.	Width of Flat Part.	Length of Flat Part.	Per Doz.
0	⅜ inch	1⅛ inches	4 inches	$0 90
1	⅜ "	1⅛ "	4½ "	0 90
2	⅜ "	1⅛ "	5 "	1 00
3	⅜ "	1⅛ "	5½ "	1 20
4	⅜ "	1⅛ "	6 "	1 50
5	⅜ "	1⅛ "	6½ "	1 80
6	⅜ "	1⅛ "	7 "	2 30
7	⅜ "	1⅛ "	7½ "	2 50

Put up in boxes of four dozen each.

NORWAY IRON SPRING BAR CLIPS.



PER DOZEN.

No. 0—⅝ inch wide, Centre 4¼ inches long, 5-16 inch Shank..... $1 00
No. 1— " " " 4¾ " " " " 1 15
No. 2— " " " 5¼ " " " " 1 22
No. 3— " " " 5¾ " " " " 1 30
No. 4— " " " 6½ " " " " 1 45
No. 5— " " " 7 " " " " 1 65
No. 6— " " " 7¾ " " " " 1 85

Put up in boxes of four dozen each.

These Clips are designed for fastening the Spring Bar to the Spring, and are made with a rib that extends the entire length of the flat part of the Clip gradually increasing in size from the Centre to the Shank.

EXTRA HEAVY AXLE CLIP.

Shank, 7-16; Width of Clip, 1 5-8.

NO.	LENGTH OF FLAT.	PER DOZEN.
0	5 inch	$2 00
1	6 "	2 25
2	7 "	2 50
3	8 "	2 90
4	9 "	3 25
5	10 "	3 75

Two dozen in a box.

OVAL SPRING AND SIDE BAR CLIPS.

No.	Size of Shank.	Width of Clip.	Oval Part.	Per Doz.
2	5-16 inch	⅝ inch	5 inch	$1 20
3	5-16 "	⅝ "	5¾ "	1 30
4	5-16 "	⅝ "	6⅜ "	1 45
5	⅜ "	⅞ "	6½ "	1 80

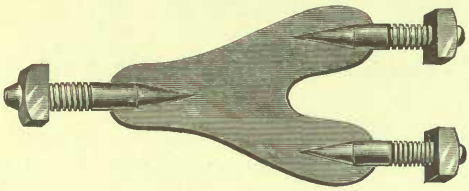
SPECIAL CLIPS.

No. 1—Flat part 2¾ inches long, 1¼ inches wide..... $1 00
No. 2— " 3¼ " 1¼ " 1 00

⅜ Shank. Other sizes when ordered.

THREE SHANKED CLIP.

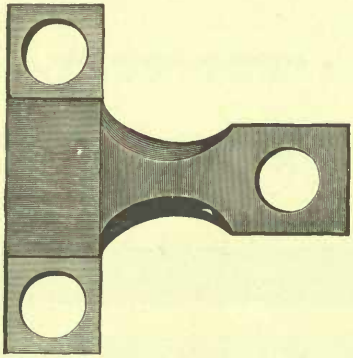
Single Shank, 3-8; Double, 5-16.



Flat part 3½ inches long, per dozen $2 00

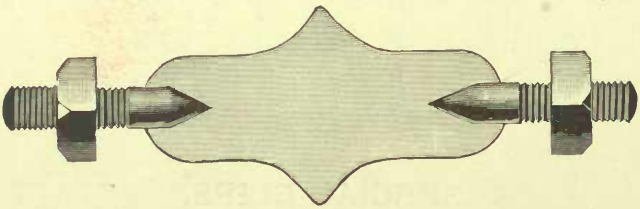
MALLEABLE CLIP TIE.

FOR ABOVE CLIP.



Per dozen.... ..... $0 25

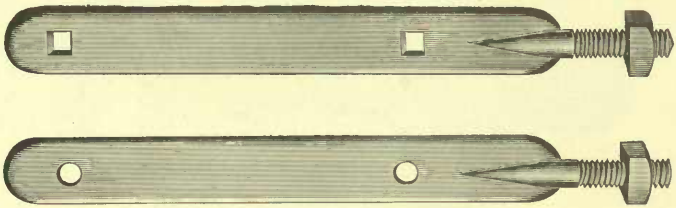
POINT CENTRE CLIPS.



5-16 Shank.

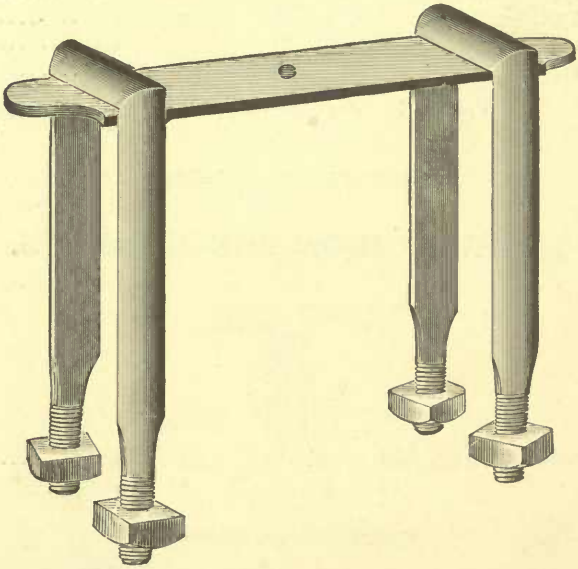
No. 1—	Flat part	3	inches long,	1⅝	inches	across	points	.....	$1 00
No. 2—	"	3½	"	1⅝	"	"	"	.....	1 00
No. 3—	"	4	"	1⅝	"	"	"	.....	1 15

CART STRAPS OR CLIPS.



Per dozen pieces..... $0 60

HALF ROUND BUGGY SADDLE CLIPS.



Clips are made from Norway Iron.

PRICE LIST.

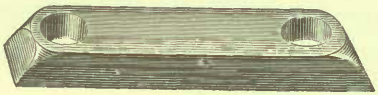
With Top Plates, per dozen sets, all sizes..... $5 00

For 1¼ Inch Spring.					For 1½ Inch Spring.				
No. 00	Flat Part	2	inches	long.	No. 6¾	Flat Part	2¼	inches	long.
No. 0	"	2¼	"	"	No. 7	"	2½	"	"
No. 0½	"	2½	"	"	No. 8	"	2¾	"	"
No. 1	"	2¾	"	"	No. 8½	"	3	"	"
No. 2	"	3	"	"	No. 8¾	"	3¼	"	"
No. 3	"	3¼	"	"	No. 9	"	3½	"	"
No. 4	"	3½	"	"	No. 10	"	3¾	"	"
					No. 11	"	4¼	"	"
					No. 12	"	4½	"	"

I also make to order shorter lengths where parties require them, and all lengths for 1⅜ spring. Packed in boxes of one dozen sets each.

WROUGHT IRON CLIP YOKES.

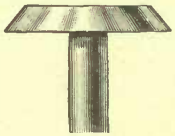
BEVEL CORNERS.



Yokes for	⅞	inch Axle,	5/16	inch holes,	per pound	$0 12
"	1	"	"	"	"	0 12
"	1⅛	"	"	"	"	0 12
"	1¼	"	"	"	"	0 12
"	1⅜	"	"	"	"	0 12
"	1½	"	"	"	"	0 12

Packed in boxes of ten pounds each.

NORWAY IRON JOINT RIVETS.



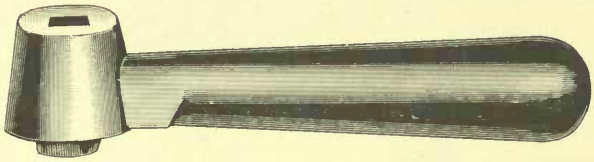
Bevel Polished Heads, per gross.....$2 20

LONG JOINT ENDS.

½, 9/16 and ⅝ oval, per set.....$0 75

A set consists of one piece 25 inches long, with eye on each end; two pieces 18 inches long, with eyes on each end, and two pieces 22 inches long, with eye on one end, making eight eyes to the set. Size of hole for prop, ⅜ to 9/16 inch. It is better when ordering to state what prop Joint End is wanted to fit. The Joint Ends are nicely wired together in sets. Fifty sets make the most convenient number to pack in a case.

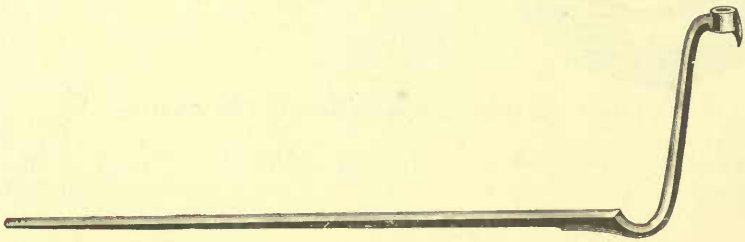
PHÆTON OR CENTRE BODY LOOPS.



For 5-16 inch Bolt, per dozen	$1 00
For ⅜ " " "	1 00

FINISHED BODY LOOPS.

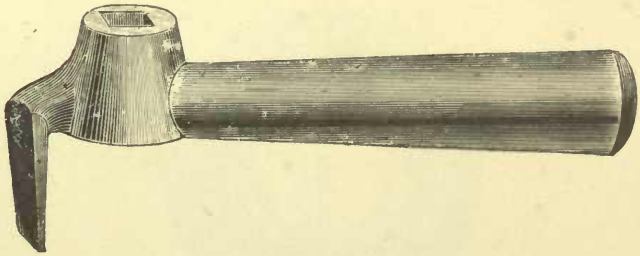
SINGLE LIP.



For 5-16	inch Bolt,	5	inch Drop,	per set	$1 00
For 5-16	"	5½	"	"	1 00
For 5-16	"	6	"	"	1 00
For 5-16	"	6½	"	"	1 00
For 5-16	"	7	"	"	1 00

SINGLE LIP BODY LOOP.

MADE OF THE BEST NORWAY IRON.



Price List.

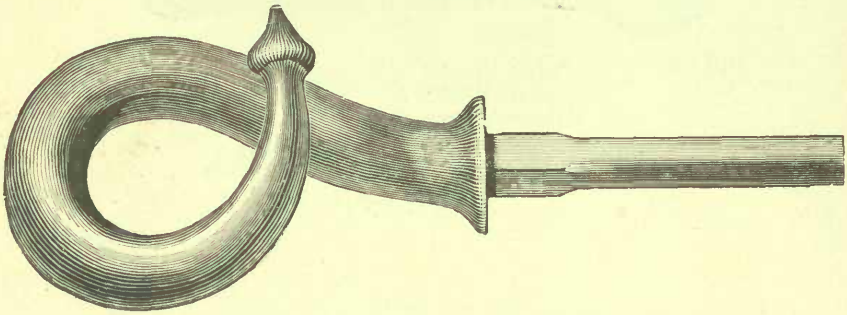
For ¼ inch bolts, per dozen	$2 70
For 5-16 inch bolts, per dozen	2 70
For ⅜ inch bolts, per dozen	2 70

Put up in boxes of six sets each.

Plated Cone and Steeple Head Bolts furnished with above as per page 23.

WHIFFLETREE HOOKS.

WROUGHT IRON OR STEEL.



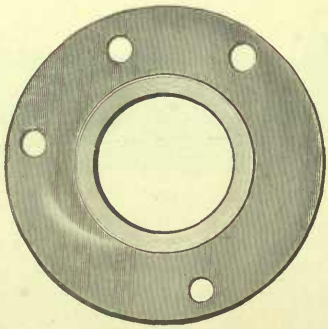
Furnished Complete With Nuts or For Riveting.

These Hooks are especially adapted to the use of manufacturers of all kinds of Improved Farm Machinery, being very light, strong and far superior to malleable iron.

List Price.

For Riveting, per dozen pairs	$1 00
Complete with Nuts	1 30

COLLARS FOR COLLENGE AXLES.

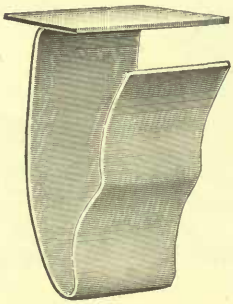


All Sizes.

Prices on application.

CRUCIBLE STEEL ANTI-RATTLER.

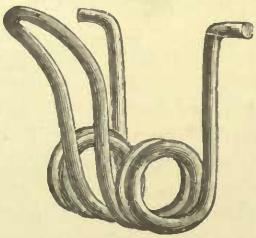
FOR THILL SHACKLES.



"DANDY."

Per dozen pairs..... $ 1 50

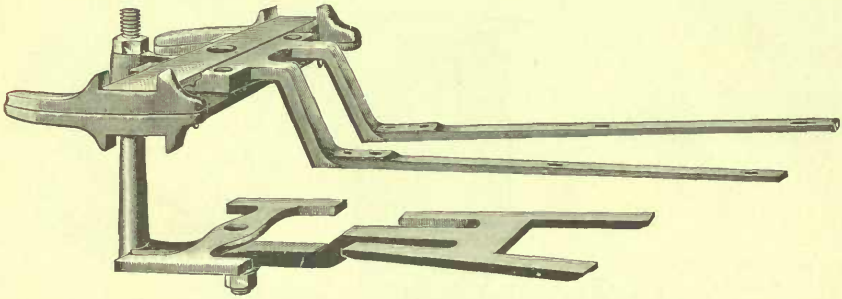
THE INDESTRUCTIBLE THILL SPRING ANTI-RATTLER.



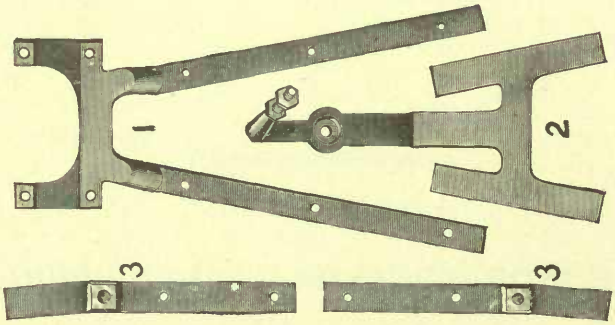
Price, per dozen pairs..... $1 00

BURDSALL'S PATENT FIFTH WHEELS.

DOUBLE REACH.



Malleable sets..... $1 50

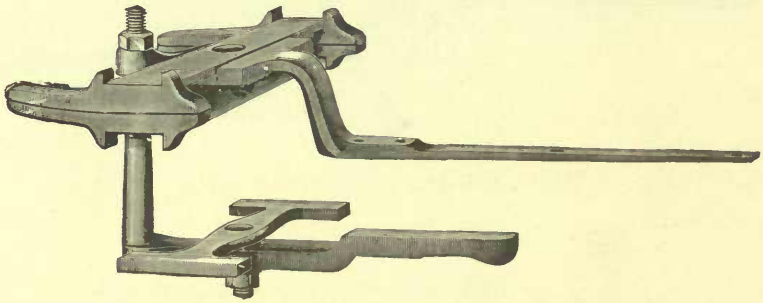


No. 1—Top Front Reach Iron.
No. 2—Lower Front Reach Iron.
No. 3—Back Reach Irons.

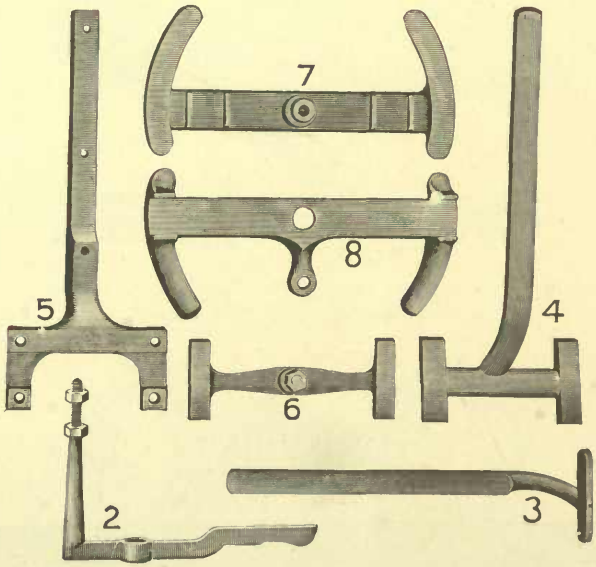
The only perfect drop-reach Gear Irons ever invented. For neatness, strength, and simplicity of construction, it excels all others. Any style of gear may be constructed, light or heavy, single or double reach, end spring, Timken spring, or side bar with the one set of top or bottom plates. To make the same set answer for Timken's and similar gears, all that is necessary is to use No. 3 instead of No. 5, as shown on page 37. The bearings are such that the king bolt is relieved of all strain. There is no hole in the axle to weaken it. The upper reach iron being detachable, may be made of Norway or malleable, and the fifth wheels of steel or malleable. The lower half of fifth wheel is clipped to the axle. The bodies may be hung very low if required.

BURDSALL'S PATENT FIFTH WHEELS.

SINGLE REACH.



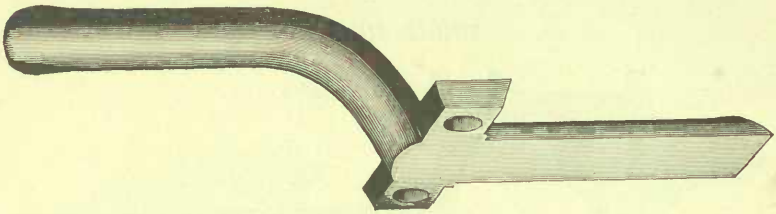
Malleable sets, One Seated Vehicle	$1 00
" " Two " "	2 00



No. 8—Lower Circle.
No. 7—Upper Circle.
No. 5—Top Front Reach Iron.
No. 2—Lower Front Reach Iron.
No. 6—Bottom Axle Plate.
No. 3—Forging for Timken, Burdsall or end Spring.
No. 4—Back Reach Iron.

All the parts are wrought iron except Nos. 6, 7 and 8, and these are the same for both single and double sets.

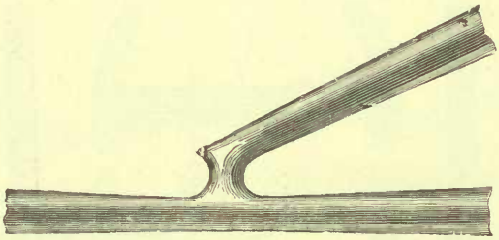
SLEIGH KNEE BRACES.



Sizes, 5-8, 3-4, 7-8 Between Holes.

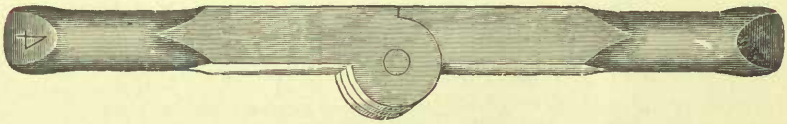
Per dozen..... $1 00

FORGED OFFSETTS.



7-16—per dozen..... $1 50
½—per dozen 1 60

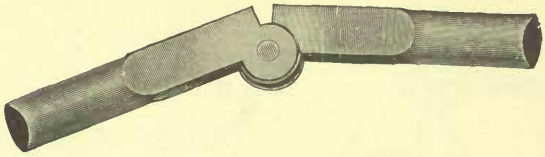
STUMP JOINTS.



Refined Iron--Half Milled.

½ x ½ inch, per dozen pieces..... $1 65
9-16 x ½ inch, per dozen pieces..... 1 75
⅝ x ½ inch, per dozen pieces..... 2 00

HIGGIN'S PATENT STUMP JOINTS.

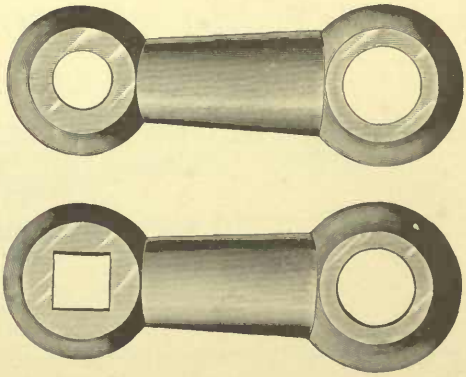


9-16 x ½, per dozen pieces..... $1 25
⅝ x ½, per dozen pieces..... 1 40

SPECIAL SLEIGH SHACKLE EYES.

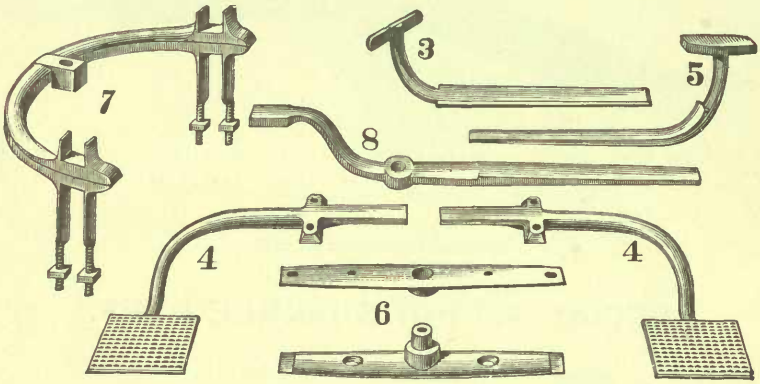
Per dozen pairs..... $2 00

EQUALIZER EARS.



Per dozen pairs..... $ 1 00

TIMKEN GEAR IRONS.



LIST PRICE.

Complete Sets, $3 20.

No. 3—Top Front Reach Stay, each	$0 18
No. 4—Steps, pair	0 87
No. 5—Back Drop Reach Stay, each	0 23
No. 6—Head Block and Bed Plate, No. 7—Fifth Wheel, set	1 75
No. 8—Bottom Front Reach Stay and Fifth Wheel Stay, each	0 20

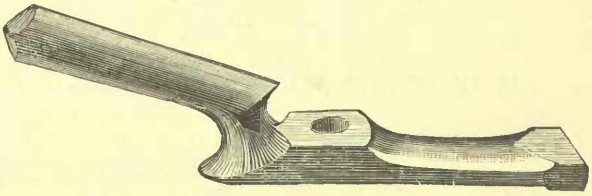
WROUGHT IRON FOOT RAILS.

No. 2—22, 24, 26, 28 and 30 inch, per dozen $3 00

Holes are drilled and countersunk. Additional sizes will be furnished at special rates.

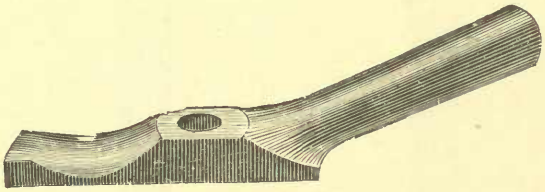
FORGED FRONT STAY ENDS.

FANCY.



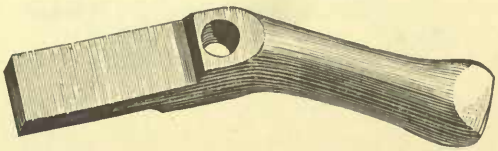
7-16 inch, per dozen $1 80
½ " " 2 00

PLAIN.



7-16 inch, per dozen $1 40
½ " " 1 55

FORGED BACK STAY ENDS.

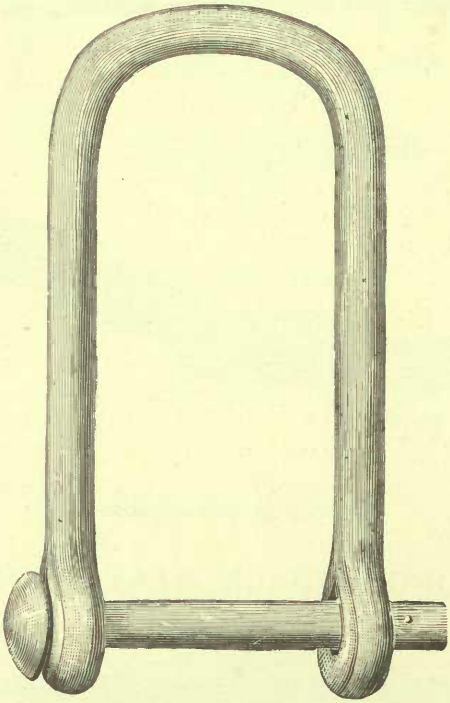


7-16 inch, per dozen $1 40
½ " " 1 55

All offsetts and Back Stay Ends are forged from a solid piece of Norway Iron. In the latter the back hole can be drilled to fit any size of axle. As one size will answer for several sizes of axles, it is unnecessary for dealers to carry so much of a stock as they would need to if both holes were drilled.

FORGED WROUGHT IRON CLEVIS.

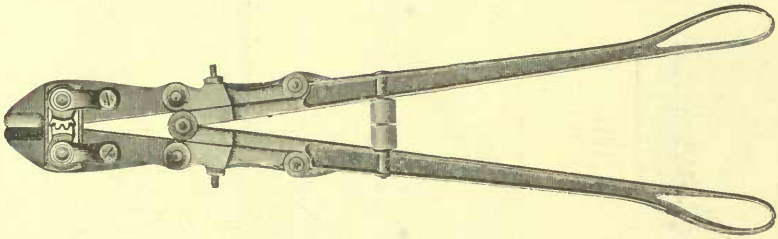
WITH SCREW BOLT OR BOLT KEY.



5 inch Clevis of ⅝ inch Iron, per dozen $2 25

Other dimensions and sizes of Iron in proportion.

VICTOR BOLT CUTTER.



This Clipper has now been tested for some time, and I claim for it all the merits of the best now in the Market, and some advantages over all peculiar to itself.

It has the open-pointed Cutting Jaws, is light and easily operated and is manufactured with great care and from the very best materials. The Blades are made from the best CAST SILVER STEEL, carefully tempered—each machine being tested by cutting ⅜ bolt.

Care should be used to keep the cutting edges close to each other. To do this remove the two nuts, tap the two studs gently down with a block of wood or soft metal, remove the T strap by drawing it forward, loosen set screws, and with key or small end of wrench turn the eccentrics it toward handles, using care to turn each equally till jaws meet, thereby keeping points of cutting jaws even. When adjusted tighten set screws firmly, replace T straps and nuts, tighten nuts firmly also.

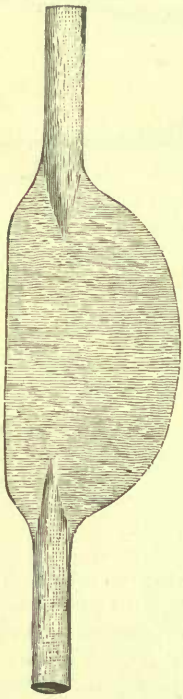
☞ Keep all pivots well oiled, and oil the cutting jaws occasionally on large bolts.

☞ Cut no steel under any circumstance.

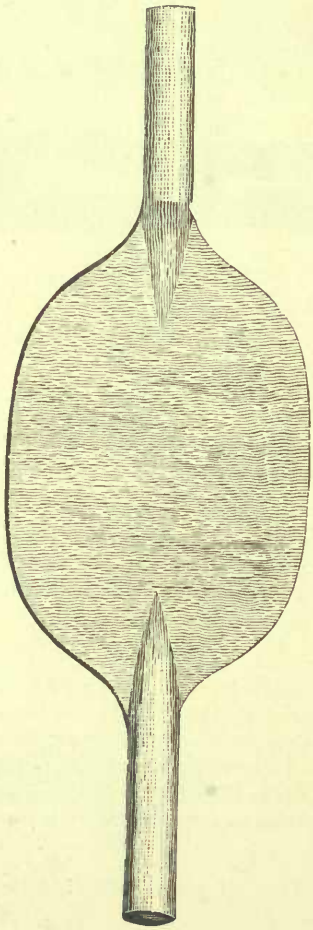
Price $6 00

SINGLE AND DOUBLE TREE CLIPS.

WROUGHT IRON--Scale One-Half.



No. 1.

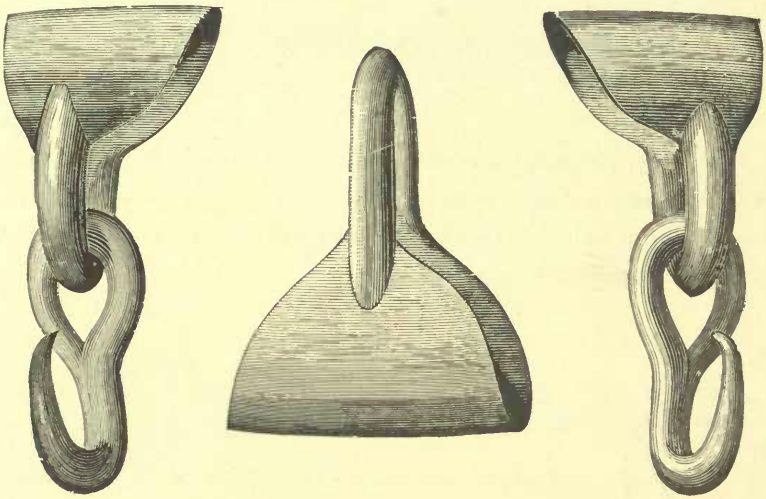


No. 2.

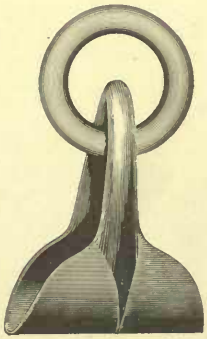
No. 1—	For end	Single	Tree	Irons,	⅜	Shank,	Flat	Part 2	x 3½,	per doz...	$0 40
No. 2—	"	centre	"	"	9-16	"	"	3½	x 5,	" ...	60
No. 3—	"	"	"	"	⅝	"	"	4	x 5,	" ...	65
No. 4—	"	"	"	"	⅝	"	"	4	x 6,	" ...	65

Other sizes made if ordered.

SINGLE TREE IRONS.



Price per Double Set..... $1 50

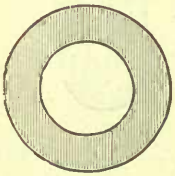


⅝ inch Clip, ½ inch Ring.
9-16 " 7-16 "

Price per hundred $10 00

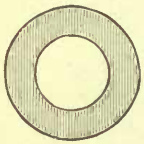
THIN STEEL WASHERS.

These Washers being made from thin steel, are the cheapest, by the hundred, that can be bought, and being made from a superior quality of material, will stand as much wear as an ordinary washer of much greater thickness. They are packed in boxes of 1 lb. each, or in bulk.



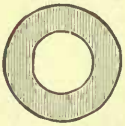
There are 500 washers for ½ inch bolt in one pound.

◆



There are 500 washers for ⅜ inch bolt in one pound.

◆



There are 600 washers for 5-16 inch bolt in one pound.

◆

There are 800 washers for ¼ inch bolt in one pound.

◆

There are 1100 washers for 3-16 inch bolt in one pound.

◆

There are 2000 washers for ⅛ inch bolt in one pound.

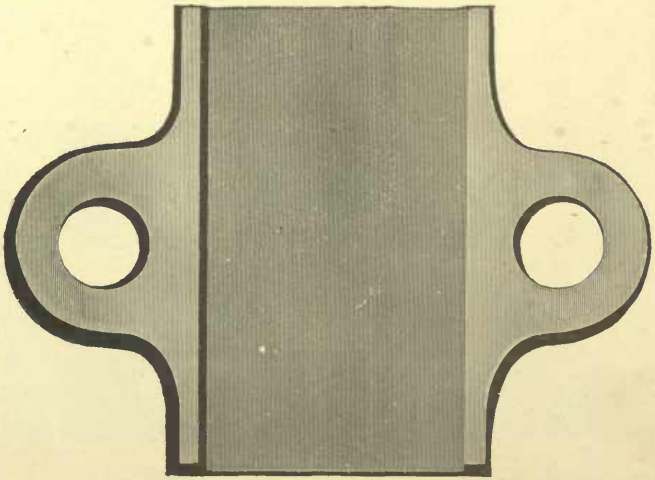
HAME STARTS.

Price per lb..... $0 25

SHIFTER PINS.

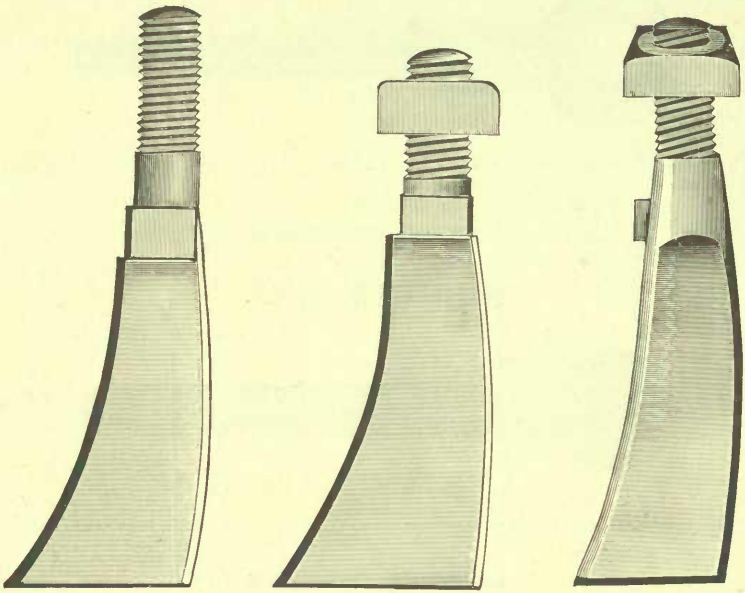
Price per hundred $4 00

FORGINGS FOR SPRING TOOTH HARROWS.



Harrow Forgings of all kinds and prices furnished on application.

THRESHING MACHINE TEETH.



Forged from best Soft Steel or Norway Iron if preferred. Prices on application

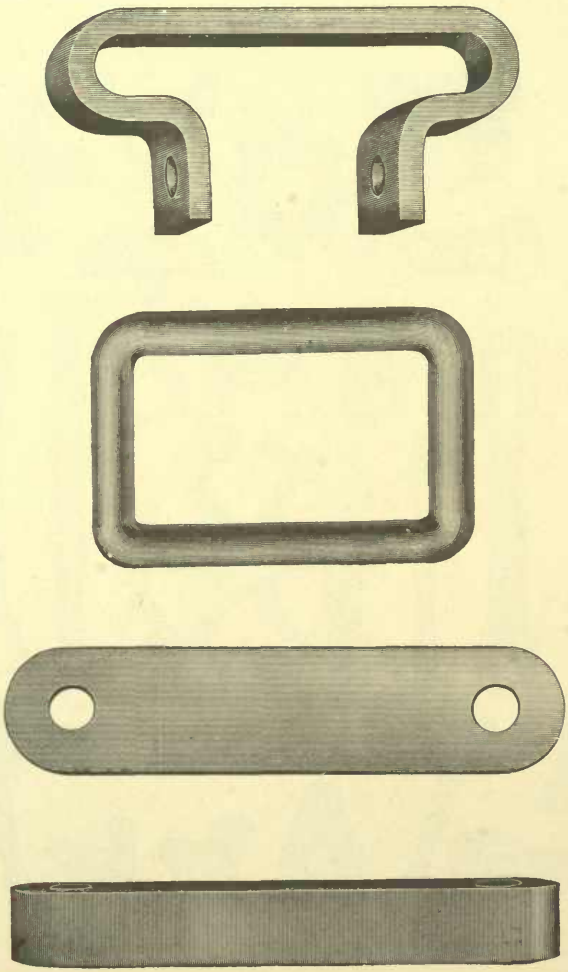
CANT HOOK FORGINGS.

Clasp and Hook.

Hook made of Steel and Clasp of Soft Steel or best Wrought Iron. Prices for them and other forgings on application.

CHAIN LINKS FOR SAW MILLS.

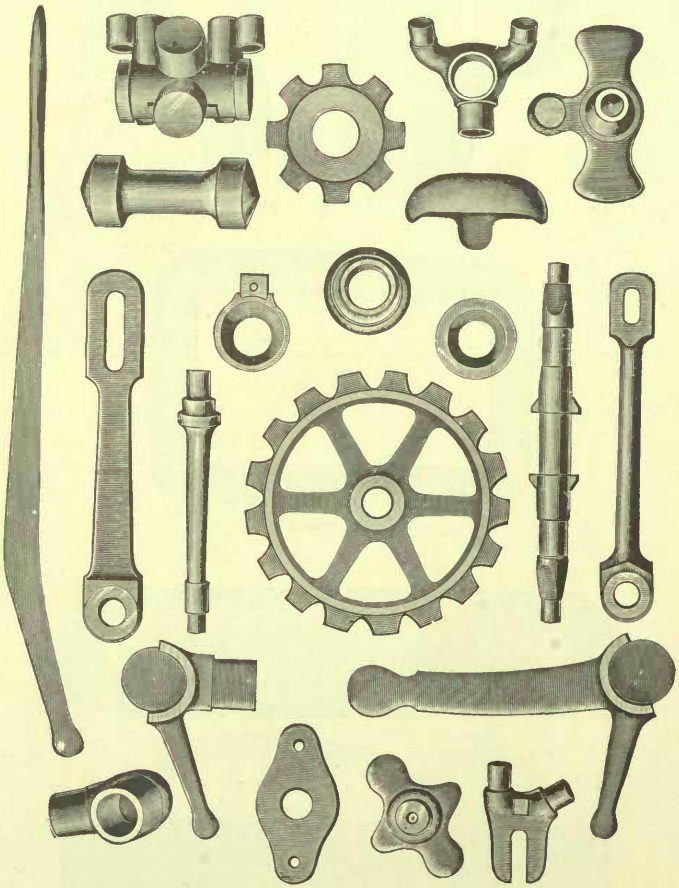
WASTE CARRIERS AND LOG HAULERS.



Prices for all sizes on application.

BICYCLE FORGINGS.

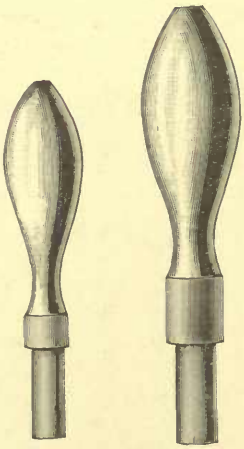
MADE FROM EITHER SOFT, CAST STEEL OR IRON.



Prices for dies and forgings furnished on application.

FORGED MACHINE HANDLES.

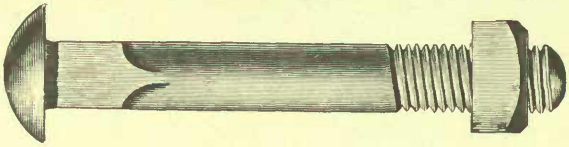
FOR WOOD, IRON AND OTHER MACHINES.



No. 1. No. 2.

	Per 100.
No. 1—3¾ long from shoulder to point	$ 8 00
No. 2—4½ " " "	10 00

"VICTOR."



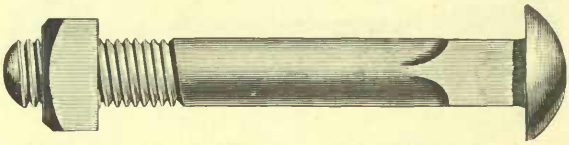
FULL SQUARE NORWAY IRON CARRIAGE BOLTS.

With Turned Heads and Forged Nuts.

PRICE PER HUNDRED.

LENGTH.	3-16 & ¼	5-16	⅜	7-16	½
1 inch	$3 00	$4 00	$ 5 00	$ 7 40	$ 9 00
1¼ "	3 10	4 00	5 00	7 40	9 00
1½ "	3 20	4 00	5 00	7 40	9 00
1¾ "	3 30	4 00	5 00	7 40	9 00
2 "	3 40	4 10	5 00	7 40	9 00
2¼ "	3 50	4 20	5 20	7 60	9 25
2½ "	3 60	4 40	5 40	7 80	9 50
2¾ "	3 70	4 50	5 60	8 00	9 75
3 "	3 80	4 70	5 80	8 20	10 00
3¼ "	3 90	4 90	6 00	8 40	10 25
3½ "	4 00	5 00	6 20	8 60	10 50
3¾ "	4 10	5 20	6 40	8 80	10 75
4 "	4 20	5 30	6 60	9 00	11 00
4¼ "	4 35	5 50	6 80	9 20	11 25
4½ "	4 50	5 70	7 00	9 40	11 50
5 "	4 80	6 00	7 40	9 80	12 00
5½ "	5 10	6 30	7 80	10 20	12 50
6 "	5 40	6 60	8 20	10 60	13 00
6½ "	....	7 00	8 60	11 00	13 50
7 "	....	7 30	9 00	11 40	14 00
7½ "	...	7 60	9 40	11 80	14 50
8 "	....	7 90	9 80	12 20	15 00
8½ "	....	8 20	10 20	12 60	15 50
9 "	....	8 50	10 60	13 00	16 00
9½ "	....	....	11 00	13 40	16 50
10 "	....	....	11 40	13 80	17 00
10½ "	....	....	.....	14 20	17 50
11 "	....	....	.....	14 60	18 00

"CROWN."



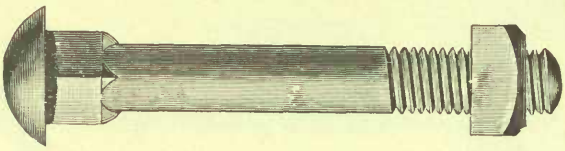
FULL SQUARE CARRIAGE BOLTS

With Turned Heads and Forged Nuts.

PRICE PER HUNDRED.

LENGTH.	3/16 & 1/4	5/16	3/8	7/16	1/2	9/16 & 5/8
1 inch	$2 40	$3 00	$3 70	$ 5 20	$ 6 25	$11 80
1¼ "	2 40	3 00	3 70	5 40	6 50	12 20
1½ "	2 40	3 00	3 70	5 60	6 75	12 60
1¾ "	2 45	3 10	4 00	5 80	7 00	13 00
2 "	2 50	3 20	4 00	6 00	7 25	13 40
2¼ "	2 55	3 30	4 15	6 20	7 50	13 80
2½ "	2 60	3 40	4 30	6 40	7 75	14 20
2¾ "	2 65	3 50	4 45	6 60	8 00	14 60
3 "	2 70	3 60	4 60	6 80	8 25	15 00
3¼ "	2 75	3 70	4 75	7 00	8 50	15 40
3½ "	2 80	3 80	4 90	7 20	8 75	15 80
3¾ "	2 85	3 90	5 05	7 40	9 00	16 20
4 "	2 90	4 00	5 20	7 60	9 25	16 60
4¼ "	2 95	4 10	5 35	7 80	9 50	17 00
4½ "	3 00	4 20	5 50	8 00	9 75	17 40
4¾ "	3 05	4 30	5 65	8 20	10 00	17 80
5 "	3 10	4 40	5 80	8 40	10 25	18 20
5½ "	3 20	4 60	6 10	8 80	10 75	19 00
6 "	3 30	4 80	6 40	9 20	11 25	19 80
6½ "	....	5 00	6 70	9 60	11 75	20 60
7 "	....	5 20	7 00	10 00	12 25	21 40
7½ "	....	5 40	7 30	10 40	12 75	22 20
8 "	....	5 60	7 60	10 80	13 25	23 00
8½ "	....	5 80	7 90	11 20	13 75	23 80
9 "	....	6 00	8 20	11 60	14 25	24 60
9½ "	....	....	8 50	12 00	14 75	25 40
10 "	....	....	8 80	12 40	15 25	26 20
11 "	....	....	....	13 20	16 25	27 80
12 "	....	....	...	14 00	17 25	29 40
13 "	....	....	....	14 80	18 25	31 00
14 "	....	....	....	.....	19 25	32 60
15 "	....	....	....	.....	20 25	34 20
16 "	....	....	....	.....	21 25	35 80

"STAR."



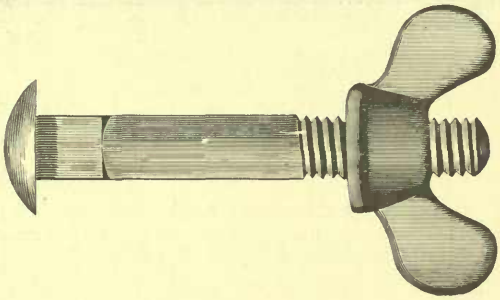
COMMON CARRIAGE BOLTS WITH FORGED NUTS.

PRICE PER HUNDRED.

LENGTH.	3/16 & 1/4	5/16	3/8	7/16	1/2	9/16 & 5/8	3/4
1 to 1½ inch....	$1 35	$1 60	$2 30	$3 10	$3 80	$7 50	.....
1¾ " ...	1 40	1 68	2 30	3 10	3 80	7 50	.....
2 "	1 45	1 75	2 30	3 10	3 80	7 50	.....
2¼ "	1 50	1 83	2 40	3 23	3 96	7 50	.....
2½ "	1 55	1 90	2 50	3 35	4 12	7 50	.....
2¾ "	1 60	1 98	2 60	3 48	4 28	7 50	.....
3 "	1 65	2 05	2 70	3 60	4 44	7 50	$13 50
3¼ "	1 70	2 13	2 80	3 73	4 60	7 75	13 85
3½ "	1 75	2 20	2 90	3 85	4 76	8 00	14 20
3¾ "	1 80	2 28	3 00	3 98	4 92	8 25	14 55
4 "	1 85	2 35	3 10	4 10	5 08	8 50	14 90
4¼ "	1 90	2 43	3 20	4 23	5 24	8 75	15 25
4½ "	1 95	2 50	3 30	4 35	5 40	9 00	15 60
4¾ "	2 00	2 58	3 40	4 48	5 56	9 25	15 95
5 "	2 05	2 65	3 50	4 60	5 72	9 50	16 30
5¼ "	2 10	2 73	3 60	4 73	5 88	9 75	16 65
5½ "	2 15	2 80	3 70	4 85	6 04	10 00	17 00
5¾ "	2 20	2 88	3 80	4 98	6 20	10 25	17 35
6 "	2 25	2 95	3 90	5 10	6 36	10 50	17 70
6¼ "	2 30	3 03	4 00	5 23	6 52	10 75	18 05
6½ "	2 35	3 10	4 10	5 35	6 68	11 00	18 40
7 "	2 45	3 25	4 30	5 60	7 00	11 50	19 10
7½ "	2 55	3 40	4 50	5 85	7 32	12 00	19 80
8 "	2 65	3 55	4 70	6 10	7 64	12 50	20 50
8½ "	2 75	3 70	4 90	6 35	7 96	13 00	21 20
9 "	2 85	3 85	5 10	6 60	8 28	13 50	21 90
9½ "	2 95	4 00	5 30	6 85	8 60	14 00	22 60
10 "	3 05	4 15	5 50	7 10	8 92	14 50	23 30
10½ "	3 15	4 30	5 70	7 35	9 24	15 00	24 00
11 "	3 25	4 45	5 90	7 60	9 56	15 50	24 70
11½ "	3 35	4 60	6 10	7 85	9 88	16 00	25 40
12 "	3 45	4 75	6 30	8 10	10 20	16 50	26 10
12½ "	3 55	4 90	6 50	8 35	10 52	17 00	26 80
13 "	3 65	5 05	6 70	8 60	10 84	17 50	27 50
13½ "	3 75	5 20	6 90	8 85	11 16	18 00	28 20
14 "	3 85	5 35	7 10	9 10	11 48	18 50	28 90
14½ "	3 95	5 50	7 30	9 35	11 80	19 00	29 60
15 "	4 05	5 65	7 50	9 60	12 12	19 50	30 30
15½ "	4 15	5 80	7 70	9 85	12 44	20 00	31 00
16 "	4 25	5 95	7 90	10 10	12 76	20 50	31 70

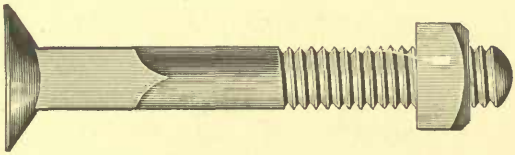
CARRIAGE BOLTS.

WITH THUMB NUT.



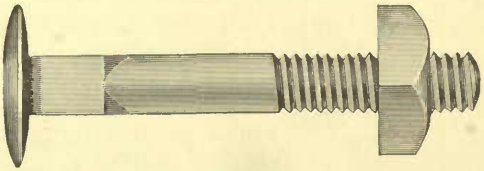
Prices on application.

COUNTERSUNK HEAD.



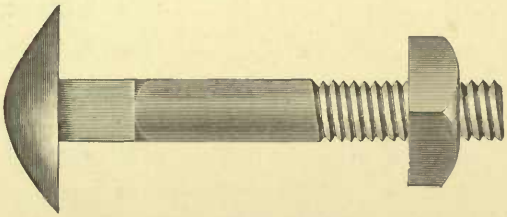
Same list as page 52.

BASTARD HEAD.



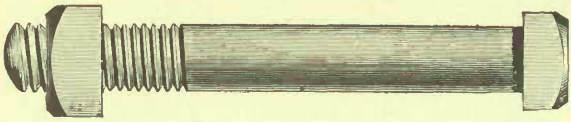
Same list as page 52.

ELLIPTIC OR PERCH HEAD.



Same list as page 52.

MACHINE BOLTS.

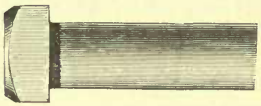


PRICE PER HUNDRED.

LENGTH.		1/4	5/16	3/8	7/16	1/2	9/16 & 5/8	3/4	7/8	1
1½	inch.....	$ 2 80	$ 3 20	$ 3 60	$ 4 60	$ 5 00	$ 7 20	10 50	14 90	$22 00
2	"	2 90	3 35	3 80	4 90	5 30	7 70	11 10	15 80	23 10
2½	"	3 00	3 50	4 00	5 20	5 60	8 20	11 70	16 60	24 20
3	"	3 10	3 65	4 20	5 50	5 90	8 70	12 30	17 50	25 30
3½	"	3 20	3 80	4 40	5 80	6 20	9 20	12 90	18 30	26 40
4	"	3 30	3 95	4 60	6 10	6 50	9 70	13 50	19 20	27 50
4½	"	3 40	4 10	4 80	6 40	6 80	10 20	14 10	20 00	28 60
5	"	3 50	4 25	5 00	6 70	7 10	10 70	14 70	20 90	29 70
5½	"	3 60	4 40	5 20	7 00	7 40	11 20	15 30	21 70	30 80
6	"	3 70	4 55	5 40	7 30	7 70	11 70	15 90	22 60	31 90
6½	"	3 80	4 70	5 60	7 60	8 00	12 20	16 50	23 40	33 00
7	"	3 90	4 85	5 80	7 90	8 30	12 70	17 10	24 30	34 10
7½	"	4 00	5 00	6 00	8 20	8 60	13 20	17 70	25 10	35 20
8	"	4 10	5 15	6 20	8 50	8 90	13 70	18 30	26 00	36 30
9	"	.....	.....	6 60	9 10	9 50	14 75	19 50	27 70	38 50
10	"	.....	.....	7 00	9 70	10 10	15 75	20 70	29 40	40 70
11	"	.....	.....	7 40	10 30	10 70	16 75	21 90	31 10	42 90
12	"	.....	.....	7 80	10 90	11 30	17 75	23 10	32 80	45 10
13	"	.....	.....	.....	.....	11 90	18 75	24 30	34 50	47 30
14	"	.....	.....	.....	.....	12 50	19 75	25 50	36 20	49 50
15	"	.....	.....	.....	.....	13 10	20 75	26 70	37 90	51 70
16	"	.....	.....	.....	.....	13 70	21 75	27 90	39 60	53 90
17	"	.....	.....	.....	.....	14 30	22 75	29 10	41 30	56 10
18	"	.....	.....	.....	.....	14 90	23 75	30 30	43 00	58 30
19	"	.....	.....	.....	.....	15 50	24 75	31 50	44 70	60 50
20	"	.....	.....	.....	.....	16 10	25 75	32 70	46 40	62 70

Bolts with Hexagon Nuts 10 per cent. extra.
If both Hexagon Heads and Hexagon Nuts, 20 per cent. extra.

SQUARE HEAD BLANK BOLTS.

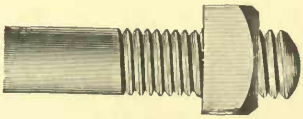


PRICE PER HUNDRED.

Lgth.	1/4	5/16	3/8	7/16	1/2	9/16	5/8	3/4	7/8	1
1	$2 30	$2 70	$3 10	$3 50	$4 10	$4 80	.....	.....	.....	.....
1½	2 30	2 70	3 10	3 50	4 10	4 80	.....	.....	.....	.....
2	2 40	2 80	3 25	3 70	4 35	5 10	$ 6 00	$ 9 00	$12 75	.....
2½	2 50	2 90	3 40	3 90	4 60	5 40	6 40	9 50	13 50	$18 40
3	2 60	3 00	3 55	4 10	4 85	5 70	6 80	10 00	14 25	19 35
3½	2 70	3 10	3 70	4 30	5 10	6 00	7 20	10 50	15 00	20 30
4	2 80	3 20	3 85	4 50	5 35	6 30	7 60	11 00	15 75	21 25
4½	2 90	3 30	4 00	4 70	5 60	6 60	8 00	11 50	16 50	22 20
5	3 00	3 40	4 15	4 90	5 85	6 90	8 40	12 00	17 25	23 15
5½	3 10	3 50	4 30	5 10	6 10	7 20	8 80	12 50	18 00	24 10
6	3 20	3 60	4 45	5 30	6 35	7 50	9 20	13 00	18 75	25 05
6½	3 30	3 70	4 60	5 50	6 60	7 80	9 60	13 50	19 50	26 00
7	3 40	3 80	4 75	5 70	6 85	8 10	10 00	14 00	20 25	26 95
7½	3 50	3 90	4 90	5 90	7 10	8 40	10 40	14 50	21 00	27 90
8	3 60	4 00	5 05	6 10	7 35	8 70	10 80	15 00	21 75	28 85

Hex Heads 10 per cent. extra.

BOLT ENDS.



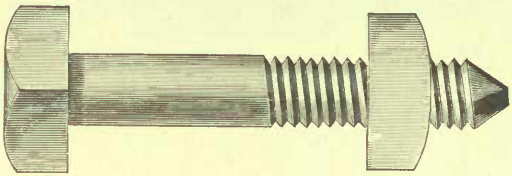
PRICE PER HUNDRED.

Size of Iron.....	5/16	3/8	7/16	1/2	5/8	3/4	7/8	1	1⅛
Length.....	6	7	7	8	9	10	11	12	13
Price per lb.....	28	24	20	16	14	12			

Size of Iron.....	1¼	1⅜	1½	1⅝	1¾	1⅞	2
Length.....	14	15	16	17	18	19	20
Price per lb.....		14		16			

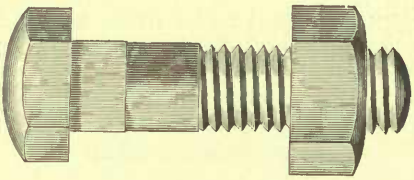
Hex Nuts 10 per cent. extra.

JOINT BOLT WITH OBLONG NUT.



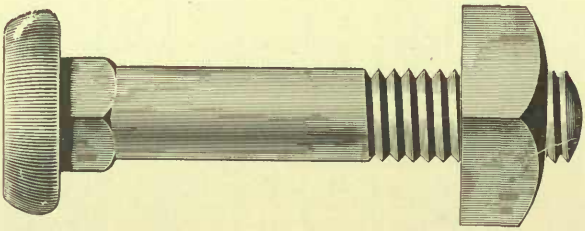
Add 10 % to Machine Bolt list.

CANT HOOK BOLT.



Prices on application.

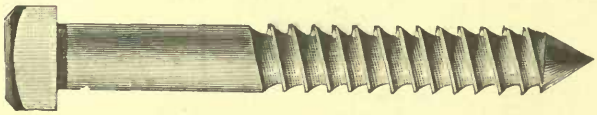
DECK BOLT.



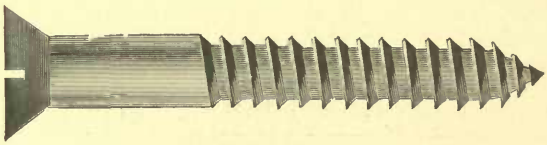
Prices on application.

LAG OR COACH SCREWS.

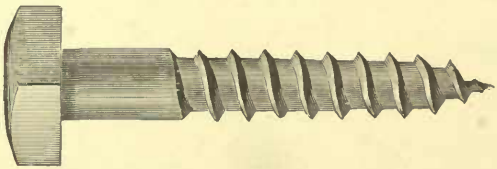
WITH SQUARE HEAD.



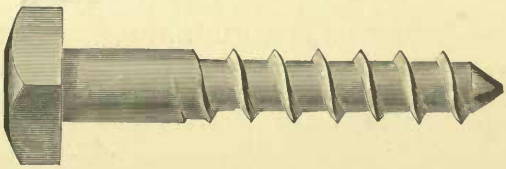
COUNTERSUNK HEAD.



WITH GIMLET POINT.



SKEIN BOLT.



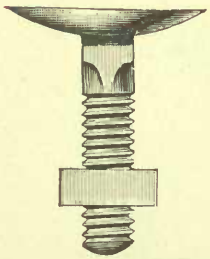
List for all above on page 60.

COACH SCREW LIST.

PRICE PER HUNDRED.

LENGTH.	$\frac{5}{16}$	$\frac{3}{8}$	$\frac{7}{16}$	$\frac{1}{2}$	$\frac{9}{16}$ & $\frac{5}{8}$	$\frac{3}{4}$	$\frac{7}{8}$	1
$1\frac{1}{2}$ inch	$2 70	$3 10	$4 00	$ 4 30	.....	.....	.....	.....
2 "	2 90	3 30	4 25	4 60	$ 6 50	.....	.....	.....
$2\frac{1}{2}$ "	3 10	3 50	4 50	4 90	6 90	$10 00	.....	.....
3 "	3 30	3 70	4 75	5 20	7 30	10 50	$15 00	.....
$3\frac{1}{2}$ "	3 50	3 90	5 00	5 50	7 70	11 00	15 75	$21 60
4 "	3 70	4 10	5 25	5 80	8 10	11 50	16 50	22 50
$4\frac{1}{2}$ "	3 90	4 30	5 50	6 10	8 50	12 00	17 25	23 40
5 "	4 10	4 50	5 75	6 40	8 90	12 50	18 00	24 25
$5\frac{1}{2}$ "	4 30	4 70	6 00	6 70	9 30	13 00	18 75	25 25
6 "	4 50	4 90	6 25	7 00	9 70	13 50	19 50	26 25
7 "	.....	.....	6 75	7 60	10 50	14 50	21 00	28 25
8 "	.....	.....	7 25	8 20	11 30	15 50	22 50	30 25
9 "	.....	.....	7 75	8 80	12 10	16 50	24 00	32 25
10 "	.....	.....	.....	9 40	12 90	17 50	25 50	34 25
11 "	.....	.....	.....	10 00	13 70	18 50	27 00	36 25
12 "	.....	.....	.....	10 60	14 50	19 50	28 50	38 25

Hex Heads 10 per cent. extra.



ELEVATOR BOLTS.

FOR BOLTING BUCKETS TO GRAIN ELEVATORS.

PRICE PER HUNDRED.

$\frac{3}{16}$ & $\frac{1}{4}$ INCH. ELEVATOR BOLTS, NORWAY IRON.	$\frac{5}{16}$ INCH. ELEVATOR BOLTS, NORWAY IRON.
$\frac{3}{4}$ inch.....$2 20 per 100	1 inch.....$3 00 per 100
1 " ..... 2 20 "	$1\frac{1}{4}$ " ..... 3 00 "

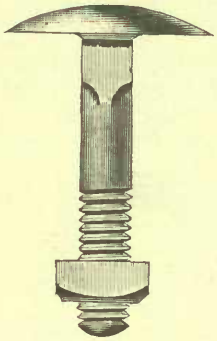
FANCY BOLTS.

PRICE PER HUNDRED.

Cone and Steeple Head.			Step.		Shaft.		
$\frac{1}{4}$		$\frac{5}{16}$	$\frac{3}{16}$ & $\frac{1}{4}$		$\frac{3}{16}$ & $\frac{1}{4}$		$\frac{5}{16}$
$1\frac{1}{2}$	$3 20	$4 00	1	$3 00	1	$3 00	Same list as Norway Iron Carriage Bolts.
$1\frac{3}{4}$	3 30	4 00	$1\frac{1}{4}$	3 10	$1\frac{1}{4}$	3 10	
2	3 40	4 10	$1\frac{1}{2}$	3 20	$1\frac{1}{2}$	3 20	
$2\frac{1}{4}$	3 50	4 20	$1\frac{3}{4}$	3 30	$1\frac{3}{4}$	3 30	
$2\frac{1}{2}$	3 60	4 40	2	3 40	2	3 40	
$2\frac{3}{4}$	3 70	4 50	$2\frac{1}{4}$	3 50	$2\frac{1}{4}$	3 50	
3	3 80	4 70	$2\frac{1}{2}$	3 60	$2\frac{1}{2}$	3 60	
$3\frac{1}{2}$	4 00	5 00	$2\frac{3}{4}$	3 70	$2\frac{3}{4}$	3 70	
4	4 20	5 30	3	3 80	3	3 80	

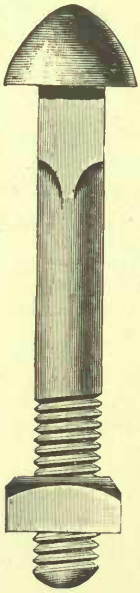
SHACKLE BOLTS.

All sizes..... .....$6 50 per hundred

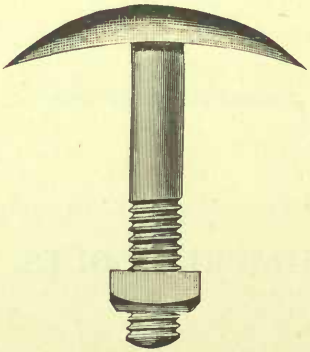


STEP.

STEEPLE.



CONE.



SHAFT.

WHIFFLETREE BOLTS.

SPUR.

$\frac{3}{8}$ inch diameter, $3\frac{1}{2}$ inches long	Per doz.,	$3 00
$\frac{5}{16}$ " " $3\frac{1}{2}$ " "	"	3 00

Made of Best Norway Iron.

These bolts are put up in paper boxes of 4 dozen each, and made any length ordered for Whiffletrees, at same price.

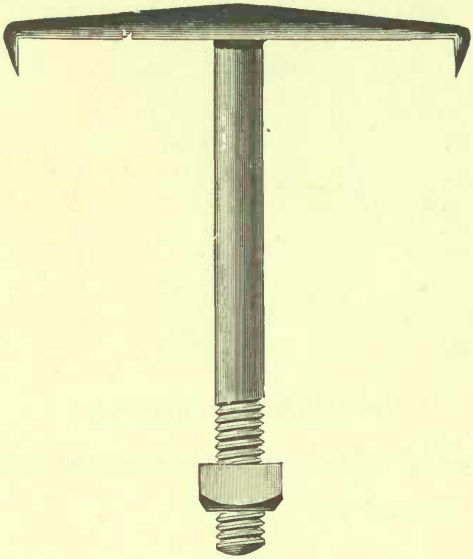
WHIFFLETREE BOLTS.

BENT PATTERN.

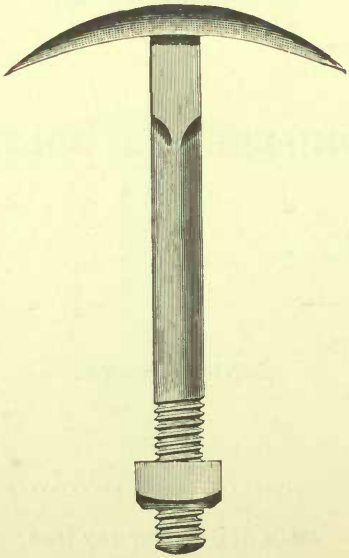
$\frac{5}{16}$ x $3\frac{1}{2}$, 4 & $4\frac{1}{2}$ inches	Per doz.,	$1 00
$\frac{3}{8}$ x $3\frac{1}{2}$, 4 & $4\frac{1}{2}$ "	"	1 25

Made of Best Norway Iron.

Put up in paper boxes of 4 dozen each.

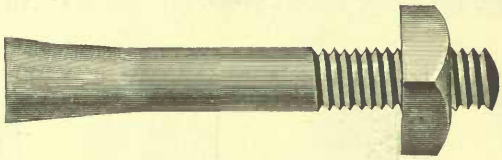


SPUR.



BENT PATTERN.

SLEIGH SHOE BOLTS.

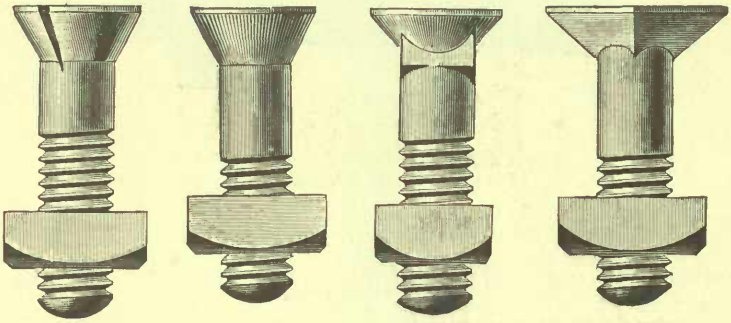


PRICE PER HUNDRED.

LENGTH.	$\frac{1}{4}$	$\frac{5}{16}$	$\frac{3}{8}$	$\frac{7}{16}$	$\frac{1}{2}$
1¼ inches....	$1 90	.....	.....	.....	.....
1½ "	2 00	$2 70	.....	.....	.....
1¾ "	2 15	2 85	.....	.....	.....
2 "	2 25	3 05	$5 00	$ 7 40	$ 9 00
2½ "	2 50	3 35	5 40	7 80	9 50
3 "	2 75	3 65	5 80	8 20	10 00
3½ "	3 00	3 95	6 20	8 60	10 50
4 "	3 25	4 25	6 60	9 00	11 00
4½ "	.....	4 55	7 00	9 40	11 50
5 "	.....	4 90	7 40	9 80	12 00
5½ "	.....	.....	7 80	10 20	12 50
6 "	.....	.....	8 20	10 60	13 00
6½ "	.....	.....	.....	11 00	13 50
7 "	.....	.....	.....	11 40	14 00
7½ "	.....	.....	.....	11 80	14 50
8 "	.....	.....	.....	12 20	15 00

PLOUGH BOLTS.

WITH RIGHT OR LEFT HAND THREAD, AS MAY BE ORDERED.



No. 1 Key. No. 2. No. 3. No. 4.

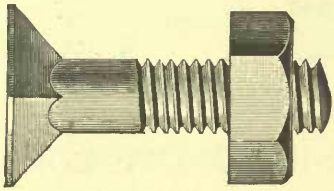
PRICE PER HUNDRED.

LENGTH.	$\frac{5}{16}$	$\frac{3}{8}$	$\frac{7}{16}$	$\frac{1}{2}$	$\frac{9}{16}$	$\frac{5}{8}$
$1\frac{1}{4}$ inch	$1 70	$2 00	$2 60	$3 50	$4 50	$5 70
$1\frac{1}{2}$ "	1 80	2 10	2 75	3 70	4 75	6 00
$1\frac{3}{4}$ "	1 90	2 20	2 90	3 90	5 00	6 30
2 "	2 00	2 30	3 05	4 10	5 25	6 60
$2\frac{1}{4}$ "	2 10	2 40	3 20	4 30	5 50	6 90
$2\frac{1}{2}$ "	2 20	2 50	3 35	4 50	5 75	7 20
$2\frac{3}{4}$ "	2 30	2 60	3 50	4 70	6 00	7 50
3 "	2 40	2 70	3 65	4 90	6 25	7 80
$3\frac{1}{4}$ "	2 50	2 80	3 80	5 10	6 50	8 10
$3\frac{1}{2}$ "	2 60	2 90	3 95	5 30	6 75	8 40
$3\frac{3}{4}$ "	2 70	3 00	4 10	5 50	7 00	8 70
4 "	2 80	3 10	4 25	5 70	7 25	9 00

$\frac{5}{16}$	Plough Bolts, all lengths		25	cents per lb
$\frac{3}{8}$	"	"	15	"
$\frac{7}{16}$	"	"	14	"
$\frac{1}{2}$	"	"	13	"
$\frac{9}{16}$	"	"	13	"
$\frac{5}{8}$	"	"	13	"

GUARD BOLTS.

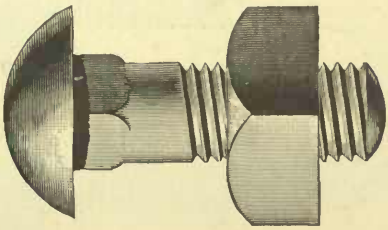
SQUARE COUNTERSUNK.



Prices same as plough.

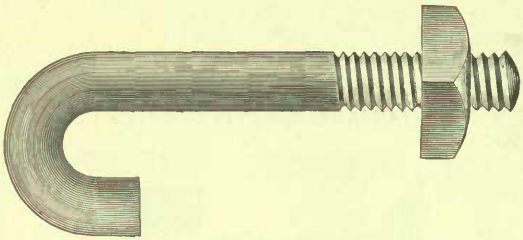
GUARD BOLTS.

OVAL HEAD AND SQUARE NECK.



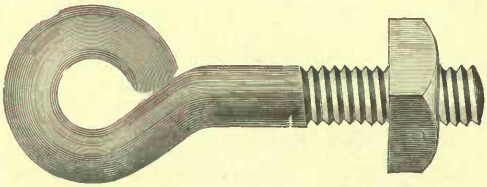
Prices same as Full Square Carriage Bolts.

HOOK BOLT.

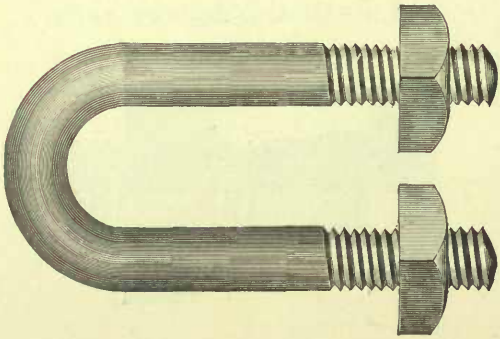


SINGLE EYE BOLT.

NOT WELDED.

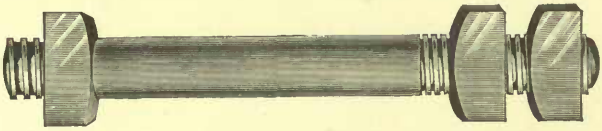


STAPLE BOLT.



Prices on application.

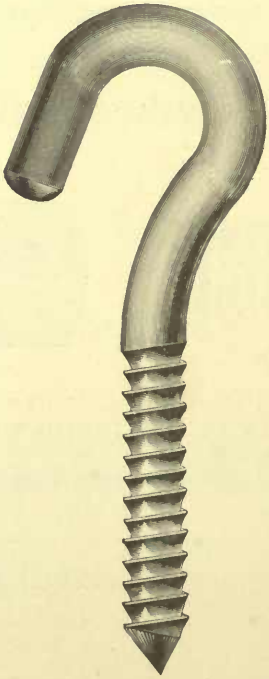
JOURNAL STAPLES.



Prices on application.

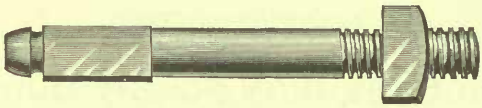
WROUGHT IRON SCREW HOOKS.

COACH SCREW THREAD.



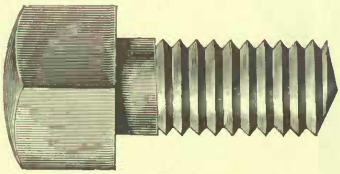
HEADLESS BOLTS.

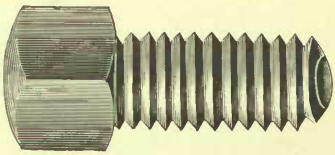
FOR CAST IRON OR BRASS HEADS.



Prices on application.

FORGED SET SCREWS AND TAP BOLTS.

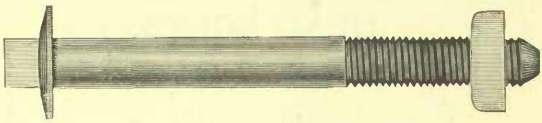




PRICE PER HUNDRED.

LENGTH.	$\frac{1}{4}$	$\frac{5}{16}$	$\frac{3}{8}$	$\frac{7}{16}$	$\frac{1}{2}$	$\frac{9}{16}$ & $\frac{5}{8}$	$\frac{3}{4}$
$1\frac{1}{2}$ inch	$2 50	$2 80	$3 30	$3 90	$4 50	$6 60	$ 8 90
$1\frac{3}{4}$ "	2 60	2 90	3 40	4 00	4 70	6 80	9 20
2 "	2 70	3 00	3 50	4 10	4 90	7 00	9 50
$2\frac{1}{4}$ "	2 80	3 10	3 60	4 20	5 10	7 20	9 80
$2\frac{1}{2}$ "	2 90	3 20	3 70	4 30	5 30	7 40	10 10
$2\frac{3}{4}$ "	3 00	3 30	3 80	4 40	5 50	7 60	10 40
3 "	3 10	3 40	3 90	4 50	5 70	7 80	10 70

BOLT SCREW.



LIST

PRICE PER GROSS.

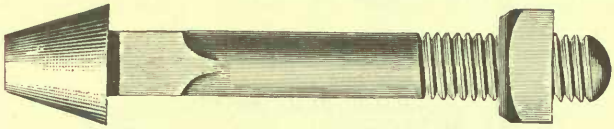
3/8			7/16			1/2		
4	inch	$4 00	5	inch	$5 70	6	inch	$ 9 00
4½	"	4 25	5½	"	6 05	6½	"	9 50
5	"	4 50	6	"	6 40	7	"	10 00
5½	"	4 75	6½	"	6 75	7½	"	10 50
6	"	5 00	7	"	7 10	8	"	11 00
6½	"	5 25	7½	"	7 45	9	"	12 00
7	"	5 50	8	"	7 80	10	"	13 00
7½	"	5 75	9	"	8 50			
8	"	6 00	10	"	9 20			

STOVE RODS.

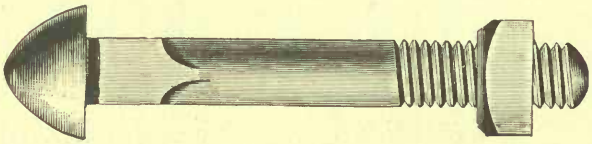
LIST.

	PRICE PER POUND
1/4	$0 15
5/16	0 12½
3/8	0 10

NICKEL PLATED CONE AND STEEPLE HEAD BOLTS.

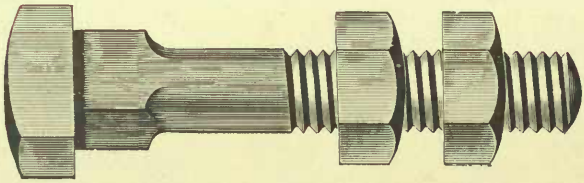


$5.00 per hundred.



$5.00 per hundred.

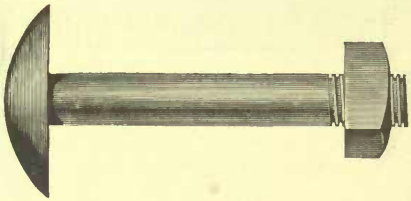
T HEAD BOLTS.



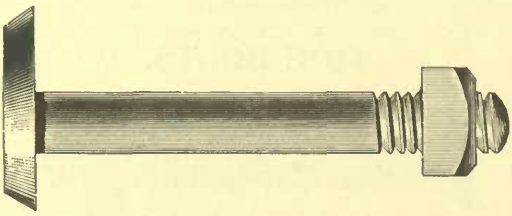
Prices on application.

SPRING BOLTS.

BUTTON HEAD.



CHEESE HEAD.



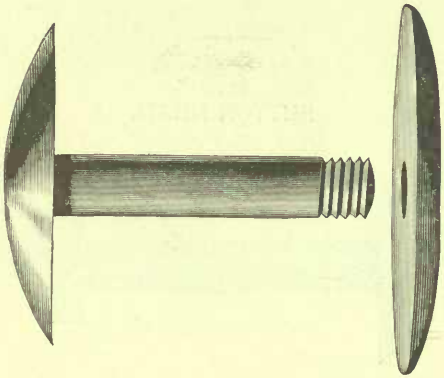
From Best Norway Iron.

PRICE PER HUNDRED.

LENGTH.	$\frac{5}{16}$	$\frac{3}{8}$	$\frac{7}{16}$
1¾ inches	$2 90	....	....
2 "	3 00	$3 80	$5 50
2¼ "	3 10	3 92	5 65
2½ "	3 20	4 05	5 80
2¾ "	3 30	4 18	5 95
3 "	3 40	4 30	6 10
3¼ "	3 50	4 42	6 25
3½ "	3 60	4 55	6 40
3¾ "	....	4 68	6 55
4 "	....	4 80	6 70
4½ "	....	....	7 00
5 "	....	....	7 30

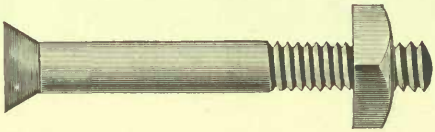
LARGE HEAD BOLT AND NUT.

FOR C SPRINGS.



Price per hundred $15 00

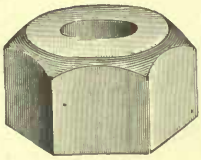
TIRE BOLTS.



PRICE PER HUNDRED.

3/16			1/4			5/16			3/8		
1¼	inch	$0 60	1¼	inch	$0 80	1¼	inch	$1 10	1¼	inch	$2 20
1½	"	0 60	1½	"	0 80	1½	"	1 10	1½	"	2 20
1¾	"	0 65	1¾	"	0 85	1¾	"	1 10	1¾	"	2 20
2	"	0 70	2	"	0 90	2	"	1 17	2	"	2 20
2¼	"	0 75	2¼	"	0 95	2¼	"	1 24	2¼	"	2 30
2½	"	0 80	2½	"	1 00	2½	"	1 31	2½	"	2 40
2¾	"	0 85	2¾	"	1 05	2¾	"	1 38	2¾	"	2 50
3	"	0 90	3	"	1 10	3	"	1 45	3	"	2 60
			3¼	"	1 15	3¼	"	1 52	3¼	"	2 70
			3½	"	1 20	3½	"	1 59	3½	"	2 80
			3¾	"	1 25	3¾	"	1 66	3¾	"	2 90
			4	"	1 30	4	"	1 73	4	"	3 00
			4½	"	1 40	4½	"	1 87	4½	"	3 20
			5	"	1 50	5	"	2 01	5	"	3 40
						5½	"	2 15	5½	"	3 60
						6	"	2 29	6	"	3 80

HOT-PRESSED HEXAGON NUTS.

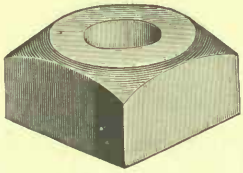


MANUFACTURERS' STANDARD LIST.

Size Square.	Thickness.	Diameter Hole.	Size of Bolt.	Price Per Pound.	Average No. in 100 lbs.
$\frac{1}{2}$	$\frac{1}{4}$	$\frac{7}{32}$	$\frac{1}{4}$	20 cents.	9250
$\frac{9}{16}$	$\frac{5}{16}$	$\frac{9}{32}$	$\frac{5}{16}$	20 "	5000
$\frac{5}{8}$	$\frac{5}{16}$	$\frac{9}{32}$	$\frac{5}{16}$	16 "	4500
$\frac{3}{4}$	$\frac{3}{8}$	$\frac{11}{32}$	$\frac{3}{8}$	13 "	2700
$\frac{7}{8}$	$\frac{7}{16}$	$\frac{13}{32}$	$\frac{7}{16}$	11.2 "	1700
$\frac{7}{8}$	$\frac{1}{2}$	$\frac{7}{16}$	$\frac{1}{2}$	11.2 "	1600
1	$\frac{1}{2}$	$\frac{7}{16}$	$\frac{1}{2}$	10.5 "	1100
$1\frac{1}{8}$	$\frac{9}{16}$	$\frac{1}{2}$	$\frac{9}{16}$	10.3 "	850
$1\frac{1}{8}$	$\frac{5}{8}$	$\frac{9}{16}$	$\frac{5}{8}$	10.3 "	750
$1\frac{1}{4}$	$\frac{5}{8}$	$\frac{9}{16}$	$\frac{5}{8}$	9.8 "	550
$1\frac{1}{4}$	$\frac{3}{4}$	$\frac{9}{16}$	$\frac{5}{8}$	9.8 "	500
$1\frac{3}{8}$	$\frac{3}{4}$	$\frac{21}{32}$	$\frac{3}{4}$	9.8 "	400
$1\frac{3}{8}$	$\frac{7}{8}$	$\frac{21}{32}$	$\frac{3}{4}$	9.8 "	370
$1\frac{1}{2}$	$\frac{3}{4}$	$\frac{21}{32}$	$\frac{3}{4}$	9.5 "	300
$1\frac{1}{2}$	$\frac{7}{8}$	$\frac{21}{32}$	$\frac{3}{4}$	9.5 "	280
$1\frac{5}{8}$	$\frac{7}{8}$	$\frac{25}{32}$	$\frac{7}{8}$	9.5 "	250
$1\frac{5}{8}$	1	$\frac{25}{32}$	$\frac{7}{8}$	9.5 "	225
$1\frac{3}{4}$	1	$\frac{7}{8}$	1	9.5 "	200
$1\frac{3}{4}$	$1\frac{1}{8}$	$\frac{7}{8}$	1	9.5 "	170
2	$1\frac{1}{4}$	$\frac{15}{16}$	$1\frac{1}{8}$	9.5 "	110
$2\frac{1}{4}$	$1\frac{3}{8}$	$1\frac{1}{16}$	$1\frac{1}{4}$	9.5 "	80
$2\frac{1}{2}$	$1\frac{1}{2}$	$1\frac{3}{16}$	$1\frac{3}{8}$	9.8 "	60
$2\frac{3}{4}$	$1\frac{5}{8}$	$1\frac{5}{16}$	$1\frac{1}{2}$	10 "	47
3	$1\frac{3}{4}$	$1\frac{7}{16}$	$1\frac{5}{8}$	10.5 "	39
$3\frac{1}{4}$	$1\frac{7}{8}$	$1\frac{9}{16}$	$1\frac{3}{4}$	10.5 "	29
$3\frac{1}{2}$	2	$1\frac{11}{16}$	$1\frac{7}{8}$	11 "	24
$3\frac{1}{2}$	2	$1\frac{13}{16}$	2	11 "	25

Sizes not enumerated above will be charged extra.

HOT-PRESSED AND MACHINE-FORGED SQUARE NUTS.



MANUFACTURERS' STANDARD LIST.

Size Square.	Thickness.	Diameter. Holr.	Size of Bolt.	Price Per Pound.	Average No. in 100 lbs.
$\frac{1}{2}$	$\frac{1}{4}$	$\frac{7}{32}$	$\frac{1}{4}$	13 cents.	7500
$\frac{9}{16}$	$\frac{5}{16}$	$\frac{9}{32}$	$\frac{5}{16}$	13 "	5400
$\frac{5}{8}$	$\frac{5}{16}$	$\frac{9}{32}$	$\frac{5}{16}$	11.5 "	4000
$\frac{3}{4}$	$\frac{3}{8}$	$\frac{11}{32}$	$\frac{3}{8}$	10 "	2400
$\frac{7}{8}$	$\frac{7}{16}$	$\frac{13}{32}$	$\frac{7}{16}$	9 "	1400
$\frac{7}{8}$	$\frac{1}{2}$	$\frac{7}{16}$	$\frac{1}{2}$	9 "	1320
1	$\frac{1}{2}$	$\frac{7}{16}$	$\frac{1}{2}$	8.7 "	1000
$1\frac{1}{8}$	$\frac{9}{16}$	$\frac{1}{2}$	$\frac{9}{16}$	8.5 "	650
$1\frac{1}{8}$	$\frac{5}{8}$	$\frac{9}{16}$	$\frac{5}{8}$	8.5 "	600
$1\frac{1}{4}$	$\frac{5}{8}$	$\frac{9}{16}$	$\frac{5}{8}$	8.3 "	460
$1\frac{3}{8}$	$\frac{3}{4}$	$\frac{21}{32}$	$\frac{3}{4}$	8.3 "	340
$1\frac{1}{2}$	$\frac{3}{4}$	$\frac{21}{32}$	$\frac{3}{4}$	8 "	280
$1\frac{5}{8}$	$\frac{7}{8}$	$\frac{25}{32}$	$\frac{7}{8}$	8 "	200
$1\frac{3}{4}$	$\frac{7}{8}$	$\frac{25}{32}$	$\frac{7}{8}$	8 "	160
$1\frac{3}{4}$	1	$\frac{7}{8}$	1	8 "	145
2	1	$\frac{7}{8}$	1	8 "	110
2	$1\frac{1}{8}$	$\frac{15}{16}$	$1\frac{1}{8}$	8 "	100
$2\frac{1}{4}$	$1\frac{1}{8}$	$\frac{15}{16}$	$1\frac{1}{8}$	8 "	78
$2\frac{1}{4}$	$1\frac{1}{4}$	$1\frac{1}{16}$	$1\frac{1}{4}$	8.3 "	80
$2\frac{1}{2}$	$1\frac{1}{4}$	$1\frac{1}{16}$	$1\frac{1}{4}$	8.0 "	55
$2\frac{3}{4}$	$1\frac{3}{8}$	$1\frac{3}{16}$	$1\frac{3}{8}$	8.3 "	43
3	$1\frac{1}{2}$	$1\frac{5}{16}$	$1\frac{1}{2}$	8.3 "	33
$3\frac{1}{4}$	$1\frac{5}{8}$	$1\frac{7}{16}$	$1\frac{5}{8}$	8.8 "	27
$3\frac{1}{2}$	$1\frac{3}{4}$	$1\frac{9}{16}$	$1\frac{3}{4}$	9.3 "	25
$3\frac{3}{4}$	$1\frac{7}{8}$	$1\frac{11}{16}$	$1\frac{7}{8}$	9.3 "	20
4	2	$1\frac{13}{16}$	2	9.3 "	14

Sizes not enumerated above will be charged extra.

HOT-PRESSED SQUARE AND HEXAGON NUTS.

U. S. STANDARD SIZES.

Diameter.	Thickness.	Hole.	Bolt.	Price.	
				Square.	Hexagon.
$\frac{1}{2}$	$\frac{1}{4}$	$\frac{13}{64}$	$\frac{1}{4}$	13 cents.	20 cents.
$\frac{19}{32}$	$\frac{5}{16}$	$\frac{1}{4}$	$\frac{5}{16}$	12 "	18 "
$\frac{11}{16}$	$\frac{3}{8}$	$\frac{19}{64}$	$\frac{3}{8}$	10.5 "	14 "
$\frac{25}{32}$	$\frac{7}{16}$	$\frac{11}{32}$	$\frac{7}{16}$	10 "	13 "
$\frac{7}{8}$	$\frac{1}{2}$	$\frac{25}{64}$	$\frac{1}{2}$	9 "	11.2 "
$\frac{31}{32}$	$\frac{9}{16}$	$\frac{29}{64}$	$\frac{9}{16}$	9 "	11.2 "
$1\frac{1}{16}$	$\frac{5}{8}$	$\frac{33}{64}$	$\frac{5}{8}$	8 7 "	10.2 "
$1\frac{1}{4}$	$\frac{3}{4}$	$\frac{5}{8}$	$\frac{3}{4}$	8.4 "	9.9 "
$1\frac{7}{16}$	$\frac{7}{8}$	$\frac{47}{64}$	$\frac{7}{8}$	8.4 "	9.9 "
$1\frac{5}{8}$	1	$\frac{27}{32}$	1	8.2 "	9.7 "
$1\frac{13}{16}$	$1\frac{1}{8}$	$\frac{15}{16}$	$1\frac{1}{8}$	8.2 "	9.7 "
2	$1\frac{1}{4}$	$1\frac{1}{16}$	$1\frac{1}{4}$	8.4 "	9.9 "
$2\frac{3}{16}$	$1\frac{3}{8}$	$1\frac{5}{32}$	$1\frac{3}{8}$	8.4 "	9.9 "
$2\frac{3}{8}$	$1\frac{1}{2}$	$1\frac{9}{32}$	$1\frac{1}{2}$	8.8 "	10.3 "
$2\frac{9}{16}$	$1\frac{5}{8}$	$1\frac{3}{8}$	$1\frac{5}{8}$	8.8 "	10.3 "
$2\frac{3}{4}$	$1\frac{3}{4}$	$1\frac{1}{2}$	$1\frac{3}{4}$	9.3 "	10.8 "
$2\frac{15}{16}$	$1\frac{7}{8}$	$1\frac{5}{8}$	$1\frac{7}{8}$	9.3 "	10.8 "
$3\frac{1}{8}$	2	$1\frac{23}{32}$	2	9.5 "	11 "
$3\frac{15}{16}$	$2\frac{1}{8}$	$1\frac{13}{16}$	$2\frac{1}{8}$	10 "	11.5 "
$3\frac{1}{2}$	$2\frac{1}{4}$	$1\frac{15}{16}$	$2\frac{1}{4}$	10 "	11.5 "

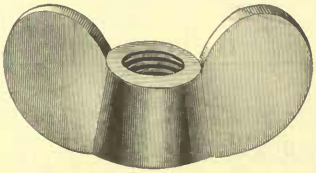
SPECIAL SIZES MACHINE FORGED NUTS.

Square.	Thick.	Hole.	Bolt.	Per lb.	No. in 100 lbs.
$\frac{11}{32}$	$\frac{5}{32}$	$\frac{3}{32}$	$\frac{1}{8}$	35 cents.	30000
$\frac{13}{32}$	$\frac{3}{16}$	$\frac{5}{32}$	$\frac{3}{16}$	20 "	15000
$\frac{7}{16}$	$\frac{7}{32}$	$\frac{7}{32}$	$\frac{1}{4}$	14 "	10000
$\frac{1}{2}$	$\frac{3}{16}$	$\frac{7}{32}$	$\frac{1}{4}$	13.5 "	9000
$\frac{1}{2}$	$\frac{7}{32}$	$\frac{7}{32}$	$\frac{1}{4}$	13.5 "	8500
$\frac{9}{16}$	$\frac{9}{32}$	$\frac{17}{64}$	$\frac{5}{16}$	12 "	5000
$\frac{11}{16}$	$\frac{5}{16}$	$\frac{21}{64}$	$\frac{3}{8}$	10.7 "	3500
$\frac{11}{16}$	$\frac{3}{8}$	$\frac{21}{64}$	$\frac{3}{8}$	10.7 "	3200
$\frac{3}{4}$	$\frac{5}{16}$	$\frac{11}{32}$	$\frac{3}{8}$	10.2 "	3000
$\frac{13}{16}$	$\frac{3}{8}$	$\frac{3}{8}$	$\frac{7}{16}$	9.5 "	2200
$\frac{7}{8}$	$\frac{3}{8}$	$\frac{7}{16}$	$\frac{1}{2}$	9.2 "	1800
1	$\frac{7}{16}$	$\frac{7}{16}$	$\frac{1}{2}$	8.9 "	1100

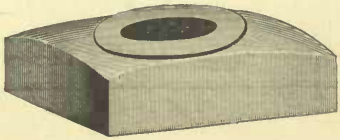
HALF ROUND NUTS.

THUMB NUTS.

MALLEABLE IRON.



OBLONG NUTS.



Thumb Bolts and Screws.

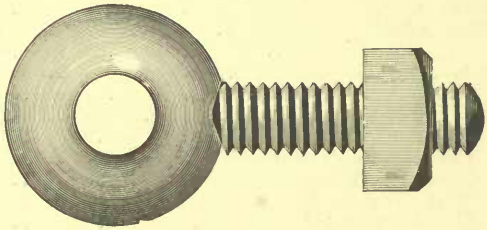
Prices for above on application.

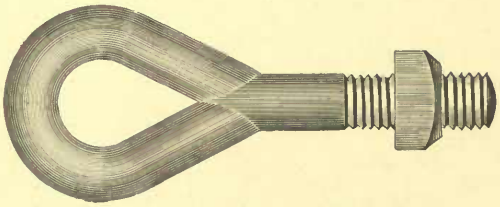
TAPPING NUTS.

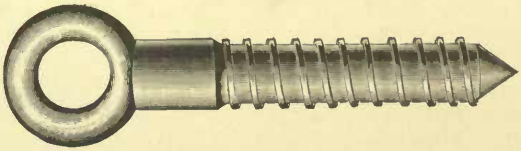
PRICE PER POUND.

BOLT.		SQUARE NUTS.		HEXAGON NUTS.		BOLT.		SQUARE NUTS.		HEXAGON NUTS.	
$\frac{1}{4}$	inch.	10	Cents.	12	Cents.	$1\frac{1}{8}$	inch.	2	Cents.	$2\frac{1}{2}$	Cents.
$\frac{5}{16}$	"	7	"	9	"	$1\frac{1}{4}$	"	2	"	$2\frac{1}{2}$	"
$\frac{3}{8}$	"	5	"	$6\frac{1}{2}$	"	$1\frac{3}{8}$	"	2	"	$2\frac{1}{2}$	"
$\frac{7}{16}$	"	$4\frac{1}{2}$	"	6	"	$1\frac{1}{2}$	"	2	"	$2\frac{1}{2}$	"
$\frac{1}{2}$	"	3	"	4	"	$1\frac{5}{8}$	"	$2\frac{1}{4}$	"	3	"
$\frac{9}{16}$	"	$2\frac{1}{2}$	"	$3\frac{1}{2}$	"	$1\frac{3}{4}$	"	$2\frac{1}{4}$	"	3	"
$\frac{5}{8}$	"	2	"	$2\frac{1}{2}$	"	$1\frac{7}{8}$	"	$2\frac{1}{4}$	"	3	"
$\frac{3}{4}$	"	$1\frac{1}{2}$	"	2	"	2	"	$2\frac{1}{4}$	"	3	"
$\frac{7}{8}$	"	$1\frac{1}{2}$	"	2	"	$2\frac{1}{8}$	"	$2\frac{1}{2}$	"	$3\frac{1}{2}$	"
1	"	$1\frac{1}{2}$	"	2	"	.....		.....		.....	

FORGED EYE BOLTS.







WITH COACH SCREW THREAD.

Prices on application.

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