

The Armstrong Cycle and Motor Agency

Head Office: PERTH

Branches:

FREMANTLE
KALGOORLIE
COOLGARDIE



CATALOGUE OF

Cycle Accessories

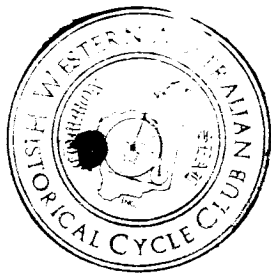
1916

INTRODUCTION

IN submitting our 1916 Accessory Catalogue to our clients and the public, we would point out that this catalogue has been compiled from an experience of twenty years as suppliers of all kinds of Cycle Accessories. We believe everything necessary to the convenience and comfort of cyclists will be found within these pages.

¶ We carry one of the largest stocks in Australia, and make a special feature of prompt delivery to clients through the State.

**THE ARMSTRONG CYCLE
AND MOTOR AGENCY
PERTH, FREMANTLE & GOLDFIELDS**



BROOKS SADDLES AND BAGS.

WE illustrate on this page a few models of the well-known Brooks Saddles.

For quality of material and workmanship, these saddles are unquestionably as good as they can be made.

B10 is perhaps the most widely known light road saddle ever made.

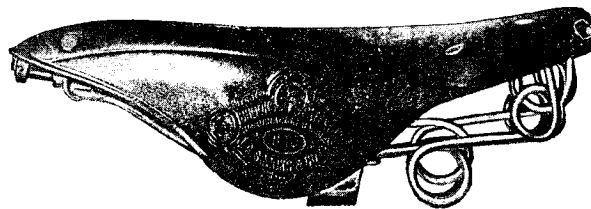
B18 is somewhat similar.

B90 is a roomy saddle, strongly made, luxuriously sprung, and yielding the maximum of comfort.

It is made in three sizes for riders of different weights.

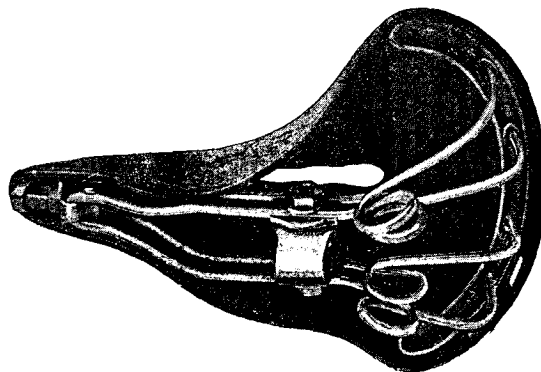
“**Release**” is a very comfortable hammock saddle, whose design facilitates the adjustment of the saddle top.

B10 and B10L. Light Road Saddle.



No. 4.

B18 and B18L. Light Road Saddle.

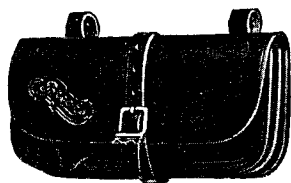


No. 5.

B2765 Tool Bag.

Size :

7 in. × 3½ in. × 2¼ in.

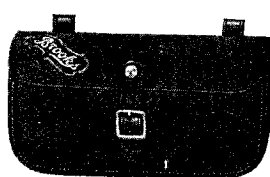


No. 1.

B2501 Tool Bag

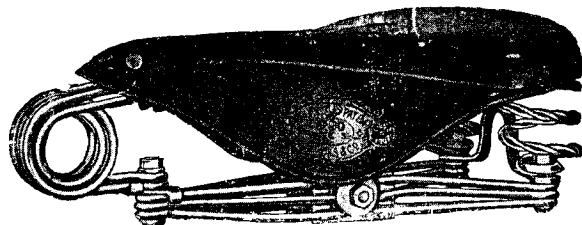
Size :

6½ in. × 3½ in. × 1¼ in.



No. 2.

B90. Road Saddle (Patent).



No. 6

B2769 Tool Bag.

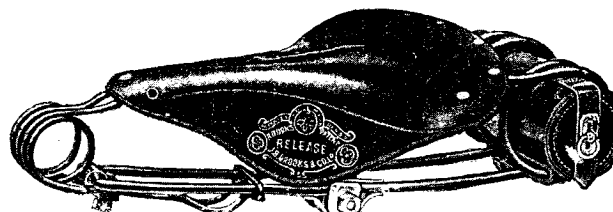
Size :

6¼ in. × 2¼ in. diameter



No. 3.

The “Release” Hammock Saddle.



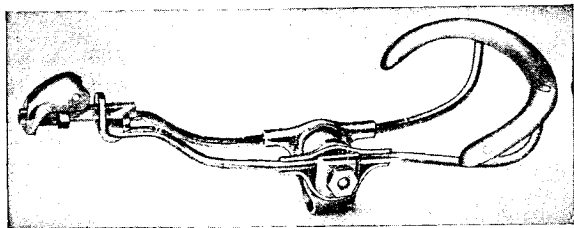
No. 7.

BROOKS PATH RACING SADDLES.

BROOKS "CHAMPION" Racing Saddles are distinguished by the special shape of their tops, these being domed or cambered, so as to allow perfect freedom of movement, and entire absence of chafing.

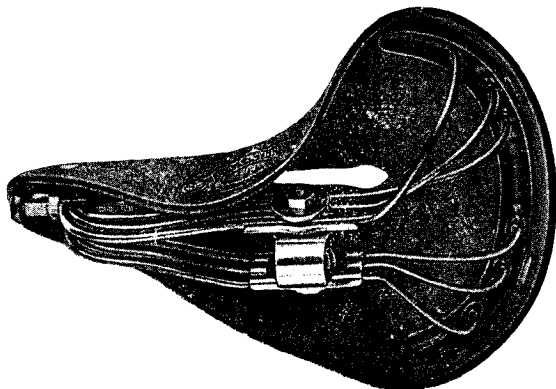
"Champion" models include several sizes of tops, and various forms of spring arrangement, to meet different requirements.

B17C and B17N Path Saddles.
Champion Models.
Made in Gentleman's Model only.



No. 8.

B11 Path Saddle. (Patent).
Made in Gentleman's Model only.



No. 9.

B11 is fitted with springs, which, by spreading outwards at the back of the saddle, prevent sagging.

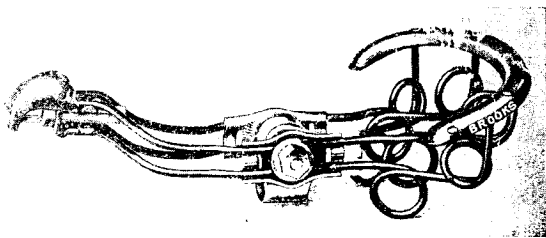
"Champion" Saddle Top, showing cambered seat.



No. 10.

B10 Path Saddle.

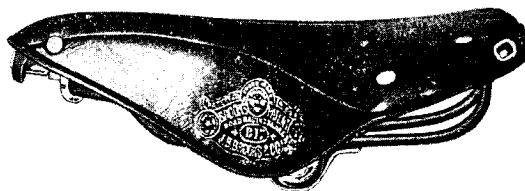
Champion Model. Made in Gentleman's Model only.



No. 11.

Side view of "Champion" Saddle-Top.

B17 Path Saddle.
Made in Gentleman's Model only.

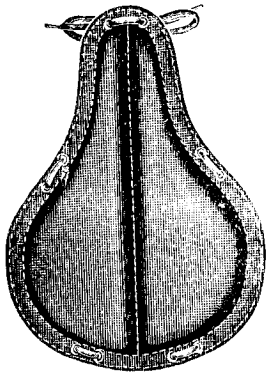


No. 12.

B17 is a light and neat saddle, suitable for the rider who prefers a practically springless seat.

All these Saddles can be obtained in Nickel or Enamel Finish.

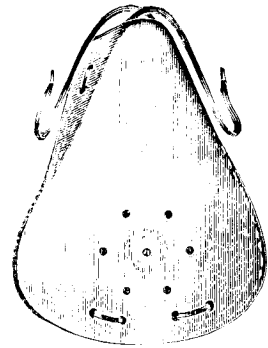
SADDLE COVERS AND PANNIER BAGS.



No. 13.

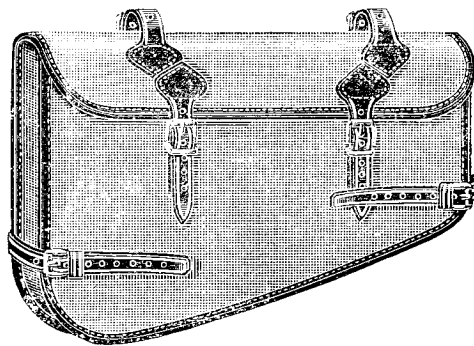
Well padded and nicely designed. This article is to be recommended.

It fastens in position with laces, and is made of good quality felt, with lined back.



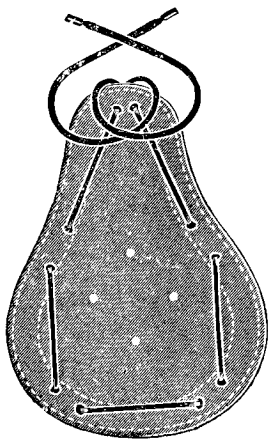
No. 14.

A neat and useful Saddle Cover.



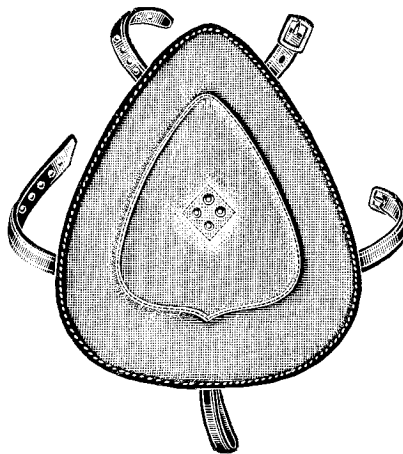
No. 15.

This bag is made in three different qualities, and is an indispensable article when on Tour for carrying clothing, etc. The canvas is waterproof and of good quality.



No. 16.

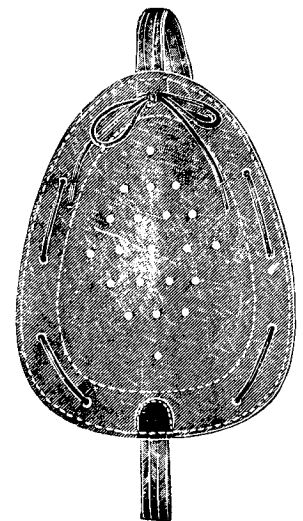
As a cheap Saddle Pad, there is nothing better. It is hard wearing and fastens to the saddle with laces.



No. 17.

This shaped Saddle Pad fits perfectly, and is made with a nose. An excellent quality felt is used, with a hard wearing material on the back. It is very thickly padded and is provided with leather straps.

This pattern is also made in a perfectly waterproof material.



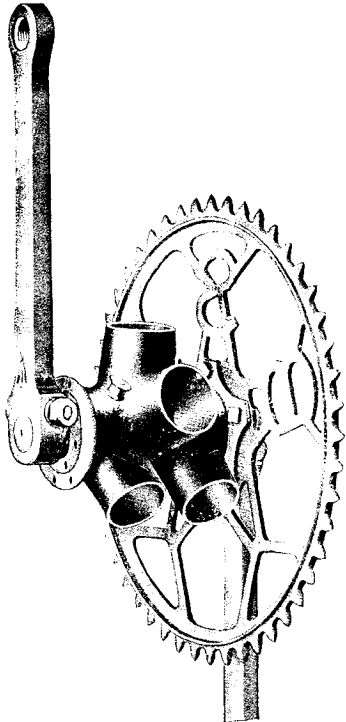
No. 18.

Good quality is used for this article in various shades. It fits with tapes and laces.

This pattern made in single and double felt.

B.S.A. CYCLE FITTINGS.

THE persistent policy of the B.S.A. Company in producing but one quality of B.S.A. Cycle Fittings—the best possible—continues to be justified by results. From the year 1884, when the Company commenced the manufacture of the standard component parts, now universally known as B.S.A. Fittings, the sales have increased, and to-day the name B.S.A. is known the world over as representing the very highest quality in cycle construction.



No. 19.

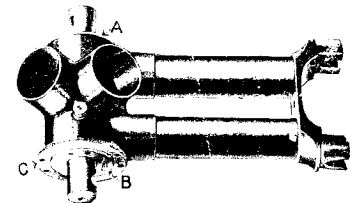
B.S.A. DISC-ADJUSTING CRANK BRACKET AND CHAIN WHEEL.

Loosen the locking ring (C), and after correct adjustment has been obtained by the screwing inward or outward of the left cup (B), tighten the ring (C) against the face of the bracket.

The cup (A) on the chain side is screwed **left hand** thread, and has a solid collar which locks up to the face of the bracket.

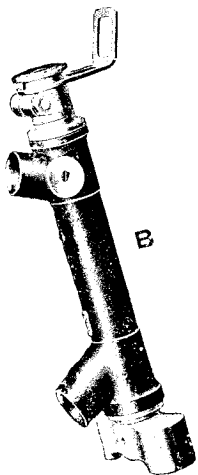
The cup (B) on the left side is screwed **right hand** thread, and projects beyond the bracket face sufficient to allow for the locking ring (C).

Number of balls fitted, 11 each side, size $\frac{1}{4}$ in.



No. 20.

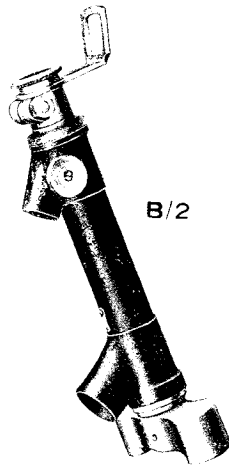
B.S.A. STEERING HEADS.



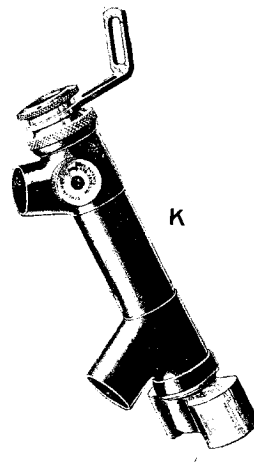
No. 21



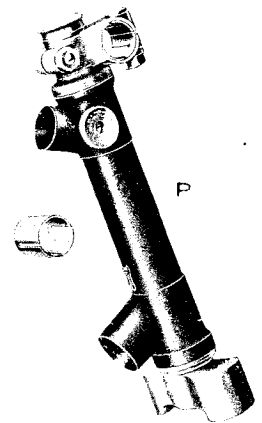
No. 22.



No. 23.



No. 24.



No. 25.

The standard head is designed to take the ordinary handlebar and stem, and is fitted with B pattern clip. Options are offered of the expanding handlebar stem, pattern K; also of the fixed forward lug, pattern S, which allows the bar to be reversed; and the adjustable forward clip R, which allows the bar to be reversed or adjusted to any position.

Oval Open Crowns, both narrow and wide, can be supplied if specially ordered.

The "S" Pattern Racing Steering Heads are now sent out with ordinary Roadster Pattern Clips, but can be fitted with $\frac{1}{2}$ in.

Forward Clips, as illustrated, if required.

Special Steering Heads are supplied when required for use with Handlebars with Expanding Stems.

Steering Heads are also made of intermediate sizes if required.

Special Lugs may be had for Double Top Tube to suit Light Roadster Frame.

B.S.A. CYCLE FITTINGS.

SPANNERS.



No. 26.



No. 27.



No. 28

B.S.A. STAY LUGS.



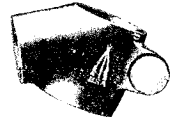
No. 29.

B/2



No. 30.

A P



No. 31.

S



No. 32.

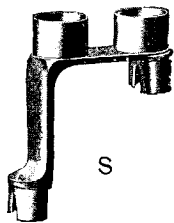
B.S.A. Top Tube Lug (with Struts).

1½ in. × ¾ in., for ¾ in. curved Tube. For lady's frame.



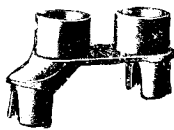
No. 33

B.S.A. BACK FORK BRIDGES.



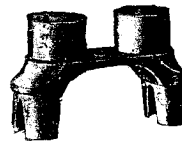
No. 34.

S



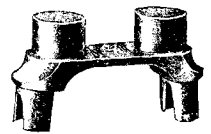
No. 35.

A



No. 36.

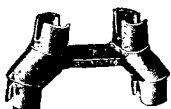
B



No. 37.

C

B.S.A. BACK STAY BRIDGES.



No. 39



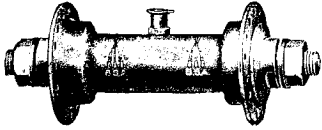
No. 40.



Bridge Piece
for Cranked Back Stays.
No. 41.

B.S.A. CYCLE FITTINGS.

B.S.A. HUBS.

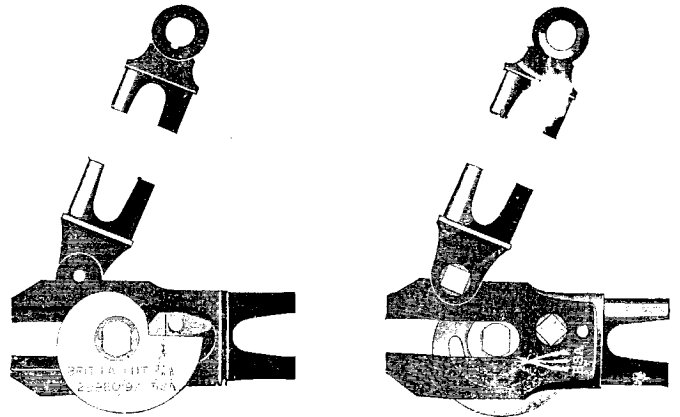


No. 41.

To ensure perfect lubrication, all B.S.A. Hubs are made oil-retaining and are dust-proof. They are constructed of the finest selected material by skilled workmen using the most up-to-date machinery, and are as near mechanical perfection as it is possible to make them. They are suitably screwed to take either B.S.A. Mark I, or Hyde Free Wheel Clutches.

B.S.A. BACK FORK ENDS. (With Cam Chain Adjustments.)

For $.875 \times .557$ in. D Section, Back Stays 22 Gauge.
 „ $1.012 \times .657$ in. D Section, Back Forks 19 Gauge.
 (External Dimensions.)

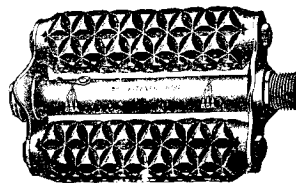


No. 42.

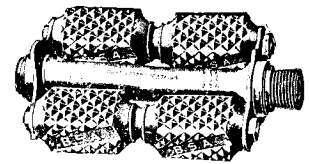
B.S.A. PEDALS.



No. 43.



No. 44.



No. 45.

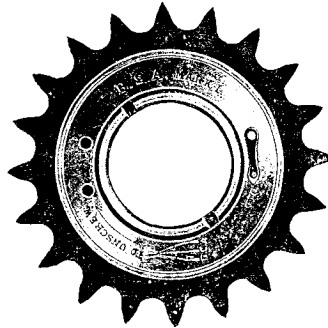
Standard Sizes :

Rat-Trap, $3\frac{1}{4}$ in., $3\frac{1}{2}$ in., $3\frac{3}{4}$ in., 4 in., $4\frac{1}{4}$ in.
 Rubber, $3\frac{1}{4}$ in., $3\frac{1}{2}$ in., $3\frac{3}{4}$ in., 4 in., $4\frac{1}{4}$ in., $4\frac{1}{2}$ in.
 Divided Rubber, $3\frac{1}{4}$ in., $3\frac{1}{2}$ in., $3\frac{3}{4}$ in., 4 in.

Number of balls fitted :

Up to $3\frac{3}{4}$ in. wide : 14 crank end, 11 outer end,
 size $\frac{1}{8}$ in.
 From 4 in. wide : 10 crank end, 9 outer end,
 size $\frac{3}{16}$ in.

B.S.A. CYCLE FITTINGS.



THE B.S.A. MARK I.
FREE WHEEL.
No. 46.

B.S.A. FREE WHEELS.

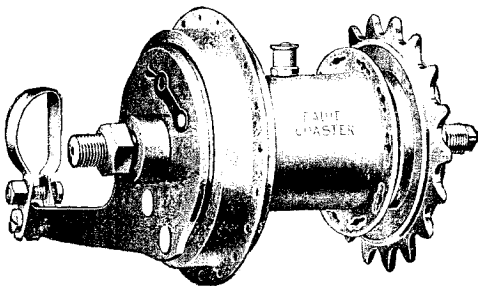
The never-failing efficiency of the B.S.A. Mark I. Free Wheels has secured for them a deservedly popular reputation.

B.S.A. Free Wheels are made in the undermentioned sizes, suitable for fitting to any standard hub, and for use with any style of chain.

Sizes:—8, 9, 10, 11 teeth, 1 in. pitch; 16, 18, 20, 22 teeth, $\frac{1}{2}$ in. pitch;
14, 15, 16, 17 teeth, $\frac{3}{8}$ in. pitch; Eadie and B.S.A. Threads.

Clutches are stocked, bored and tapped to a diameter of $1\frac{3}{8}$ in.; also with soft centres

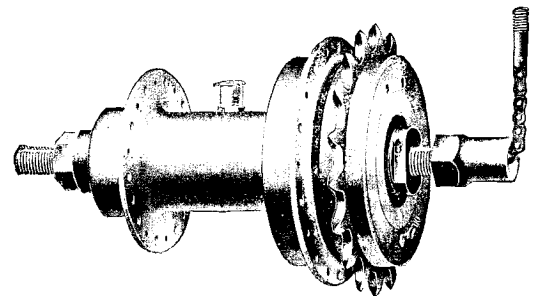
EADIE COASTER AND TWO-SPEED HUB.



No. 47.

The Eadie Coaster Hub links simplicity with security, and is an ideal combination of a frictionless free wheel and perfect brake. Its direct action enables the cyclist to keep complete control over his bicycle down the steepest hill.

Supplied in $1\frac{5}{8}$, $1\frac{7}{8}$, $1\frac{1}{2}$, $1\frac{1}{4}$, $1\frac{3}{8}$ and $1\frac{3}{4}$ in. chain lines, and with 8, 9, 10 and 11 teeth \times 1 in. pitch; 16, 18, 20 and 22 teeth \times $\frac{1}{2}$ in. pitch, and 13, 14, 15 and 17 teeth \times $\frac{3}{8}$ in. pitch.

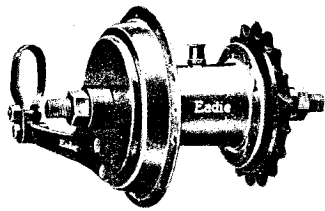


No. 48.

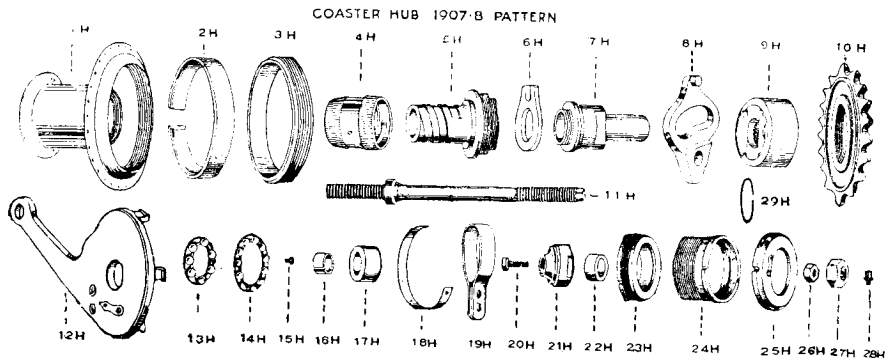
The outstanding feature of the Eadie Two-Speed Hub is that its working parts are comparatively few, making it, without question, the most satisfactory two-speed on both gears.

Stocked in $1\frac{5}{8}$, $1\frac{1}{2}$, $1\frac{3}{8}$ and $1\frac{3}{4}$ in. chain line; 8, 9, 10 and 11 teeth \times 1 in. pitch; 16, 18, 20 and 22 teeth \times $\frac{1}{2}$ in. pitch, and 15 teeth \times $\frac{3}{8}$ in. pitch.

REPLACEMENT PARTS for the EADIE COASTER—1907-8 Pattern.



No. 49.

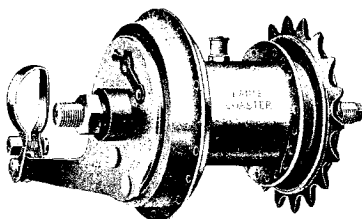


- 1H Shell, with cups and phosphor bronze ring.
- 2H Brake Spring.
- 3H Phosphor Bronze Ring.
- 4H Clutch Nut.
- 5H Driving Screw.
- 6H Cam Cone Lever.
- 7H Cam Cone.
- 8H Brake Lever.
- 9H Clutch Cup and Spring.
(Spring only, 1d.)

- 10H Chain Ring. Price according to size.
- 11H Spindle, with fixed cone.
- 12H Friction Plate.
- 13H Ball Retainer, $\frac{1}{4}$ in.
- 14H Ball Retainer, $\frac{1}{8}$ in.
- 15H Clutch Nut Spring Screw.
- 16H Split Collar.
- 17H Fixing or Check Nut.
- 18H Clutch Nut Spring.

- 19H Chain Stay Clip, with bolts and nuts.
- 20H Adjusting Cone.
- 21H Packing Washer.
- 22H Left-hand Cup.
- 23H Right-hand Cup.
- 24H Lock Nut, complete.
- 25H Spindle Nut.
- 26H Lubricator.
- 27H Clutch Cup Spring.

REPLACEMENT PARTS for the EADIE COASTER—1912 Pattern.



No. 50.

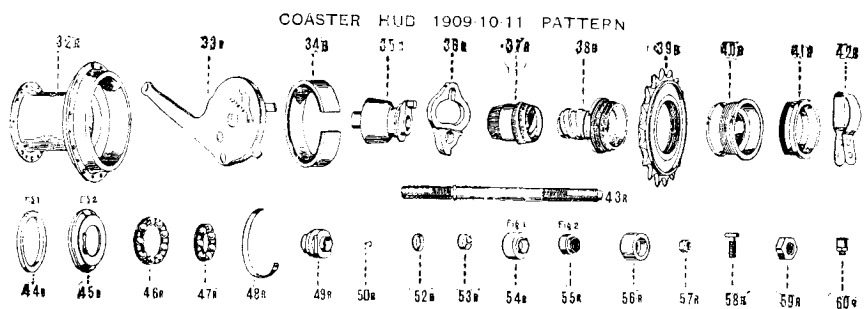


Fig. 1 For Cam Adjustment

Fig. 2 For Draw Bar Adjustment

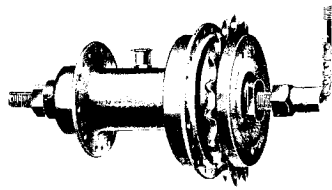
- 32R Shell, with cups and serrated ring.
- 33R Friction Plate.
- 34R Brake Spring and phosphor bronze ring.
- 35R Brake Cone and Lever.
- 36R Brake Spring Lever.
- 37R Clutch Nuts.
- 38R Driving Screw.
- 39R Chain Ring.
- 40R R.H. Cups.

- 41R L.H. Cups.
- 42R Chain Stay Clips, complete.
- 43R Spindle only.
- 44R Lock Ring
- 45R Lock Nuts, with oil hole cover.
- 46R Ball Retainers, with balls, large.
- 47R Ball Retainers, with balls, small.
- 48R Clutch Nut Spring.
- 49R Adjusting Cone.
- 50R Clutch Nut Spring Screw.

- 52R Split Collar.
- 53R Fixing-Nut.
- 54R Spindle Collar.
- 55R Chain Stay Clip Nut.
- 56R Chain Stay Clip Screw.
- 57R Spindle Nuts.
- 58R Lubricator.
- 59R
- 60R

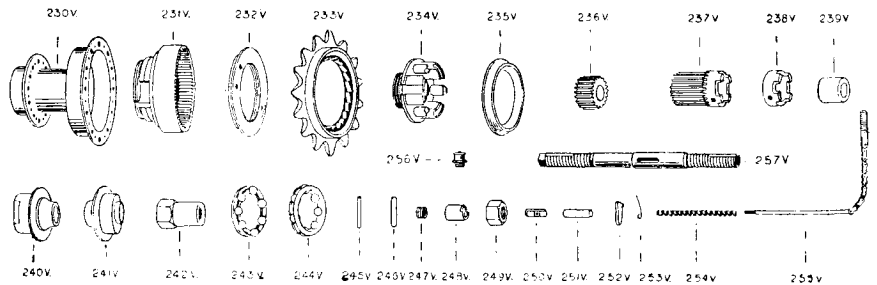
REPLACEMENT PARTS of the EADIE TWO-SPEED HUB.

Mark II, 1912.



No. 51

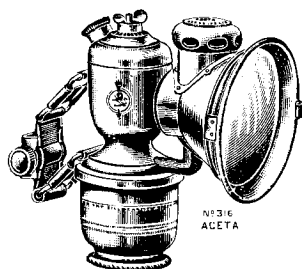
EADIE TWO SPEED HUB MARK II.—GEARING DOWN



- | | | | |
|------|---|------|-------------------------|
| 230v | Hub Shell with left-hand cup fixed. | 244v | Ball Cage with Balls. |
| 231v | Clutch Part. | 245v | Detaining Clutch Peg. |
| 232v | Free Wheel Outer Plate with Oil Hole Cover. | 246v | Fixed Cone Peg. |
| 233v | Free Wheel Chain Ring. | 247v | Grub Screw. |
| 234v | Pinion Carrier. | 248v | Pinion Bush. |
| 235v | Ball Race Ring. | 249v | Spindle Nut. |
| 236v | Planet Pinions, 24 teeth. | 250v | Actuating Pin. |
| 237v | Sliding Pinion. | 251v | Brass Ferrule. |
| 238v | Detaining Clutch. | 252v | Free Wheel Pawl. |
| 240v | Adjusting Cone. | 253v | Free Wheel Pawl Spring. |
| 241v | Fixed Cone. | 254v | Toggle Spring. |
| 242v | Guide Nut. | 255v | Toggle, Chain and Rod. |
| 243v | Ball Cage with Balls. | 256v | Lubricator. |
| | | 257v | Spindle. |

In ordering, the chain line should be stated, and special mention made when required for use with machines built of B.S.A. Fittings.

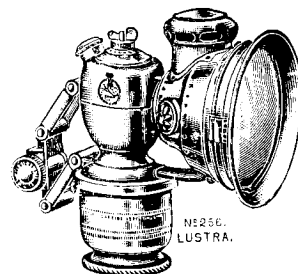
LUCAS CYCLE LAMPS.



No. 52.

5 $\frac{3}{4}$ in. 14 oz. Nickel-plated on Brass.

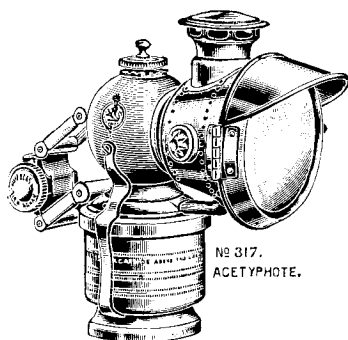
The "Aceta" is particularly well made and always gives satisfaction. The standard finish is plated, but it can be supplied in ebony black.



No. 53.

6 in. 16 oz. Plated.

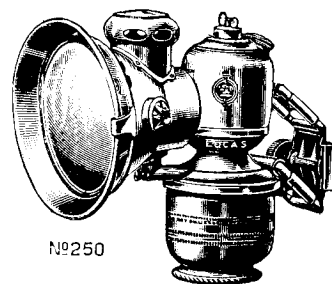
The "Lustra" is a very useful medium-sized lamp. The body is detachable, and with a large size reflector makes an effective and handsome type.



No. 54.

7 $\frac{1}{4}$ in. 34 oz. Plated.

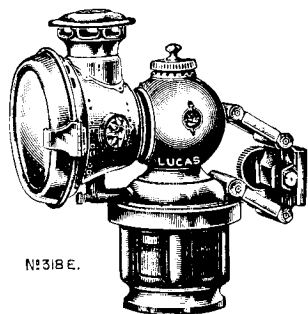
The "Acetyphote" is fitted with a flat-flame burner, parabolic reflector, and extra large water body, and carbide container; specially useful where long burning is desired.



No. 55.

5 $\frac{3}{4}$ in. 16 oz. Plated.

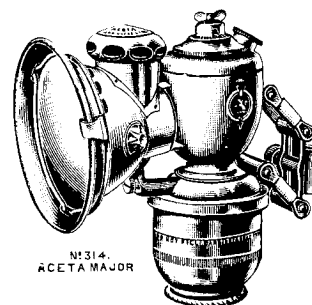
The "Lucia" has a large front and meets the demand of the cyclist who requires good appearance at a strictly moderate price.



No. 56.

Height, 7 in. Weight, 30 oz. Finish, Plated.

The "Calcia King" is a great improvement over the old pattern, having a larger lens front, and a patent fixing for the carbide container. A screw-in pattern cleaner is fitted immediately underneath the burner.

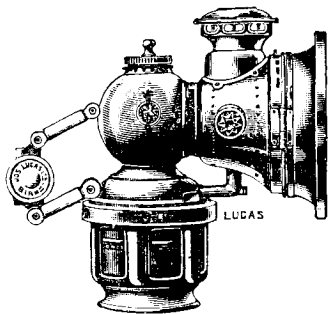


No. 57.

6 $\frac{1}{4}$ in. 19 oz. Plated.

The "Aceta Major" is a very strong and useful lamp.

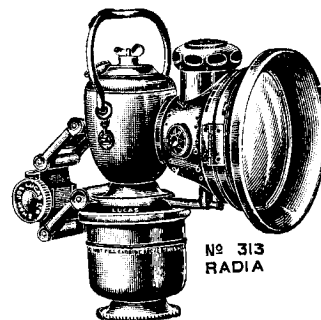
LUCAS CYCLE LAMPS.



No. 58.

7 in. 30 oz. Plated.

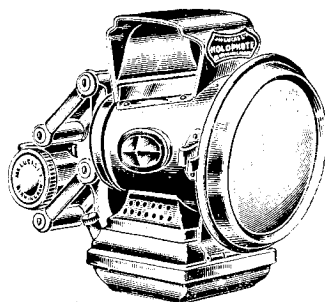
The "**Colonia**" is particularly suitable for touring purposes, being fitted with a double convex lens of extra size.



No. 59.

7½ in. 24 oz. Plated.

The "**Radia**" is a very useful model, and can be used for carrying in the hand.

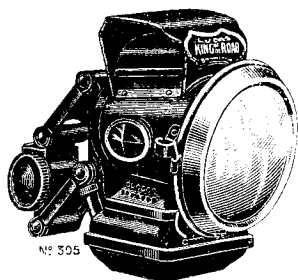


No 307.
HOLOPHOTE.

No. 60.

5½ in. 20 oz. Plated.

The "**Holophote**" is an extremely effective oil lamp, and specially suited to tourists, who require more than the average light.

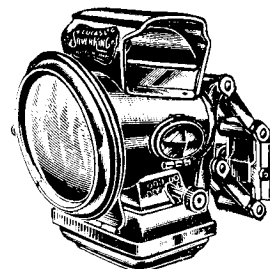


No. 61.

Height, 5 in. Weight, 16½ oz. Lens, 2¼ in.

Japanned.

The "**King of the Road.**" A good reliable oil Lamp.



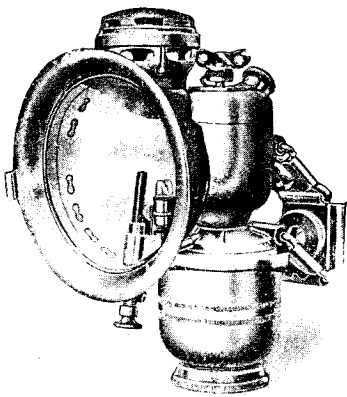
No. 62.

5 in. 16½ oz. Plated.

The "**Silver King**" is a lamp, the reputation of which has stood for many years, and one which can be strongly recommended.

ACETYLENE AND OIL LAMPS.

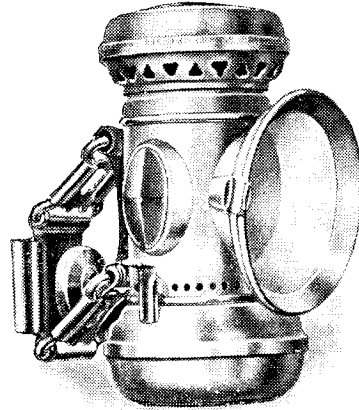
The "Panther"



No. 63.

A new pattern Acetylene Lamp, fitted with Self-lighter. All made of brass, and highly finished.
Height, 6 in. Weight, 14 ozs.

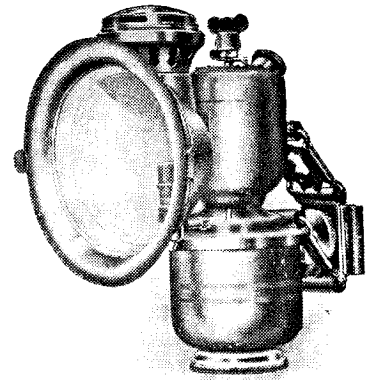
The "Corsair."



No. 64.

A very efficient Oil Lamp. Made of burnish tin, and well plated, and fitted with adjustable screw at back.

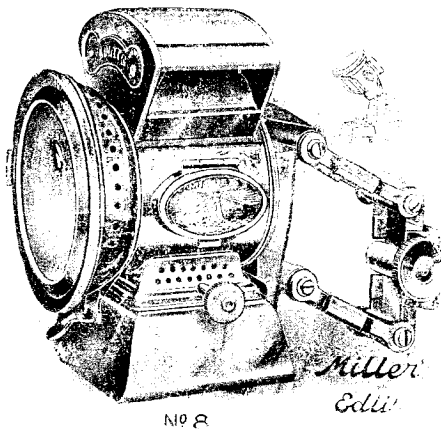
The "Panther."



No. 65.

A new pattern Acetylene Lamp. All made of brass, and highly finished.
Height, 6 in. Weight, 14 ozs.

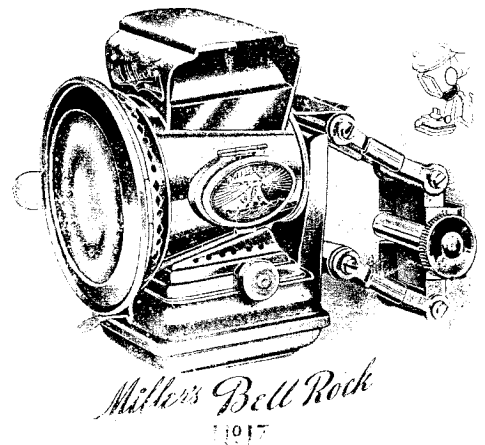
"Edlite."



No. 66.

A first class Oil Lamp. Made of brass throughout. Finest lamp made for "all weather" use.
Height, 5 in. Weight, 19 ozs. Lens, 2 3/8 in.

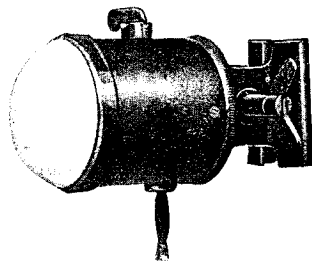
"Bell Rock."



No. 67.

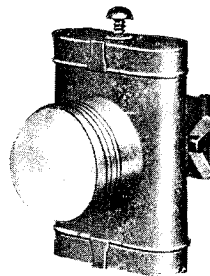
A really good Oil Lamp. Made of brass throughout.
Height, 5 in. Weight, 18 ozs. Lens, 2 1/2 in.

ELECTRIC CYCLE LAMPS.



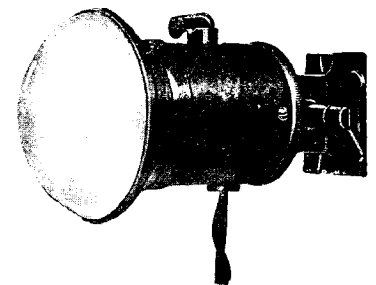
No. 68.

No. 121. Bicycle Lamp. Made from drawn heavy brass, with machine cut threads. Fitted with a handy switch and sound bracket clip, to fasten on to the lamp bracket of the cycle. Fitted with 3 feet of flexible wire to attach to separate battery, With 1 3/4 in. bull's eye lens. Black enamel finish.



No. 69.

No. 507. Bicycle Lamp. 1 3/8 in. lens. Made to unscrew. Spring contact. Whole case nickel-plated. Top and bottom lids hinged with catch hook fitted. Fixed bracket clamp fitted to back.



No. 70.

No. 122. Exactly the same as No. 121, but with a 2 1/4 in. bull's eye lens.

ACETYLENE AND OIL LAMPS.

The "Regalite."



No. 71.

A splendid Lamp, similar to the "Carbo," but without handle, and cheaper fittings. Height, $6\frac{1}{4}$ in. Weight, 19 ozs. Glass, $3\frac{1}{8}$ in. Finish, Plated.

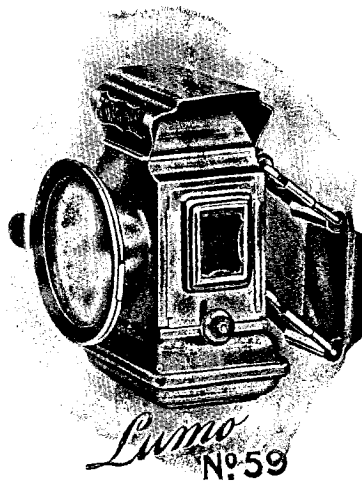


No. 72.

Burner. S 23 A. As fitted to all the lamps illustrated on previous page. Best burner made.

Burner. S 23. A cheaper pattern in same size mount.

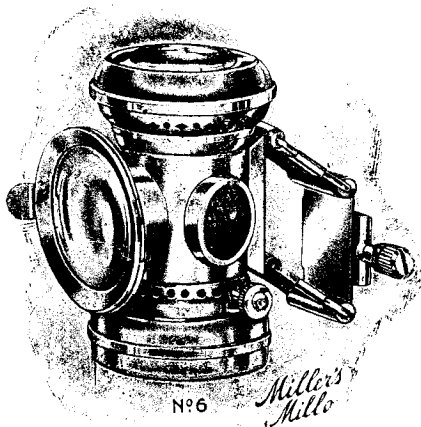
"Lumo."



No. 74.

Similar to the "Lumolite," but with plain front glass and cheaper fittings. Height, $4\frac{3}{8}$ in. Weight, $10\frac{1}{2}$ ozs. Glass, $2\frac{1}{4}$ in. Finish, Plated or Japanned.

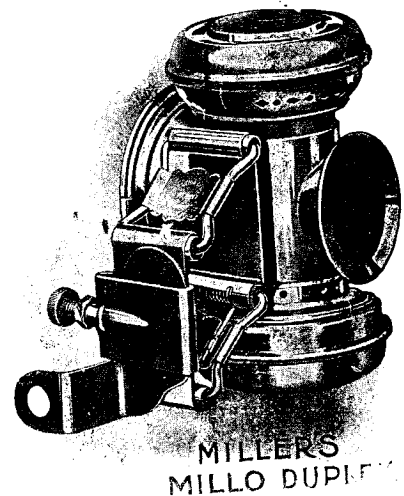
"Millo."



No. 73.

A neat round Lamp of excellent finish. Height, $4\frac{3}{8}$ in. Weight, 10ozs. Glass, $2\frac{1}{4}$ in. Finish, Plated.

"Millo - Duplex."

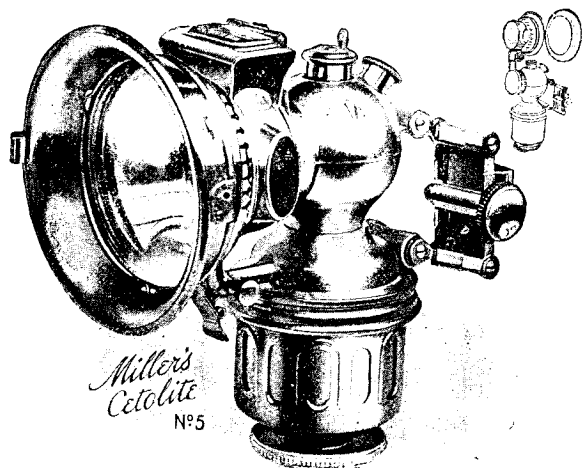


No. 75.

Similar to the "Millo," but adapted to fit on front axle. Shows white front and red rear light. Supplied complete with bracket to fit axle. Height, $4\frac{3}{8}$ in. Weight, $10\frac{1}{2}$ ozs. Lens: front, $2\frac{1}{4}$ in.; red, $1\frac{3}{8}$ in. Finish, Plated.

MILLER'S ACETYLENE LAMPS.

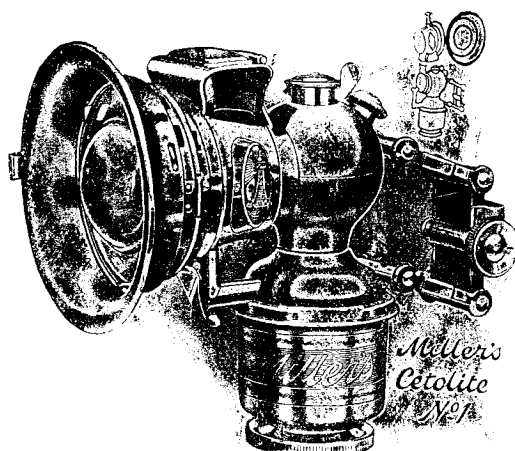
"Cetolite." No. 5.



No. 76.

A first class Lamp made of heavy gauge brass throughout. Double carbide chamber. Front opens right out for cleaning purposes. Patent bracket. Height, 6½ in. Weight, 28 ozs. Glass, 3¼ in. Finish, Plated or Ebony.

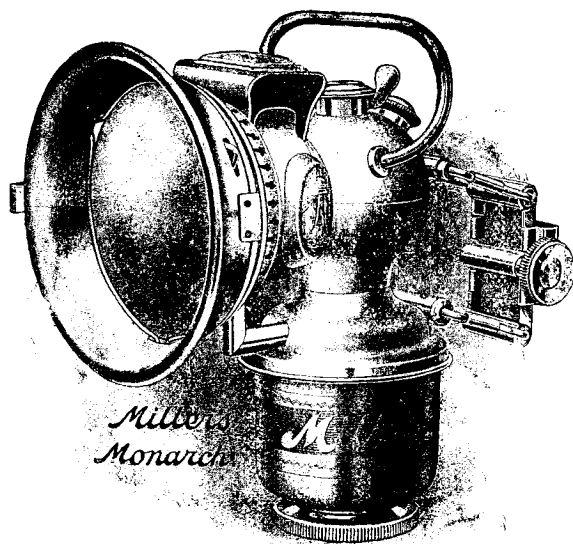
"Cetolite." No. 1.



No. 77.

Contains all the features of "Cetolite" No. 5, except double carbide chamber, and slightly smaller. Height, 6½ in. Weight, 21 ozs. Glass, 3¼ in. Finish, Plated or Ebony.

The "Monarch"



No. 78.

A really good lamp. All brass. Very strong and reliable. Height, (minus handle), 6½ in. Weight, 23 ozs. Glass, 3¼ in. Finish, Plated.

The "Carbo."

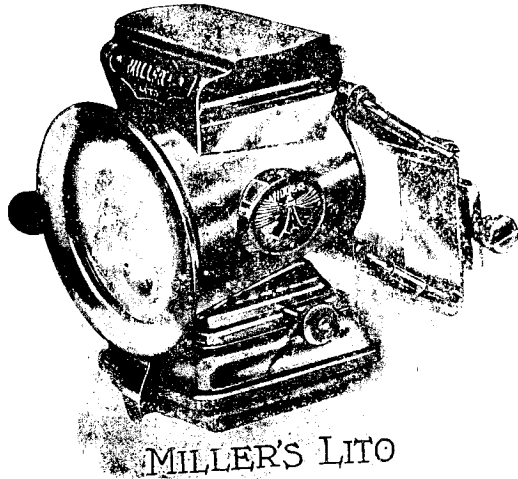


No. 79.

Similar to the "Monarch," but smaller. Of equally high-class materials and finish. Height (minus handle), 6¼ in. Weight, 21 ozs. Glass, 3¼ in. Finish, Plated.

MILLER'S OIL LAMPS.

"Lito."

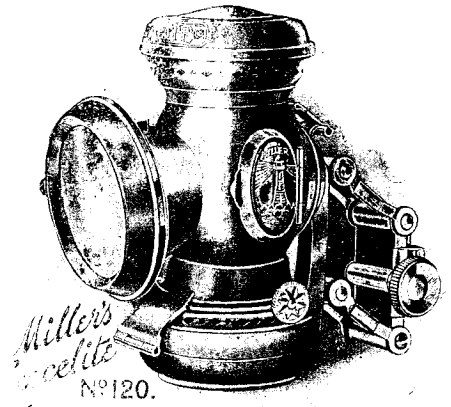


No. 80.

A good Lamp, embodying many of the features of the "Bell Rock," but cheaper materials and finish.

Height, 4 ins. Weight, 12 ozs. Lens, 2 $\frac{3}{8}$ in.

"Excelite."

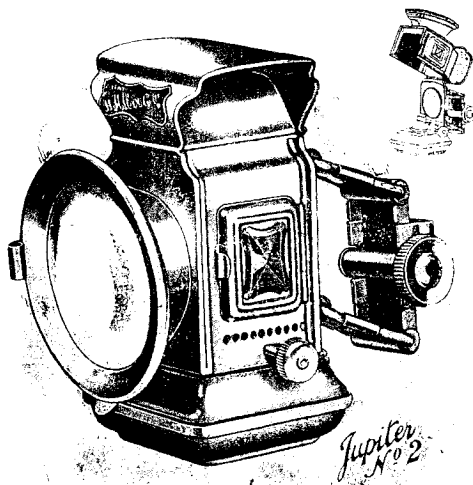


No. 81.

A very good Lamp. Made of brass throughout. Very strong and excellent finish. Opens right out for cleaning purposes. Height, 5 $\frac{1}{4}$ in. Weight, 18 ozs.

Lens, 2 $\frac{3}{8}$ in. Finish, Plated.

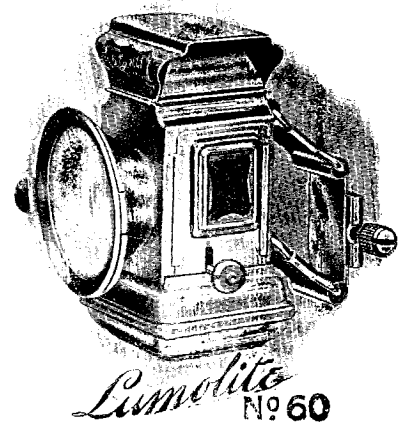
"Jupiter." No. 2.



No. 82.

A very strong Lamp. Extensively used by the British Post Office and Military services. Height, 4 $\frac{3}{4}$ in. Weight, 16 ozs. Lens, 2 $\frac{1}{2}$ in. Finish, Japanned or Plated.

"Lumolite."

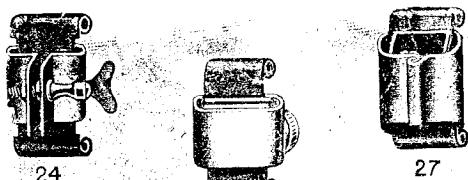


No. 83.

A neat Lamp. Reliable and useful. Fitted with hinged oil tank and side door for lighting purposes. Height, 4 $\frac{3}{4}$ in. Weight, 13 ozs. Lens, 2 $\frac{1}{4}$ in. Finish, Plated or Japanned.

SUNDRY PARTS for MILLER'S OIL LAMPS and LAMP BACKS.

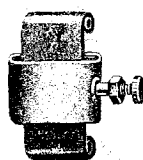
(Illustrated).



24

26

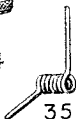
27



30



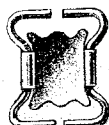
34



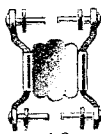
35



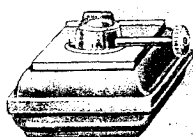
37



38



40



42



43



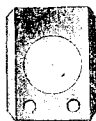
44



45



46



47



48



49



50

No. 84.

Brackets.

- No. 26. Cetolite, Monarch, Carbo, etc.
- „ 27. Lumo.
- „ 30. Millo, Lumolite, etc.

Bracket Screws.

- No. 34. Millo, Lumolite, etc.

Springs.

- No. 35. Back Springs.
- „ 37. Lumo Bracket Spring.

Gates (complete).

- No. 38. Lumo, Millo, etc.
- „ 40. Cetolite, and all best lamps.

Oil Reservoirs.

- No. 42. Lumo, and Lumolite.
- „ 43. Millo.

Burners for Oil Lamps.

- No. 44. $\frac{3}{4}$ in. Burners, plated.

Please give name of Lamp for which required

Side Glasses.

- No. 45. Square or diamond.
- „ 46. Oval, with frame complete.
- „ 46A. Oval or square, without frame.

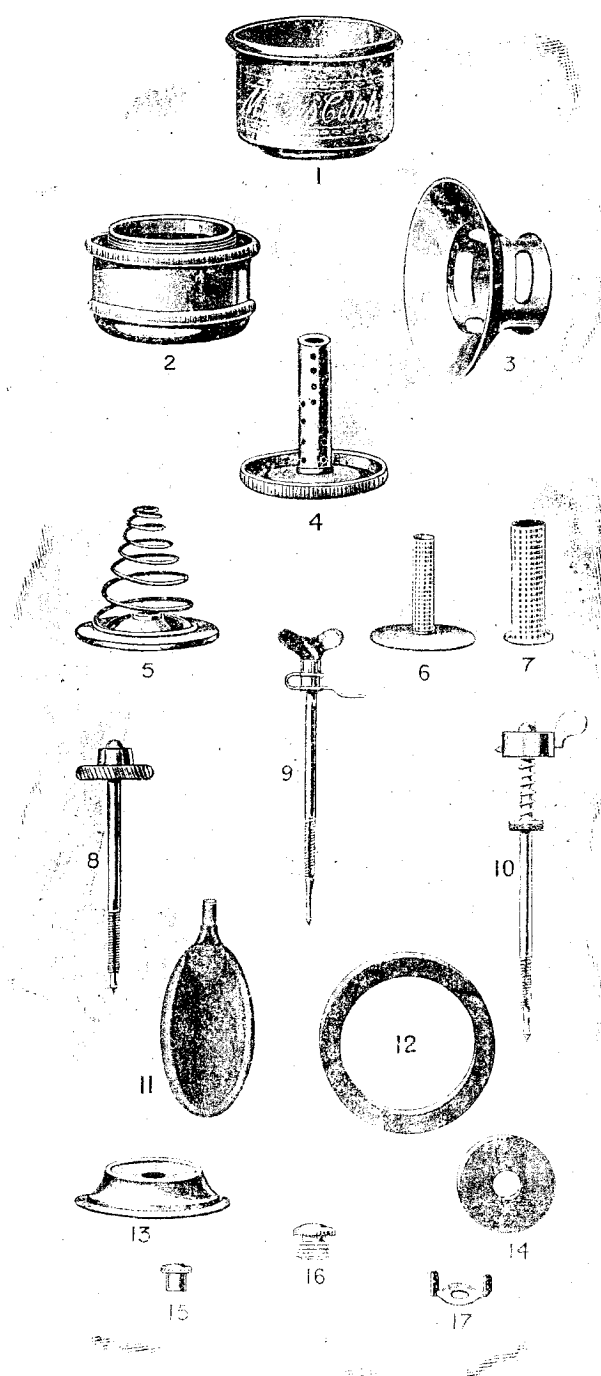
Please give name of Lamp for which required.

Reflectors.

- No. 47. Millo.
- „ 48. Edlite.
- „ 49. Lumolite, Lumo.
- „ 50. Bell Rock.

SUNDRY PARTS for MILLER'S ACETYLENE LAMPS.

(Illustrated).



Carbide Chambers.

- No. 1. Monarch.
- „ 1a. Cetolite, No. 1, Carbo and Regalite.
- „ 2. Cetolite, No. 5.

Aluminium Reflectors (Detachable).

- No. 3. Monarch.
- Carbo and Regalite.

Feet or Locking Screws.

- No. 4. All patterns except Cetolite, No. 5.

Spring Pressure Plates.

- No. 5. Cetolite, No. 5, and Monarch.
- „ 5a. Cetolite, No. 1 Carbo, and Regalite.

Perforated Tubes.

- No. 6. Cetolite, No. 5.
- „ 7. All other patterns.

Valve Rods.

- No. 10. Cetolite and all other patterns.

Gas Bags.

- No. 11.

Rubber Washers.

- No. 12. For all lamps.

Wool Plates.

- No. 13. For all lamps.

Rubber Feet Washers.

- No. 14. All patterns.

Burner Valve Caps.

- No. 15. Cetolite, No. 5.

Feeder Screws.

- No. 16. All lamps.

Wool Plate Screws.

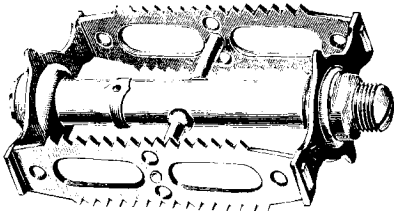
- No. 17. All lamps.

No. 85.

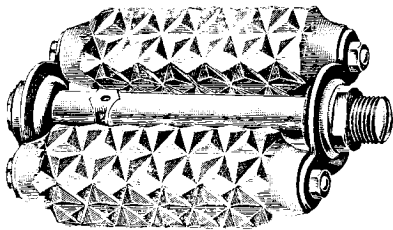
PEDALS.

BRAMPTON'S SPECIALITIES.

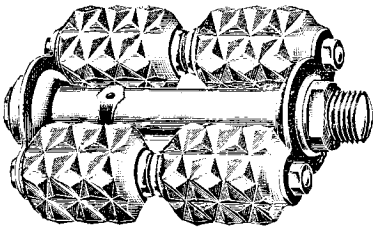
Featherweight.



No. 86.



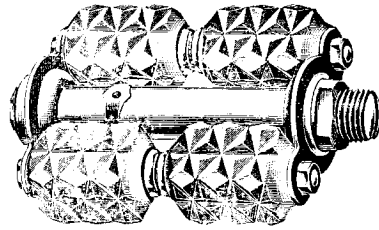
No. 88.



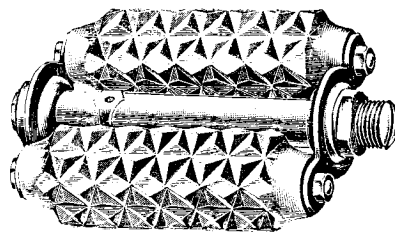
No. 90.

This is an exceedingly neat, well-finished pedal. The edges of all the plates are bevelled and polished, and the pedal made as light as possible consistent with strength. Fitted with milled edge dust cap. Genuine Hoffman's steel balls. Hardened spindles and cones. Heavily plated. Specially suitable for High Grade Light Roadsters.

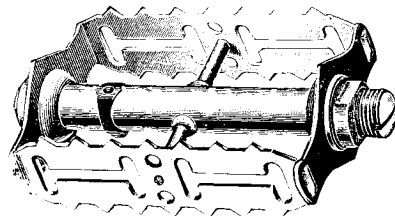
Solid Centre.



No. 87.



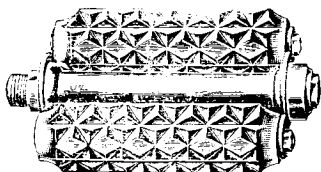
No. 89.



No. 91.

For High Grade Roadsters, where quality is the deciding factor, this pedal can be confidently recommended. Fitted with B.S.A. pattern stretcher bar, hardened spindles and cones, genuine Hoffman's steel balls. Heavily plated. Every detail of the pedal is high class in its finish.

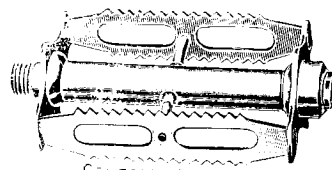
PHILLIPS' "CELTONIA" MODELS.



CELTONIA No. 107.

No. 92.

No. 107 Gents' Full Rubber.
 „ 108 Ladies' Full Rubber.



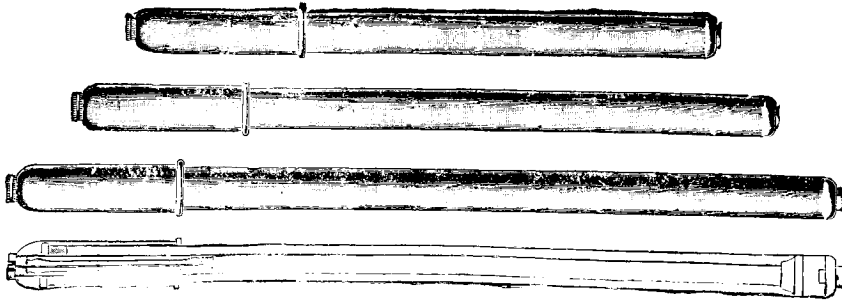
CELTONIA No. 105.

No. 93.

No. 105 Rat Trap.

The Cheapest Line of Pedals in the Market, when taking into consideration Value for Money. CAREFULLY HARDENED BALLRACES, CONES AND AXLES. GOOD FINISH.

HAND AND FOOT INFLATORS.



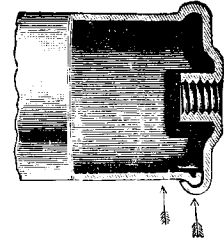
No. 94.

Tubular Handle. Nickel-plated. All with Dunlop Size Best Connections, $3\frac{1}{2}$ long. With Ferrules. Good length of thread in end of Cap.

Supplied in lengths, 9 in., 12 in., 15 in., and 18 in. $\times \frac{3}{8}$ in., $\frac{3}{4}$ in., $\frac{7}{8}$ in., and 1 in.

Section of Pump End.

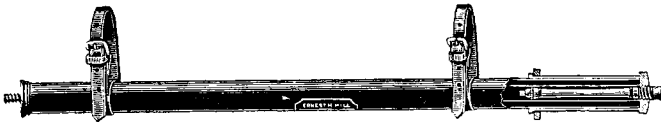
Registered Design No. 567674/10



Solid Rolled Steel End, Unbreakable, Everlasting Wear.

THE "NESTHILL" CYCLE INFLATORS.

The "Compact" Beta Tyre Inflator.



No. 95.

This Inflator is fitted with a non-return valve of novel construction, and straps for attaching to the machine. Nickel-plated, black enamelled, or polished brass. Size, $18 \times \frac{7}{8}$ in.

A pump well known for its superior qualities.

The "Compact" Registered Tyre Inflator.



No. 96.

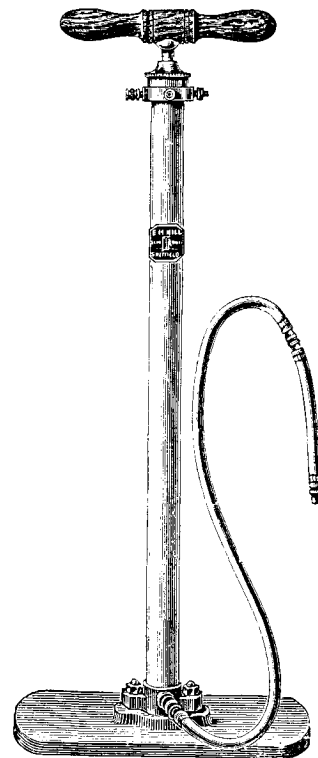
This Inflator is similar in construction to the "Beta," but fitted with Polished Ebony Handle. Nickel-plated, black enamelled, or polished brass. Size, $18 \times \frac{7}{8}$ in.

The "Popular" Tyre Inflator.



No. 97.

Nickel-plated on brass. Size, $15 \times \frac{3}{4}$ in.



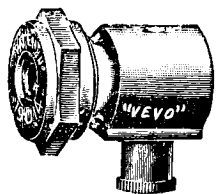
No. 98.

An Ideal Pump for the Workshop, very solid and substantial.

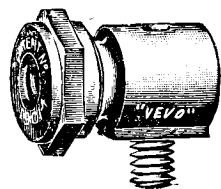
A large, powerful and speedy pump fitted with long extra flexible tube and airtight swivel joint, also adaptors to fit various types, supplied with or without gauge.

HAND INFLATORS and BLUEMEL'S "NO-WEIGHT" INFLATORS.

TYRE CONNECTIONS.



Patent No. 19014/08
No. 99.



Brevet No. 17227/08
No. 100.

The "Vevo" Tyre Connection is an exceedingly simple device for saving trouble in connecting the valve with the pump. No screwing on and off is necessary, and owing to the specially constructed rubber washer, will not slip off during inflation.



No. 101
The "Sterling." Size, 18 in. \times $\frac{7}{8}$ in.



No. 102.
15 in. \times $\frac{5}{8}$ in. Weight, 4½ oz.

These Inflators are guaranteed to be of excellent finish, quality, and good workmanship. They are all carefully tested, and the greatest care is given to every detail in manufacture. They are fitted with Bluemel's patent connection, which, being made with a spring collar, obviates the tedious operation of screwing into the pump handle. The connection is merely pressed in, the spring collar holding it securely.

THE "AD" INFLATOR CONNECTIONS.



No. 103.

The "AD" Black and White Inflator Connection, is the strongest and most perfection connection made, having non-stretching, non-kinking twin coils and lock-joint ends. Has a most attractive appearance.



No. 104.
Leather covered. 4¾ in. long. Ferruled Ends.



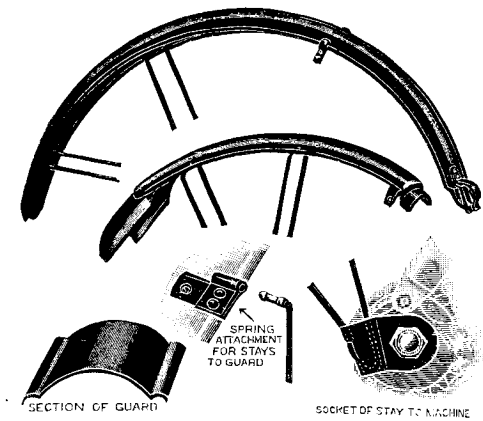
No. 105.
Best braided Tube. 5 in. long. Patent bands.
Spring ends.



No. 106.
Best braided Tube. 4¼ in. long. Patent bands.

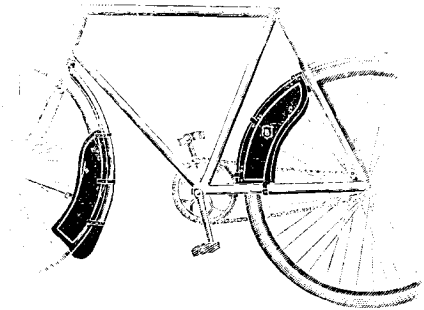
The "AD" Inflator Connections, are of superior quality, having double bands and double strength.
Can be very highly recommended.

BLUEMEL'S MUDGUARDS and GEAR CASES.



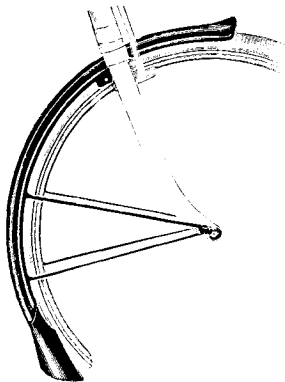
No. 107.

The "**Noweight**" celluloid detachable Mudguards are ideal for speedy and featherweight machines. They can be instantly attached or detached, owing to the special small springs which have been substituted for leather straps.



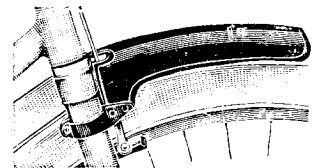
No. 108.

The black celluloid side Mudguards shewn in the above illustration, have been remodelled and enjoy a great popularity. They are extremely efficient and easy to attach. Being moulded with a beaded panel, they present a smart appearance. They will fit any machine, and can be taken off in a few minutes.



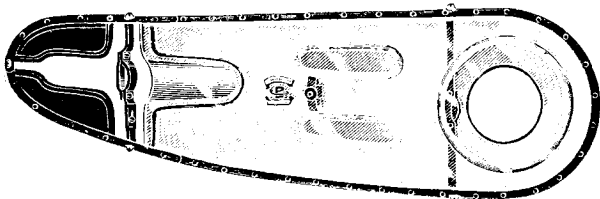
No. 109.

The "**Noweight**" front Mudguard and extension is in one piece, and is only suitable for bicycles with wide brake stirrups, measuring not less than $2\frac{3}{4}$ in. inside.

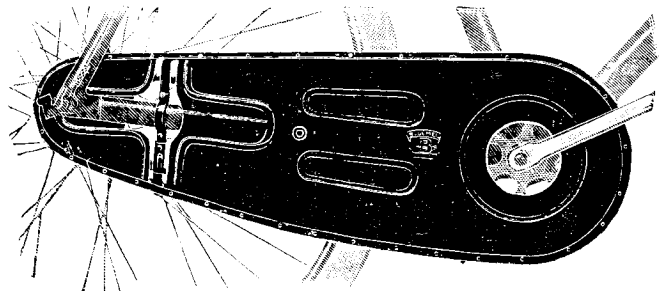


No. 110.

The above illustration shews the "**Noweight**" front extension guard fitted to a machine and ready for use. It will fit any shape tube.



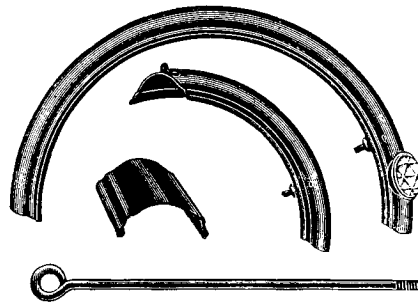
No. 111.



No. 112.

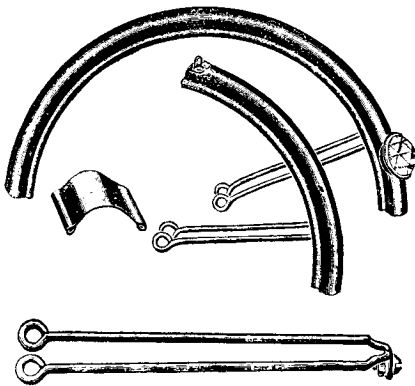
The "**Challenge**" detachable chain cover is suitable for either ladies' or gents' machines. It is supplied in transparent, also black celluloid, and can be lengthened or shortened to suit cycles with centres varying from 18 in. to $20\frac{1}{2}$ in., as it is fitted with a patent extending endpiece.

ILLUMINATED CYCLE MUDGUARDS.



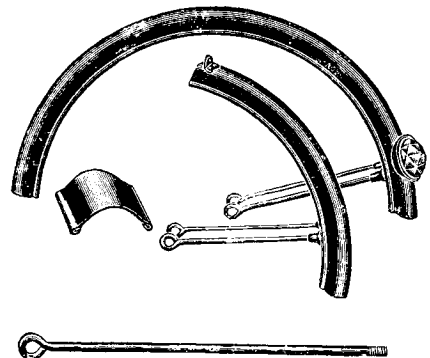
No. 113.

No. 1. 61 blade, 2 $\frac{1}{4}$ in. Enamelled. With rustless stays.



No. 114.

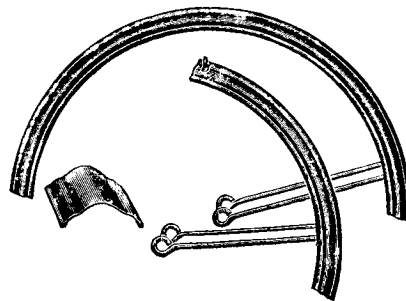
No. 2. 34 blade, 2 $\frac{1}{16}$ in. Enamelled. With rustless stays.



No. 115.

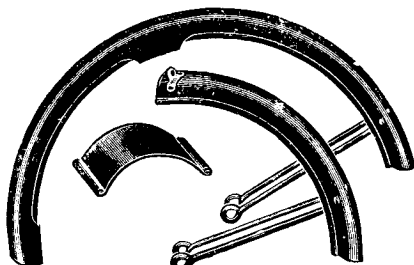
No. 3. 34 blade, 2 $\frac{1}{16}$ in. Enamelled. With rustless stays.

PLAIN CYCLE MUDGUARDS.



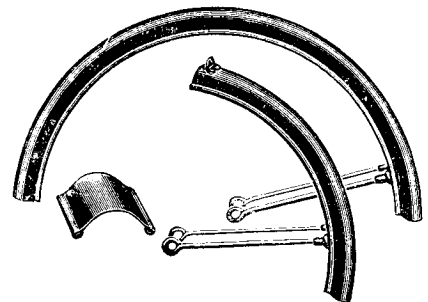
No. 117.

No. 23. 2 $\frac{1}{16}$ in. blades. Enamelled. With rustless stays.



No. 116.

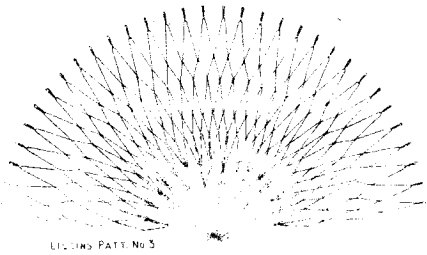
No. 27. 2 $\frac{1}{2}$ in. Blades. Enamelled. With detachable stays.



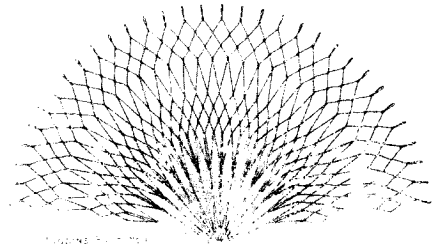
No. 118.

No. 62. Enamelled. With rustless stays. Stays screw into bridges.

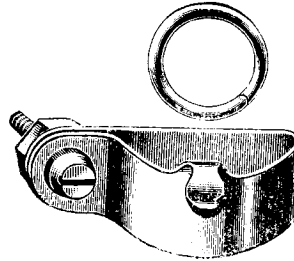
LIGGINS' DRESS GUARDS.



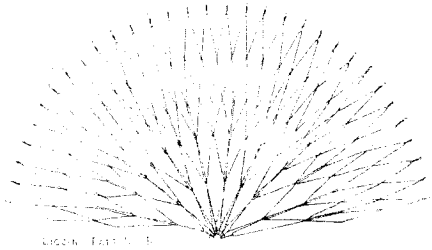
No. 119.
Best Quality Cord. 28 × 32 hooks.



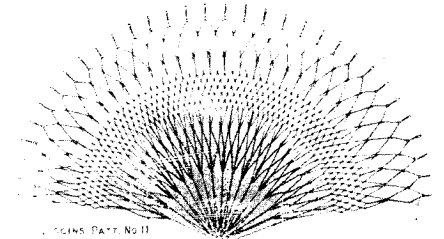
No. 121.
Best Quality Cord. 28 × 32 hooks.



No. 120.
Liggin's Detachable and Adjustable Quadrant.
Brass. Highly plated.



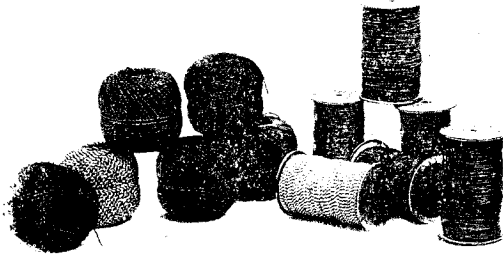
No. 122.
Medium Quality Cord. 28 × 32 hooks



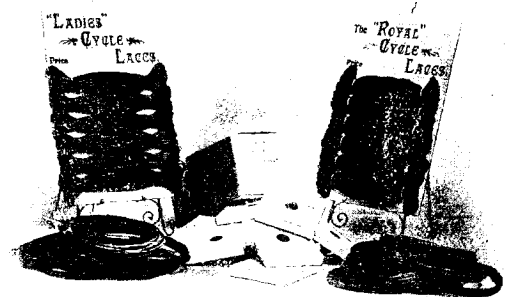
No. 123.
Superior Quality Cord. Special close mesh. 28 × 32 hooks.

These guards, having elastic ends, are at once taut and symmetrical when attached to the machine, and are not affected by the weather.

LACING CORDS AND BRAIDS.



No. 124.
144 yard Reels or Balls.



No. 125.
24 yard Coils, Cards or Cartons.

THE STOCK COLOURS AND RESPECTIVE NUMBERS ARE :

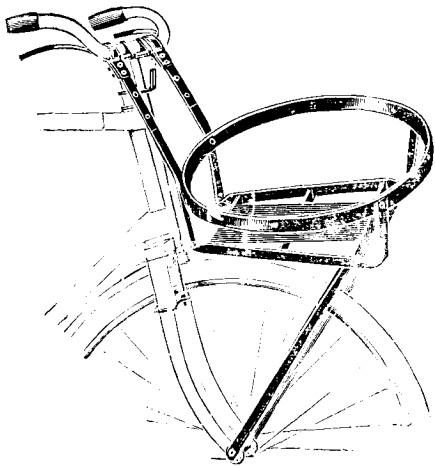
Black.	Blue.	Chocolate.	Green.	Gold.	Black & Green.	Black & Gold.	Black & Red.	Black & White.	Chocolate & Blue.	Green & Gold	Red.
1	2	3	4	5	6	7	8	9	10	11	12

THE BRAIDS WITH ONLY A SPECK OF COLOUR ARE :

Black & Green Speck.	Black & Gold Speck.	Black & Red Speck.	Black & White Speck.	Green & Gold Speck.
6½	7½	8½	9½	11½

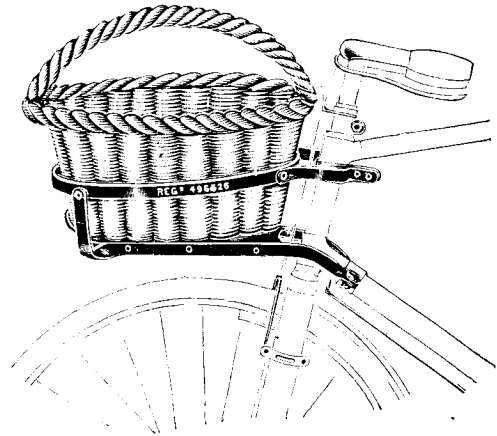
These Numbers can also be used to describe the Dress Guard Colourings.

TRADESMEN'S CARRIERS.



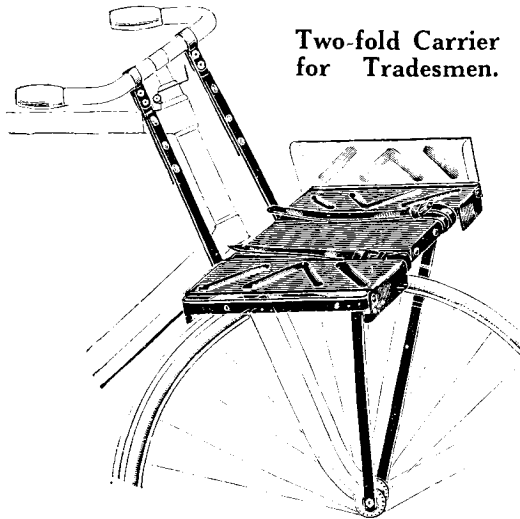
No. 126.

Tradesman's Carrier. Size, 18 × 12 ins.
Enamelled, with nickel-plated fittings.



No. 127.

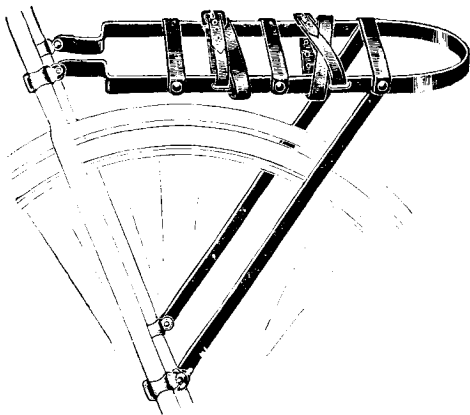
Enamelled Carrier with nickel-plated fittings.
Oval, 18½ × 14½ ins. Oblong, 18 × 12 ins.



**Two-fold Carrier
for Tradesmen.**

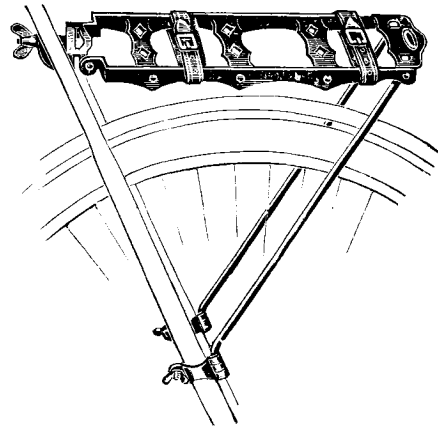
No. 128.

Can be used for carrying large parcels. Extra long straps being provided, or by simply turning four thumb screws two shelves are raised and a receptacle thus formed for a basket.



No. 129.

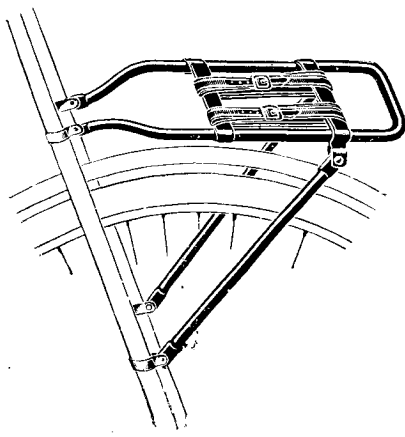
Extra Strong Carrier. Size, 15 × 6 ins.
Straps, ¾ × 30 ins.



No. 130.

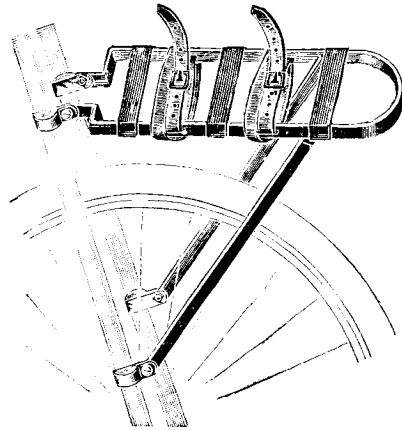
A special **Tourist's Carrier** for front or back.
Enamelled or nickel-plated. Size, 13 × 5¼ ins.
Straps, ¾ × 27 ins.

CYCLE LUGGAGE CARRIERS.



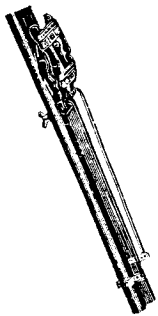
No. 131.

Size, $15 \times 7\frac{3}{4}$ in. Straps, $\frac{5}{8} \times 34$ in. Has extra wide platform suitable for carrying heavy parcels.

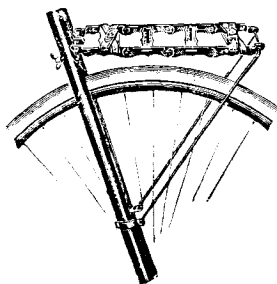


No. 132.

Size, 14×5 in. Enamelled. Very popular model.

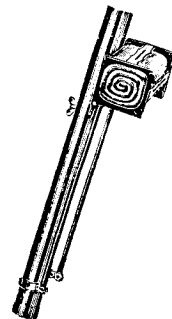


Closed entirely when not required for use.

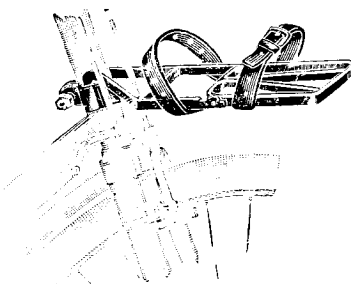


No. 133.

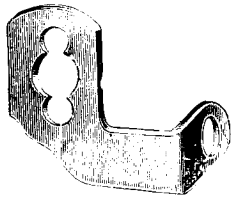
Threefold Carrier. Absolutely unique. Rivetless and possessing great strength combined with neatness.



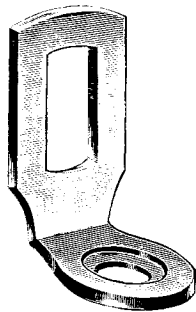
Shewn as a Cape Carrier.



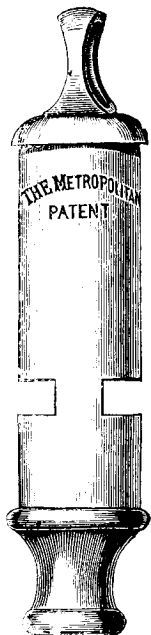
LAMP BRACKETS, WHISTLES and TOE CLIPS.



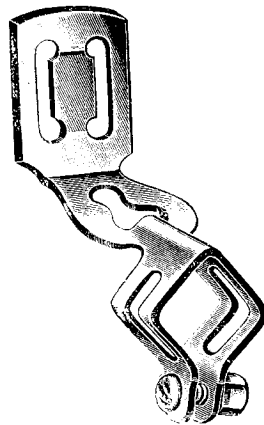
No. 134.
Spindle Lamp Bracket.



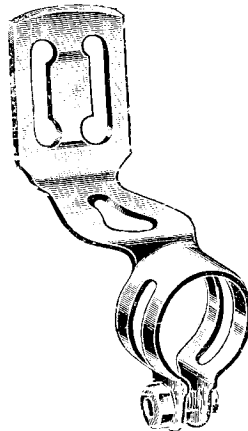
No. 137.
Expander Head Lamp Bracket. Plated on copper.



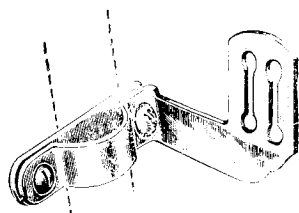
No. 141.
Genuine Metropolitan Police Whistle.



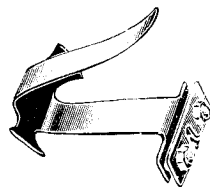
No. 135.
Square or Oval section Lamp Bracket, to suit Major-Taylor Handlebars. Nickel-plated on copper.



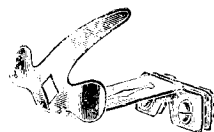
No. 138.
Handle Bar Extension. Nickel-plated on copper.



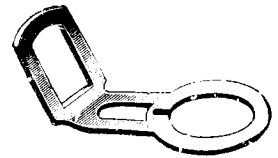
No. 140.
Ashby's No. 1, Front.



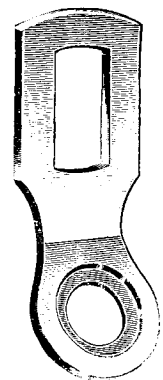
No. 142.
Very strong and well-finished Toe Clips.



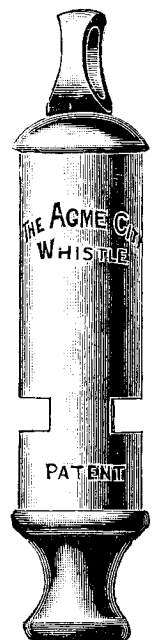
No. 143.



No. 136.
Plain Lamp Bracket.



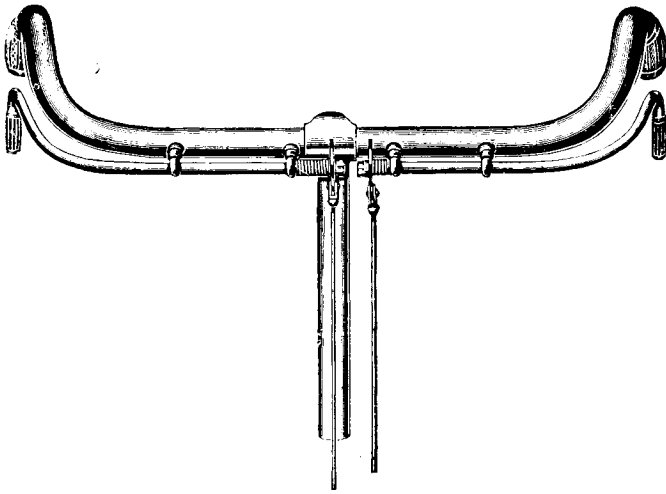
No. 139.
Best finish Lamp Bracket. Plated on copper.



No. 144.
Genuine Acme City Police Whistle.

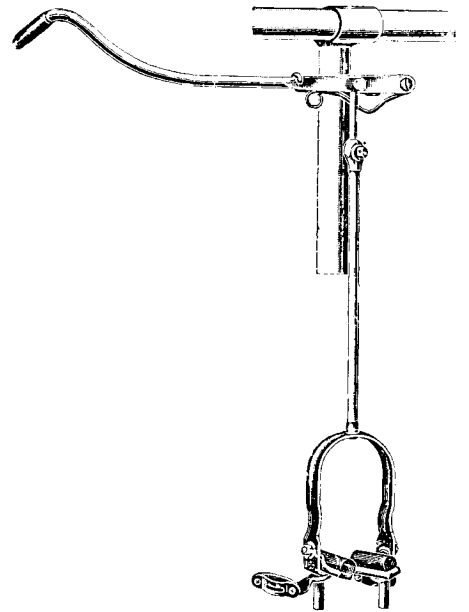
PHILLIPS' RIM BRAKES.

PHILLIPS' PULL-UP FRONT RIM BRAKES.



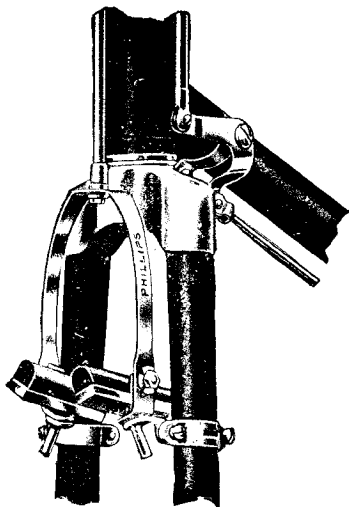
No. 145.

“Anglo” Superior Model. With patent Brake level attachment, No. 9222/09. Made in Flat and Raised. Stock sizes of Handlebars : $\frac{7}{8}$ in. Top by $\frac{3}{8}$ in. Stem. Fitted with special size Stems, 6d. each extra.



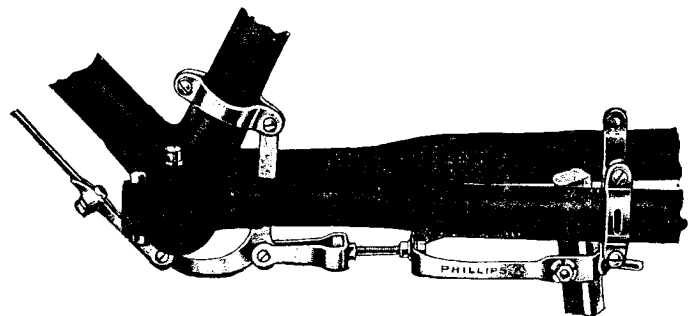
No. 146.

“Quickfit” Model. No. 50. Fitted with small lever grip. $\frac{7}{8}$ in. stem clips. D or oval fork clips. With long levers for Flat, Raised, or R.W. pattern handlebars. Also with short levers to suit any shape handlebar.



No. 147.

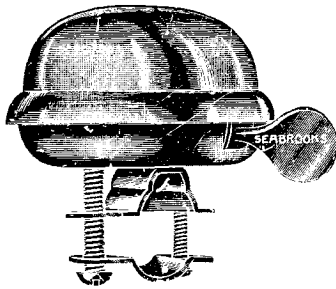
Our “ANGLO” Handlebars and Brakes are the Cheapest Line in the market when taking into consideration value for money.



No. 148.

“Seabrook” Patent Ideal Bells.

ROTARY ACTION.



No. 149.

Seabrook Ideal Bells.

201S. 202S. 203S. 204S.

They are better **nickelled** and ring louder and clearer than any other cheap line made.

They are not Continental made, being made much stronger.

SEABROOK BELLS HAVE A LARGER SALE THAN ANY OTHER LINE.

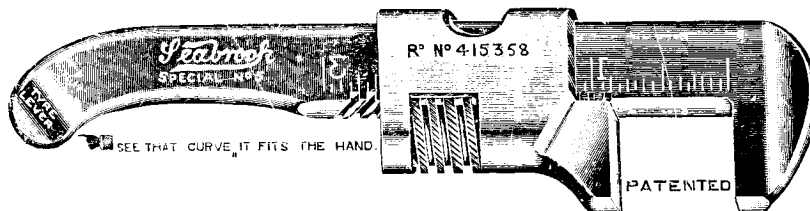
The Famous “Seabrook” Spanners.

With New Hardened **Solid Narrow Jaws.** Special Nickel Plate.

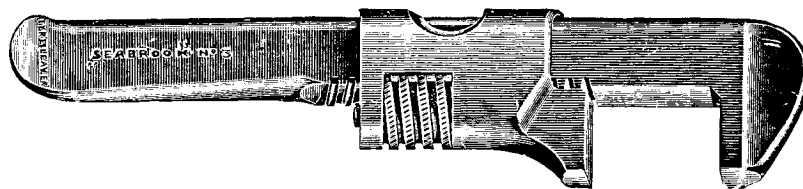
Which have four times the sale of any other adjustable ones made or sold in Britain.

CYCLE, MOTOR, MOTOR CYCLE AND ENGINEERS’

They are drop-forged from High Carbon Steel. **The jaws are all made solid, being one piece** (a cheaper way is rivetting several pieces together, but spanner jaws made in this way are worthless). Carded for Window Display



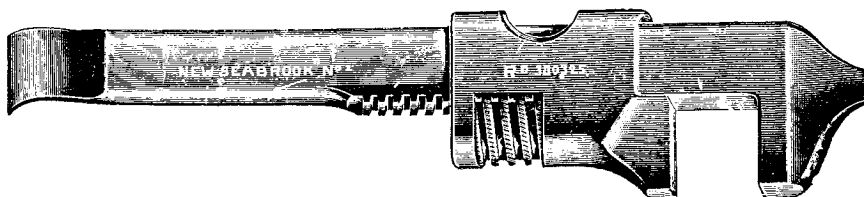
No. 150. Seabrook No. 5.



No. 151. Original Tyre Lever. Seabrook No. 3.

Motor and Engineers’ Spanners.

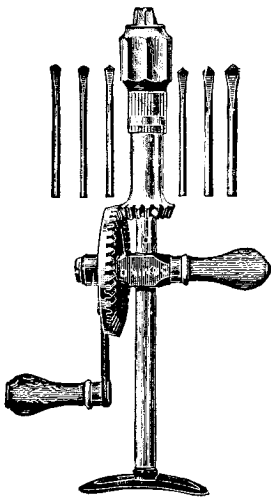
(Our Registered Designs.)



No. 152. Seabrook No. 2.

BREAST DRILLING MACHINES, CYCLE HEAD PARTS, ETC

Breast Drilling Machine.



No. 153.

13 in. long. (With 6 drills.)
Drill chuck to fit brace bits.

Ball Races.

Standard sizes.



No. 156.

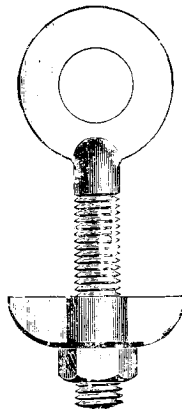
Crown Ball.
Plated and Polished.



No. 157.

Lug Ball.
Black Finish.

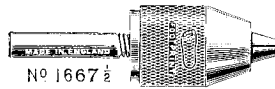
Chain Adjusters.



No. 154.

N.P. Finish.

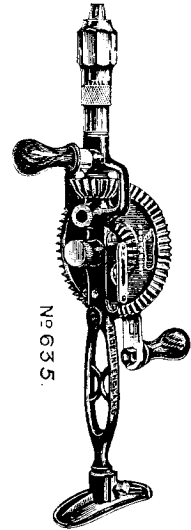
**Three Jaw Self-centring
Chuck.**



No. 153.

To take $\frac{1}{8}$ in. to $\frac{1}{2}$ in. round.

Breast Drilling Machine.



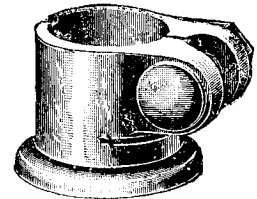
No. 155.

Black japanned frame, nickelled crank and chuck. Adjustable for two speeds. With ball bearings and spirit level.

Note. Steel pinions and cut gears, two pairs of jaws, one for parallel shanks drills up to $\frac{1}{2}$ in. diameter and one for brace bits shanks.

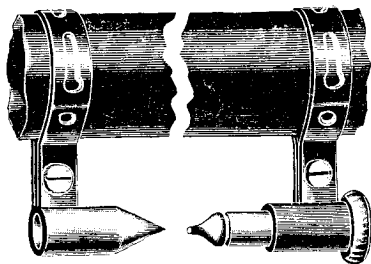
Ball Head Clips.

(Solid). With pins and nuts.



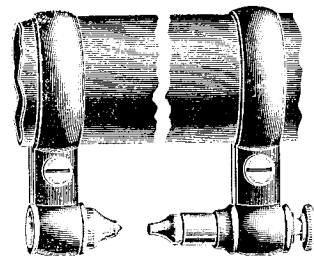
No. 159.

Standard size, $\frac{3}{4}$ in. Plated and polished. Best quality.



No. 160.

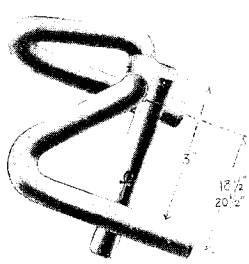
Oval Section Bands. Exceptional value.
Plated all over.



No. 161.

Oval Section Bands. Plated and Polished.
Superior Quality.

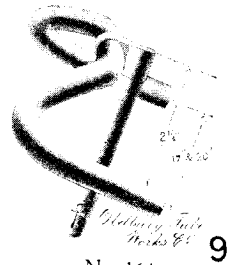
APOLLO-MAJOR-TAYLOR HANDLEBAR.



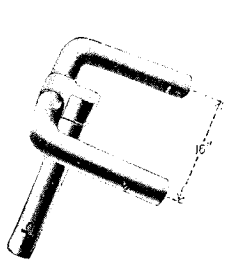
No. 162.
No. 1.—North Road Drop.
3 n. × 18 in. and 20 in. c/cs.



No. 163.
No. 2.—North Road Drop.
4 1/2 in. × 20 in. c/cs.



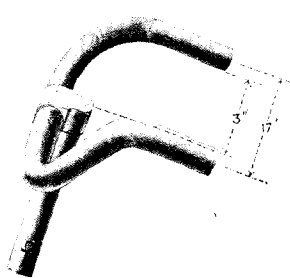
No. 164.
No. 9.—North Road Drop.
2 1/4 in. × 17 in. and 20 in. c/cs.



No. 165.
No. 6.—Flat.
16 in. c/cs.

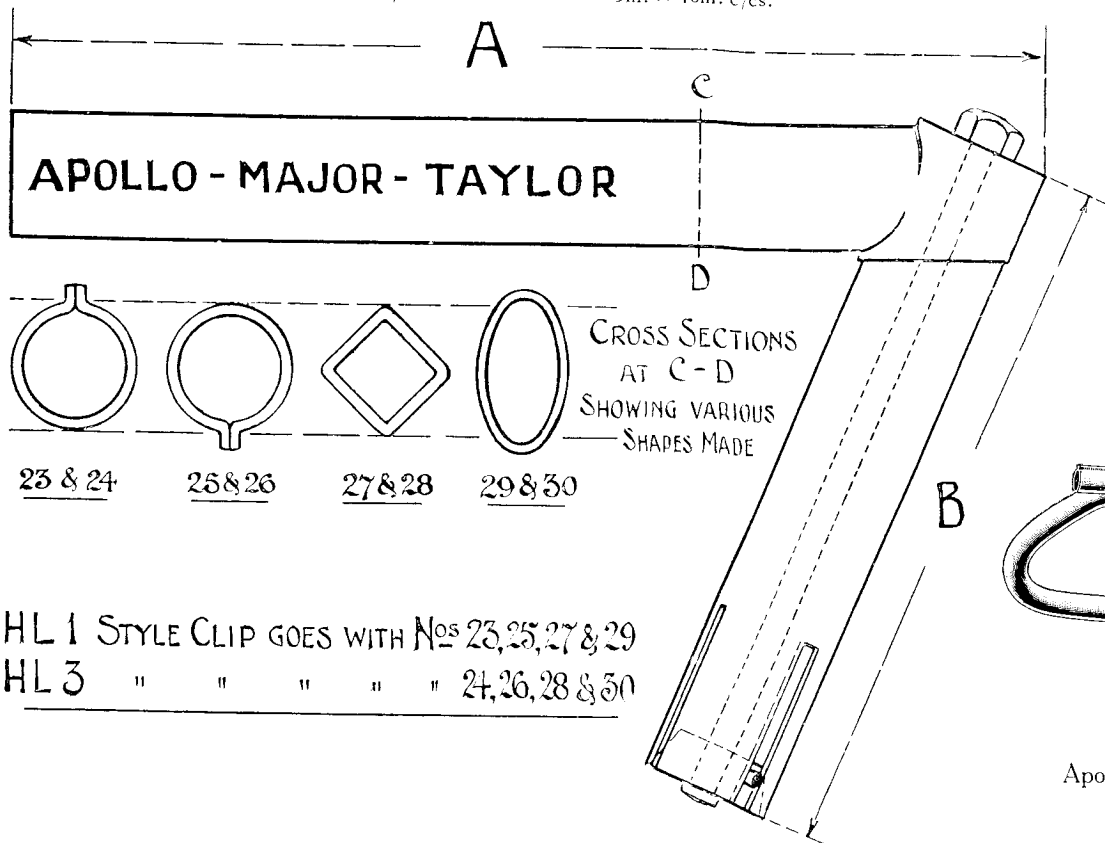


No. 166.
No. 10.—R.-W. Pattern Flat.
16 in. c/cs.



No. 167.
No. 11.—Upturned.
3 in. × 16 in. c/cs.

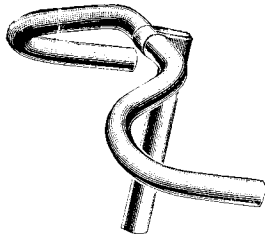
The six handlebars illustrated shew the regular and popular patterns produced by Accles & Pollock, Limited, of Oldbury, Birmingham. Their trade mark the "Ankh" which means "Long Life" will be observed upon the stems, and this indicates best quality plating which is not beaten anywhere. They add the letters "Pop" to indicate popular quality plating, which is their second grade, and this they claim is up to any other best quality on the market. They also supply what they term a "Mark IV" finish, and this certainly is up to many of the so-called best qualities turned out. Variations of dimensions can be promptly furnished by the makers.



HL 1 STYLE CLIP GOES WITH NOS 23, 25, 27 & 29
HL 3 " " " " 24, 26, 28 & 30

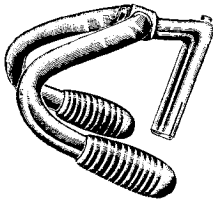
The above illustrates the Apollo-Major-Taylor Handlebars, as made and protected by Accles & Pollock, Limited, of Oldbury, Birmingham. The round extension tube with a key may be considered as quite out of date. The oval section extension is asked for by so few people that its manufacture is not being continued. The square section extension is positively "the thing." It serves every requirement, obviates all the nuisance of breakages and of looseness, so very annoying with the round section having a key or feather, and the clip grips each of the four sides and the four corners. Sales have increased immensely. A loose lamp bracket is supplied to fit on the front end, if required, and the choice of "Mark IV." quality, "Popular" quality, or "Best" quality plating is offered.

HANDLEBARS.



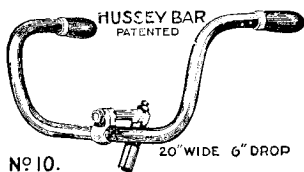
No. 169.

North Road. Dropped.



No. 172.

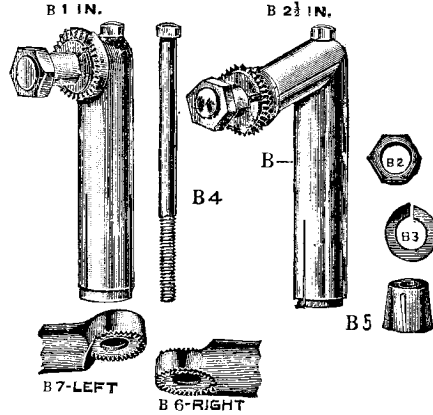
The only bar made with divided top. Can be set in 25 positions, with no change in the pitch of the grips.



No. 174.

No. 10H. Bar with Stem, complete.

This bar has a square shaped top. It is just the width of the body, giving better action and easier control. It is popular as a racing bar and is very satisfactory for road use.



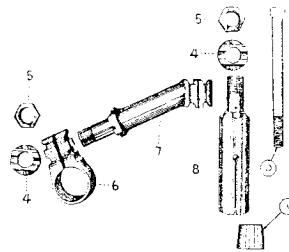
No. 170.

- B. 1 Forward Extension Stem, expander.
- B. 2½ in. Forward Extension Stem, expander.
- B2. Forward Extension Stem nut.
- B3. Forward Extension Stem washer.
- B4. Extension Stem expander screw.
- B5. Extension expander plug.
- B6. (Double row teeth) Forward Extension right side arm for No. 3, 4 or 5.
- B7. (Single row teeth) Forward Extension left side arm for No. 3, 4 or 5.
- B6A. (Double row teeth) Forward Extension right side arm for No. 6 or 8.
- B7A. (Single row teeth) Forward Extension left side arm for No. 6 or 8.

Extra Length Stem, up to 8 in., additional.

When ordering give number of part and also for what number bar part is desired.

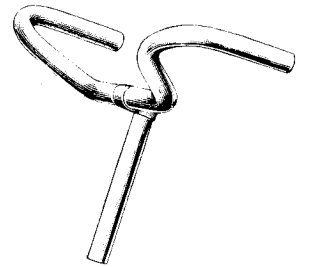
PARTS OF HUSSEY BARS.



No. 174a.

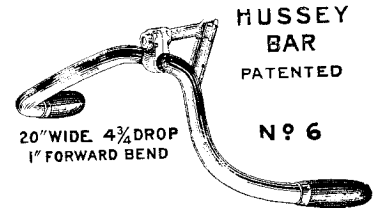
Order Parts by Number.

- No. 1. Expander Plug.
- No. 3. Expander Bolt.
- No. 4. Lock Washer.
- No. 5. Lock Nut.
- No. 6. Clamp.
- No. 7. Extension.
- No. 8. Stem.
- No. 9. Stem, complete, with No. 3 Bolt and No. 1 Expander Plug.
- Top Bar (only).



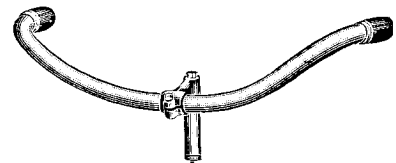
No. 171.

North Road. Raised.



No. 173

It is possible to set this handle bar in 45 different positions, the grips remaining same distance apart at all times. The forward arm may be set backward, forward, reversed or let out altogether, thus making the bar a three inch or one inch extension. The material and finish is excellent, and the expander device effective and simple.

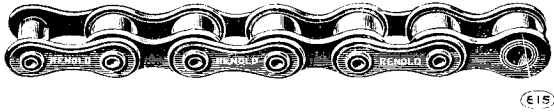


No. 175.

Very popular for general riding. Size, 20 or 22 ins. wide, 4¼ inch drop, 2 inch forward.

RENOLD CHAINS.

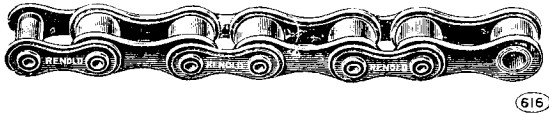
RENOLD ROLLER CYCLE CHAINS.



No. 176.

PITCH	WIDTH		ROLLER Diam.	WEIGHT Per 4ft.	MINIMUM BREAKING STRENGTH	CHAIN No.
	Inside	Outside				
1/2 in.	Inch 1/8	.37	.305	Ozs. 12	1,850	184
	3/16	.43		14		164
	1/4	.49		16		174
	5/16	.56		18		189
	3/8	.62		20		188
	7/8 in.	1/8		.37		.335
	3/16	.43	14	165		
	1/4	.49	16	175		

RENOLD TWIN ROLLER CYCLE CHAINS.



No. 177.

1 in.	1/8	.37	.305	12	1,850	168
	3/16	.43		14		166
	1/4	.49		16		167
	5/16	.56		18		169
	3/8	.62		20		170

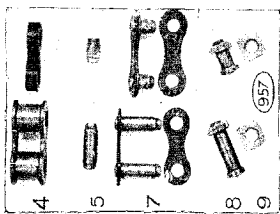
RENOLD BLOCK CYCLE CHAINS.



No. 178.

1 in.	1/8	.27	8	1,000	399
	3/16	.33	11	1,500	397
	1/4	.39	14	1,700	398
			16	1,900	1,304

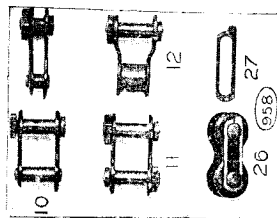
Re THE "ROLLER" CHAIN.



No. 179.

Parts.

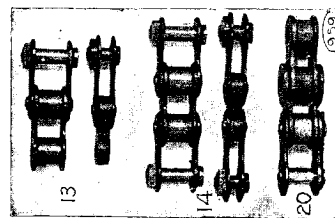
4. Inner Link complete.
5. Rivet.
7. Outer Link complete.
8. Bolt and Nut.
9. Nut only.



No. 180.

Joints.

10. Ordinary Joint for a chain with an even number of pitches.
11. Straight Detachable Joint with two bolts.
12. Cranked Detachable Joint for a chain with an odd number of pitches.
26. Spring Clip Joint.
27. Clip only.



No. 181.

Repair Parts.

13. Two-Link Part for lengthening a chain by two links.
14. Three-Link Part for repairing a broken inside link or roller.
20. Cranked Three-Link Repair Part for Chains 6194-5 only.

It is usually admitted readily enough that Renold's Chains are the best. Each chain is put to most stringent tests before leaving the factory, and high initial accuracy has been secured which means durability.

BRAMPTON'S CHAINS.



No. 182.
Standard Roller.



No. 183
"B" 3rd quality.



No. 184.
"Superb" Patent Roller.



No. 185
"BB" 2nd quality.



No. 186.
Duplex Roller.



No. 187.
"BBB" 1st quality.

Brampton Chains. The greatest possible care is taken in the manufacture to secure absolute accuracy, and every chain is submitted to test before leaving the works.

The "**Superb**" Chain (Patent), is distinct from any other form of cycle chain, each plate is a domed stamping, in which the greatest thickness of metal is placed round the rivet head. The inner plate is even more distinctive, instead of employing the usual bevel for the tooth lead, the inner plate of the chain is made with a continuous curve from edge to edge of the inner side of the plate. By this the most perfect lead of the teeth of wheel is secured, the area of friction between the plates of the chain and the teeth of the chain wheel is reduced to a minimum.

The Rivets are nickel steel, shouldered and hardened, in place of hardened mild steel. The Bushes are solid, accurately bored, and dead hard. Rollers hardened and tempered. Minimum breaking load, 1650 lbs. Finish, "Blued." Sizes :

"Superb." (Patent).

$\frac{1}{8}$ in., $\frac{3}{16}$ in. or $\frac{1}{4}$ in. wide.
1 in., DR., $\frac{1}{8}$ in., $\frac{1}{16}$ in. or $\frac{1}{4}$ in. wide.
1 in., DR., $\frac{1}{16}$ in. wide.

Standard.

$\frac{1}{8}$ in., $\frac{3}{16}$ in. or $\frac{1}{4}$ in. wide.
1 in., DR., $\frac{1}{8}$ in., $\frac{3}{16}$ in. or $\frac{1}{4}$ in. wide.
1 in., DR., $\frac{1}{16}$ in. wide.
Pitch, $\frac{1}{2}$ in. or $\frac{5}{8}$ in.

"BBB" Black. 1st quality.

$\frac{3}{16}$ in., $\frac{1}{4}$ in., $\frac{5}{16}$ in. wide.

"BB" Black. 2nd quality.

$\frac{3}{16}$ in., $\frac{1}{4}$ in., $\frac{5}{16}$ in., $\frac{3}{8}$ in., $\frac{1}{2}$ in., wide.

"B" Black. 3rd quality.

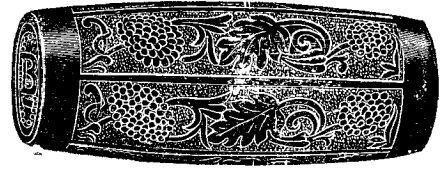
$\frac{3}{16}$ in., $\frac{1}{4}$ in., $\frac{5}{16}$ in.

CELLULOID AND LEATHER HANDLEBAR GRIPS.



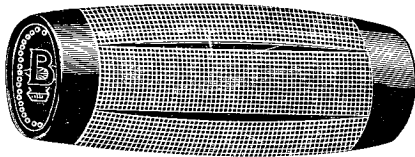
No. 188.

This Leather Grip, consists of a wooden core, covered with first quality grain leather, stitched on, the leather being in two parts, accurately moulded to form. The seam is sunk into a groove in core, leaving a smooth and even surface.



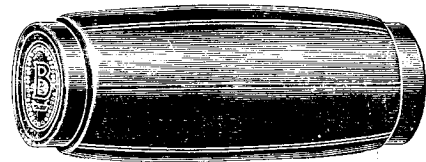
No. 189.

Black embossed. Grape design. Plain ends.



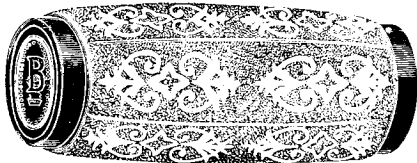
No. 190.

Black embossed. Fine check centres. Plain ends.



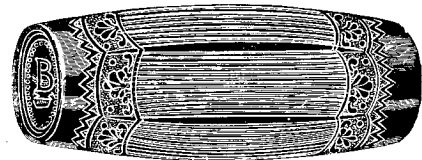
No. 191.

Plain black handle. Red lines. Shouldered ends.



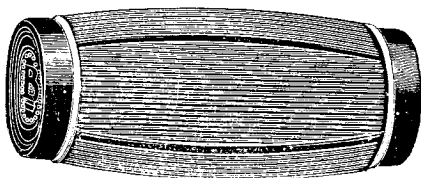
No. 192.

White embossed. Scroll centres. Green shouldered ends.



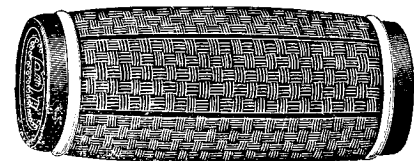
No. 193.

Black, with embossed fluted centres. Scroll and plain ends.



No. 194.

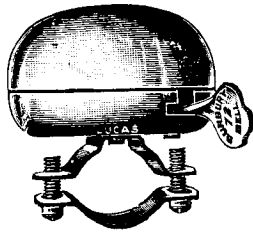
Black fluted, with either red, white, or gold beads.



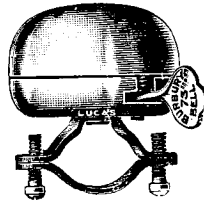
No. 195.

Special Notice.—All our Handles are **Self-Fixing**, being coated with a special preparation, which only requires to be wetted before placing on the Handle bar.

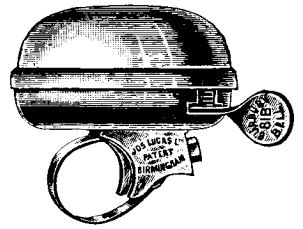
BELLS.



No. 196.
72. 2¼ in. Plain Dome.
Plated.

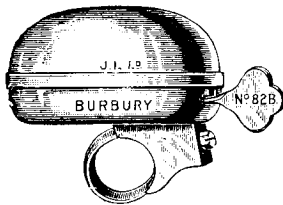


No. 197.
73. 1¾ in. Plain Dome.
Plated.

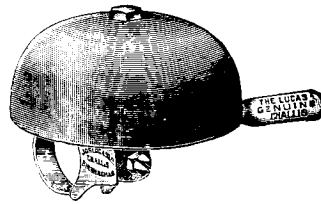


No. 198.
81B. 2¼ in. Beaded Dome.
Ebony Black.

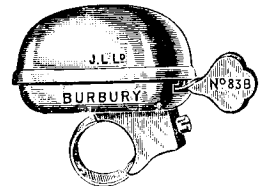
The "**Burbury**" Bells have the Lucas Rotary Movement,
and will be found good and reliable.
Nos. 196 and 197 are supplied in Plated Finish only.



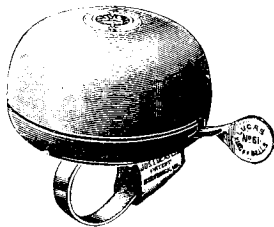
No. 199.
82B. 2¾ in. Beaded Dome.
Ebony Black.



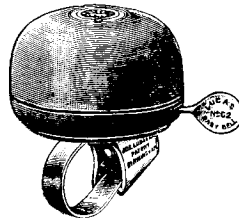
No. 200.
The Lucas "**Challis**" Bell, with
3 in. bell metal Dome, Plated.



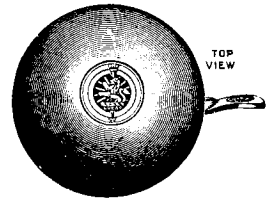
No. 201.
83B. 2¼ in. Beaded Dome.
Ebony Black.



No. 202.
61. With 2¾ in. Plain Dome.
Plated. These are best quality
"**Fixed Dome**" Bells, with the
same rotary action as the
"**L.S.D.**" series. Fitted with
the Lucas Band Clip, which
fits all bars up to one inch.



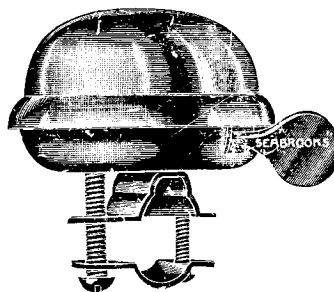
No. 203.
62. Lucas "**Baby**" Bell.



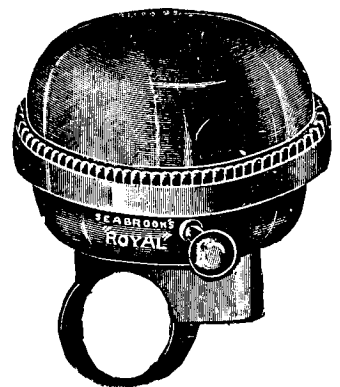
No. 204.
View showing top of
Lucas "**Medallion**" Bells.



No. 205.
Revolving Domes.
Beautiful Chimes.
Cycle size, 2¼ in. Motor cycle, 3½ in.

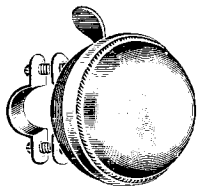


No. 206.
The "**Ideal**" rotary action.
Well Nickelled.
Made in Beaded Domes—
2 2¼ 2½ 2¾ 3¼ in.

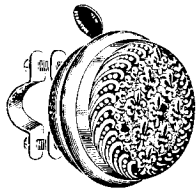


No. 207.
Continuous Ringing. Coppered works
which prevents rusting.
2¼ in. dome.

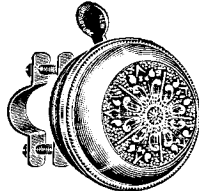
BELLS and CHIME BELLS.



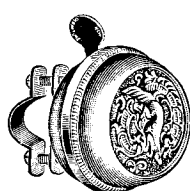
No. 208.



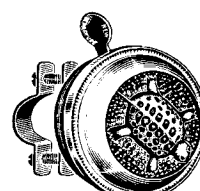
No. 209.



No. 210.



No. 211.

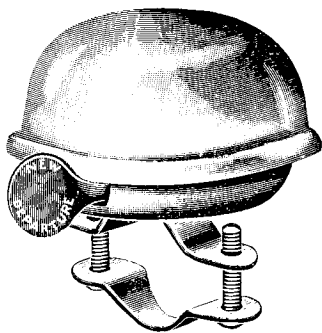


No. 212.



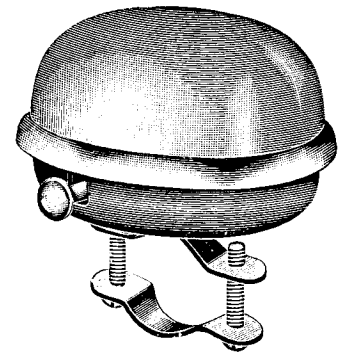
No. 213.

The "Zoo" assortment. The gongs are made of best bell metal and brilliantly ornamented in colors. The tone is sharp and musical.



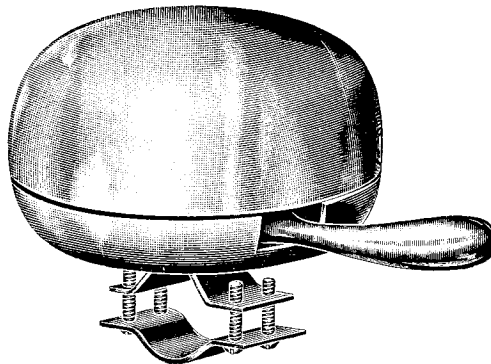
No. 214.

A low priced Bell of exceptional value. Highly recommended.



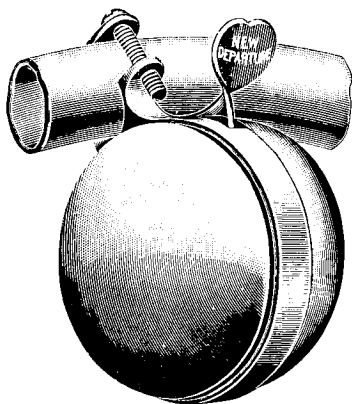
No. 215.

A push lever Bell. The gongs are of wrought steel, and the mechanism is strong and simple.



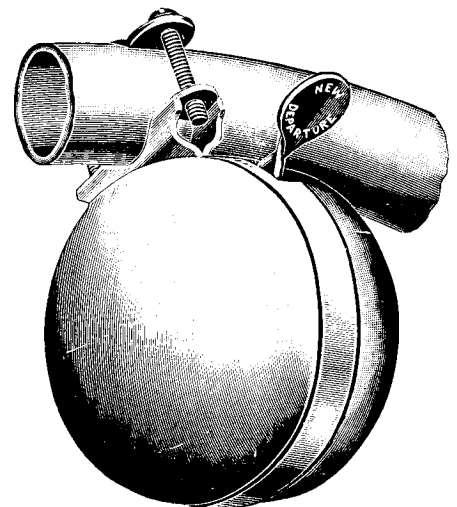
No. 216.

A large Bell, with distinctive tone. Very suitable for use in large cities when the bicycle is ridden in busy streets.



No. 217.

A chime Bell, particularly adapted for noisy streets. One movement of the lever striking the gongs many times.



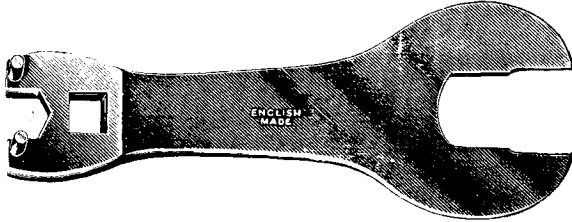
No. 218.

A low clear chime Bell. Splendid value in a low-priced multiple toned alarm.

SUNDRIES.

STANDARD PATTERN SPANNERS, MARVELLOUS VALUE.

Cone and Peg Spanner.



No. 219.

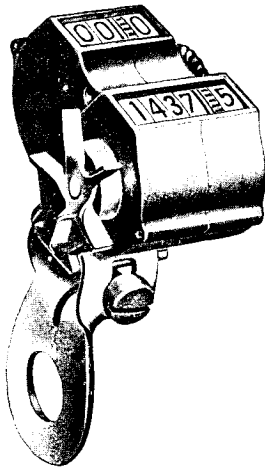
Box Spanner.



No. 220.

CYCLOMETERS.

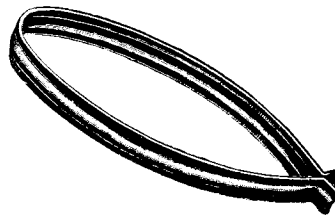
"Veeder" Trip Cyclometer.



No. 221.

This instrument embodies all the good points of the regular cyclometer. It has the addition of a smaller dial which will register to shew the mileage on each trip.

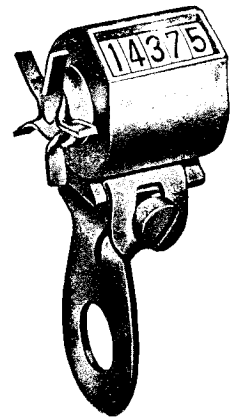
Trouser Band.



No. 222.

Black Enamelled Trouser Bands.
Spring steel.

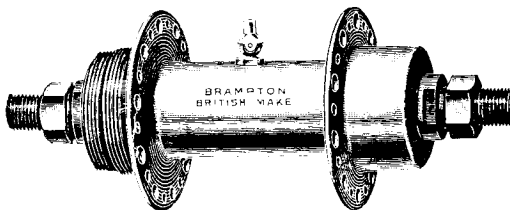
"Veeder" Regular Cyclometer



No. 223.

The above illustration shows this instrument in full size. It is dust and water proof and cannot slip or register too much. The figures are large and close to the glass, and can easily be read from the saddle at all times. Will register up to 9999'9 miles.

BRAMPTON'S HUBS.



No. 224. Back Hub.



No. 225. Front Hub.

Very special quality of Hubs, and supplied with Genuine Hoffman Steel Balls.

Nipple Keys, Tube Clamps, Bracket Taps, &c.

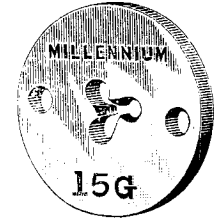
"Mikado" Spanner.



No. 227.

Fits all cups (provided with pinholes) and cones in a cycle, and can be used as a spanner. The pins of this tool are extremely strong.

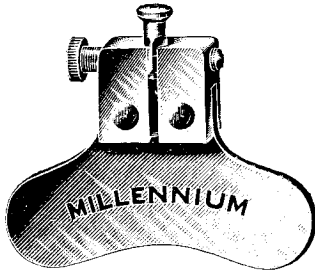
Millennium Circular Spoke Dies.



No. 228.

Made in all sizes.

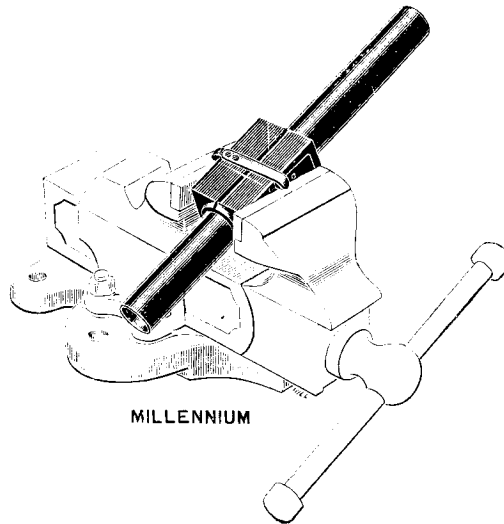
Adjustable Nipple Key.



No. 226.

Fits all Nipples in general use.

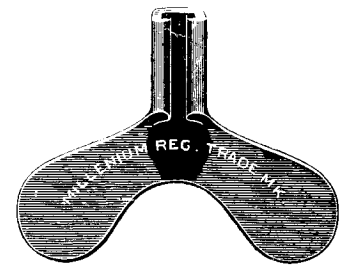
Tube Clamps.



No. 230.

For holding frames and other parts in the vice for filing up, etc. Sizes: For round tubes, $\frac{1}{8}$ in., $\frac{1}{4}$ in., $\frac{3}{8}$ in., $\frac{1}{2}$ in., $\frac{5}{8}$ in., $\frac{3}{4}$ in., $1\frac{1}{8}$ in., $1\frac{1}{4}$ in., $1\frac{3}{8}$ in., $1\frac{1}{2}$ in. For "D" tubes, $1\frac{1}{8} \times \frac{3}{8}$ in., $1 \times \frac{3}{8}$ in., $\frac{7}{8} \times \frac{1}{2}$ in. Weight, $1\frac{1}{2}$ to $2\frac{1}{2}$ lbs. per pair.

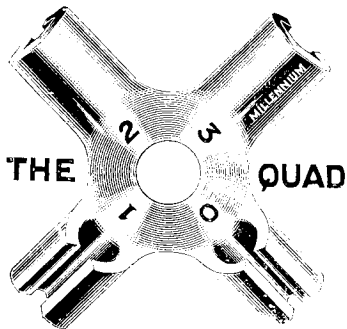
Millennium Steel Nipple Key.



No. 231.

No. 1 Fits Square Nipples 10.
 " 2 " " " 9.
 " 3 " " " 7.
 I.S.W.G. over flats.

Quad Nipple Key.



No. 229.

Best of its kind, guaranteed not to split in work. Takes 11, 10, 9, 7 I.S.W.G. over flats.

Twist Drill and Countersink for Jointless Rims.



No. 232.

Cuts a clean washer, and being magnetised brings most of the washers and chips out of the hole with it.

Diameter of Drill, 7 B.W.G. = .180 diameter.

Countersink, $\frac{1}{16}$ in.

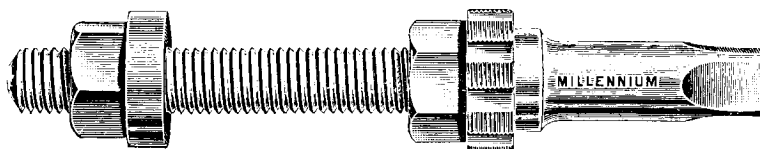
Engineers' Taps, Taper and Plug.



No. 233.

Supplied in all sizes.

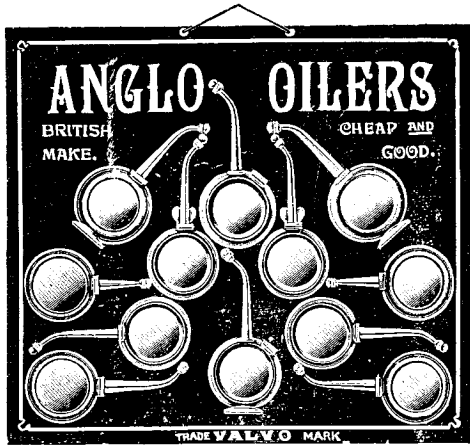
Bottom Bracket Taps.



No. 234.

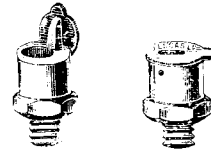
For tapping bottom brackets or clearing the thread after brazing. The following sizes of cutting taps are stocked: 1.370 dia. \times 24 threads, right and left, (B.S.A., Eadie, 1093, C.E.I.), and $1\frac{1}{8} \times 26$ Components.

OILERS and LUBRICANTS.



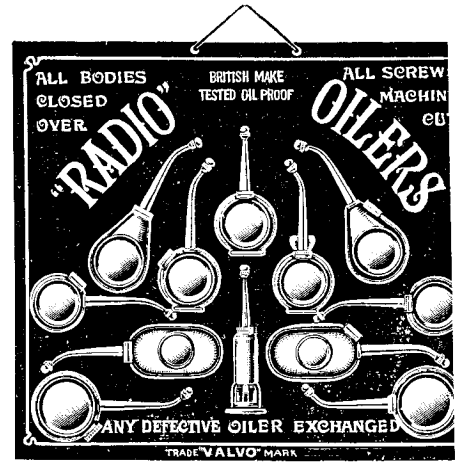
No. 235.

Exceptional value. British make.
Cheap and good.



No. 236.

The Lucas "Spring-Lid"
Lubricator. Extremely
strong and well made.
Easily opened or closed
with end of oiler.



No. 237.

A most attractive series of Oilers to
suit all requirements.



No. 238.

Lucas "Brittenwhite" Oil
gives a bright and white
light. The best Oil for
Lucas Lamps.



No. 239.

The finest chain lubricant
manufactured of the right
smoothness and adds to life
of chain.



No. 240.

It will thoroughly lubricate
the chain and stop all cracking
and snapping. Wrapped in
tinfoil.



No. 241.

The Lucas "King" Lubri-
cating Oil. Specially pre-
pared for Cycles, Sewing
Machines, and other light
machinery.



No. 242.

The "Vesta"
Convenient to use and
easy to refill.



No. 243.

Brass, Nickel-plated Oiler.
Will not leak, as the top
cannot jar loose.



No. 244.

Seat Pillar Oil Can.
Brass, Plated and Polished.