

**ILLUSTRATED  
CATALOGUE  
OF  
ACCESSORIES**



*Distributed throughout Great Britain by the Sole Concessionaire*

**ACCAL**

**ANGLO-CONTINENTAL CYCLES & ACCESSORIES Ltd**

Cycling Centre - **HARROGATE** - England

Telephone 4996-4985

**CATALOGUE OF  
ACCESSORIES 1963**

**DISTRIBUTED BY**

**Anglo-Continental**  
CYCLES AND ACCESSORIES LTD.



**CYCLING CENTRE      HARROGATE  
   ENGLAND**

*Telegraphic Address: RONKIT, HARROGATE.  
Telephones: Harrogate 4996 and 4985.*

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- PRICE LIST AC/EXP — For Overseas buyers.
- PRICE LIST AC/FAC — For British wholesalers.
- PRICE LIST AC/OE — For British cycle manufacturers.

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The History of Ron Kitching's Catalogue

# "Everything Cycling"



This catalogue is the outcome of 25 years in the service of cyclists.

## 1938

saw the modest beginning of Ron Kitching's cycle business at Harrogate. Already Ron's experience at the age of 22 was considerable and included YHA and CTC cycling activity in all parts of Great Britain and in countries as far away as Australia.

His racing career continued unbroken through 17 years until brought to a halt through injury and, despite the calls of a rapidly expanding business giving limited time for training, he enjoyed innumerable successes in "opens" at all distances from 25 miles to 12 hours, in Hill Climbs, Cyclo Cross and Massed Start races both on circuits and open roads. One of the early pioneers for Road Racing, Ron was BLRC Northern Champion and in 1945 was the first British rider to race on the Continent.

## 1963

Thirty years of cycling and 25 years of specialised service in the cycle trade combined with the friendship of the "heads" of British and Continental cycle sport have achieved an expert knowledge that is unrivalled in the cycling game today.

Ron's unique contacts enable him to supply to over 1,000 cycle shops in all parts of Great Britain every cycling need in quality Accessories and Clothing both British and Continental. Overseas orders are also executed to all parts of the world.

As a result of this lifetime experience of cycling

**RECOMMENDED BY RON KITCHING**

is now the hallmark of quality in cycle fitments.

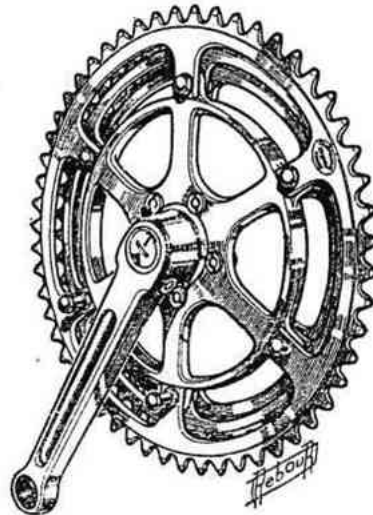
**PRICE - 3/6**

# **SPECIALITIES T.A.**

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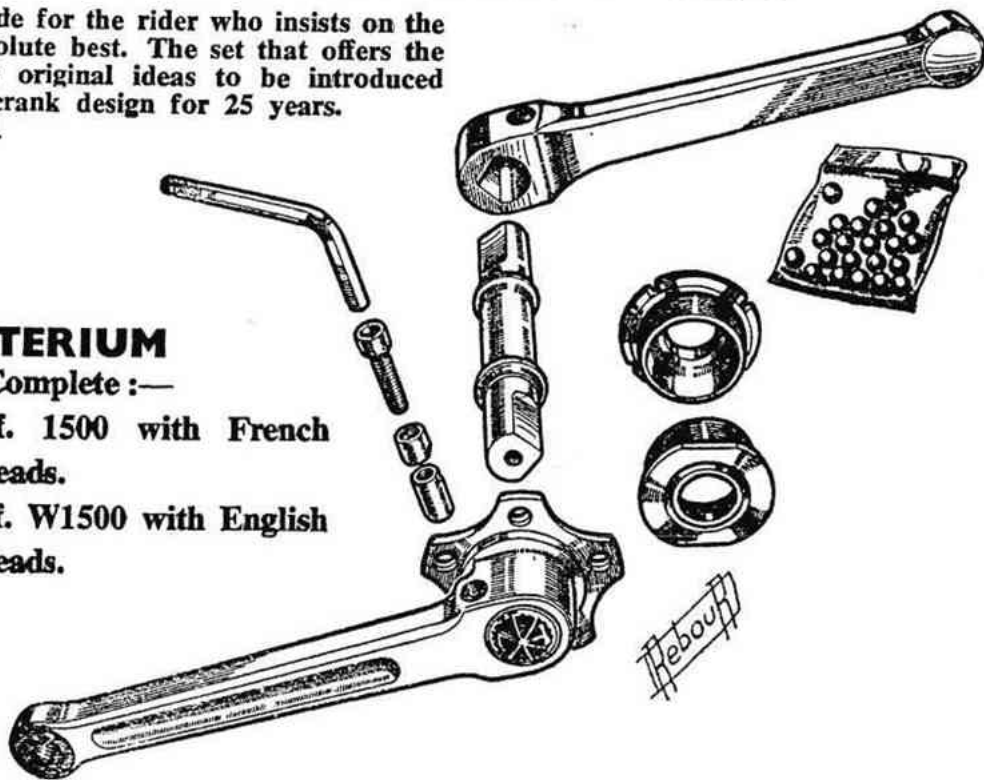
The World's Finest Cycle Transmission



Famous for  
**QUALITY METAL**  
**PRECISION TOOLING**  
**IRREPROACHABLE FINISH**  
**INTERCHANGEABILITY**

# CRITERIUM T.A. CRANK SET

Made for the rider who insists on the absolute best. The set that offers the first original ideas to be introduced in crank design for 25 years.  
Ref.



## CRITERIUM

Set Complete :—

Ref. 1500 with French threads.

Ref. W1500 with English threads.

*The TA crank set answers ALL your problems with*

**NO**

Hammered Cotters  
Rusting parts  
Extractor tools required  
Loose axle end bolts

*... and these advantages*

**PLUS**

Choice of 9 crank lengths  
Adjustable chain line  
Pedal axle stop washer  
Blanked off pedal axle hole  
Super polished chrome bearing surfaces  
Patented solid drive on right-angled axle  
Immediate and simple detachability  
Ultra light weight (cranks 12½ oz. pair)  
(Set as illustrated 27½ oz.)

Made in light alloy these cranks, with the aid of a choice of 3 axle lengths and the patented T.A. method of attachment which permits a lateral adjustment of over 4 mm. on the patented right-angled axle, will give you accurate chainline with either single, double or triple chainwheels.

Axle and cups are in nickel chrome steel, coated and polished, ball bearings are finest high precision.

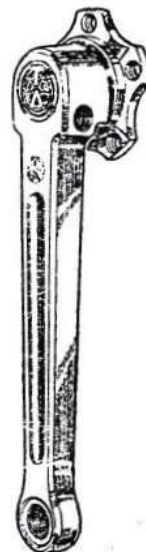


# CRITERIUM CRANK SET



## CRANK LENGTHS AVAILABLE

mms.	ins.
160	6 5/32
162.5	6 9/32
165	6 1/2
167.5	6 9/16
170	6 11/16
172.5	6 13/16
175	6 7/8
177.5	7
180	7 3/32

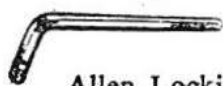


**Left Hand Crank**  
**Ref. 620**  
 (French threads 14/125)  
**Ref. W620**  
 (English threads  
 9/16" - 20F)

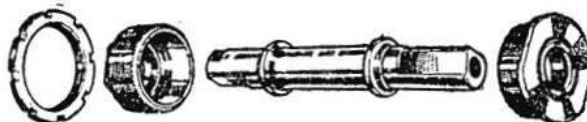
**Right Hand Crank**  
**Ref. 510**  
 (French threads 14/125)  
**Ref. W510**  
 (English threads  
 9/16" - 20F)

Right Hand crank is designed to take any standard 5-pin chainwheel, single, double or triple.

Lockring	Adjusting Cup	Axle suitable for			Fixed Cup
		Single chainwheel	Double and Triple racing chainwheels	Triple Cyclo-tourist chainwheel	
French threads <b>Ref. 730</b>	French threads <b>Ref. 720</b>	Ref. P315	Ref. 345	Ref. 375	French threads <b>Ref. 710</b> English threads <b>Ref. W710</b>
English threads <b>Ref. W730</b>	English threads <b>Ref. W720</b>				



Allen Locking Key.  
**Ref. 136**



**Ref. 135**

A  
B  
C



2 Securing Bolts  
2 Collars  
2 Threaded bushes

Complete set of 6 pieces



Set of 2 Pedal Stop washers  
**Ref. 137**



Set of 22 High Precision 6,35 Ball Bearings  
**Ref. 740**



# PROFESSIONNEL CRANK SET

The latest introduction from T.A. for 1963

A new Crank Set having all the special features of the CRITERIUM Crank Set except the cranks fit on **Standard** squared-end cotterless axles. Held in position by improved large-headed extra long axle end bolts, chromed to save the need for crank dust caps, these cranks are available in all the 9 listed T.A. lengths.

**NOTE:** The PROFESSIONNEL Crank Set uses the following fittings exactly the same as the CRITERIUM Crank Set.

THREADS	Lockring	Adjusting Cup	Fixed Cup	Set of Pedal Stop Washers	Set of Ball Bearings
French Ref.	730	720	710	137	740
English Ref.	W730	W720	W710	137	740



**Left Hand Crank**  
(French threads 14/125) Ref. 720  
(English threads 9/16"-20F)  
Ref. W720

With PROFESSIONNEL Crank Set use PROFESSIONNEL AXLE Suitable for		
Single Chainwheel	Double and Triple Racing Chainwheels	Triple Cyclo-Tourist Chainwheel
Ref. 715	Ref. 745	Ref. 775



**PROFESSIONNEL  
Crank Set Complete**  
Ref. 1700 (French threads)  
Ref. W1700 (English threads)

ALL T.A. Right Hand Cranks are designed to take any standard 5-pin chainwheel, single, double or triple.



**Right Hand Crank**  
(French threads 14/125) Ref. 710  
(English threads 9/16"-20F)  
Ref. W710

## T.A. PROFESSIONNEL HEAD SET

Made by T.A. for the rider who will have the best, this head set is unrivalled in looks, design and quality. Examine the highly-polished races coated with special hard nickel chrome, the precision ground, perfectly true bearings, the practical octagonal-shaped locknut, screwed race and bottom head race and you will agree that T.A. is ahead of the rest. As befits such a quality production the T.A. Head Set is supplied in a special presentation box.



Complete Set	<b>Ref. 1600</b>	Top Head Race	<b>Ref. 163</b>
Lock Nut	<b>Ref. 166</b>	Bottom Head Race	<b>Ref. 162</b>
Lockring Washer	<b>Ref. 165</b>	Crown Race	<b>Ref. 161</b>
Screwed Race	<b>Ref. 164</b>	Set of 48 Balls	<b>Ref. 167</b>

# Type **PROFESSIONNEL** Chainwheels

**ROAD RACING CHAINWHEELS** — Double or Triple assembled on adapter  
Use Chain  $\frac{1}{2}$  x 3/32.

Range : — Minimum 44 Teeth.  
Maximum 68 Teeth.  
(Above 68 T. to Special Order)



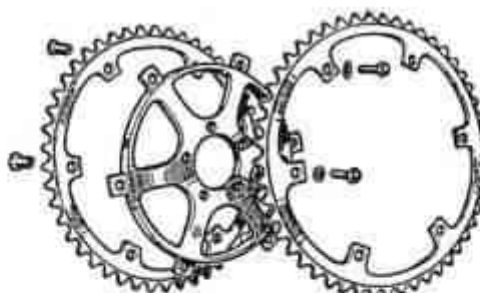
**Complete Adaptor Sets**  
3-arm Double. Ref. 2173  
3-arm Triple. Ref. 3173



**Complete Adaptor Sets**  
5-pin Double. Ref. 2175  
5-pin Triple. Ref. 3175



**Road Adaptor**  
Ref. 173



**Inner Chainring**  
Ref. 106

**Outer Chainring**  
Ref. 104

Note: Always specify outer or inner chainring with Ref. No.

Triple set has 1 Ref. 104 outer and 2 Ref. 106 inner chainrings assembled with Ref. 84 fixing bolts.



**Road Adaptor**  
Ref. 175

Crank Fixing Bolts (Set of 5). Ref. 25. (Supplied free with 175, 2175 and 3175).



Assembly Bolts, etc., for Doubles (Set of 6). Ref. 62. (New pattern—use 136 Allen key).



Assembly Bolts, etc., for Triples (Set of 6). Ref. 84



## **PROFESSIONNEL ADAPTOR SETS**

*offer the finest combination for racing.*

*Immediate detachability — rings pass easily over toeclip and strap.*

*Incomparable rigidity. — The continuous double flanged rim ensures that the rings always remain true.*



**Inner Chainring**  
Ref. 106



**Outer Chainring**  
Ref. 104



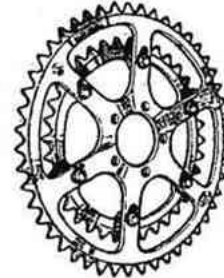
# Type RANDONNEUR chainwheels

Road Chainwheels — Double or Triple. Use Chain  $\frac{1}{2}$  x 3/32

Range : — Minimum 36 Teeth  
Maximum 68 Teeth



**Randonneur complete**  
3-arm Double Ref. 2213  
3-arm Triple Ref. 3213



**Randonneur complete**  
5-pin Double Ref. 2215  
5-pin Triple Ref. 3215



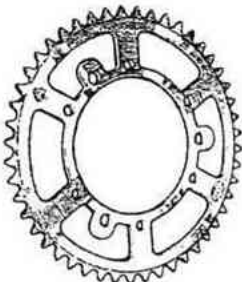
Crank Fixing Bolts (Set of 5). Ref. 25. (Supplied free with 2215 and 3215).



Assembly Bolts, etc., for doubles, (Set of 6). Ref. 64.



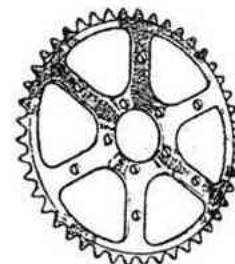
Assembly Bolts, etc., for triples. (Set of 6). Ref. 85.



Outer chainwheel  
3-arm Ref. RA203



Inner chainring to fit  
RA203 or RA205  
Ref. 206



Outer chainwheel  
5-pin Ref. RA205

*The RANDONNEUR range is made in the same famous TA forged duralumin as the other TA chainwheels — material respected throughout the world for its lightness and longevity.*

# Type **CYCLOTOURISTE** chainwheels

Road Chainwheels — Double or Triple 5-pin only Use Chain  $\frac{1}{2}$  x  $\frac{3}{32}$ .

Range : — Minimum 26 Teeth  
Maximum 68 Teeth



**Cyclotouriste complete.**  
5-pin Double Ref. 2235



**Cyclotouriste complete.**  
5-pin Triple Ref. 3235



Crank Fixing Bolts  
(Set of 5). Ref. 25  
(Supplied free with  
2235 and 3235).



Assembly Bolts, etc.,  
for doubles (Set of  
6). Ref. 64

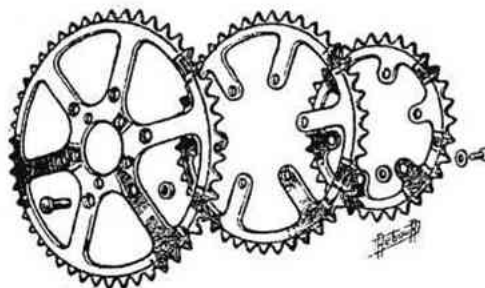


Assembly Bolts, etc.,  
for triples (Set of 6).  
Ref. 87

Inner chainring to  
fit to CY205.  
Ref. 207.  
26 to 35 teeth.



Outer chainwheel  
5-pin for 2235  
(Double).  
Ref. CY205.  
36 teeth minimum.



Outer chainwheel 5-pin  
for 3235 (Triple).  
Ref. TCY205.  
36 teeth minimum.

Intermediate chainring  
for TCY205 (Triple).  
Ref. 208.  
26 to 50 teeth.

Inner chainring for  
TCY205 (Triple).  
Ref. 207.  
26 to 35 teeth.

*Every TA chainwheel is surface plate tested before despatch. For doubles and triples we recommend  $\frac{1}{2}$  x  $\frac{3}{32}$  chains only to be used.*

# Type CRITERIUM Chainwheels

ROAD CHAINWHEELS — Double or Triple. Use Chain  $\frac{1}{2}$  x  $\frac{3}{32}$

Range : — Minimum 44 Teeth.

Maximum 68 Teeth.

(Above 68 Teeth to Special Order)



**Criterion complete**  
3-arm Double. Ref. 2203  
3-arm Triple. Ref. 3203



**Criterion complete**  
5-pin Double. Ref. 2205  
5-pin Triple. Ref. 3205



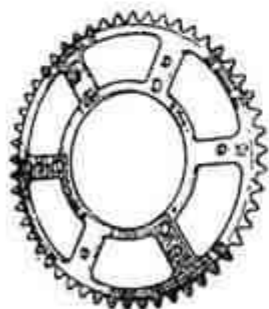
Crank Fixing Bolts (Set of 5). Ref. 25. (Supplied free with 2205 and 3205).



Assembly Bolts, etc., for Doubles. (Set of 6). Ref. 64.



Assembly Bolts, etc., for Triples (Set of 6). Ref. 85.



**Outer Chainwheel**  
3-arm. Ref. CR203

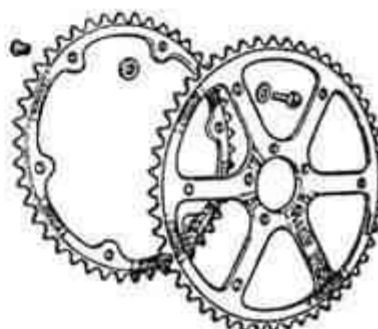


**Inner Chainring**  
To fit CR203 or CR205. Ref. 204



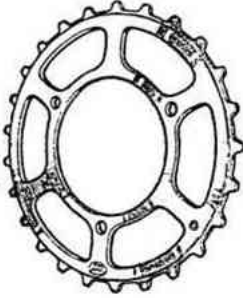
**Outer Chainwheel**  
5-pin. Ref. CR205

*CRITERIUM doubles and triples offer the same range as the PROFESSIONNEL without the use of the adaptor.*

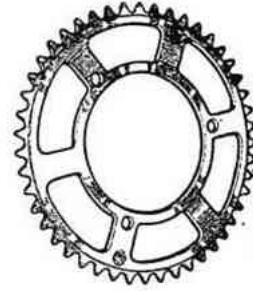


# Single TRACK chainwheels

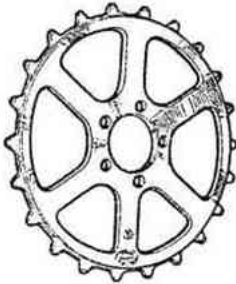
3 or 5-pin



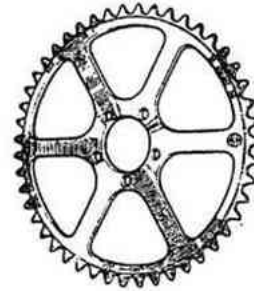
Chainwheel 3-arm using Bloc track chain. 1" x 3/16".  
Ref. P233.  
20 to 34 teeth.



Chainwheel 3-arm using road chain  $\frac{1}{2}$  x  $\frac{1}{8}$ " or 3/32".  
Ref. P203.  
44 to 68 teeth.



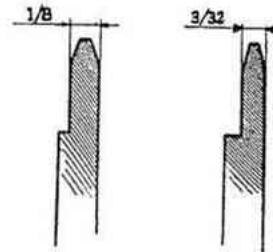
Chainwheel 5-pin using Bloc track chain. 1" x 3/16".  
Ref. P255.  
20 to 34 teeth.



Chainwheel 5-pin using road chain  $\frac{1}{2}$  x  $\frac{1}{8}$ " or 3/32".  
Ref. P205.  
44 to 68 teeth.



Crank Fixing Bolts.  
(Set of 5).  
Ref. 25  
(Supplied free with P255 and P205).

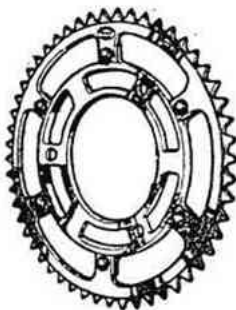


NOTE.—Specify type of chain to be used— $\frac{1}{2}$ " x  $\frac{1}{8}$ " or 3/32—when ordering chainwheels. References: 201: 203: 205: P203: P205: P209: P1753: P1755.

*TA employ no professional riders—their products are used on merit alone. They have been successful in 10 post-war Tour de France events—World Championships for Road, Track and Pursuit, World's Hour Record, etc. Records unequalled by any other similar products.*

# Single TRACK Chainwheels on ADAPTOR

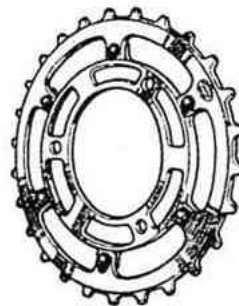
3 or 5 pin



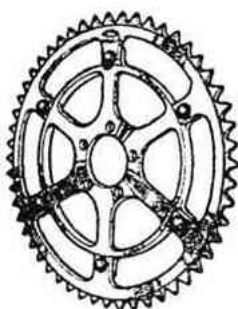
Complete Track Adaptor Set 3-arm using  $\frac{1}{2}$  x  $\frac{1}{4}$  or  $\frac{3}{32}$  chain. Ref. P1753. 44 to 68 teeth.



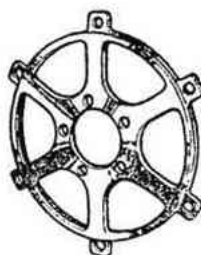
3-arm Single Track adaptor. Ref. P173.



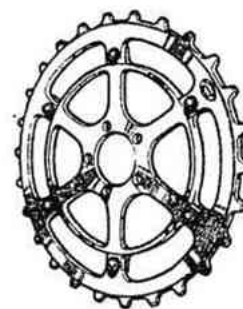
Complete Track Adaptor Set 3-arm using 1" x  $\frac{3}{16}$ " chain Ref. P1733. 20 to 34 teeth.



Complete Track Adaptor Set 5-pin using  $\frac{1}{2}$  x  $\frac{1}{4}$  or  $\frac{3}{32}$  chain Ref. P1755. 44 to 68 teeth.



5-pin Single Track adaptor. Ref. P175.



Complete Track Adaptor Set 5-pin using 1" x  $\frac{3}{16}$ " chain Ref. 1735. 20 to 34 teeth.



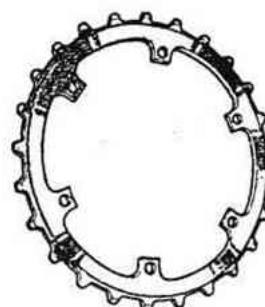
Chainring for single adaptors P173 & P175. Ref. P209. 44 to 68 teeth. (Above 68 to special order).



Track adaptor assembly bolts, etc. (Set of 6). Ref. P75.



Crank Fixing Bolts. (Set of 5). Ref. 25. (Supplied free with P1755, P175 & P1735).



Chainring for single adaptors P173 and P175. Ref. P210. 20 to 34 teeth.

*Single TRACK ADAPTOR SETS in addition to being used for Track sprinting and pursuing are ideal for Road use when a quickly interchangeable single ring is required.*

# Single ROAD chainwheels

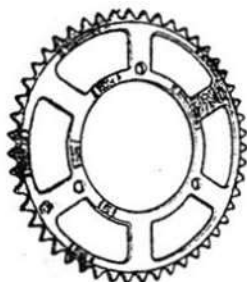
For use with either  $\frac{1}{2} \times \frac{1}{8}$  or  $\frac{1}{2} \times \frac{3}{32}$  chains.

Range : — Minimum 5-pin 26 teeth.

Minimum 3-arm 36 teeth.

Maximum 68 teeth.

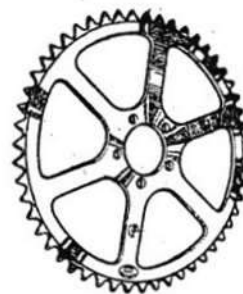
(Above 68 Teeth to Special Order)



Chainwheel 3-arm  
Ref. 203.  
36 to 68 teeth.



Crank Fixing Bolts  
(Set of 5).  
Ref. 25.  
(Supplied free with  
201, and 205).



Chainwheel 5-pin  
Ref. 205  
36 to 68 teeth.



Chainwheel 5-pin.  
Ref. 201.  
26 to 35 teeth.

NOTE.— Specify  $\frac{1}{2} \times \frac{1}{8}$  or  $\frac{1}{2} \times \frac{3}{32}$  when ordering single chainwheels.



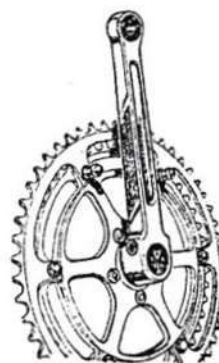
Special Cyclo Cross  
Chainwheel.

(For  $\frac{1}{2} \times \frac{3}{32}$  chain).

Ref. 3-arm 1203.

Ref. 5-pin 1205.

This chainwheel incorporates two light dural chainguards rivetted to each side of the chainwheel thus preventing the chain from derailing when riding over bumpy ground. The flush rivets are so finished to give maximum clearance.



Chain Trap.  
The Pair. Ref. 24.

Two double or triple Road adaptor fixing bolts fitted as shown, one on each side of the crank. These are extended to catch a derailed chain and prevent it jamming behind the crank and at the same time permitting it to be replaced easily while riding.

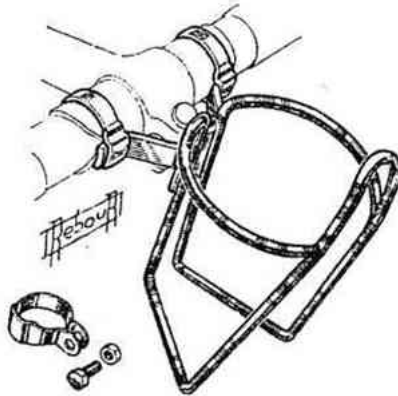


# BOTTLE CAGES

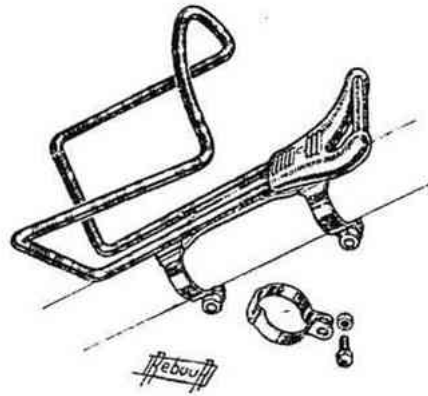
are the finest ever produced.

Look for these exclusive features:—

- \* *Constructed in one piece heavy gauge steel wire.*
- \* *No springs or expanders used.*
- \* *Solid brazed-on back plate.*
- \* *Fits any full-size bottle.*
- \* *Two accurate-fitting non-slip fixing clips.*
- \* *Superb heavy chrome plate finish.*

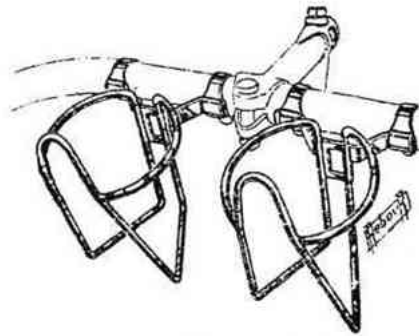


Clips for 213  
Pair Ref. 13.      Handlebar Type.  
Ref. 213.



Down Tube Type.      Clips for 215.  
Ref. 215.              Pair Ref. 15.

Two handlebar cages can be fitted alongside to equal a double handlebar cage as illustrated.



## BOTTLES AND HIP FLASKS

The TA Bottle secured the coveted contract for the world's most important cycle race—the TOUR de FRANCE, chosen because of these features:—

- \* *Made in special white polythene it will stand enormous pressure.*
- \* *It is light—it will take hot or cold liquids and is guaranteed against any odour.*
- \* *Fitted with a double seal cap ensuring a watertight fit.*
- \* *Cap is attached by a flexible moulded loop and has a thumb push lip for easy opening.*



Standard Bottle. Cap for 200,  
Ref. 200              Ref. 20



Hip Flask.  
Large  
Ref. 300.  
Cork for 300  
Ref. 30.

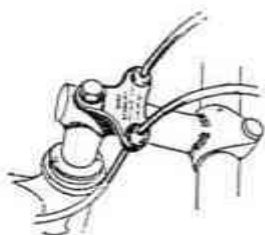


Hip Flask.  
Small  
Ref. 150.  
Cork for 150  
Ref. 15.

Standard Bottle can be impressed with your own trade name or with your "extra-sportive" marque.

# T.A. ACCESSORIES

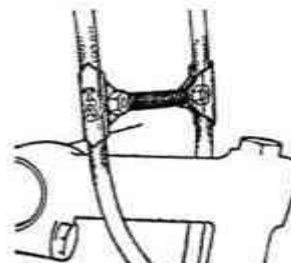
These are famous for their superb quality and improved design.



**Tourist  
Brake Cable Guide  
and Identity Plaque.**  
Ref. 32

Made in alloy this guide can be fitted to either expander bolt or stem clip bolt. Guides and rubber ring inserts are both slotted so that the brake cable can be fitted without cutting. Free movement is allowed to the cables without friction. This guide is ideal for engraving as an identity plaque.

**Racing  
Brake Cable Guide.**  
Ref. 34.  
Two neat clips joined  
by a spring giving full  
movement.



**Shoe Plates.**  
Ref. 36.

Here are the reasons why TA shoe plates are different and better.

- \* Extra light — only  $\frac{1}{4}$  oz. in finest duralumin.
- \* Extra strong — perfectly machined in one piece.
- \* Most practical — carefully tapered into a deep slot.
- \* Easiest to fit — location slot enables the plate to be held with a tack while the exact position is set.

## RECOMMENDED TOOLS



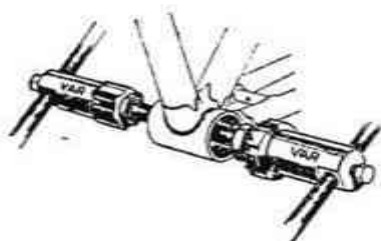
Forked Screwdriver for threaded chainwheel assembly bolt bush.  
Ref. V23.



Spanner for six-sided chainwheel assembly bolts.  
Ref. V24.



Allen Key for locking crank securing bolts. and new type Professionnel double assembly bolts.  
Ref. 136.



Tools for threading and dressing the bracket shell. Indispensable for correct fitting of BB cups.  
For French threads. Ref. 380.  
For English threads. Ref. W380.

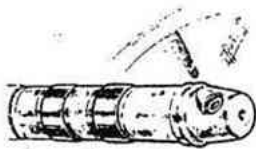




The French are famous for Cycle Accessories and as a result of a highly-developed industry catering for the National Sport of Cycling, French specialities lead the world in design.

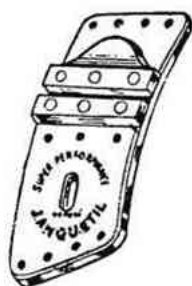
## AD-HOC PUMPS

These superb French racing pumps in finest dural were the first to use the widely copied plastic hand grip. The full range available is as follows:—



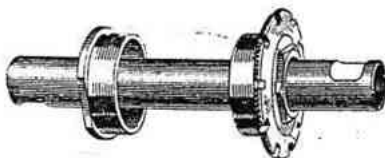
Integral

**MUSETTE** short 12" shoulder bag pump.  
**TOURISME** 15" x  $\frac{7}{8}$ " touring.  
**VENTOLUX** 18" x  $\frac{7}{8}$ " economy pump.  
**PROFESSIONEL** 19" x  $\frac{7}{8}$ " standard racing.  
**SPECIALE COURSE** 19" x  $\frac{13}{16}$ " narrow racing.  
**INTEGRAL** 19" x  $\frac{15}{16}$ " with special built-in racing adaptor, no connection fittings required.  
 and in plastic the **VENTIC** 15" x  $\frac{7}{8}$ " silver finish.



## ANQUETIL Shoe Plates

(Weight 2 ozs. pr.) Manufactured in forged duralumin consisting of 3 pieces rivetted with copper and a special extra long steel plate to protect the shoe sole. ROAD model (illustrated) has an extra long base plate, joining the heel and re-inforcing the sole without losing the necessary flexibility. The famous French rider, J. ANQUETIL, claims that this design assists in avoiding cramp during long races into the wind or in the rain. TRACK model is shorter with deep slots and extra strong base plate.



## BOHEM Bracket Set

"SUPER HOLLOW" set, perfectly machined in British dimensions this French production is really light with its full hollowed axle and distinctive cut-out locking. First class chrome plated with 3 lengths of axle, 127, 132 and 135 mm. the set weighs only  $7\frac{1}{2}$  ozs.

## BATAM Pump Adaptor

The BATAM is the most popular of all push-on adaptors due to its solid brass construction. Used in place of the loose pump connection the BATAM saves valuable seconds, being ready for immediate use at any time. Spare rubbers are available if required.





## Handlebars & Stems with a World-wide Reputation

**ABSOLUTE SECURITY** is ensured by the method of manufacture, and the use of **First Class Materials**, particularly with regard to the light metals, enables A.V.A. to guarantee all handlebars. The most modern installations in the works give all accessories an impeccable finish, thus achieving the maximum resistance to oxydisation. A.V.A. designs are produced in collaboration with racing champions and leading cycle tourists.

*A.V.A. SUPER-DURA dural stems are supplied in 2½", 3¼", 4" and 4½" forward, 8½" stem.*

*Bends are illustrated on the Super-dura duralumin stem.*



### **Super Riviera**

15½" wide, 5½" drop, 3½" forward. One of the most popular of post-war bends with a short forward reach and medium drop.

### **Antonin Magne**

15¼" wide, 6" drop, 4½" forward. This is the bend for the **distance rider**, square and comfortable, with grip slightly turned out to avoid wrist ache in long events.



### **Criterium**

14½" wide, 5½" drop, 4½" forward. An old favourite, the slightly narrow bar giving a good square top position.

### **Pelissier Route**

15½" wide, 6¼" drop, 4½" forward. The pre-war favourite and still very popular. Wider, deeper and more forward, this is a real **speedsman's bend**.

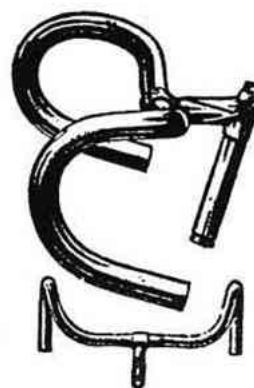


### **Azureen**

15½" wide, 6" drop, 3½" forward. A **really modern** bend with its short forward reach, deeper drop and sloping grip.

### **Le Randonneur**

16" wide, 4½" drop, 4½" forward. The **tourist's favourite**, giving a perfect touring position. A slight lift from the centre enables the Continental type of touring brake levers to be used, so avoiding riding down hill on the drops.



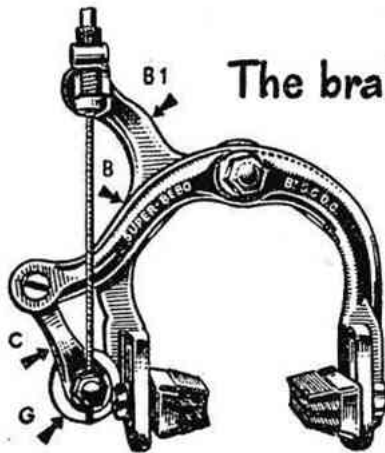
SEE SEPARATE LIST FOR PRICES

*Innovation!*

THE

**BEBOREX**

BRAKE



The brake with leverage amplified!

More powerful  
—it stops you  
with one finger!



Here is the 5 star brake that is more robust than any you have ever handled before.

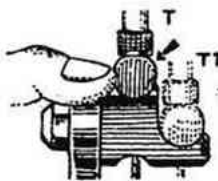
Made famous by the late STAN OCKERS in the Tour de France and used by KEN RUSSELL during his Tour of Britain success, this brake, made in maximum strength duralumin has features in design that are both different and better.

No other brake has all these Star features:—

\* **LEVERAGE AMPLIFIER**

The arm B, longer than B1, is actuated by pulling on lever C which rests on arm B1 by the intermediary of the pulley wheel G, so combining the action of the two unequal arms, therefore amplifying the least pressure put on the control lever.

\* **MOVEABLE CABLE STOP AND TENSION RELEASE**



To give clearance for a buckled wheel or tyre or for a quick racing wheel change, push the barrel T with the thumb into position T1. The brake blocks are thus moved away from the rim without altering the braking efficiency. This change can be effected without dismounting from the cycle.

\* **HOODED LEVER**

The hooded lever is beautifully shaped to fit the hand, and in addition has these exclusive features. Extra long top hood rest — Hood top shaped into cable cup — Lever imprinted with knurled finger grips — Spring steel clip held with hidden extra strong nut and bolt.

\* **SPRING ACTION**

The extra strong double coil spring operates smoothly behind studs incorporated in the brake arms. No snatching due to spring hooks causing wear in the dural arms.

\* **INCREASED ADJUSTMENT**

The brake block shoe slides are extra long to allow full adjustment to suit both popular rim sizes, enabling the brake to be used for all purposes.

REMEMBER — YOU ARE SURE OF BETTER BRAKING WITH BEBOREX

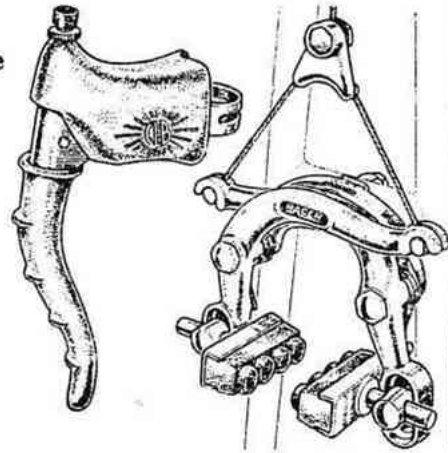
# FRENCH SPECIALITIES



CLB introduces a new centre pull brake, the

## RACER COURSE

Made in highly-polished dural in a design that offers efficiency and robustness with absolute security and incorporating several innovations. The brake is supplied with the CMC racing lever fitted with attractive rubber lever hoods.



These handsome French cranks are constructed in nickel-chrome steel with a new superior chrome finish in British threads and dimensions. Finely drawn they are fluted on all four edges and on the front face enabling the weight to be reduced. Two models for single or double chainwheels are available in either 3-arm or 5-pin fixing as follows:—

### 'PROFESSIONNELS RECORD'



- No. 300S 3-arm N.G.C.C. for single chainwheels. weight 16 ozs. pair.
- No. 300D 3-arm G.C.C. for double chainwheels. weight 16 ozs. pair.
- No. 500S 5-pin N.G.C.C. for single chainwheels. weight 20 ozs. pair.
- No. 500D 5-pin G.C.C. for double chainwheels. weight 20 ozs. pair.



A range of superb chrome cranks made for the rider who prefers strength to lightness. These cranks have given satisfaction when other types have failed.

3 models available

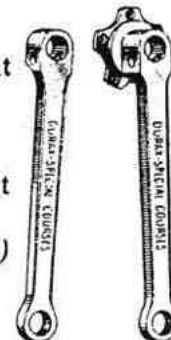
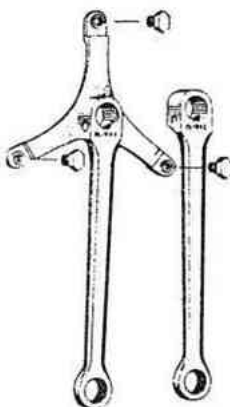
#### 3-ARM PATTERN

H.C. chrome bayonet fluted, weight 18 ozs. pair.  
(Length 6½" N.G.C.C. or G.C.C.)

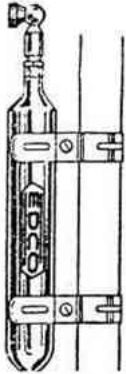
S.C. chrome square solid pattern, weight 20 ozs. pair.  
(Length 6½", 6¾", 7" N.G.C.C. or G.C.C.)

#### 5-PIN PATTERN

S.C. chrome square solid pattern, weight 20 ozs. pair.  
(Length 6½" 6¾" G.C.C. only.)



# French SPECIALITIES

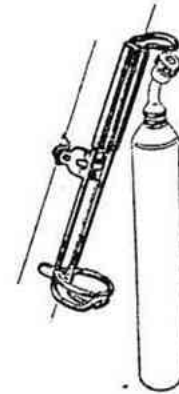


## EDCO COMPRESSED NITROGEN PUMP

Fitted with a quick-fit push-on racing adaptor and controlled release valve the EDCO will inflate a tyre to any desired pressure quickly and safely. Size only  $8\frac{1}{2}$ " x  $1\frac{1}{8}$ " the EDCO fits a racing vest centre back pocket or can be attached to the frame by clips or holder. Inflates a tyre in 2 seconds with half a turn of the body, capacity for 2 tyres. The nitrogen used is non-inflamable, harmless to the tyre and will not leak during use. Standard issue to all professional riders the EDCO can be refilled cheaply by our return post service.

## JULIEN PRUNIER NITROGEN PUMP HOLDER

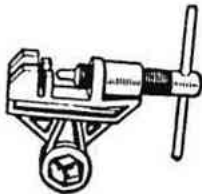
The PRUNIER is a patented pump holder made specially for the EDCO pump. It is soundly constructed in brazed chrome steel wire, spring loaded to give an instant release and return to hold the pump firmly in the base cup. Save those precious seconds — with one quick movement, put the pump valve into the top loop, push, and the pump drops into the cup, firmly held by the return spring.



## ECLAIR BRAKE CABLE CLAMP

A neat two-piece dural double cable clamp held together with a single centre screw. All popular colours in flamboyant finish.

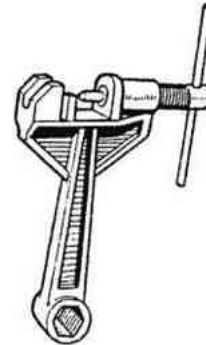
## FIFON CHAIN RIVET EXTRACTORS



The original bronze extractor and still the best. It will remove or re-fit either  $\frac{1}{8}$  or  $\frac{3}{32}$  chain rivets easily. The hardened steel punches can be replaced at any time.

No. 1 pattern is short and the spanner end flat to fit into a vice if required.

No. 2 pattern is longer, giving a good hand grip for roadside repairs. The FIFON is light in weight and cannot rust — it should be in every cyclist's tool kit.



## FIFON SPOKE NIPPLE KEYS



Bronze pattern is light and rustless and fits two popular sizes of cycle nipple. The two flats give a positive grip to finger and thumb. Professional type is in round cadmium plated steel and fits all popular sizes of nipples. Extra strong.



## G.B. - PARIS HANDLEBAR END STOPS



This French production is without doubt the most popular of all end stops. Made in plastic and rubber the stop expands after fitting by tightening the expander screw. Available with either small or large end cap executed in all popular bright colours.

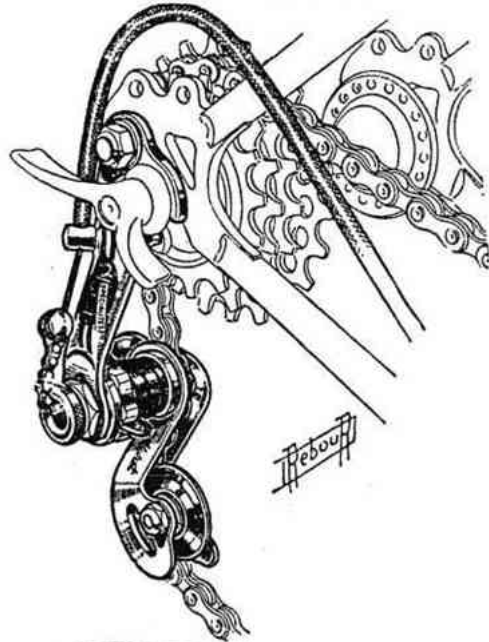


*This firm has a world-wide reputation for quality products, up to the minute design, race proved performance, full servicing and above all economy.*

Here are details of three of their most popular products.

**DERAILLEUR**  
**Tour de France**

Simple, light and rigid the TDF gear will cover the full range of ratios normally called for in racing, touring or town use. Suitable for a freewheel range of up to 15 teeth variation. The rigid construction is foolproof and at the same time allows easy and quick wheel removal.



**REAR DERAILLEUR**  
**ALLVIT**

The parallelogram gear that is different and better with the derailing cage rising to engage the smaller sprockets and falling along the contour of the freewheel to easily engage the larger low gear sprockets.

Exceptional range allowing variation of 15 teeth on freewheel and 13 teeth on double chainwheel.

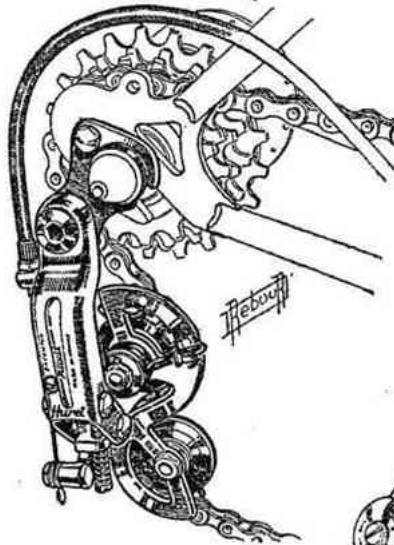
Adaptable for  $\frac{1}{4}$  or  $\frac{3}{32}$  freewheels in 3, 4 or 5 speeds.

Any screwdriver will effect a quick adjustment of the check screws.

Chain tension adjustment is made by hand.

Design enables full wrap of the chain over the sprocket and eliminates any jump or slip.

Model 1900 is supplied with single down tube right-hand control lever, 1884 or 1840.

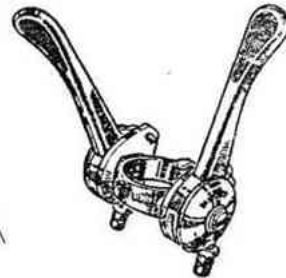
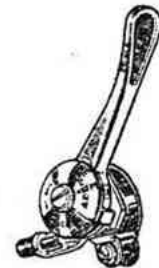


**FRONT CHANGER**  
**ALLVIT**

Cable operated parallelogram action front changer suitable for  $\frac{1}{4}$  or  $\frac{3}{32}$  chains, for double or triple chainwheel with large or small tooth variations.

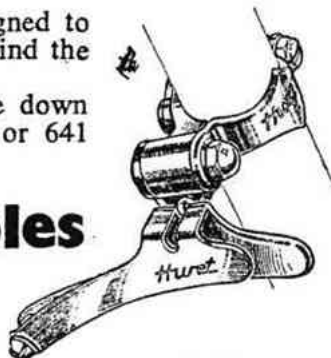
Extremely light and specially designed to enable the fitment of a pump behind the seat tube.

Model 600 is supplied with single down tube left-hand control lever 632 or 641 (L.H. with double clip).



**Allvit Ensembles**

Model 1960. Front and rear gears complete with double down tube control 1882.



*ALLVIT Front and Rear Gears are available in Standard chrome or LUXE chrome finish.*

# IDEALE

## The Continent's Finest Saddle

Since 1890 IDEALE have been manufacturing top quality Cycle Saddles.

Today their high standards of production, allied to quality materials, and modern design have produced a leather saddle which is recognised as without equal. TOM SIMPSON, Britain's first Tour de France leader, is amongst the many "pro" riders who use IDEALE, realising that only IDEALE quality can withstand the demands of modern stage racing.

More and more of Britain's popular lightweight cycles are being fitted with IDEALE—proof that our manufacturers realise the importance of using a quality saddle even on cheaper machines.

Here is the STANDARD SPORTS RANGE—unbeatable for value.

Model	Size	Weight	Flap Sides
Norex	11½" x 6½"	1lb. 5oz.	Perforated
Franceix	11" x 6½"	1lb. 4oz.	Plain (Tan colour)
Club 5	11½" x 6½"	1lb. 7oz.	Plain
Sport 41	11½" x 6½"	1lb. 7oz.	Perforated
Record 42	11" x 6"	1lb. 7½oz.	Plain
Course 44	11½" x 6½"	1lb. 7oz.	Perforated
Course 38	10½" x 6"	1lb. 6½oz.	Plain
Special 46	10¾" x 5½"	1lb. 10½oz.	Perforated
Special 75	10" x 6¼"	1lb. 8oz.	Plain



Club 5



Sport 41



Course 44

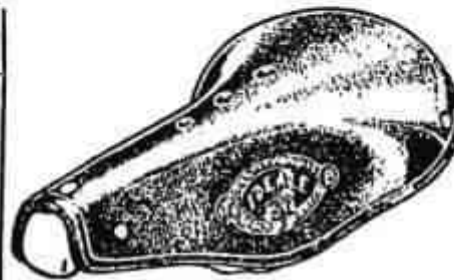
The Standard Sports Range of Saddles are made with **top quality butt hide** tops on frames with two high-strength wires and improved clips—bag loops fitted. Model 46 is fitted with a **patented removable steel wire spring** on a single point of attachment to the canle plate ensuring rapid removal and so enabling the leather to be broken in manually. (See illustration on next page.)

# IDEALE

'RECORD' and 'PROFESSIONAL' RANGE  
with these 'extra' features.

- \* Butt hide tops, quality tanned with oak bark.
- \* Solid copper rivets.
- \* Reinforced frame with fine adjustment.
- \* Patented nose tension, easily adjustable with spanner or tommy bar.
- \* Reinforced pillar clip.

Model & Size	Weight	Flap Sides
Record 51 10 x 6	11lb. 10½oz.	Plain
Professional 51 10 x 6	11lb. 12oz.	Plain
Record 52 11½ x 6	11lb. 9¼oz.	Plain
Professional 52 11½ x 6	11lb. 12oz.	Plain
Record 59 11½ x 6	11lb. 6oz.	Perforated
Professional 59 11½ x 6	11lb. 7oz.	Perforated



51



52



59

**NOTE:—**

Model 51 has patented Cylo-Cross nose.

Model 51 and 52 have patented removable steel wire spring (see illustration).

Model 59 has spring consisting of two removable duralumin spars.

Record Saddles are made in Black leather. Professional Saddles are identical but are specially WEATHERPROOFED.

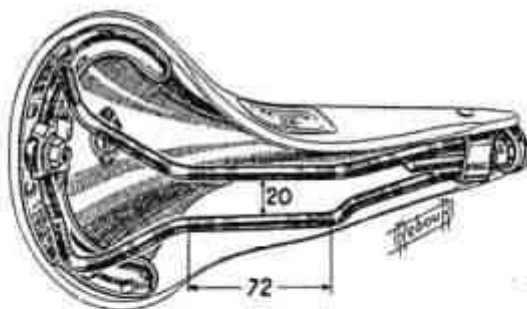


Illustration showing the patented IDEALE removable steel wire spring with single point of attachment featured in Models 46, 51, 52, 88, 89.

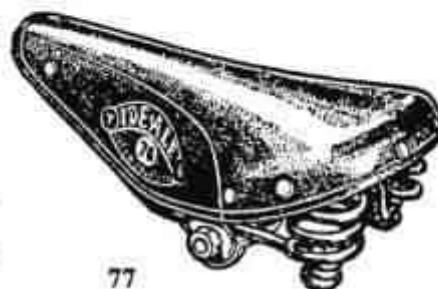
Note also the IDEALE adjusting nose.

IDEALE have produced a special touring saddle.

No. 77. CYCLO TOURIST.  
Size 10" x 6. Weight 2 lbs 5 ozs.

Natural leather. Special Cylo-Cross nose.

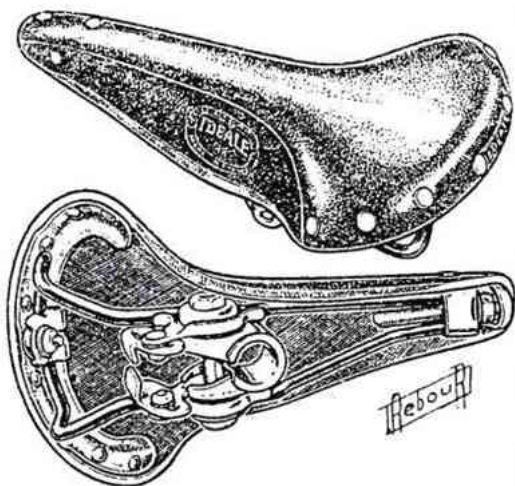
Reinforced clip. Two COIL SPRINGS at rear.



77



# IDEALE SPECIAL COMPETITION SADDLES



Accepted by the Continental 'pros' as the world's finest leather racing saddle by reason of these exclusive features:—

- \* New form to avoid triangulation of the top.
  - \* Extra quality tanned butt hide, with internal mudguard.
  - \* Detachable patented 2-wire steel springs.
  - \* Easily adjusted reinforced front tension.
  - \* Red copper rivets across back of the cantle plate.
  - \* Special patented frame.
  - \* Competition saddle clip guaranteeing non-slip security and incorporating spare tubular or cape carrying strap.
- Saddle Top size 10½" x 6".

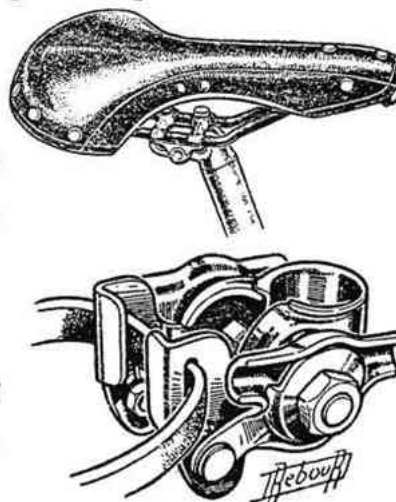
**SPECIAL COMPETITION SADDLES** are available in 4 models.

- 88 SC and 88 C have full side flaps.
- 89 SC and 89 C have cut-away sides.
- 88 SC and 89 SC are fitted with the **SPECIAL COMPETITION non-slip clip**.
- 88 C and 89 C have special frame to fit NITOR 1963 or CAMPAGNOLO Seat Pins

and the new Saddle Clip, the

## IDEALE SPECIAL COMPETITION

incorporating a security lock and a tubular tyre or cape holder.



This clip will bring your favourite saddle right up to date. Adjustment by serrations of the standard saddle clip has long been criticised, particularly by racing men who have been unable to adjust the incline of the saddle to fine limits.

If the serrations are very fine, permitting exact adjustment, there is risk of the saddle tipping at any time.

On the other hand, if the serrations are more pronounced the adjustment is not precise and this is equally annoying.

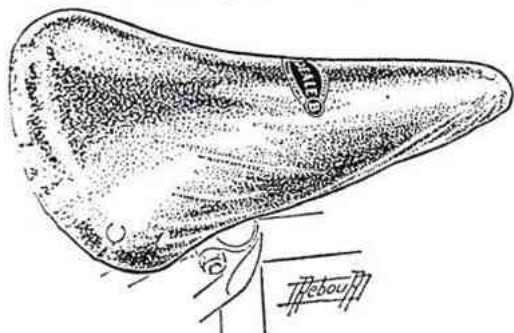
**The new IDEALE saddle clip overcomes these faults.**

The surfaces usually serrated are lightly knurled and separated by a semi-pliant washer. The locking is effected by the usual axle bolt and two nuts.

The cyclist adjusts his saddle position as with a normal clip then when set, he strongly tightens the two axle-bolt nuts and also the two smaller securing nuts and bolts which prevent any movement or alteration of position.

If for any reason he wishes to remove the saddle from the pillar, it is sufficient to loosen the two main axle nuts leaving the security nuts tightened. The position is therefore conserved and the saddle easily returned to its initial place.

Part of the rear of the clip has been extended, turned back and slotted. A **quick release strap** is supplied and fitted through the slots acting as an excellent tubular or cape carrier.



The new IDEALE clip is available for the usual type of two wire saddle frames and also for the special IDEALE duralumin frames (Model 59).

**All RACING type saddles are fitted with numbered IDENTITY plate and supplied with printed guarantee.**

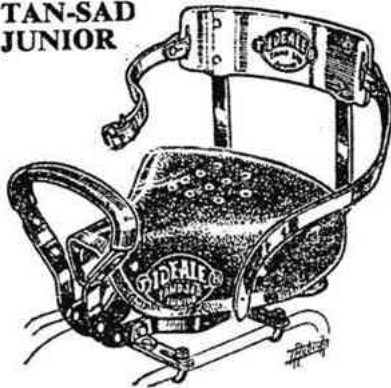
Protect your leather saddle from the weather and also your trouser seat from contact with greasy leather—use the IDEALE saddle cover, made in translucent plastic it will easily fit all models.

# IDEALE SADDLES FOR JUNIOR

A Range of Six Models

Model	Type	Material
130	BOYS	NORTAL PLASTIC
28	BOYS	Leather 2 wire frame
29	GIRLS	" 2 " "
30	BOYS	" 4 " "
31	GIRLS	" 4 " "
27	BOYS	" RACING Model

## TAN-SAD JUNIOR



and for carrying "baby" the best of all child carriers—

### TAN-SAD JUNIOR

adaptable for all types of cycles and mopeds.

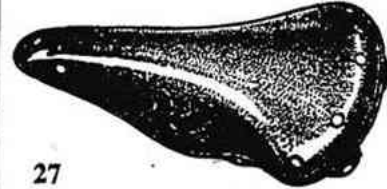
Delivered with— SECURITY STRAP,  
LUMINESCENT BACK,  
MATTRESS seat in VINYL  
Extra.  
In all colours.



28



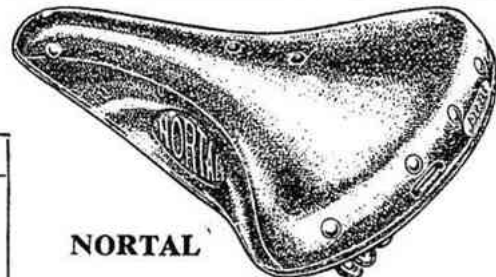
30



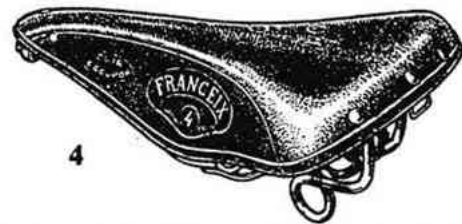
27

## A Range of 4 ROADSTER Models.

Model	Type	Material
NORTAL	GENTS	Moulded in PLASTIC of High Resistance in Maroon or Fawn.
NORTAL	LADIES	
4 FRANCEIX	GENTS	1st choice LEATHER with 4-wire frame.
6 FRANCEIX	LADIES	



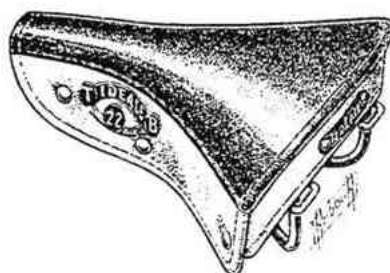
NORTAL



4

## MATTRESS TOP Models

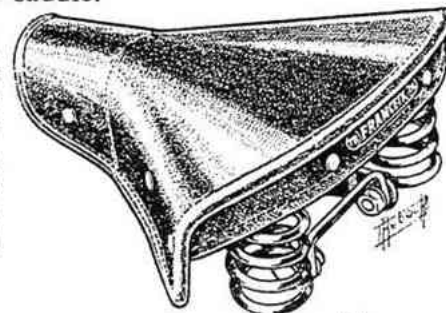
**No. 22** A new Supple Saddle suitable for gents, or ladies in attractive 2 colour design. Supplied with GREY sides with MAROON or BLUE top or top colour to choice.



22

**No. 22 AR.** For safety at night, model 22 is available as No. 22 AR with a patented LUMINESCENT back. This advantage, exclusive to IDEALE, means that every source of light is stored and reflected later over a long period by the luminescent back of the saddle.

**No. 24. FRANCEIX.** A sturdy Saddle suitable for either cycle or moped with VINYL top supported on 2 strong coil springs.



24

# IDEALE MOTORISED SADDLES

A Programme that incorporates the most modern Saddle improvements with the famous IDEALE quality of workmanship and materials, allied to patented IDEALE features.

## TYPE 23

A saddle suitable for cycles as well as mopeds.

Black VINYL EXTRA top on strong covered mattress springs.

RIGID FRAME incorporating 2 strong COIL SPRINGS.

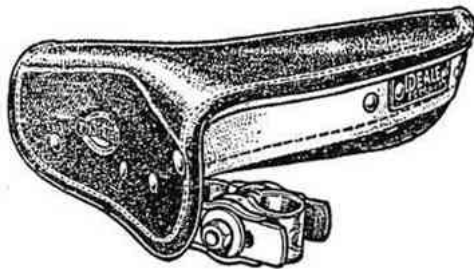


23 and 25

## TYPE 25

Similar to 23 but incorporating the famous IDEALE LUMINESCENT back.

Top available in colour.



150

## TYPE 150

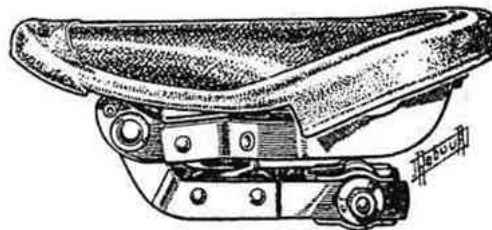
This saddle is suspended with the point of articulation at the front and has a large central cylindrical compression spring. The top is in VINYL EXTRA in any of the famous IDEALE colour ranges. Superior rigid frame and clip and LUMINESCENT night safety back.

## TYPE 160

This model has the same type of central suspension by single spring as 150 but the top of the saddle is composed of a double cover of rubber.

This interior rubber comes into use if the rider is very heavy or should the condition of the road be such as to cause excessive springing.

The top of this saddle is in LIGHT GREY colour.



160

IDEALE Saddles have been famous since 1890—proof enough that you can trust the products bearing this famous Trade Mark.



**INTRODUCING**



# Cycle Lighting

## “LIGHTEST IN THE WORLD” CYCLE DYNAMO SETS!

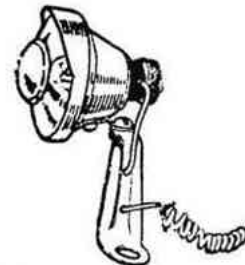
JOS Lighting Sets are the result of the most practical research into the cyclist's lighting requirements.

The sets combine working dependability, mechanical soundness and high efficiency with originality of presentation. Made of ultra-light non-rusting alloy of high resistance, they offer a considerable saving in weight compared with other types. These features are most important to the all-year-round cyclist.

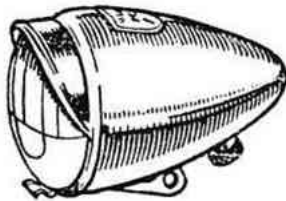
### HEADLAMPS

Special 9 star features:—

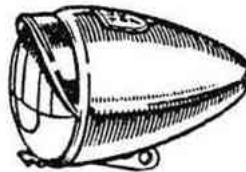
- \* Brilliant mirror reflectors, non deteriorating.
- \* Unbreakable perspex glass.
- \* Anti-dazzle built-in visors
- \* Automatic quick release glass fixing clip (except on 430 and 431).
- \* SECURITY finger locking terminal screw on 430 and 431.
- \* Easily removable bulb holders.
- \* Aerodynamic streamlined design.
- \* Supplied with either mudguard or lamp bracket attachment.
- \* Superb polished finish in CHROMINOX alloy.



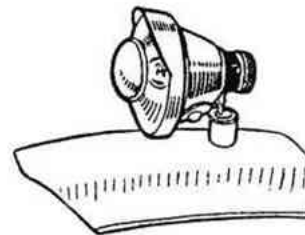
**430C.** 1½" diameter. Magnified "bull's eye" glass. UNIVERSAL fixing stay permitting easy fitting to guard eye, brake bolt, stem bolt or front fork dyno. bracket. Weight 1oz.



**663Cv.** 2½" diameter. Weight 3 ozs. Anti-dazzle built-in visor.

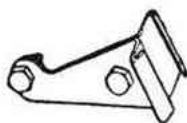


**513Cv.** 2" diameter. Weight 3 ozs. Anti-dazzle built-in visor.



**431C.** As 430C but with STUD fitting for front mudguard extension.

### HEADLAMP BRACKETS



**PL** Standard English type lamp attachment fitted as standard to all headlamps except 430 and 431.



**GT** Mudguard attachment fitted as alternative to PL if required.



**PG** Handlebar stem type supplied if required at small extra cost.

## DYNAMOS

### Special features :—

- \* Made in *CHROMINOX* treated non-rusting alloy.
- \* Dynamo bodies are of 35 m/m diameter and are treated by anodic oxidation and are guaranteed against any change in finish.
- \* The *JOS* method of articulation on vertical axle used with push button spring release (except on TC - horizontal axle) is exclusive and ensures a smooth pulley drive under all atmospheric conditions, rain, snow, frost etc.
- \* De Luxe dynamo *XA* has a rotor with special poles, which reduces the pull for equal power. For example, the 3.6w has less pull than the normal 2.7w for much greater power.
- \* Built-in spring cable grip on TC. *SECURITY* type finger locking terminal screw on *XA*.



TC 6 volts — 3 watts. Weight 6½ ozs. Support pivots on horizontal axle.



XA 6 volts — 3.6 watts. Weight 9 ozs. Special *CHROMINOX* finish. Support pivots on vertical axle.

## DYNAMOBLOC SETS

This popular clubrider's set consists of type TC dynamo with 513 Cv headlamp attached in one unit.

The support axle is extended forward so as to avoid any interference with the brake blocks.

B504 Cv. 6 volts — 3 watts. Weight 7¼ ozs.

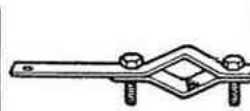


## DYNAMO SUPPORTS

Special design ensures a correct position for the dynamo and avoids any possibility of movement. Special oxidised finish gives protection and good appearance. Types BF and BH have built-in earthing screws.



BF. Front fork bracket supplied with B504 Cv Dynamo-bloc set.



BN. Roadster rear stay bracket supplied only on request.



BH. Rear pencil stay bracket supplied with TC and XA dynamos unless requested otherwise.

Recommended bulbs.	Head.	Tail.
TC and B504 Cv dynamos	6v. .35A. or 6v. .4A.	6v. .1A. or 6v. .04A.
XA dynamos	6v. .5A.	6v. .1A.

All *JOS* Dynamos are stamped with the bulb reference and carry a guarantee of 3 years. Full range of spares are available in Great Britain with prompt servicing facilities.

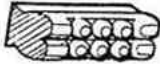
# FRENCH SPECIALITIES

## J.B. DYNAMO PULLEY COVER



This neat moulded rubber all-over cap is available in two sizes, in all colours and has deep serrations to give a sure grip to the pulley wheel in wet or snowy weather. Saves replacing a worn pulley wheel — essential for all dynamo users.

## LA VIPERE BRAKE BLOCKS



Popular studded pattern giving smooth and safe braking under all types of weather conditions. Two types are available — HAVANE No. 4 in white rubber for steel rims and PYTHON No. 5 in softer red rubber for alloy rims.

## ANDRE LEDUCQ PUMP CLIPS

Three types of popular quick-fit pump clips, all light in weight and practical in use.

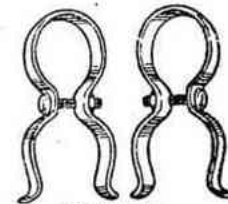
**LE RAPID** — spring loaded two-way clip, plastic covered in attractive colours on chrome.

**LUTECE** — one piece clip with open spring end. Chrome plated but covered in coloured plastic for protection.

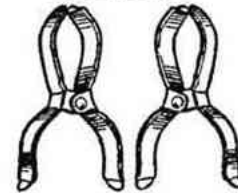
**G.F. 28** — Standard type clip-on pegs in silver finish.



G.F. 28



LUTECE



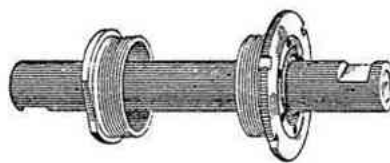
LE RAPID

## LIGHTRACE

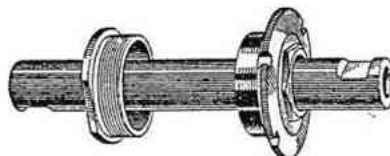
### BRACKET FITTINGS

2 models available both constructed in specially treated chrome nickel steel with 3 lengths of axle for single (128 mm.) double (130) or triple (132) chainwheels.

Supplied in British or Continental standards.



GMA model fitted with standard solid axle. Weight 10 ozs.



LELEGE model fitted with full hollow axle specially strengthened. Weight 8 ozs.

### HEAD FITTINGS

Extra light, chrome micro-adjusting.

Races specially ground and hardened in finest nickel-chrome steel. French or British standards. Weight 5 ozs.



## MAFAC BRAKE BLOCKS

As fitted to the famous MAFAC brakes, these blocks are constructed in a special black rubber, 4 studded for solos and 5 studded for tandem use.

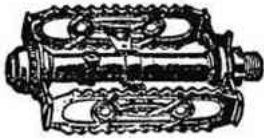




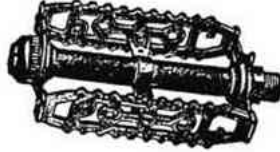
## PEDALS ARE FAMOUS THROUGHOUT THE WORLD

Pierre Lyotard, the original designer of the quill pedal produces an unrivalled range of light-weight pedals, each manufactured from the best of materials in either finest chrome steel or polished duralumin, every model designed for a particular purpose. Features of LYOTARD pedals include hollow spindles and solid centre barrels.

### Duralumin Range



No. 460 COURSE  
3½" wide, extra light  
12oz. pair



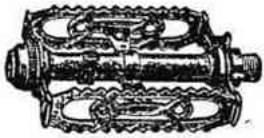
No. 240 COURSE  
4" wide, 12½oz. pair



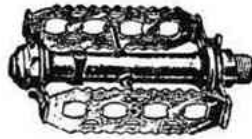
No. 45 CA. Piste,  
steel body, quill cage  
in duralumin. 3½"  
wide, 12oz. pair.

Model 45 TER is  
similar to 45 CA but  
in all duralumin

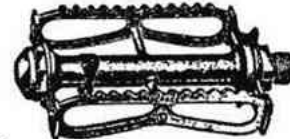
### Chrome Steel Range



No. 460 A. COURSE  
popular double sided  
sports type 3½" wide,  
18oz. pair.



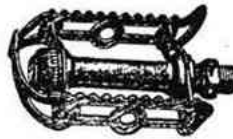
No. 15B Tour de France  
solid centre barrel,  
double sided, 3½"  
wide, 18oz. pair.



No. 15S Piste & Route  
single sided, solid centre  
barrel, 3½" wide, 16½oz.  
pair.

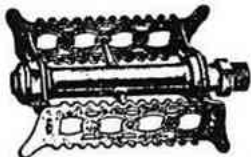


No. 23 Piste Marcel Berthet  
platform type, solid centre  
barrel, 3½" wide, 14oz. pair.

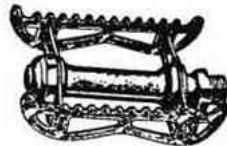


No. 45 PISTE  
single sided quill, solid  
centre barrel, 3½" wide,  
16oz. pair.

MODELS  
15S & 23  
are also  
available  
threaded for  
toeclips.  
Ref. TF.



No. 38 COURSE LUXE  
double sided, solid  
centre barrel, 3½"  
wide, 16½oz. pair.



FAUCHEAUX  
new pattern single  
sided quill, solid centre  
3½" wide, 16oz. pair.



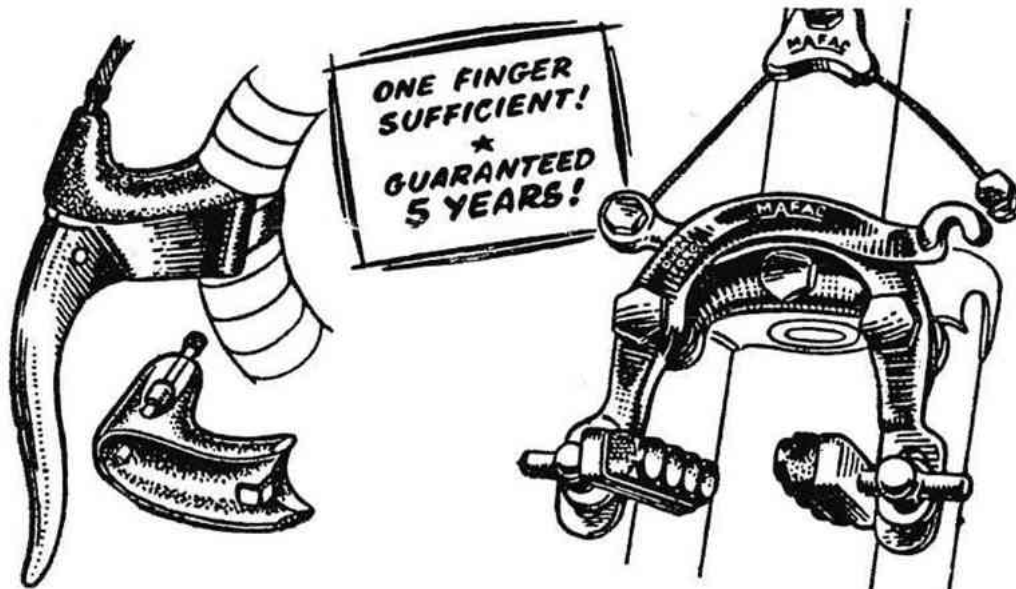
No. 46  
Course and Cyclotouriste  
World patented design  
giving a choice of reach  
simply by reversing the  
pedal. The concave side  
gives a rational support for  
the foot and the reverse  
side being flat allows a  
relaxation of the leg. 3½"  
wide, 15oz. pair.

*Our LYOTARD pedals are made especially in British Standard threads and dimensions, and a full range of spare parts is always available.*

# MAFAC

## THE FIRST CYCLE BRAKE OF REALLY GREAT CLASS

This famous French manufacturer has produced a range of cycle brakes unrivalled in quality and design. No other brake has been adopted by cycling champions so unanimously, winning every classic including the TOUR de FRANCE and the WORLD'S CHAMPIONSHIPS.



For racing use the model . . .

### **RACER** the brake with these \* STAR improvements.

- \* Weight only 25 ozs. pair.
- \* Brake bolts 6 & 7 mm. in special steel, giving a braking resistance of over 3,000 lbs.
- \* Brake arms in forged duralumin, specially treated and absolutely unbreakable.
- \* Articulation on bronze bushes with openings for oiling, a MAFAC creation that has survived every test.
- \* Movement works in equilibrium by central pull and independent return springs.
- \* Patented studded blocks, the only type effective in the rain.
- \* Instant cable release allowing free passage of a badly buckled rim, and immediate disengaging of the brake.
- \* Complete pivoting of all points of cable attachments.

and the famous *PROFESSIONEL* racing lever.

- \* Classic hooded design with rounded inside edges avoiding any roughness to the fingers.
- \* Patented spring steel lever clip with special stud attached.
- \* Fitted comfortable durable rubber lever hood cap in choice of four colours, White, Red, Blue or Green, with incorporated cable adjuster having  $\frac{1}{2}$ " movement.



The ease of working of this brake and the strength of braking almost eliminates any risk of breaking cables.

### FITTING AND ADJUSTMENT

Centre bolts supplied either 6 or 7 mm. dia. For latter drill crown to 7-1 central and plumb. Rear Pivot bolt pads are unequal thickness to permit stepping out or closing up of rear brake. Supplied for bridges of 12 mm. diameter, the minimum necessary for proper fixing.

Contrary to models CRITERIUM and TANDEM, the brake blocks must approach the rim rather low but must never touch the tyre. Deep or shallow stirrups to accommodate all wheel sizes—be sure to state which required. Full range of spares always available—see separate list.



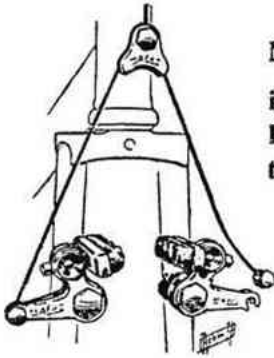


## Brakes for Tourists and Tandemists

The super forged dural MAFAC brakes are available in special cantilever design to pivot on brazed-on fork pegs. This method is ideal for touring and tandem machines giving full clearance for the widest of mudguards and allows ample adjustment for any size of wheel or tyre.

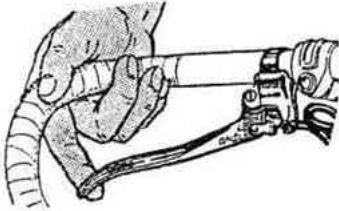
Note these special features:—

- \* Pivot arms articulate on bronze bushes giving trouble free long life.
- \* Brake shoes have full adjustment in all directions.
- \* Complete pivoting of all parts of cable attachments.
- \* Pivot arms are independently spring loaded.
- \* Extreme simplicity of design.
- \* Instant cable release allowing free passage of a badly buckled rim and immediate disengaging of the brake.
- \* Economy in weight, the CRITERIUM weighing only 22 ozs. pair and the TANDEM only 26 ozs. pair.



### MODEL CRITERIUM

is for solo machines and is available with either PROFESSIONEL hooded levers or the special GUIDONNET touring lever.



### THE GUIDONNET

lever clips to the centre of the bars and follows the contour of the "tops" enabling the brake to be applied without reaching for the lower grip. Made in pairs, left and right hand to fit any shape of dropped handlebar but is most effective with the "Randonneur" shape.

### MODEL TANDEM

is similar in design to the CRITERIUM but with longer pivot arms giving greater leverage and with blocks having five studs in lieu of the four fitted on models RACER and CRITERIUM.



### MODEL TANDEM

is supplied with PROFESSIONEL levers, one of which can be supplied specially constructed to operate two cables so that a third brake can be used if required. This lever is fitted with a double holed rubber hood cap as illustrated.



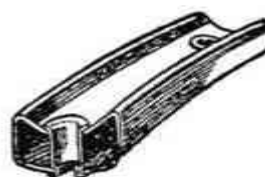
A full range of spares is always available — see separate illustrated list.

# FRENCH SPECIALITIES

## MAVIC SPRINT RIMS

These superb sprint rims are manufactured in finest duralumin. The spoke holes have water-tight ferrules fitted, giving the rim exceptional strength, and the deep flat sides have ample braking surface. Drilled 28/28, 32/40 or 36/36, the MAVIC is available in 27" only.

Two models — FISTE 13 ozs. and MONTLHERY.



## METAFIL Inner Wires

A range of inner wires unequalled for quality. A full range is available to fit most of the popular modern cycle brakes and derailleur gears. All wires are individually packed.



## OZANNE Thorn Catchers

The original racing thorn catcher in fine steel wire — fully adjusting in all directions. The best — in exclusive gold finish.



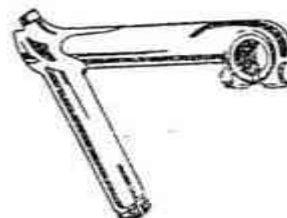
## CHARLES PELISSIER



Here is the favourite with the lightweight enthusiast. Designed by the famous French champion, the PELISSIER is made in the lightest of duralumin and is cleverly spring loaded and pivoted in its centre. Highly polished and streamlined it enhances the appearance of any machine.

## PHILIPPE No. 40 HANDLEBAR STEM

Made in super quality dural, re-inforced and highly polished with attractive red enamelled cut-outs. Fitted with expander bolt this stem is available in 4 forward lengths; 7, 8, 9 and 10 cms.



## No. 37 BIS HANDLEBAR STEM.

A superior chrome stem with fully adjustable slider. Supplied with expander bolt fitted.



## Toestraps

*No scraps or rejects from the tannery—only the very finest chrome leather used.*



**ECLAIR No. 15** A really super chrome leather toe strap specially treated to resist wet. Cadmium plated non-rusting and non-slip roller buckle.

**PATURAUD SUPER No. 30** A similar quality to ECLAIR but with original tie end acting as a grip when tightening or as a stop when releasing. As used in the Tour de France.

**PATURAUD "CAMPIONISSIMO"**

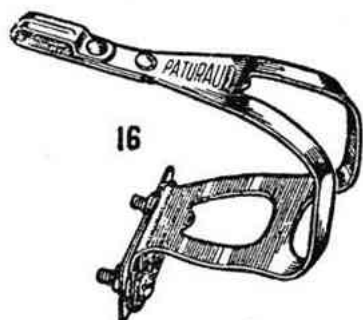
Latest introduction super quality toe-strap with non-slip buckle.

*All types available in Red, Blue, Gold, Green or Natural colours.*



## Toeclips

*Guaranteed Manufactured in tempered steel.*



**SUPER CHAMPION 10B**

Chrome ribbed, tempered steel.

**PATURAUD "GRAND LUXE" No. 16**

Chrome plated in a new shape to give maximum comfort. Two sizes, medium and long. As No. 22 without leather covering.

**PATURAUD "GRAND LUXE" No. 22**

Chrome with the front bars covered in chrome leather. Protects the shoes.

**FEMINA "GRAND LUXE" No. 18**

Chrome. Special short pattern for ladies' use. As No. 22 but without leather covering.

**FEMINA "GRAND LUXE" No. 18c**

As No. 18 with leather covered front bars.

**PATURAUD AUTOMATIC No. 23**

Chrome, adjustable to fit all sizes. Top and base firmly clamped together with studs giving a choice of five non-slip positions. Easily altered.

**PATURAUD AUTOMATIC No. 23c**

As above, but with leather covered front bars.

**PATURAUD TOURIST No. 20**

Chrome, with clamping bolts to fit to rubber pedals, two sizes.

**PATURAUD VILLE No. 27**

Chrome, short pattern for town use without toe strap.

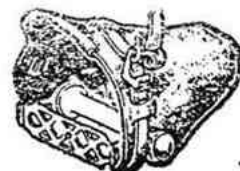
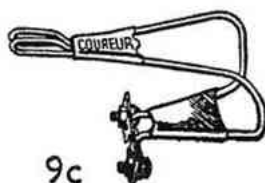
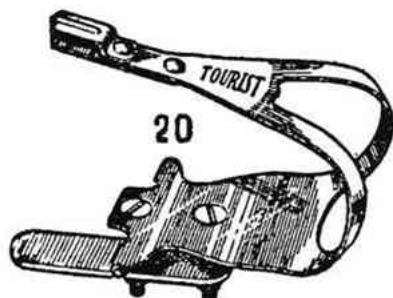
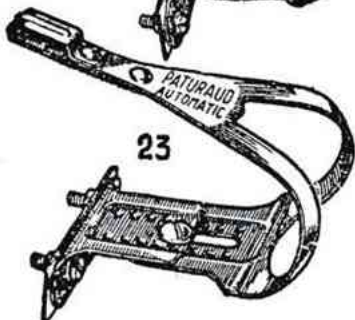
**PATURAUD "COUREUR" No. 9c**

A new extra strong toeclip in cadmium plated piano wire formed in the modern square shape.

**PATURAUD PIESCHO No. 38**

Solid chrome leather toeclip cover held by toe strap. Full protection against cold, wet and mud.

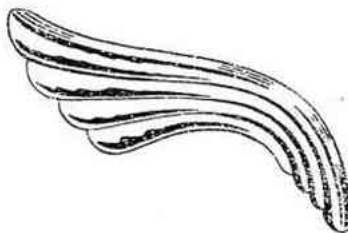
*PATURAUD toeclips and straps are used by the Champions of France, World champions and record holders, and winners of the principal stages of the Tour de France. Riders ask again and again for PATURAUD specialities.*



# FRENCH SPECIALITIES

## PIGEON'S WING CHAINGUARD

This Strong Lightweight Top Chainguard is attractively finished and made in polished duralumin. Popular on touring machines giving the necessary protection. Supplied complete with all fittings.



## ROBERGEL - THE WORLD'S FINEST CYCLE SPOKES.

Anquetil — Simpson — Bobet — Elliott — Van Steenberg — Riviere.  
Champions of the Road prove these spokes to be the best.

Available in three qualities:—

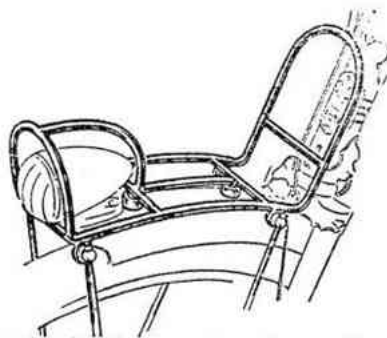
**ETGILE** — for touring and sports cycles. Specially-treated stainless-steel coated with zinc or chrome. Available in 13, 14 or 15 plain gauge or 13 x 15, 14 x 16 or 15 x 17 double butted.

**SPORT** — for racing and sports cycles. Specially-treated stainless-steel coated with zinc. Available in 15 x 17 double butted gauge only.

**TROIS ETOILES** — for special competitions and de luxe cycles. Guaranteed chrome-nickel stainless-steel throughout. Available in 15 x 17 double butted gauge only.

## SIBIEN FRONT BAG SUPPORT

Popular French support in light aluminium finished steel, suitable for attaching only to alloy mudguards. Attachment by two rubber cushioned bolts with additional support from four loop pattern stays from fork ends secured in six strong eyebolts. The design provides for fitting a front mudguard dynamo headlamp.



## TRANSFIL Cabling

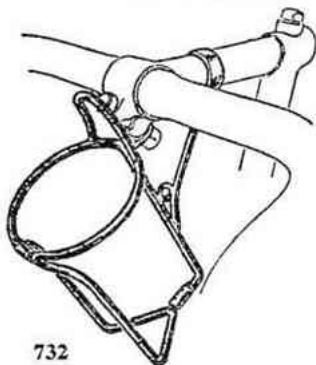


"Suplex" superior quality ribbed plastic in attractive colours of Red, Grey, White, Green and Black.

"Dynoflex" Dynamo Cabling in Red, Blue, Grey or Transparent.

## VIT BOTTLE CAGES

**THE** most popular bottle cage. Used by almost every leading roadrider. Patented design strongly constructed in chrome plated heavy gauge steel wire weighing only 3ozs. Expands when bottle inserted by means of **TWO** springs closing firmly to prevent any rattle.



732



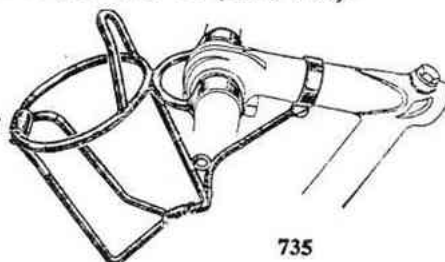
730

Standard models for **HANDLEBAR** (Ref. 730) or **DOWN TUBE** (Ref. 731).

Plastic bottle models for **HANDLEBAR** (Ref. 732) or **DOWN TUBE** (Ref. 733).

Down Tube (with 2 clips) (Ref. 734).  
Special Handlebar (Ref. 735) with 3 handlebar stem clips.

Plastic Bottle Models have an additional loop (as lower illustration) to hold the plastic bottle firmly in place.



735

# WOLBER

*The most famous tyre firm in France introduce the new*

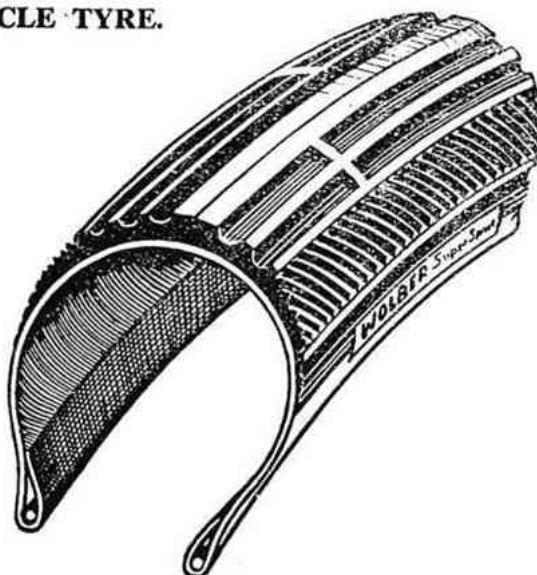
## **SUPER SPORT**

### **HIGH PRESSURE WIRED-ON CYCLE TYRE.**

Designed expressly for the British market to fit 27" x 1½" High Pressure rims these tyres fill the long felt need for a better product.

*Look for these "Super Sport" features:—*

- \* Weight only 13½ ozs. — much lighter than the average Pressure tyre.
- \* Deep sided black tread with exclusive diagonal ribbed walls for safe cornering.
- \* Centre section deep ribbed for effortless speed.
- \* Strong cord casing with flexible translucent walls.



*The WOLBER "Super Sport" is the truest tyre ever made and the safest and most reliable.*

SUPER SPORT inner tubes fitted with best quality French Presta valves and neat narrow rubber rim tapes are also available to complete the set—all at reasonable prices.

... or if you prefer "sprints" WOLBER offer the following tubular racing tyres:—

**INTERNATIONAL** Weight 14 ozs. with ribbed centre and file walls tread.

**SPECIAL COURSE** Weight 13 ozs. with file tread.

... and for the all-year-round "sprints" user the:—

**RENFORCE** the famous all red fully rubbered 22 oz. tubular.

**YOU WILL HAVE NO TYRE TROUBLE IF YOU FIT WOLBER**

**REMEMBER**—if you want the best—you want

*French*  
**SPECIALITIES**

# PENNINE

## CO<sub>2</sub> (Carbon Dioxide Gas) RACING PUMP

*Re-introduced in an improved form the PENNINE racing pump is now made in light polished alloy tubing and is fitted with two attractively coloured plastic hand grips.*

Look for these 8 STAR features:—

- \* Weight complete with cartridge only 3½ ozs.
- \* The pump fills a cycle tyre to the desired pressure in one second.
- \* The tyre will hold the pressure for 8 to 12 hours.
- \* Replacements are easily and cheaply obtained everywhere.
- \* Each cartridge suffices for one tyre and spares can be carried in the pocket.
- \* No damage will result to the cycle tube by using the Pennine pump.
- \* The pump can be carried in the pocket or held in a quick release single clip which can be brazed to the cycle frame if required, (See Fig. 1).

### INSTRUCTIONS FOR USE.

1. Fit tyre to rim.
2. Test that the tyre valve is open.
3. Push the pump end firmly over the valve.
4. With a quick movement turn the extended lever handle, which will be found in the shallow slots, 180 degrees until touching the body as shown in Fig. 2. This movement will fire the "Sparklet" cylinder and draw the gas into the cycle tube.
5. Free the lever.
6. Close the tube valve.

### INSERTION OF A NEW CHARGE.

1. Hold the lever handle firmly with one hand.
2. Draw the body of the pump away until the lever catches into the longer slots.
3. The lever can at once be taken away.
4. The old cartridge falls out and the new one, narrow end first, can now be inserted.
5. Replace the lever into the shallow slots.
6. Fit the pump body back into the Pennine brazed pump clip or other type of holder, once more ready for instant use.

*NOTE:—If the pump is carried in jersey pocket it is advisable to leave the release lever in the longer slots so as to ensure there is no unintentional discharge.*

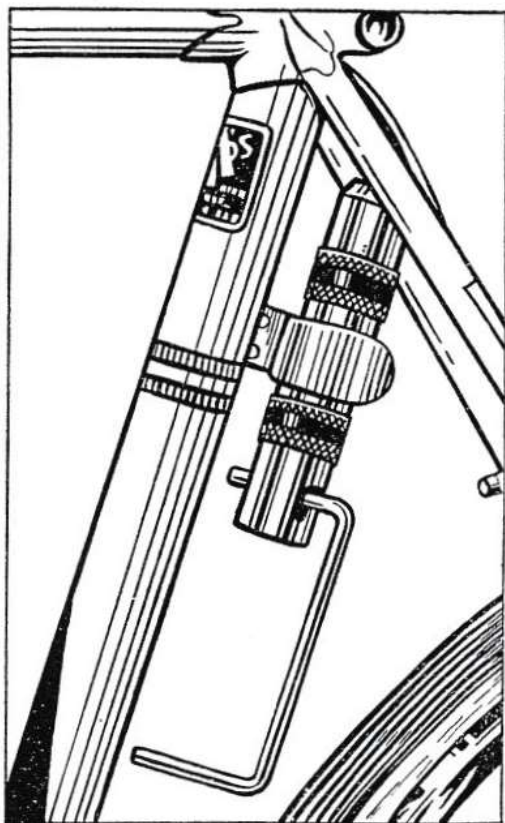


FIG. 1. PUMP HELD IN BRAZED CLIP, LOADED AND READY FOR USE.

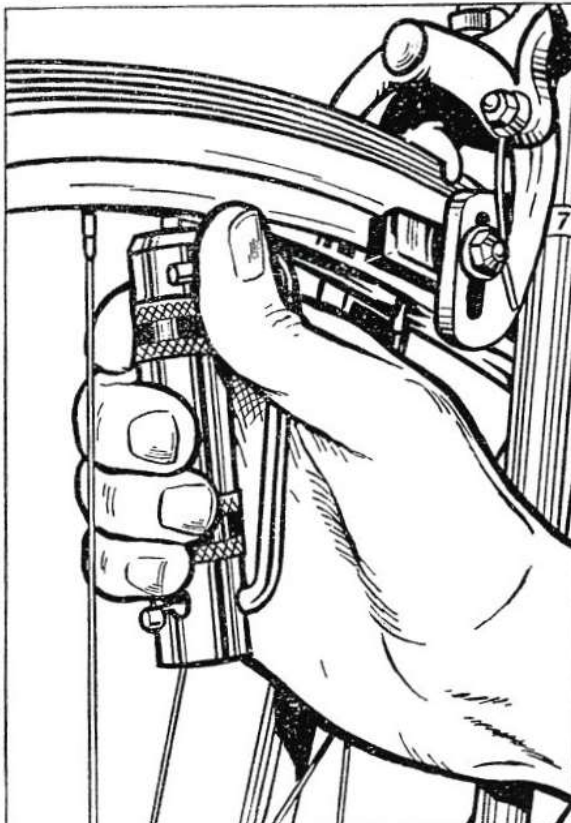
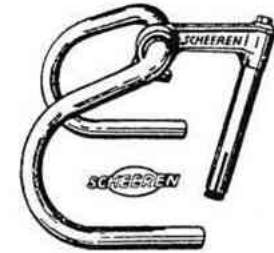


FIG. 2. PUMP AFTER FIRING.

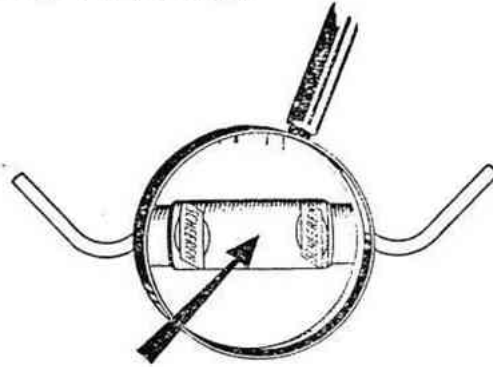
**BEWARE — USE ONLY GENUINE "SPARKLET" CYLINDERS**

# **SCHEEREN** Light Metal Handlebars and Stems

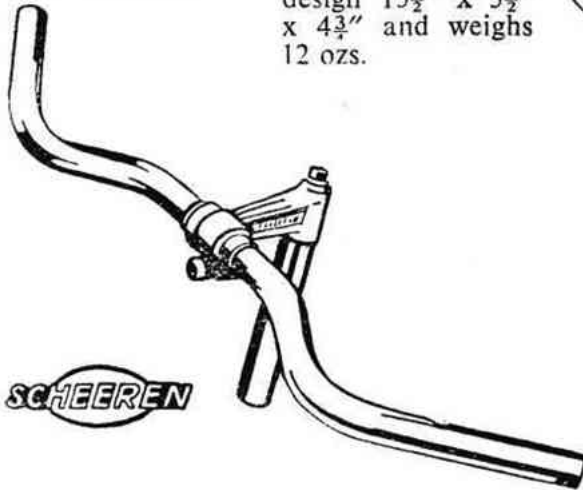
Constructed in an extremely light metal which is as hard as steel and yet non-corrosive, these bars are guaranteed against breakage.



**WELTMEISTER**  
115 World Champion model is in the internationally popular square design 15½" x 5½" x 4¾" and weighs 12 ozs.

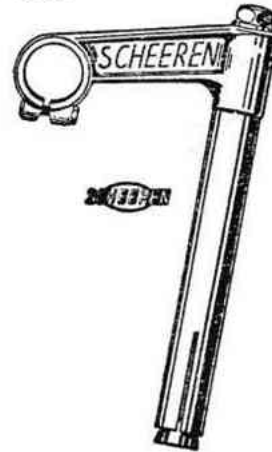


All types of **SCHEEREN** bars are fitted with a 25 mm. diameter ferrule giving extra strength and stability at the point where it is most needed.



**SPORT 125** All Rounder type flat bars have dimensions of 23" x 1¼" x 1¼" and weigh only 7 ozs.

**SCHEEREN** handlebar stems are made to comply with International Standards. They are not cast, but made of extremely hardened light metal of fine quality, unbreakable and rustproof. They are known throughout Europe for their outstanding high grade metal and durable chromium plated finish.

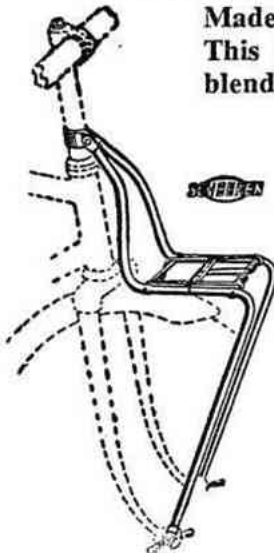


**WELTMEISTER 151** World Champion reinforced girder pattern, weight 11 ozs. 3 lengths forward — 6, 7.5 and 9.5 cms. Stem length 155 mm.

**WELTMEISTER 153** as above but with extra long 175 mm. stem, weight 11 ozs. 1 length forward only — 6 cms.

## **CARRIERS in Light Metal by SCHEEREN**

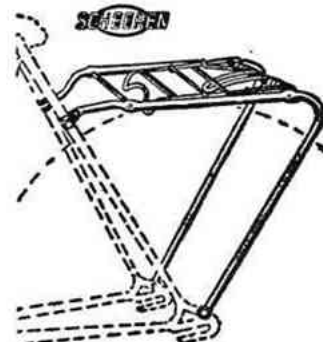
Made in two easily fitted models for front or rear in finest alloy. This high grade metal is in a polished neutral finish and will blend with any colour of frame enamel.



**Model 203** Front attaches with a clip round handlebar stem and support stays to fork end guard eyes.

**Model 201** Rear attaches with two clips to rear seat stays and supports to fork end guard eyes.

Both types are fitted with strong spring loaded parcel grip and weigh only 19 ozs. each.



*SCHEEREN Light metal products are used everywhere.*

# CONTINENTAL

## TUBULARS



offer a range to suit every purpose. Manufactured in Germany, the home of high-speed motor-paced cycle racing, CONTINENTAL'S have established a reputation for safety, being used by specialists MEIFFRET and KRAMER for their World's paced speed records. Every type is fitted with an exclusive extra strong base tape.

### TRACK RACING

**WOOD TRACK (Holzbahn 180).** A super light tyre weighing only 6 ozs., designed primarily for wood tracks, this tyre is the choice of the leading 6-day racers of Europe. Cold cured and with *smooth* black tread in size 27ins x 1½in.

**CEMENT TRACK (Zementbahn 230).** A light 8 ozs. tyre for hard tracks or that under the hour "25." Black *smooth* tread, lightweight fabric, cold cured in 27in. x 1½in.

*NOTE.*—CONTINENTAL pace following tubulars are available to special order. Sizes 24in. x 1½ in. and 27in. x 1½in.

### ROAD RACING

#### 265 (Strasse 265)

Intended for short distance events and massed start racing on good surfaces this tyre is the speedman's delight. Weight only 9 ozs. with a *smooth* black tread, lively walls and ultra light inner tube. Handsewn—outside cold cured size 27in. x 1/16in.

#### 285 (Strassen Reinreifen 285)

A light fast tyre for Championship events with a neat black *ribbed* tread. Light fabric walls, handsewn—outside cold cured. 10 ozs. only in weight, size 27in. x 1½in.

#### 350 (Strassen Reinreifen 350)

The ideal stage race tyre with its tough black non-skid *file* pattern tread this 12 oz. tyre is suitable for all distances of time trials or massed start events. Handsewn—outside cold cured it is available in 27in. x 1½in.

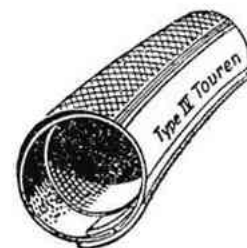
#### 320 (Strassen Reinreifen 320)

Similar to the No. 1 but only 11 ozs. in weight.

### TOURING

#### TOURING 530 (Tourreifen 530)

A really substantial tubular for all the year round use over all types of road. Steam cured, 27in. x 1½in., the weight is 19 ozs., tread of sturdy black rubber in non-skid *file* pattern, walls fully covered in tough translucent rubber and finished with a strong rim tape. The ideal training and touring tyre for the rider who likes "sprints" all the time and economical too.



Remember CONTINENTALS have been used successfully by famous road and track aces in all parts of the world, including champions—Brian Robinson, Mueller, Kubler, Goldschmidt, Kramer, Meiffret, Plattner, Gillen, Strom, Arnold, Koblet, Thyssen, Ian Steel.





Designed, tested and proved by active cyclists, men with a practical knowledge of your sports needs — produced in Europe's finest factories from top quality materials, MILREMO Accessories are offered at unbeatable prices.

Fully guaranteed and backed by a reliable Spares Service, MILREMO is the answer to your search for reliability.



## OFFERS THE MOST COMPREHENSIVE RANGE OF ACCESSORIES

### BAGGAGE STRAPS

Exceptionally strong well braided elastic these are the handiest of straps, useful for all purposes. The elastic ends are fully turned back and firmly gripped by the spiral metal ends. The end hooks are fully plastic covered to avoid damage to enamel or material. Available in all popular sizes, single or 4, 6, or 8 way spiders.



### BOTTLES

Ask for the Bottle with the famous three-colour MILREMO badge and you will be buying the best.

Made in a superior pearl white plastic that is non-odour this bottle will stand enormous pressure and take hot or cold liquids.

Two models are available — both ribbed, for easy handling and to fit snugly into the MILREMO cages.



Tour de France

TOUR de FRANCE model has the original plain double seal cap with extended lip and flexible hinged attachment loop.

GIRO d'ITALIA model has a choice of two caps —

the "SPRINKLER" which is drilled with small holes allowing the liquid to be "showered" over the head as a cooling refresher,

and the "DRINKING" which has a centre hole to take a polythene drinking straw. This hole can be sealed by the hinged plug.

The drinking straws, full length, can be obtained as an extra.



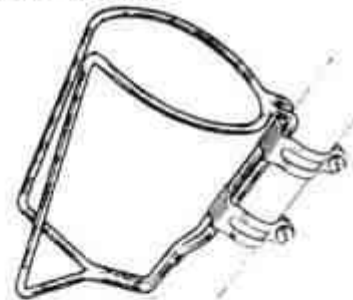
Giro d'Italia

Drinking



Sprinkler

### ... and now for the finest value ever in BOTTLE CAGES



These Cages have been designed to fit all popular bottles and are made in the simplest and most practical of styles.

Made in superb heavy gauge wire in a highly-polished chrome finish the cages are now improved by the addition of a coloured plastic MILREMO badge plate on the base junction. A feature of the Cages is the chrome fixing clips perfectly shaped to fit over the cage wires.

The MILREMO Bottle and Cage set makes the perfect combination and is truly non-rattle and at the same time offering easy withdrawal.



## 'GALIBIER' RACING BRAKE

Careful examination and exhaustive testing by the MILREMO designers of every other modern cycle brake, has resulted in the MILREMO 'Galibier' incorporating every worthwhile feature, at the same time eliminating those many annoying faults to be found in other products.

In addition the MILREMO brake gives you several new and unique features that have now been patented.

For some years the MILREMO designers have worked hard to overcome these braking problems.

### MATERIAL

Only the world-famous French forged duralumin could give the brake the required extra rigidity combined with ultra lightweight.

### DESIGN

The new popular centre-pull design was chosen to give ease of movement with maximum leverage and tyre clearance.

### RETURN SPRINGS

Two independent springs were favoured rather than the cheaper single and less powerful horseshoe type. The springs are secured firmly with one end into the centre fixed stirrup, the other extending to give maximum leverage at the very end of the pivot stirrup arms.

### CABLE QUICK RELEASE

Something positive, simple and easy to operate was called for. Nothing could be better than the MILREMO patented idea, a cam at the junction of the cables operated instantaneously with finger and thumb. The resulting outward movement of the stirrup arm gives the maximum wheel clearance and allows closer setting of the blocks when in the closed position.

### STIRRUP ADJUSTMENT

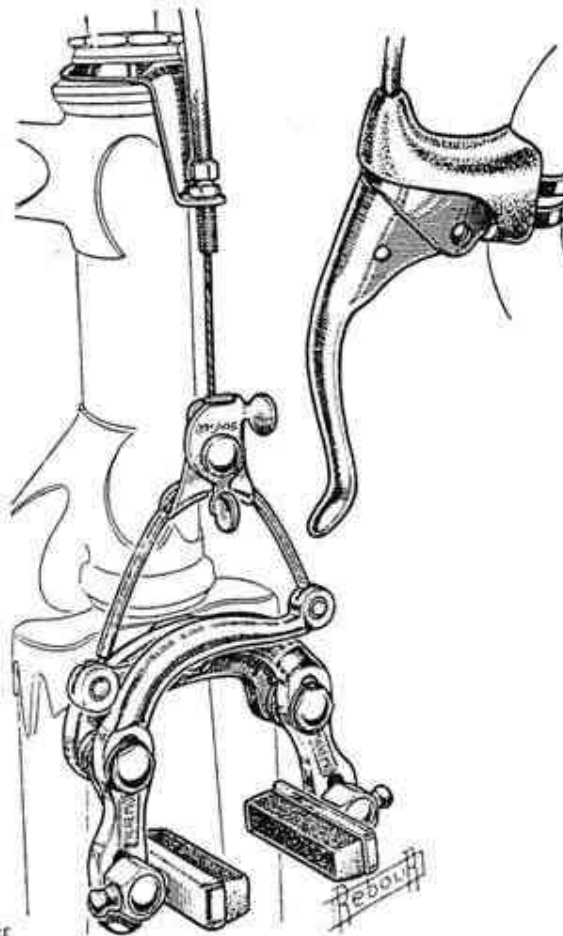
Another brilliant MILREMO patented idea enables the stirrups to be quickly converted from deep to shallow pattern or vice versa, simply by reversing the half cams hidden behind the stirrup pivot bolts. One stirrup thus serves front and rear, deep or shallow — a boon to the spares stockist.

### BRAKE SHOE FIXING

None of the existing fixing methods were really satisfactory, therefore an entirely new principle was evolved — yet another MILREMO patent. Each brake shoe can be moved independently in almost any direction and finally locked in position by a new double locking eyebolt thus ensuring absolute security — unique in cycle brake design.

### FIXED CENTRE STIRRUP

Solidly constructed in forged dural, movement is impossible by virtue of the squared centre hole locating with the square on the centre pivot bolt.



### CABLES

Only first quality transmissions are used. The straddle wire is nylon sheathed for protection and has two strong end nipples securely locating into quick release slotted holes in the pivot stirrups.

### CABLE HANGERS

These are constructed in chrome steel for extra rigidity and incorporate cable stops and long adjusters.

### LEVER

Constructed in duralumin with these classic features: Hood top has popular forward reach shaped up to make a cable cup and is slotted for easy cable fitting. Inside edges of the lever closed to give protection. Complete absence of any protruding bolts. Chrome bar clip with solid T bolt and slotted fixing nut.

### LEVER HOOD

Made in soft red rubber in an entirely new shape that is comfortable without being bulky. Easily fitted and held securely without clips. Alternatively all round white complete lever hoods can be fitted.

### APPEARANCE

The "Galibier" has a highly polished finish and ultra modern appearance.

### NAME

The brake is called "Galibier" after the most famous "col" in the history of the Tour de France.

### PRICE

We make no excuses for the high price of the "Galibier" — in designing the world's finest cycle brake, price was the last consideration.

Short, Medium or Long — 3 or 5-Pin Fixing — Light or Heavy Section  
**3-ARM MODELS** **Whichever You Prefer** **5-PIN MODELS**



Will Meet With Your Requirements.

**CHROME CRANKS**

Made in high resistance specially treated steel by the finest craftsmen in Europe. Six models, all finely drawn and carefully fluted and finished in de luxe chrome plating.

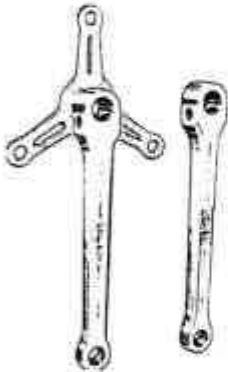


**SPECIAL COURSE 30**

Solid forged pattern in special square section, incomparably rigid.  
 Weight : 20 oz. pair.  
 Clearance : Semi GCC suitable for single or double chainwheels.  
 Lengths: 6½", 6¾", 7".

**SPECIAL COURSE 50**

Solid forged pattern in special square section, incomparably rigid.  
 Weight : 21 oz. pair.  
 Clearance : Semi GCC suitable for single or double chainwheels.  
 Lengths : 6½", 6¾".

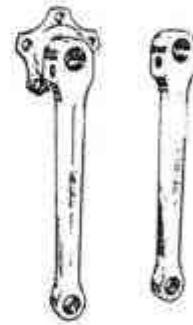


**COURSE 33**

Forged pattern in extra light section.  
 Weight : 18½ oz. pair.  
 Clearance : Semi GCC suitable for single or double chainwheels.  
 Length : 6¾".

**COURSE 55**

Forged pattern in extra light section.  
 Weight : 18 oz. pair.  
 Clearance : Semi GCC suitable for single or double chainwheels.  
 Length : 6¾".



**CLUB 333**

Heavier square section, attractively fluted.  
 Weight : 23 oz. pair.  
 Clearance : Attaching bolts reversible to accommodate single or double chainwheel.  
 Length : 6¾".

**CLUB 555**

Heavier square section, attractively fluted.  
 Weight : 20 oz. pair.  
 Clearance : 2 models, NGCC for single, GCC for double chainwheels.  
 Length : 6¾".

ALL MILREMO cranks are made for British threads and dimensions.  
 NOTE : The 3-arm pattern fits all popular CONTINENTAL 3-arm single or double chainwheels including T.A.  
 The 5-pin pattern fits all popular BRITISH and CONTINENTAL 5-pin single or double chainwheels including T.A.



**CHROME CHAINWHEELS**

Made specially to fit MILREMO cranks these excellent chainwheels are in de luxe chrome plating in all popular sizes.



**MODEL 130  
 SINGLE 3-ARM.**

To fit chains ½ x ½ or 3/32.  
 Sizes 44-46-47-48-49  
 50-52.

**MODEL 150  
 SINGLE 5-PIN.**

To fit chains ½ x ½ or 3/32.  
 Sizes 44-46-47-48-49  
 50-52.



**MODEL 230  
 DOUBLE 3-ARM.**

To fit ½ x 3/32 chain only.  
 Sizes 46/49, 46/50,  
 47/50, 48/52.

**MODEL 250  
 DOUBLE 5-PIN.**

To fit ½ x 3/32 chain only.  
 Sizes 28/48, 38/48,  
 32/52, 46/49, 47/  
 50, 48/52.





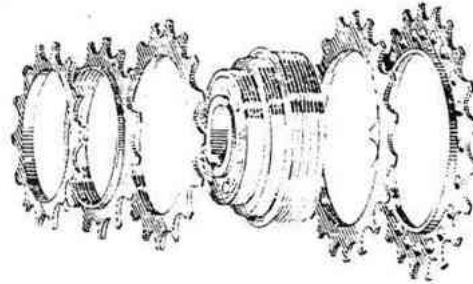
## 'ALL STAR' Freewheels

At long last a Multiple Freewheel that is simple, light, trouble-free and practical, that will give you the ratios you need.

Look for these "all star" features.

- \* Extra smooth true running.
- \* Universal body for 4 or 5 speed.
- \* Designed for quick release hubs.
- \* Interchangeable cogs, all detachable.
- \* Full range, 13 to 28 teeth.
- \* Precision guaranteed to 0.050
- \* Profile of teeth specially designed for quick gear changes.
- \* Bearing races are ground and lapped and set at extremity.

... and for the rider who will have the best, the latest,



### MILREMO

#### 'PROFESSIONAL' FREEWHEELS

Made regardless of cost in **nickel chrome forged steel** with **extra smooth bearings**, **patented pawls** and special tooth profile **guaranteed** against jump or buckle.

PRO MS66 in 14/16/18/21/24 or 13/15/18/20/23 or to order.

PRO TT33 in 13/14/15/16/17 ratio only.

MILREMO Freewheels are made to British dimensions and threads and a full spares service is always available.

Single freewheels for juvenile and adult cycles and multiple three and four speed ratios are also stocked.



#### 'ASTRO' HANDLEBAR END STOP.

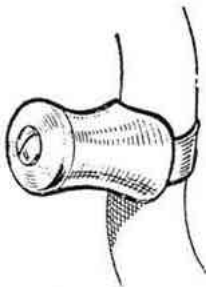
Constructed in finest hard plastic in a patented and registered design that employs a tapered cone drawn internally, this stop has these other advantages:—

- \* Ultra-light weight — less than  $\frac{1}{8}$  oz.
- \* Rustless, attractively coloured finish — a choice of Red, Black, Blue, White or Yellow.
- \* Non-usage of perishable materials such as rubber, etc.
- \* Absolute security — no fear of the stop becoming loose and being eventually lost.
- \* Clean appearance — the head has a similar diameter to the external diameter of the handlebar.



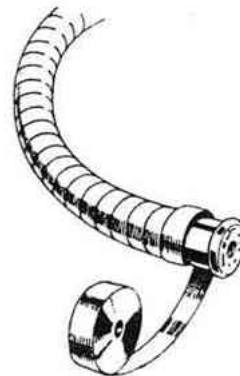
#### 'ARRESTA' HANDLEBAR REST.

Perfectly shaped in special hard plastic with chrome steel bar clip, these hand rests fit flush to the bar and have rounded ends and sides and weigh less than 1 oz. Ideal for a tandem back rider or for the fixed wheel enthusiast to supplement the machine with only one brake lever. Available in colours of Red, White, Blue, Green or Yellow.



**'PLASTOLUX'** Superior Glossy Adhesive Plastic Handlebar Tape. Five colours: Red, Blue, Green, Yellow, Black.

**'TWILOLUX'** Extra Strong Thick Twill Tape in non-slip herringbone pattern with a backing of clear adhesive. Six colours: Red, Blue, Green, Yellow, White, Black.





**OFFERS AN UNRIVALLED RANGE OF  
HANDLEBARS IN DURAL AND STEEL**

4 models in finest polished duralumin.

**RENFORCE**—the only dural handlebar that will not whip. Reinforced **internally** by a dural tube 6½" long permanently sleeved into the outer bar centre section by a patent process. Dimension 15½" x 5¼" x 4".

and 3 standard models .

**OLYMPIC** —

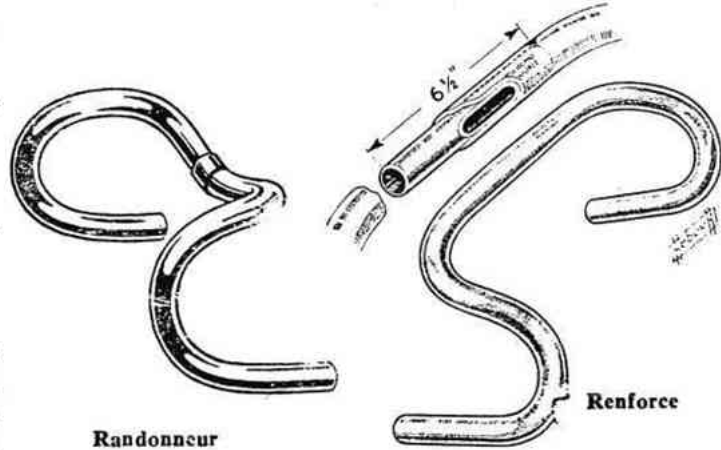
Width 16½" Drop 6½"  
Forward 3¼"

**FRANCO BELGE** —

Width 14¼" Drop 5½"  
Forward 5¼"

**RANDONNEUR** —

Width 16" Drop 4½"  
Forward 4½". The popular touring bend with a slight lift from the centre.



Randonneur

Renforce

. . . . . and for the rider who prefers steel

3 models in extra light steel in superb mirror finish chrome. Centre ferrules are attractively engraved with the model name encircled in laurel wreath badge.

**GRAN SPORT** —

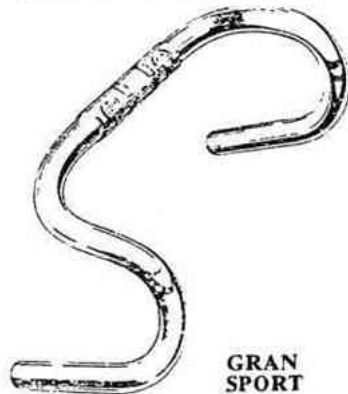
Width 15½" Drop 6¼" Forward 3¼"

**GRAN PRIX** —

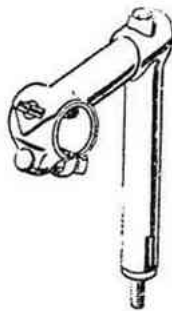
Width 15" Drop 5¼" Forward 3¼"

**GRAN PREMIO** —

Width 15" Drop 5½" Forward 4¼"



GRAN SPORT



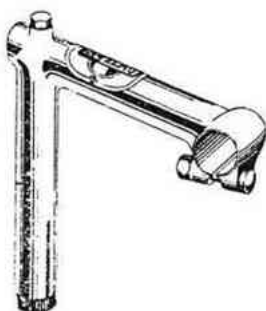
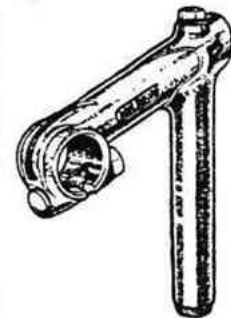
**STEMS**

3 Popular Models

**CLUB** First class chrome steel in the popular lapped drophead design. Supplied with expander in popular forward sizes.

**GRAND SPORT** Super dural, reinforced. Chrome expander bolt fitted. Has neat M initial on the head in colours. This stem is both stylish and practical. Highly polished with neat cut-outs on the top and sides, coloured in bright enamel this stem is available in forward lengths of 6.5, 8, 9 and 10 cms. Made especially to suit British

fork columns and largest diameter bends this stem is fitted as standard by most of the leading British and European Light-weight Cycle makers. The choice of racing champions, too, including ANQUETIL, France's "ace" stage rider. Supplied drilled for centre-pull brake cable at small extra cost.



**GRAN PREMIO** in special light steel, superbly heavily chrome plated this stem is in the modern style with extra wide clip. Fitted with neat multi-coloured MILREMO badge it is available in all sizes from 6 to 14 cms, forward.

*Fit MILREMO handlebars and stems  
— a range unrivalled for quality and design.*

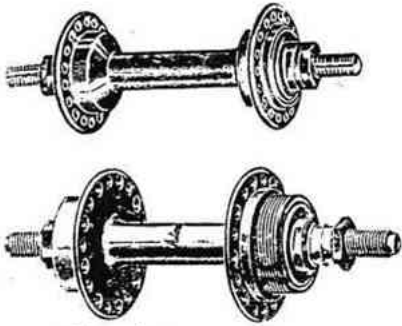


OFFERS A COMPLETE RANGE OF  
**HUBS** TO SUIT

EVERY PURPOSE AND POCKET!

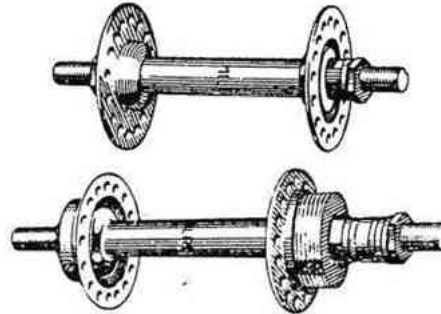
**SMALL FLANGE MODELS**

**CADET** In light chrome steel in SS/gear or DS/gear/fixed. Drilled 32/40 they are ideal for the beginner and wonderful value.



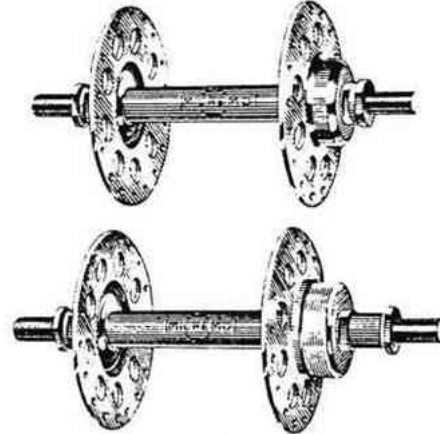
**Champion**

**SUPER CHAMPION.** Similar to the CHAMPION but fitted with hollow axes incorporating a trouble-free quick-release device. SS/gear or DS/gear/fixed, drilled in 28/28 or standard 32/40.



**Cadet**

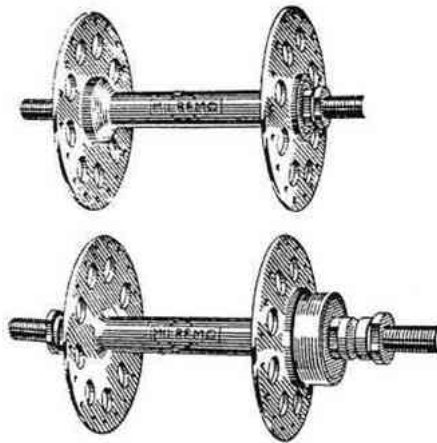
**CHAMPION.** Made in heat-treated, highly-polished duralumin these are the most popular lightweight hubs in use today. SS/gear or DS/gear/fixed, these are available with standard drilling of 32/40.



**Club**

**LARGE FLANGE MODELS**

**CLUB** Model Hubs are top value in best chrome steel. Drilled in standard 32/40 and available in SS/gear or DS/gear/fixed.



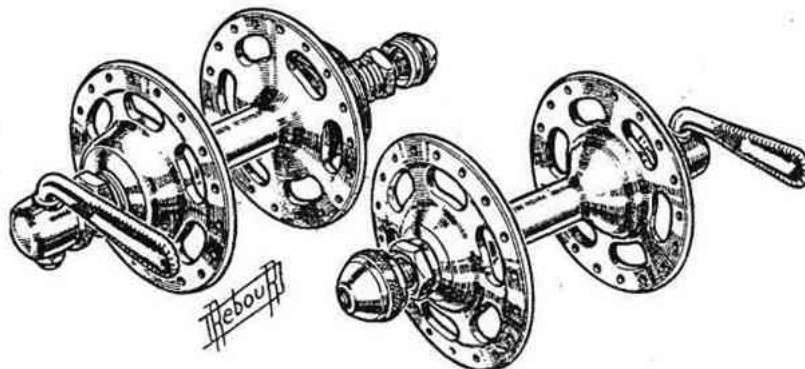
**Sport**

**SPORT** in heat-treated duralumin offering lightness with durability. The most popular large flange hub. Drilled 32/40 with a choice of threading of SS/gear or DS/gear/fixed.

**SUPER SPORT.** Similar to the SPORT but fitted with quick release and available in SS/gear or DS/gear/fixed, drilled 28/28 or 32/40.

**SUPER COMPETITION.** Made in heat-treated alloy with all bearing surfaces processed in the most modern way. High precision machining results in perfectly smooth running. Curved slotted flanges, one-piece shell, slim smooth lines all make this quick-release hub the first choice for top racing machines. SS/gear or DS/gear/fixed, drilled 28/28, 36/36 or 32/40.

ALL MILREMO Hubs are made to British standards with fronts having 3/16 balls and 5/16 spindles and rears 5/16 balls and 1/4 spindles.



## GUARD AGAINST THE WEATHER

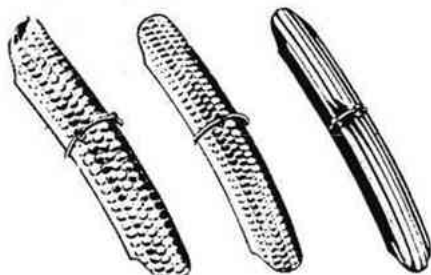
Britain's best weather can be most enjoyable—remember 1959; and the worst can be . . . well, remember 1960, 1961, 1962! You can guard against the wet with



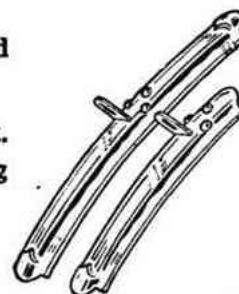
There is a type for every kind of cycling activity.

**FOR RACING**—use these lightweight, highly polished duralumin extensions.

**SPORT** in square design with firmly rivetted bracket. 2 models—9" long for the front (AV) and 12" long two-way pattern for the rear (AR).



No. 12      No. 13      No. 23



AR                      AV

**FOR TOURING**—3 models in finest duralumin. (Illustrated sections).

**LE MARTELE** Route No. 12. Semi-balloon wide pattern in strong hammered finish.

**LE MARTELE** Course No. 13. As above but slightly lighter and narrower.

**LE PAON** Course No. 23. Lighter than above in pleasing ribbed pattern.

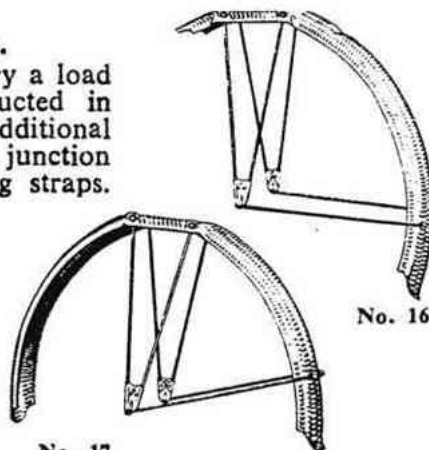
**FOR CLUB RIDING**—A model in lighter duralumin. (Not illustrated.)

**PETIT JEAN.** Light and strong with plain centre and ribbed sides which can be finished in a contrasting colour if required.

**FOR CAMPING**—A model that is exclusive.

**PLATFORM** No. 16/17. Designed to carry a load up to 200 lbs. these guards are constructed in strongest duralumin in hammered finish. Additional robust stays supported firmly in the base junction have loops at the top to take pannier bag straps.

All the above MILREMO dural guards are supplied with strong Continental pattern single loop stays attached by chrome eye-bolts. The front guard has a vertical rubber cushioned fork crown fixing attachment.



No. 17

No. 16

**FOR ALL-PURPOSE CYCLING.**

Models in Plastic and Celluloid.

**MAESTRO.** In U section plastic with special fittings. Complete with front mudflap they are available in the following colours: White, Black, Red, Royal Blue, Ice Blue, Bottle Green, Eau-de-Nil and Yellow.



**MONARCO.** A new guard made in superior quality Celluloid. Available in Red, Blue, White, Light Green and Yellow.

**MAESTRO** and **MONARCO** Mudguards can be supplied with approved rear reflector if required at slight extra cost.

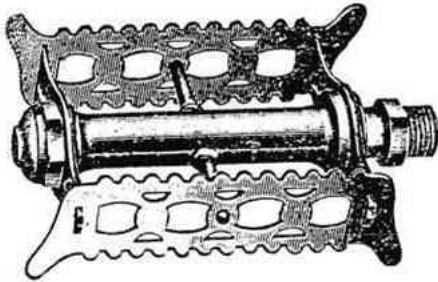
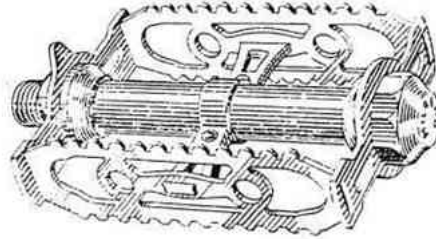




**PEDALS**—ATTRACTIVE IN DESIGN  
RELIABLE IN USE AND ECONOMICAL TO  
BUY.

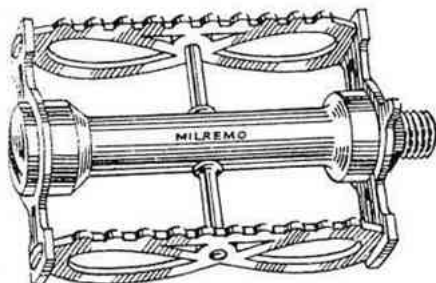
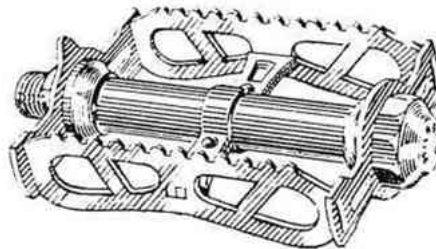
4 MODELS AVAILABLE.

**CLUB** in chrome steel is double sided with supporting centre strut and solid end cap.



**CADET** in chrome steel is similar to CLUB but with slightly different design to side plates.

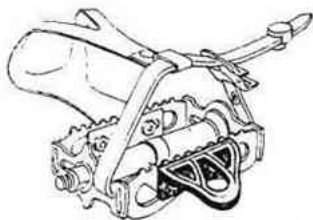
**SPORT** is also in chrome steel but is in the popular cut-away single-sided design with a distinctive pattern to the side plates. This pedal is also available with threaded studs for easy toeclip fixing and this model is known at the SPORT-T.



**CHAMPION** is made in corrosion-proof duralumin with fully machined pedal members. Single sided with specially designed machined end caps.

All MILREMO Pedals and other accessories are manufactured specially for the British market with all threads in British standards—Spares and Service are always available.

And the latest MILREMO introduction —

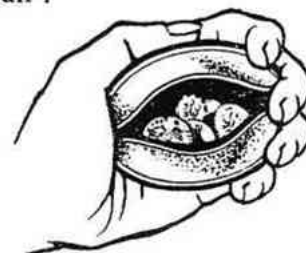


**RAPIDO Pedal Tongues**

Modernise your pedals with these ultra-light, non-rusting, quickly-attached pedal tongues and assist your feet to rapidly enter the toeclips. Weight only  $\frac{1}{4}$  oz. per pair!

**"POCHE" Plastic Container**

Ideal for cyclists this handy container will carry any small metal articles without causing excessive wear to the trouser pocket linings. Easily opened by squeezing in the hand. Colours — Red, Blue Black or Green.



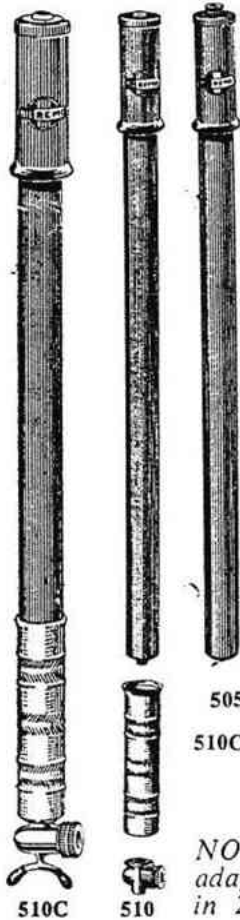
# MILREMO PUMPS

The world's finest range of racing pumps, incorporating many exclusive patented features.

## POLISHED DURALUMIN

- 901 **PIUMA** A super 18" pump with seamless metal plunger, diameter 15/16" fitted with flexible braided type N.2 connection 20 cms. long to fit all popular Sclaverand valves.
- 904 **PIUMA CORSA** A special racing pump 18" long with practical knurled hand grip. Diameter 15/16" fitted with type N.14/PC IMPERO patented quick-fit racing adaptor.

## CELLULOID in white, black and all popular colours.



- 24 **SILCA-ESPORT** An economy pump 15" x 15/16" diameter fitted type N.2 braided connection.

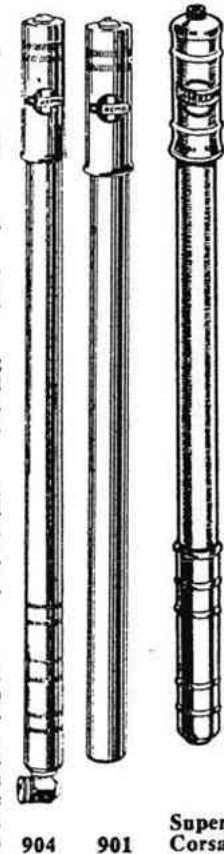
**SUPER CORSA** A new superb racing pump. All white, 18" x 1", in celluloid with polished sleeved metal hand grip. Complete with extra long braided H.P. connection.

- 505 **SILCA** A superb lightweight pump with extra large diameter body, seamless metal plunger, spring loaded handle, selected chamfered and cupped oil soaked washer. Available in lengths 17", 18" and 19" x 1" fitted with type N.2 braided connection.

- 510 **IMPERO** The world's best racing pump. As 505 but fitted with exclusive patented polished aluminium sleeved hand grip and patented type N.14/1 IMPERO racing adaptor in lieu of braided connection. The end of this pump has a brass insert incorporating a threaded stud which screws into the adaptor, this being the reverse to usual practice. Coupled with the fact that the end of the adaptor is raised and squared to fit into a matching squared end in the aluminium sleeved hand grip, the final combination of adaptor, sleeve and pump results in a joint which is not only air-tight but which cannot unscrew in normal use.

- 510C **IMPERO EXTRA** As 510 but fitted with patented racing IMPERO-CAMPAG adaptor incorporating CAMPAGOLO rubber covered horns to dispense with the need of a pump peg.

*NOTE—this adaptor is different to the standard CAMPAGNOLO adaptors having the patented IMPERO squared end. Available in 2 lengths, 18" and 19".*



## SPECIAL TRACK RACING PUMP

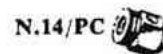
- 650 **PISTA** Super extra powerful pump for inflating racing tyres at track events.

## CONNECTIONS AND ADAPTORS

- N.14/1 **IMPERO** Special patented racing adaptor as supplied with 510 pump.



- N.14/PC **IMPERO** Special racing adaptor as supplied with 904 pump.



- N.14 **BELLONI** Standard type racing adaptor — can be fitted as alternative to pumps 901 and 505.



- N.24 **SILCA-PISTA** (Not illustrated) Special adaptor for track tubulars.

- N.25 **IMPERO-CAMPAG** Special patented racing adaptor with horn rests, as supplied with 510 pump.



- N.2 **SCLAVERAND** 20 cms. long braided connection as supplied with Nos. 901, 24 and 505 pumps.

Remember **MILREMO** — the only pump in the world with these super features.



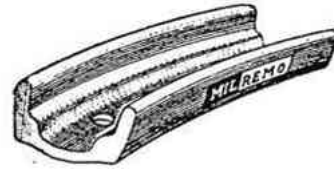
*A range of rims in finest duralumin — quality without equal — unrivalled for value.*

**FOR WIRED-ON TYRES . . . .**

### **CLUB**

— is a solid dural rim for the club rider, made especially to fit British size 27" High Pressure tyres. Deep in section to give a good braking surface, the dural combines strength with the advantage of being light and rustless.

*Weight 18 ozs. pair, drilled 32/40.*



**FOR TUBULAR RACING TYRES — ALL STANDARD 27" SIZE . . . .**

### **COURSE**

— is a hollow sprint rim at an economy price, ideal to the newcomer to the sport of cycle racing. Highly polished dural of hollow section, the rim bed is roughened to increase tyre adhesion and the flat sides are scored to facilitate efficient braking in wet conditions.

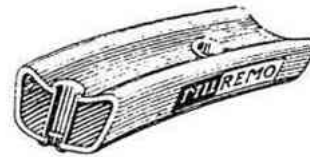
*Weight 12 ozs. pair, drilled 32/40.*



### **GIRO**

— is a sprint rim for the massed start rider who insists on strength with lightness. Deep flat sides giving maximum braking surface on those long descents, this rim has exceptional strength due to the spoke holes having water-tight ferrules.

*Weight 11½ ozs. pair, drilled 28/32/36/40.*



### **SCHEEREN**

— is the sprint rim for the super lightweight enthusiast. Used by the current Road Champion of the World these rims have been proved in the severest race conditions. Manufactured from a light alloy of the greatest strength they incorporate the famous wood block inserts giving lightness and durability but also the same elasticity as with a wooden rim. The construction of these rims permits ample offset of the spoke holes near to the edge of the rim. This results in ease of build up and the wheel retains its trueness without repeated tightening. The new "Raubett" dimpled bed prevents the dangerous roll off of the tyre. The tyre adheres to the rim extraordinarily well and is also prevented from wandering. These rims have exclusive five colour marking for the valve position enabling this to be found instantly.

The MILREMO "Scheeren" type rim is available in two models:—

#### **RECORD**

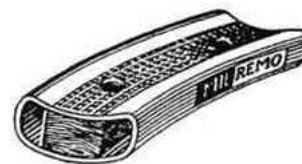
*Weight 8½ ozs., drilled 32/36/40.*

This is recommended for all road events.

#### **WELTMEISTER**

*Weight 7 ozs., drilled 28/32/40, or 24 to special order.*

This is recommended for track and time trial events.



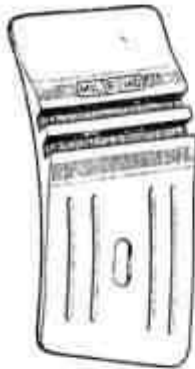
**USE MILREMO RIMS — THE RANGE WITHOUT EQUAL**



provides you with perfection in foot comfort—so essential to contented cycling. Whether you are racer or tourer you will appreciate the results in these products from the MILREMO design centre.

### DEBUT 241 SHOE PLATES.

Made in an entirely new material for shoe plates—hard plastic, these plates are ultra light and hard wearing. Carefully shaped to fit the sole and with deep pedal slots.



**'CHAMPION' SHOE PLATES.** Perfectly formed in ultra-light hard plastic, these Shoe Plates will outlast those made in alloy.

Look for these "CHAMPION" features:—

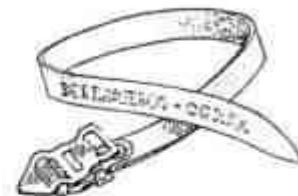
- ★ Ultra Light Weight—only 1 oz. pair.
- ★ One-piece construction in the popular extra long curved design giving full support to the instep.
- ★ Two pedal slots giving an alternative foot position when hill climbing.
- ★ Rustless and attractively coloured finish of Red, White or Blue.

**'CAMPIONISSIMO' TOECLIPS.** The world's finest toeclip. Made in tempered steel, perfectly formed to avoid contact with the shoe toe and finished in superb chrome plating on copper base. Available in two sizes, medium and long.



**'COMPETIZIONE' TOESTRAP.** A superlative toestraps in supple, wet-resisting chrome leather with non-slip non-rusting quick-release roller buckle. Available in Red, Royal Blue, Light Green, Yellow, Black, White, Light Blue, Bottle Green.

**'CORSA'** A new Italian-style Toestraps with special quick release buckle. In four colours this strap is wonderful value at its price.



**'PULL-STOP'** The handiest toestraps end button. Constructed in ultra-light plastic—weight negligible, this handy accessory is ideal for that quick pull and a sure safety stop on release. With special steel self-threading locking screw, available in three colours, Red, White or Blue.

REMEMBER—Sure feet are faster feet—Fit these MILREMO Specialities and feel the difference.



# TUBULAR RACING TYRES

have attained tremendous popularity in recent years. Manufactured by the finest tyre craftsmen in Europe from the best material available. There is a perfect MILREMO tyre for every purpose. In addition, MILREMO Tubulars are offered at prices which are unbeatable.

The range of 13 tyres is as follows:—

## Type TRAINING

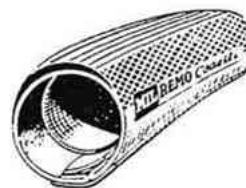
### SPORTIVO

The finest value in 'tubs' made today. Tough black tread with fine centre ribs and file pattern non-slip sides. Translucent walls. Weight 16 ozs.



### CADETTI

Similar in design to Sportivo but weight only 11½ ozs. Ideal racing tyre for the beginner or for general purpose.



## Type TRACK RACING

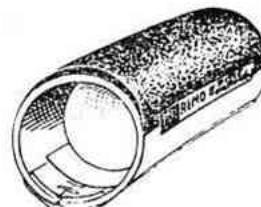
### PISTE BLANC

Smooth tread. extra-light tyre. Weight only 5½ oz.



### PISTE CONTINENTAL

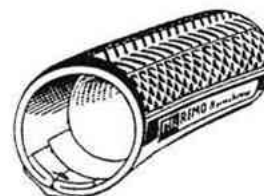
Matt tread tyre for use on hard, wet tracks. Weight 6 ozs.



## Type CYCLO CROSS

### NORMAL CROSS

A special sturdy tyre for the Cyclo-Cross enthusiast, with rough file sides and raised V-cross centre section. Weight 13½ ozs.





# TUBULARS

## TYPE ROAD RACING



### SPECIAL SPORT

A short distance road tyre with a file or multi-ribbed centre tread and translucent walls giving safety in all weather conditions. Weight 10 ozs.



### CRITERIO LEGER

A super fast tyre with a matt tread. Ideal for pursuits and short distance road events. Weight 8½ ozs.



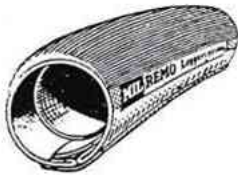
### CONTINENTAL

This tyre is fitted at special request with the famous German tread acknowledged by so many "aces" as the best. Smooth pattern suitable for all types of road events. Weight 8½ ozs.



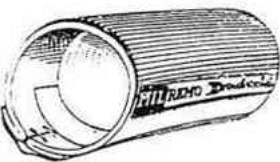
### INVULNERABLE

The favourite for the road rider requiring a really reliable tyre, almost unpuncturable, with an all purpose safe tread. Light enough at 9 ozs. for the most important event.



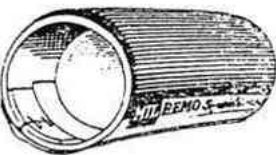
### LEggerISSIMO

A tyre for the fast road rider with a multi-ribbed all-over tread in black. Handles perfectly over bad surfaces. Weight 10 ozs.



### SUPER RECORD

A fast, medium distance time trial tyre. Fine multi-ribbed tread. Weight 8½ ozs.



### SPECIALISSIMO

Extra fast road tyre with multi-ribbed tread. Weight 10½ ozs.



### RECORD

Super-fast extra-light road tyre with fine ribbed tread. Weight only 7 ozs.

*All MILREMO Tubulars are backed with service in Great Britain.*



leads the way with these exclusive introductions.

If your local lightweight dealer is showing these attractive MILREMO display boxes you can be sure he is up to date with everything new in cycle accessories.



### 'RIPARO' TOOL KITS

10 superb ultra light tools in specially treated hardened steel in a polished rustless finish, packed neatly in a plastic wallet size 4 1/4" x 3 1/4" x 1/2", weighing only 7 ozs.

The kit provides:—  
12 closed spanners in sizes of 6, 7, 8, 9, 10, 11, 12, 13, 14, 15mm. 1 chain-wheel bolt spanner 7mm. 1 double-ended box spanner, 8 x 9mm. 1 double-ended screwdriver. 1 double-ended spoke nipple key. 3 tyre levers. 1 hub and pedal open spanner. 1 hub cone spanner. The whole kit can easily be carried in jersey pocket, musette or saddle bag and offers a complete roadside repair service.



### 'PROTECTA' SPOKE DISC



The disc that is perfect in every way. Weight—lightest ever, only 1/4 oz. Diameter—At 4 1/2" it is exactly right. Material—Hard plastic that will not rust or buckle. Finish—Choice of 3 attractive colours. Red White or Blue.

### BADGES AND TRANSFERS

The attractive 3-colour MILREMO Badge is available in several forms.

**TRANSFERS.** Small pattern suitable for rims, guards, etc. Long pattern for cycle frame down tube or chain stay.

**METALLISED PLAQUES.** Small or large size these plaques are easily fitted to any metal surface.

#### Method of Fixing.

1. Be sure that the plate is clean, free of grease and dampness.
2. Reactivate the adhesive file on the back with the aid of a soft brush dipped in acetone. It is sufficient to wet it only once.
3. Apply and press on with the hand or a cloth to assure a good contact; the adherence is instantaneous.



### 'EXTRA' TUBULAR TYRE COVERS

A superior quality article—smooth black centre band, strong cotton walls, brass fastening hooks.

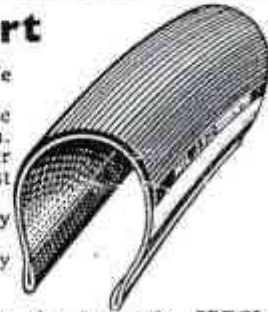
### Special Sport

A superb hand-made wired-on tyre.

The finest British size 27 in. x 1 1/16 in. High Pressure ever constructed. Extra fast rubber tread.

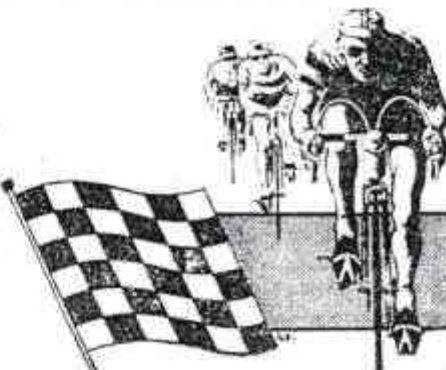
Cover — weight only 11 oz.

Tube — weight only 4 1/2 oz.



To ensure a perfect fit use only SPECIAL SPORT 1 1/16 in. inner tubes with these covers. Use care at the first fitting to avoid damage to the wires—hand-made tyres are always a tight fit.

Let MILREMO quality accessories help you to be fit past the post.



MIRACLE MARQUE

MILREMO

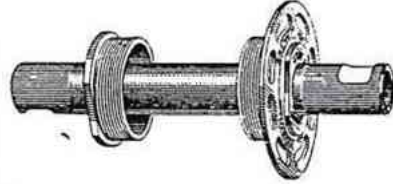
# Cycle Specialities from BELGIUM



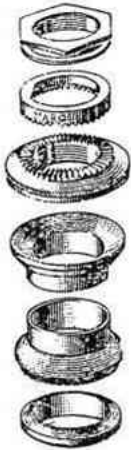
*Belgium's premier cycle fittings manufacturer offers these high quality products.*

## BRACKET FITTINGS

"SUPERLIGHT" set made in high resisting special steel. **Hollow** axle bored 11 mm. Special design ultra light lockring. Axle lengths 128 mm. for single and 134 mm. for double chainwheels. British standard dimensions only—weight 7 oz. set.



## HEAD FITTINGS



Superb quality, strongly and expertly made in super hardened chrome steel in British standards. Weight 4½ ozs.

## CYCLE SPANNERS

Made in Aluminum Bronze. Guaranteed quality with holes accurately calibered.

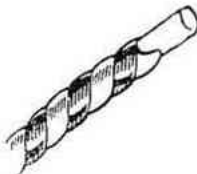


No. 676-SUPERB 8-hole suitable for Hub Nuts, Expander Bolts, Cotter Nuts, etc.



No. 675-SUPER 4-hole, light and strong, sure to appeal to the racing and clubman who remains faithful to hub track nuts.

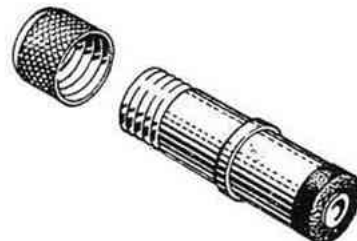
## SPIRAX



Improve the appearance of your machine and protect the brake outer cable by the fitting of these attractive spirals of cellulose acetate. Available in duo colours of Red/White, Green/White, Yellow/White, Blue/White they are supplied in lengths of 44" suitable for covering standard length front and rear brake cables.

## E.H.A.

The world's most modern cycle valve. Easily replacing your present valve the E.H.A. will make tyre **inflating the easiest** of tasks, and at the same time give increased security.





# Italian Ideas!



*From Italy there are always worthwhile new ideas for cycle fitments.*

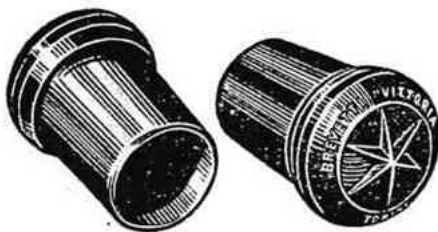
## VITTORIA OF TURIN

OFFER THESE EXCLUSIVE CYCLE ACCESSORIES

The first manufacturer to make a **rubber brake lever hood**. Two models are available in finest rubber.

**"Tour de France"** — the original all-round hood in translucent rubber giving a comfortable rest.

**"Giro d'Italia"** (illustrated) — the modern design made to fit most levers. White or translucent rubber.



**"Stella"** handlebar end caps with patented built-in shock absorbers. In finest translucent rubber these caps are the only type made to guarantee complete protection in case of accident. They are a "must" for every racing man.

**Rubber brake lever sleeve** in attractive translucent colour, hard wearing and attractive at an economy price.



**Torch holder.** Patented chrome plated clip that easily fastens to head tube, forks or handlebars and firmly grips a small torch. This very strong and carefully shaped article avoids the carrying of a cycle lamp.



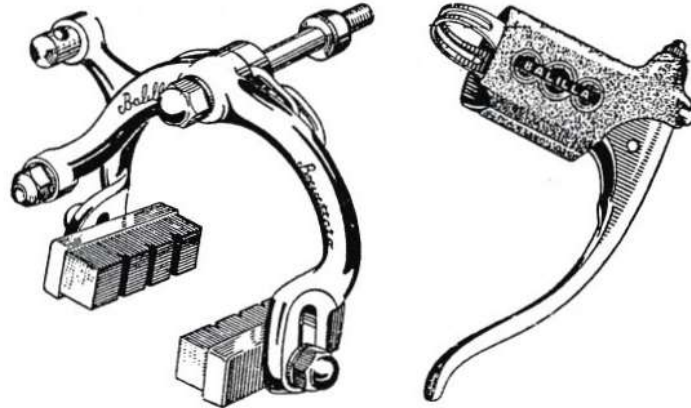
*Italy's foremost cycle racing brakes.*

Two models designed for racing and constructed in duralumin with a highly-polished finish.

### **Corsa 59 Brake**

This is in the original side-pull design with these special features :

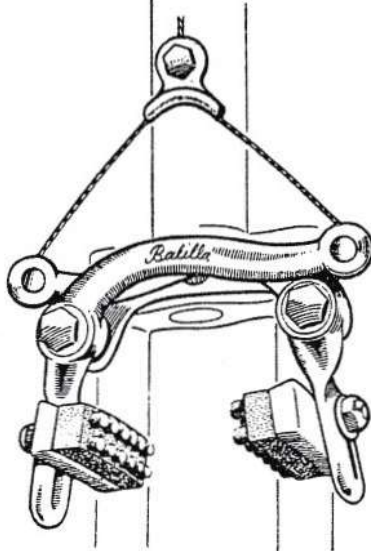
- \* Weight only 19 ozs. pair complete.
- \* Lightweight stirrups in classic Italian form giving depth variations of  $1\frac{3}{4}$ " to  $2\frac{3}{8}$ " on the front and  $2\frac{1}{4}$ " to  $2\frac{1}{8}$ " on the rear.
- \* Extra strong stirrup return spring operating against built-in non-slip studs.
- \* Special all white blocks in light alloy shoes.



### **CORSA 61 BRAKE**

The racing brake already adopted by the majority of Italy's premier racing teams. The neatest of centre-pull designs, with these additional features :

- \* Two independently operated powerful return springs extended to give maximum leverage, the extensions being neatly located into grooves at the back of the Brake Shoe Arms.
- \* Brake Shoes are extra long and are curved to follow the contour of the rim.
- \* Brake Blocks are special Red non-slip studded
- \* Stirrups are shallow front and deep rear additionally adjustable by reversing the centre pivot bolt in its location slot in the centre back plate which also prevents any back plate movement.



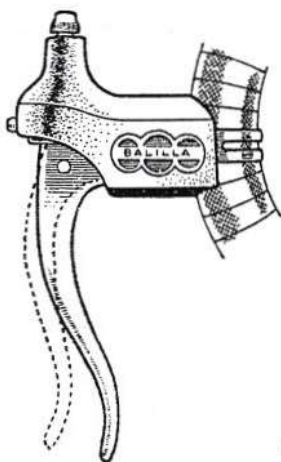
### **MODEL 62 LEVER**

The 'Corsa' 61 Brake is supplied with the new type 62 Lever, now improved by the closing of the inside edges of the lever, for maximum comfort.

The famous BALILLA PATENTED QUICK RELEASE consisting of a hinged centre piece to the front of the lever block, spring loaded and operated by a touch of a finger against the incorporated button. Centre piece thus moves outwards, allows lever to spring  $\frac{1}{4}$ " up into block, opening brake stirrups. This gives ample clearance for a quick racing tyre change even before the machine is halted. No need for re-adjustment, centre piece automatically springs back the first time the brake is used! This mechanism is neatly hidden by the hood — only the operating button is showing!

- In addition the BALILLA lever, which can be supplied separately, has these extra improvements.
- \* Heavily knurled cable adjuster screwed into the lever block, giving no less than  $\frac{1}{2}$ " variation in cable length.
- \* All-round lever hoods in thick long-last translucent rubber with Red and White BALILLA trade mark.
- \* Strong lever clip  $\frac{1}{16}$ " dia. with single fixing screw.

Buying the BALILLA brake means buying efficiency with economy. Full range of spares always available at reasonable prices.



# Italian Ideas

ALFREDO

## BINDA Toestraps

The first favourite among Italian riders both road and track. Really stiff chrome leather with QR buckle in bright red finish.



### ALE PLASTIC BOTTLE

Made in red, white, blue and yellow plastic, this attractive standard size Italian bottle has a cap with plugged centre hole for drinking tube.



### OMG WING NUTS

Super quality with serrated washer giving absolute security.



## CINELLI MUDGUARDS.



SUPER CORSA

Special guards have been constructed to fit CINELLI frames. Made in narrow light section metal with chrome centre section these superb guards are available in two types.

CORSA. Green or Silver enamel and chrome centre with all chrome double one-piece stays detachable from the guards.

SUPER CORSA. White, Mars Red or Ivory enamel and chrome centre with all chrome stays attached to the guards. Neat separate front spear-point racing extension with attractive CINELLI transfer.

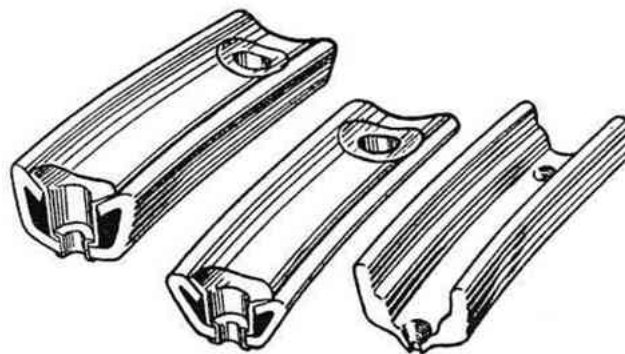
## FIAMME RIMS

World-famous Italian rims made in finest duralumin.

SPRINT RIMS are made in two types — ROAD 14 ozs. and TRACK 12 ozs. both 27" size. They are made under LONGHI'S famous patent design with re-inforced spoke holes.

Spoke drillings are 32/40, 36/36 or 28/28 for Road. 36/36, 32/40 for Track.

HIGH PRESSURE RIMS in finest duralumin are made in 27" size only. 18 ozs. Spoke drillings are 32/40.



ROAD SPRINT

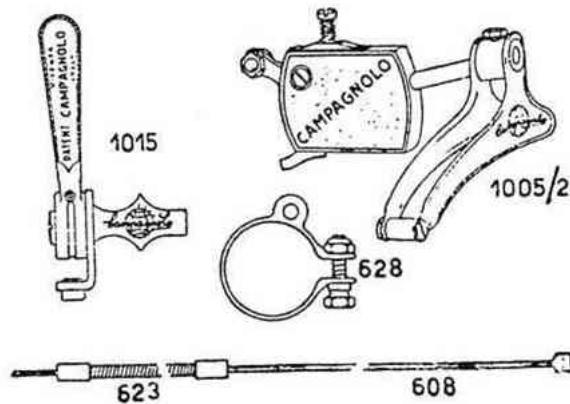
TRACK SPRINT

HIGH PRESSURE

Note the depressed spoke nipple seating.



The most popular racing gear now in use. Movement arm is machined from bronze and is on the cantilever principle thus avoiding the use of a vulnerable rigid arm. The moving parts are reduced to the minimum and these are fitted with phosphor-bronze bushes. Material and finish of all parts are excellent.



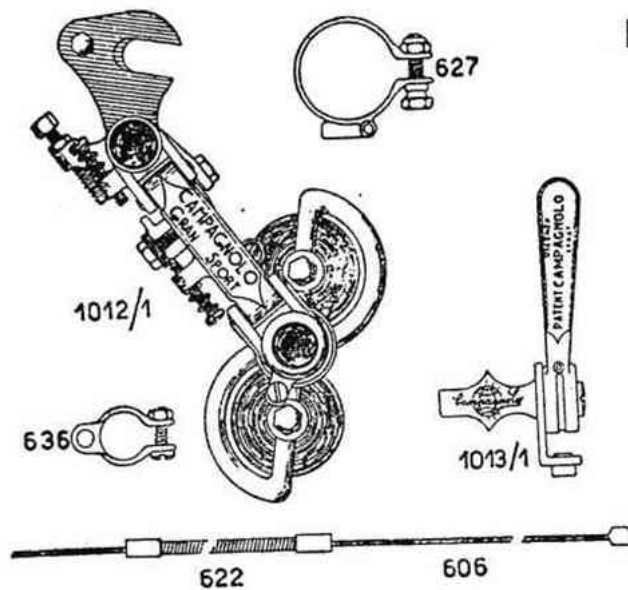
## 1005 GRAN SPORT Front Changer

### DOWN TUBE CONTROL

- 1005 with covered wire
- 1005A with bare wire (1015 DT lever - 628 DT stop)
- 1005A with bare wire for DT pump (1015 DT lever - 630 DT tunnel/stop/DT pump cradle)
- 1005A with bare wire for ST pump (1015 DT lever - 631 DT tunnel/stop/ST pump cradle)

### HANDLEBAR CONTROL (1012/3)

- 1005H with covered wire
- 1005C with bare wire (2-628 DT stops)
- 1005C with bare wire for DT pump (633 DT pump cup/stop - 630 DT tunnel/stop/DT pump cradle)
- 1005C with bare wire for ST pump (628 DT stop - 631 DT tunnel/stop/ST pump cradle)



## 1012 GRAN SPORT Rear Derailleur

*Adaptable for  
3-4 or 5 speed x 3/32*

### DOWN TUBE CONTROL

- 1012B with covered wire
- 1012A with bare wire (1013/1 DT lever - 627 DT tunnel - 636 c/stay stop)
- 1012A with bare wire for DT pump (1013/4 DT lever/pump cup - 630 DT tunnel/stop/DT pump cradle - 636 stop)
- 1012A with bare wire for ST pump (1013/1 DT lever - 631 DT tunnel/stop/ST pump cradle - 636 stop)

### HANDLEBAR CONTROL 1012/3

- 1012H with covered wire
- 1012D with bare wire (629 DT stop - 627 DT tunnel - 636 stop)
- 1012D with bare wire for DT pump (633 DT pump cup/cable stop - 630 DT tunnel/stop/DT pump cradle - 636 stop)
- 1012D with bare wire for ST pump (629 DT stop - 631 DT tunnel/stop/ST pump cradle - 636 stop)

## GRAN SPORT Front and Rear Gear ensembles

### DOWN TUBE CONTROLS

- 1003a covered
- 1003b bare (1014 DT twin levers - 626 DT tunnel/stop - 636 stop)
- 1003c bare for DT (1014/1 twin levers/pump cup - 630 DT tunnel/stop/DT pump cradle - 636 stop)
- 1003d bare for ST (1014 DT twin levers - 631 DT tunnel/stop/ST pump cradle - 636 stop)

### HANDLEBAR CONTROLS (2-1012/3)

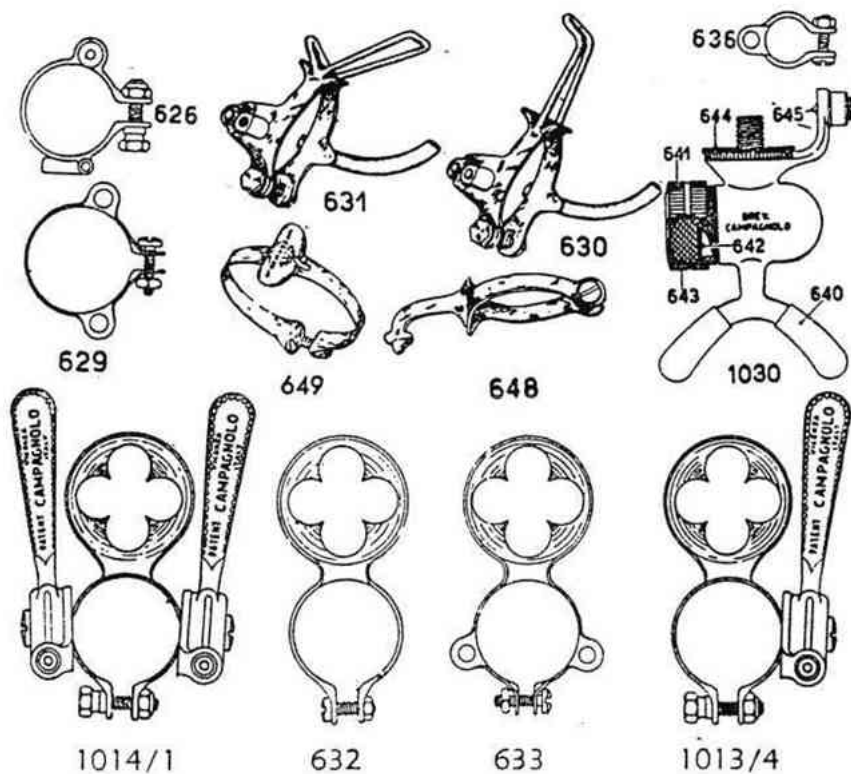
- 1003e with covered wire
- 1003f with bare wire (629 DT stops - 626 DT tunnel stop - 636 stop)
- 1003g with bare wire for DT pump (633 DT pump cup/stop - 630 DT tunnel/stop/DT pump cradle - 636 stop)
- 1003h with bare wire for ST pump (629 DT stops - 631 DT tunnel/stop/ST pump cradle - 636 stop)

*Full spares and service available - see separate section for details.*



## SPECIAL FITTINGS

as used by the leading Champions



- 626 DT tunnel for rear gear with stop for front gear
- 631 DT tunnel and stop (as 626) with ST pump cradle
- 630 DT tunnel and stop (as 626) with DT pump cradle
- 636 Chainstay cable stop
- 629 DT clip with stops for bare wire twin handlebar controls
- 649 Top tube cable clip
- 648 Clip-on standard pump peg
- 1030 Special push-on pump adaptor (1030/3 for French pumps)
- 1014/1 DT twin levers with pump cup
- 632 Clip-on pump cup for DT or ST
- 633 Clip-on pump cup with double cable stops
- 1013/4 Right hand DT lever with pump cup

For other fittings and prices see separate list.

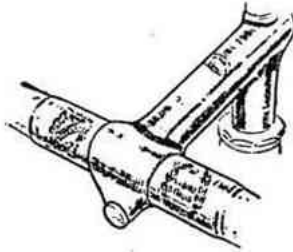
**ALL genuine CAMPAGNOLO products bear the original trade mark and are fully guaranteed**



The name that is world famous for handlebars and stems made in special light steel. Light in weight, perfectly finished in brilliant chrome plate they are ideal for the rider who prefers steel to dural.

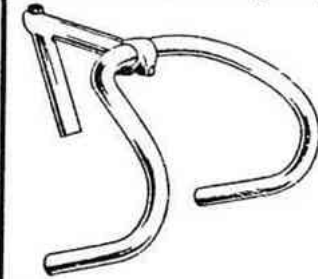
## HANDLEBARS

For Track use - 2 models in heavy gauge steel,  
For Road use - 7 models in lighter gauge steel, 3 of which are attractively engraved if required on the ferrule



### ROAD ENGRAVED

15	Tour of Britain	15½"	6¼"	3½"
16	Campione Del Mondo	15"	5½"	3½"
17D	Giro D'Italia	15"	5½"	4¼"

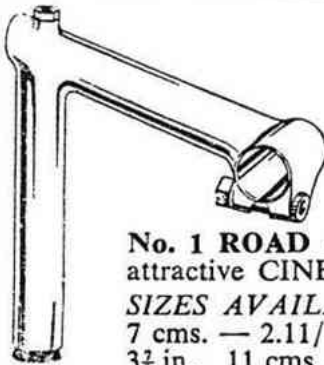
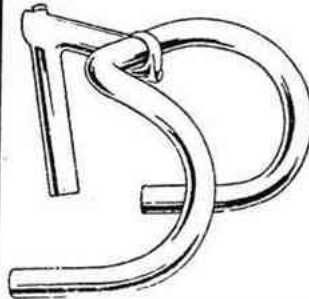


### TRACK

	Wide	Drop	Forward
14 Pista	15"	7"	5½"
18 Madison	14½"	6½"	4½"

### ROAD

11 San Remo	15"	6½"	3½"
12 Gran Fondo	15"	6½"	2"
13 Koblet	15½"	7"	3"
15 Tour of Britain	15½"	6½"	3½"
16 Campione Del Mondo	15"	5½"	3½"
17 Corsa Strada	15"	6"	3½"
17D Giro D'Italia	15"	5½"	4¼"



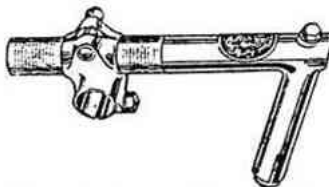
## STEMS

Cinelli stems are famous for their design and strength due to the extra wide clip. The same impeccable chrome finish as on the handlebars.

**No. 1 ROAD** - Standard type available in plain design, or with attractive CINELLI name badge on shield.

### SIZES AVAILABLE

7 cms. — 2.11/16 in., 8 cms. — 3¼ ins. 9 cms. — 3½ ins. 10 cms. — 3¾ in., 11 cms. — 4.5/16 in., 12 cms. — 4.11/16., 13 cms. — 5.1/16 in., 14 cms. — 5.7/16 in.



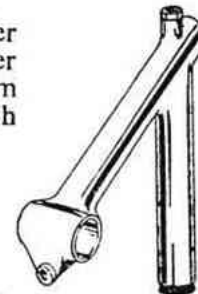
**No. 2 STAYER** - Made for the rider requiring a fully adjustable stem. Slider has special knurled finish with maximum of 6¼" forward. Supplied only with CINELLI name badge.

**No. 3 SACCHI** - As No. 1 but with extension sloping steeply downwards.

**SIZES AVAILABLE** (Cms. length in brackets).

4.5/16 in., (11) 4.11/16 in., (12) 5.1/16 in., (13) 5.7/16 in., (14)

**SPARE PARTS ALWAYS AVAILABLE.**



### Handlebar end caps.

Most attractive and very neat these plastic caps are easily fitted over the ends of the bars. Available in red, blue, grey or white they are offered at an economy price.



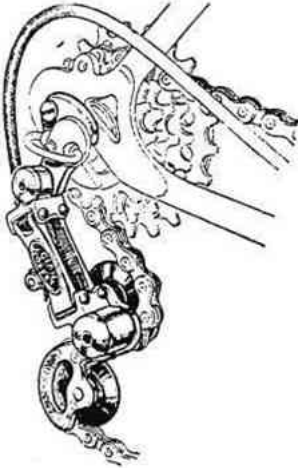


A New Name in gearing and one already assured of a great future. The GIAN ROBERT derailleur gearing is different and better!

Look for these special features:—

## REAR GEAR

- ★ Improved wrap-round giving a much quicker change with less movement required on the control lever.



- ★ Popular deformable parallelogram design — smaller and neater than other makes.
- ★ Unobtrusive spring loaded adjustment screws allowing a full range of variation of speeds and sprocket sizes.
- ★ Powerful return springs.

- ★ New improved chrome finish.
- ★ Ultra-light weight — mechanism only weighs 9½ ozs.

## FRONT GEAR

- ★ Clip and block in light rustless alloy.
- ★ Fully adjustable cage in chrome steel.
- ★ Movement and return spring totally enclosed and weather protected by the alloy block.



- ★ The flat design gives maximum clearance for a pump and rear mudguard.
- ★ Ultra light-weight — mechanism only weighs 4 ozs.

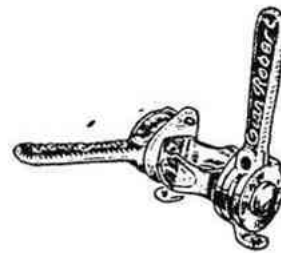
Front and Rear Ensembles complete with double down tube controls and complete with covered transmission weighs only 1 lb. 4½ ozs.

## CHAIN PLIERS

These handy pliers, strongly made and superbly finished in heavy chrome plate, are the standard equipment of all "Tour" race mechanics.

This tool will easily and quickly remove or refit cycle chain rivets. Spare pouches are available.

GIAN ROBERT gears are supported with COMPLETE SPARES SERVICE.



# UNICA - NITOR

THE WORLD'S MOST MODERN CYCLE SADDLE AND PILLAR.

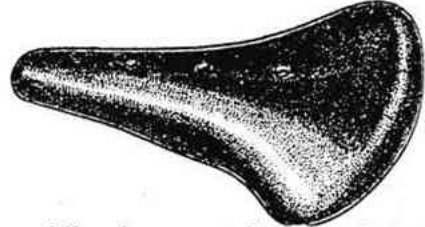
UNICA — the cycle accessory that is years ahead of its time.

UNICA — the world-famous Nylon-Plastic saddle that is veritably unique.

UNICA — the accessory that is guaranteed to improve your performance.

UNICA — the ONLY saddle that can offer you all these "star" features :

- \* The top is moulded to the saddle frame giving a clean and finished appearance.
- \* The modern curved back design without rivets, and short curved chamfered side prevent any chafing.
- \* Impervious to heat, cold, or wet the saddle always retains its original shape.
- \* No breaking-in required—the top provides a firm, comfortable seat without that springy feeling that absorbs pedalling power. Top is perforated for coolness.
- \* A choice of four fast colours—Black, Brown, Orange or Green—colours to add brightness to your bike.
- \* A weight saving of no less than 14 ozs. when compared with other saddles and pillar.



UNICA Saddles are available as follows :—

- 1 Saddle complete with patented Model 1960 Unica micro-adjusting pillar :

The 1960 Unica pillar incorporates a cam operating in a horizontal slot (easily set with a spanner) guaranteeing not only **exacting angle adjustment** but ample forward or backward movement, too. Weight of saddle and 1960 pillar complete 22 ozs.

- 2 Saddle Top in standard 2-wire model to fit Nitor 1963 pillar, Campag 1044 pillar, Ideale Speciale Competition clip or any standard 2-wire saddle clip. Weight of saddle top only, 12 ozs.

- 3 Nitor 1963 Pillar.

An entirely new innovation—a seat pin that is perfect in every way.

Look for these patented features :—

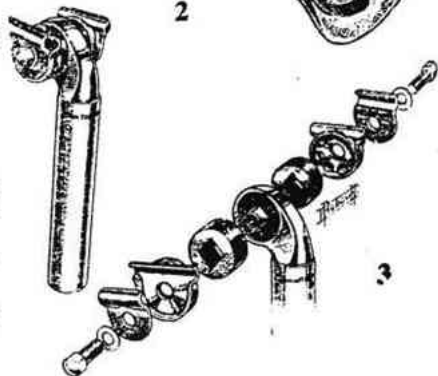
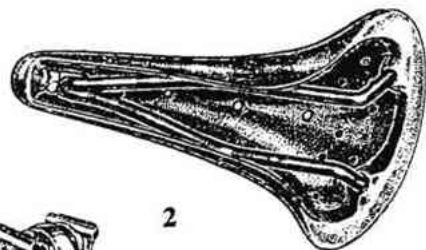
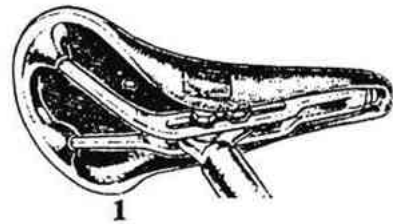
Formed in **one piece** forged alloy.

Total weight only **9½ ozs.**

**Exact** adjustment possible to any angle. Maximum security obtainable by **patented plastic grips.**

Adequate forward and backward movement.

**Horizontal** locking bolts giving easier access.



## IMPORTANT.

When ordering remember to state the following :—

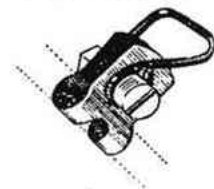
1. Colour of saddle (choice of 4 colours).
2. Size of saddle—Road 11" x 6" x 2" or Track model (Slightly narrower and more curved over back).
3. Diameter of seat pin—4 sizes available. British Nos. 3, 4 or 5, Continental 26, 2.

Also available :—

**UNICA BAG LOOPS** to fit any 2-wire saddle — neat, unseen and quickly detachable. Weight only ¼ oz.

UNICA-NITOR . . .

Cycle accessories that are years ahead in design.





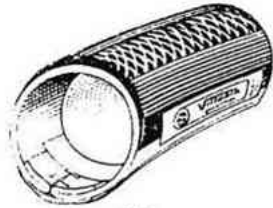


The Italian tyre hand-made by AMBROSIANA GOMMA, the world's finest craftsmen—specialists exclusively in tubular tyre construction.

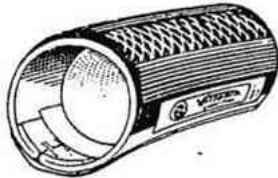
Not to be confused with mass-produced imitations. These tyres are the automatic choice of the World's Champions on Road, Track and Cyclo-Cross.

The range covers every requirement; the quality is perfect; presentation excellent, and most important, the prices are unbeatable.

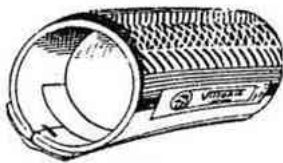
## 17 SUPERB MODELS FOR SEASON 1963



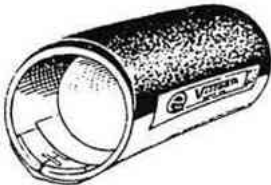
200



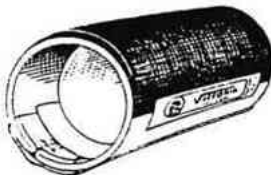
201



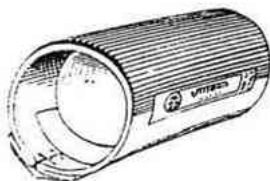
302



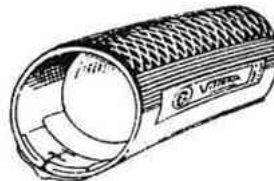
401B



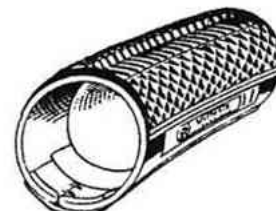
401C



401R



402



802

Model

Weight  
Tread in Tread  
Pattern oz. Colour

**Type — Road and Training — Semi vulcanised  
Rubber base tape.**

**200 VULCAN**—New and unbeatable for value. Not to be compared with similar priced fully vulcanised tyres - **Mixed 12½ Black**

**201 GRANTURISIMO** — The favourite training tyre. Like the VULCAN is fitted with strong rubber base tape - **Mixed 13½ Black**

**302 SUPER SPORT**—New—A superb all-purpose tyre at a price everyone can afford - **Mixed 10½ Black**

**401B COMPETIZIONE** — The popular smooth extra fast competition tyre - **Smooth 10 Black**

**401C COMPETIZIONE**—Similar to 401B but with special hard black tread - **Matt 10 Black**

**401R COMPETIZIONE** — another fast short distance road tyre with red all-ribbed tread and translucent walls - **Ribbed 10 Red**

**402 COMPETIZIONE** — A sturdy all-purpose tyre now reduced in weight. Ideal for massed start or longer T.T.s **Mixed 10 Black**

**Type — Cyclo-Cross/Grass Track —  
Cotton, hand made — Rubber base tape.**

**802 SUPER CROSS**—The only tyre with a non-slip tread that is ade at a real racing weight - **Criss 10 Black**



## TUBULARS (cont.)

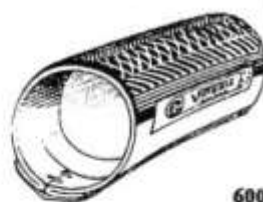
Model Weight  
Tread in Tread  
Pattern oz. Colour

### Type — Road Racing

**Cotton, hand made — Rubber base tape.**

**600 TOUR de France** — New — The perfect stage race tyre made in the best hand-made tradition - - - -

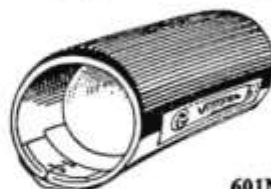
Mixed 10 Black



600

**601M GIRO d'ITALIA** — New — Similar to 600 but with lighter ribbed tread, ideal for longer T.T.s - - - -

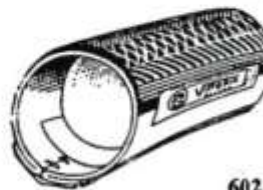
Ribbed 9 Black



601M

**602 CRITERIUM** — New — A tyre certain to be a favourite with the massed start rider - - - -

Mixed 8½ Black



602

**602M CRITERIUM** — New — A fast medium distance time trial tyre - - - -

Ribbed 8½ Black



602M

### Type — Road Racing

**Silk, hand made — Rubber base tape.**

**604 RECORD** — New — As its name implies, this will certainly be the record tyre in 1963. Lightest possible treaded road tyre in finest silk - - - -

Ribbed 6 Black



604

**607 IMPERFORABLE** — New — The almost unpuncturable road tyre with extra hard rubber tread and exclusive protection strip insert - - - -

Ribbed 8½ Black



607

### Type — Track Racing

**Silk, hand made — Cotton base tape.**

**701 PISTARD** — Using the exclusive ultra-light Vittoria pocket, this tyre is the lightest in the world - - - -

Smooth 3½-5 Black



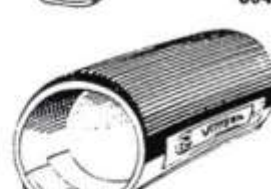
604

### Type — Track Racing

**Silk, hand made — Cotton base tape.**

**702 PISTARD** — A smooth band extra light tyre with attractive multi-coloured bands of red, white and green on black - - - -

Smooth 5 Tricolour



607

**703 PISTARD** — New — With a matt tread, this is designed to fill the need for a tyre to be used on any wet, hard track - - - -

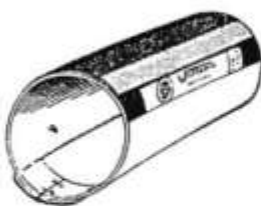
Matt 5½ Black



703



701



702

## ACCESSORIES

921 RIM CEMENT for ROAD

923 RIM CEMENT for TRACK

910 TUBULAR SEWING THREAD/NEEDLES

920 COMPLETE TUBULAR REPAIR KIT

**VITTORIA means VICTORY** — If you want racing success or just training reliability you can't afford not to buy VITTORIA. Remember, too — VITTORIA tubulars can be quickly serviced, your local dealer has only to return them to the Sole Concessionaire for Great Britain.



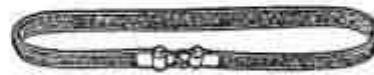
*Cycle Accessories are for the rider who wants quality at economy prices. New in ideas — first rate in design — the best of materials — a combination that ensures success.*

### BAGGAGE STRAPS

Made in strong expanding rubber with easy fit metal clip join, these straps are available in two lengths and in all bright colours.

168/30 is 12" long.

168/50 is 20" long.



168

### BOTTLES

**313 Plastic** is the best value in full-sized bottles ever offered. With easy to grip ribbed sides it is fitted with a special double seal press-on cap that is holed for a drinking tube. When not in use the centre hole is closed with a neat hinged plug.

Available in attractive colours of White, Red, Yellow and Blue.



313

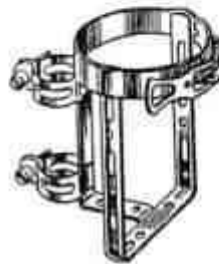


500

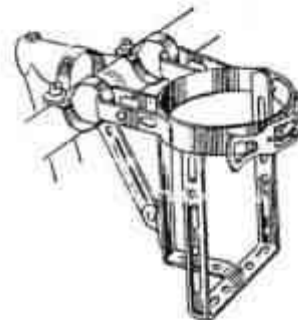
**500 Bambino** Bottle is small size to fit the Bambino cages.

### BOTTLE CAGES

The Reg Cages are unbeatable for value. All models are fitted with a quick release, spring loaded grip.



164



162

**162** Polished zinc strip — handlebar model.

**164** As above but for down tube. Both types are drilled for lightness.

**Bottle Cages in Strong Plastic in choice of 4 colours: Red, Blue, White or Yellow.**

**226** Bambino junior size for handlebar.

**226T** Bambino junior size for down tube.

**230** Standard adult size for handlebar.

**231** Standard adult size for down tube.



230



231

# REG CYCLE ACCESSORIES

## BRAKE CABLE CLAMP BUFFER

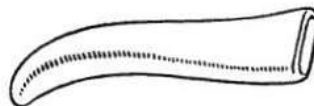
**350** An essential fitment to all brake inner wire ends to give full protection. Assorted colours in plastic.

**352** As above, but plain end cover.



## BRAKE LEVER SLEEVES

**351** Brake Lever Sleeves in coloured plastic. Red, White, Blue, Grey, Yellow, Green.



## BRAKE CABLE CLAMP

**749** Neat Double Clamp in plastic of assorted colours.



## CABLE CLAMPS

Super chrome finish in the latest Italian style, these are available in 5 models.

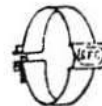
**751/25** (Diameter 1" for top tube) with cable loop at top.

**754/25** (Diameter 1" for top tube) with cable loop at side.

**751/28** (Diameter 1 1/8" for down tube) with cable loop at side.

**752** (Diameter 3/4" for chainstay) with cable loop at top.

**753** (Diameter 9/16" for chainstay) with cable loop at top.



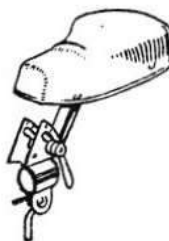
## CHAIN GUARD

**1204** A neat Tourist pattern short polished alloy guard easily fitted with clips provided.

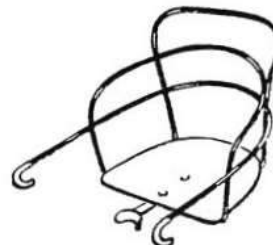


## CHILD CARRIERS

**33** Neat Junior mattress saddle on a universal clip that will fit either lady's or gent.'s cycle. Quick lever locking action for easy detachability.



**248** Standard child carrier with frame in steel wire and seat of wood. Adjustable.



**247** Strongly constructed steel frame. Enamelled finish. Frame tube fitted with universal clip.



## DYNAMO PULLEY COVERS

**3003** Made in VINYL para plastic these easy-to-fit caps will prevent pulley slipping in bad weather. Available in three sizes.

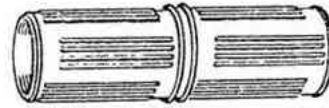


# REG CYCLE ACCESSORIES

## HANDLEBAR GRIPS

**338** Standard plastic  $\frac{7}{8}$ " dia. grips available in all colours.

**348** Lightweight marbled plastic with finger grooves. Pale or dark horn.



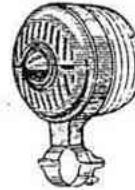
338



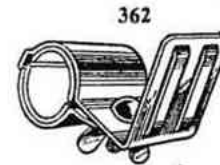
348

## HORNS

**211 Comet Cycle Horn.** Attractive metal and plastic horn attached to handlebars with a single screw steel clip. Available in all popular colours.



211



362

## LAMP BRACKETS

**362 Handlebar Lamp Bracket.** Strong lightweight steel in non-rust finish this lamp bracket is on or off in a jiffy having a half clip held with easy turn thumb screw. Fitted with exclusive plastic liners to clip, thus preventing damage to the bar and at the same time ensuring a firm grip.

## MIRRORS

Four extremely well made lightweight Mirrors at economy prices. Mirrors bevelled  $2\frac{1}{2}$  ins. diameter. **581** has mirror holder and clip in plastic in assorted colours.

**58** has mirror back in polished alloy with clip and bolt in chrome steel.

**582** New model 3" dia. round in white plastic with rim in fluorescent colours.

**583** Similar to 582 but rectangular  $4\frac{1}{8}$ " x  $5\frac{1}{8}$ ". Both new models have pillar in ZP steel and clips in plastic.



## PUMPS

The new REG pumps are constructed in a very durable hard plastic and they avoid the use of internal threads in the top of the barrel by the fitting of two slots into which locates small pegs in the top cap. This method successfully overcomes the stripping of the barrel threads so prevalent in plastic pumps. Best leather washer fitted.

**13** Available in WHITE or BLACK in 16" lengths.

**14** Available in BLACK or WHITE in  $14\frac{1}{2}$ " lengths.

**15A** Available in WHITE or BLACK in 19" length.

**15AR** Similar to 15A but with 5 coloured plastic rings as hand grip.

All above are fitted with standard H.P. braided connection.

**15 Racing**—This is an entirely new design of pump. The end of the barrel fits into a plastic handle shaped to fit the fingers and into this handle is incorporated a racing adaptor, the whole unit being neat and workmanlike.

The pumps are in WHITE or BLACK with the handle in a contrasting colour.

BLACK with handle in either RED, YELLOW, GREY or BLUE.

WHITE with handle in either RED, YELLOW, BLUE, BLACK or GREEN.

3 lengths available: 1— $16\frac{1}{8}$ " 2— $17\frac{1}{2}$ " 3—20".



71

15AR



15



# REG CYCLE ACCESSORIES

## PUMP HOLDERS

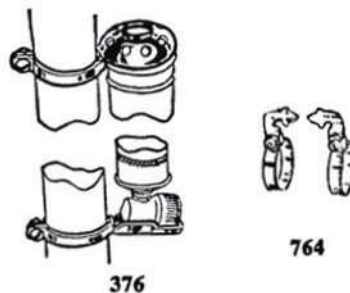
A range of pump holders for all purposes.

**376 "ORTELLI" racing.** Suitable for a pump with fitted adaptor. The domed top cup is drilled for lightness and is a positive stop, the lower clip has a holder for the pump adaptor, both being easy to fit when quickly replacing the pump. Chrome finish in 1" or 1½" diameter.

**376/S "ORTELLI" top cup only.** For use with pump fitted with horn rests. This model is in super chrome finish and is fitted with wing screw.

**71 Quick-fit holder.** Double ended type, lined with dermoid for protection and tightened by spring loaded bolt. Chrome finish.

**764** Strong and practical these standard type pump pegs are in rustless finish.



## MASCOTS

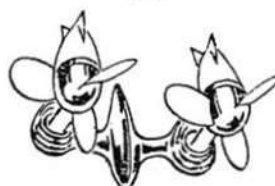
**249 Swallow.** Body in ivory-white plastic. Wings in chrome-plated brass.

**5026 Torpedo.** Polished light alloy and plastic, red or ivory white.

**5024 Lion.** Polished light alloy.

**405 Rocket.** Propellor in chrome-plated brass. Body in plastic in assorted colours.

**406 Twin Rocket.** As 405 but with streamlined support in polished light alloy.



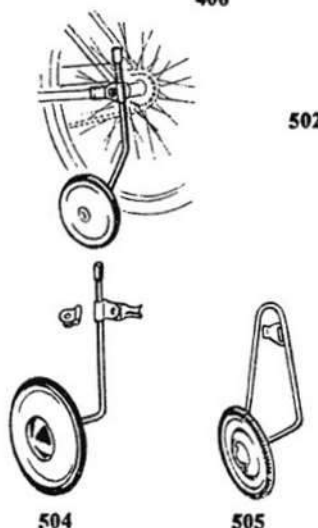
## STABILISORS

**502** Patented extended model in bright zinc-plated finish with universal fixing clip. For wheels 14", 16" or 18" diameter.

**503** As above, but for wheels 18", 20" or 22" diameter.

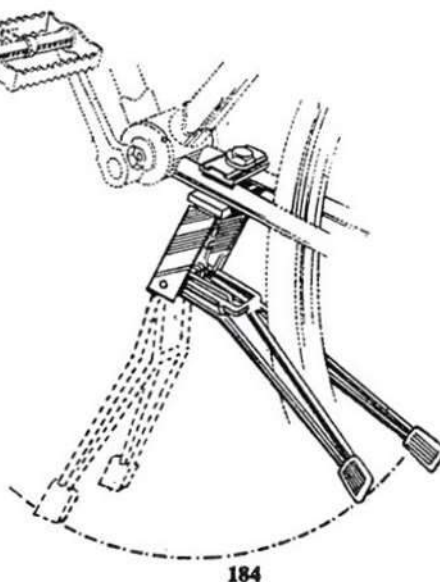
**504** For cycles with wheels from 14" to 22" diameter. Patented adjustment — main rod with bright zinc-plated clip. Large enamelled wheels 6 5/16" diameter — axle cap plated — Clip type fixing brackets.

**505** As 504 but with new strengthened triangular frame.



## STANDS

**184** Light Steel Cycle Central Prop Stand. Fitted with exceptionally strong return spring and frame fixing clip. Feet are plastic covered.



# REG NEW CYCLE ACCESSORIES

Article

Ref. No.            Description

**325    CYCLE OIL CAN**

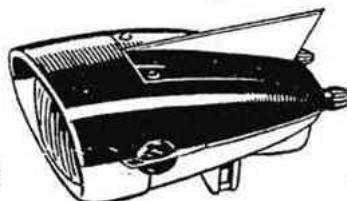
Small Thumb push model in plastic.  
50 cc.



325

**12     STREAMLINE CYCLE HEADLAMP.**

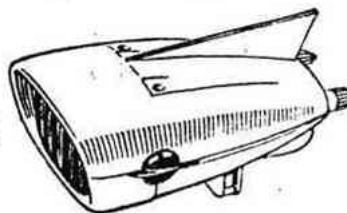
Plastic, suitable for dynamo and battery.



12

**12/c    STREAMLINE CYCLE HORN.**

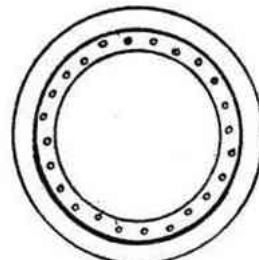
Red and white plastic, battery operated with push button.



12/c

**86/1    SPORT-DISC.**

Fits 5-pin racing chainwheels. Plastic in 3 colours, red, white or blue.



86/1

86/2    Similar to 86/1 to fit Campagnolo chainset.

**GEAR LEVER RUBBER**

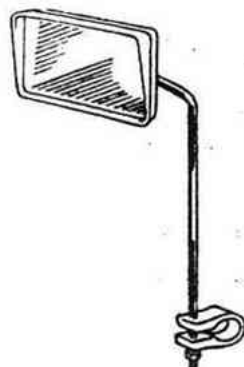
630    Neat plastic cover to fit all types of gear control levers or hub quick release. Red, White or Blue.



**HANDLE GRIPS**

622    Juvenile 14 mm. Handle Grips, complete with coloured streamers.

623    As above, 16 mm. size. All popular colours.



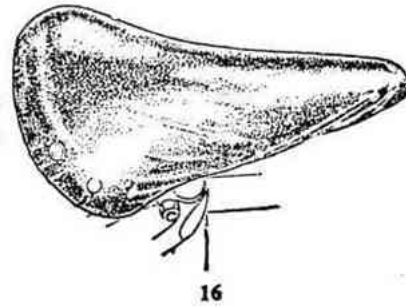
**MIRRORS**

30     Bambino Tricycle Mirror, rectangular white plastic frame.

# REG CYCLE ACCESSORIES

## SADDLE COVER

16 Extra strong plastic with well stitched elastic edges. Give full protection and will fit all types of saddle.



## SADDLE SUPPORT

Made in chrome steel, extra light in weight, the support clips round the top tube and is secured at the other end to the saddle nose. Exact tension is obtained by the expanding centre adjustment. Available in two lengths.

200 5".

300 6½".



## SPOKE DISC

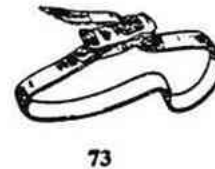
67 In super chrome finish. Lightweight Spoke Protecting Disc, 4½" dia., suitable for all makes of hubs and derailleur gears.



## TOECLIPS & TOESTRAPS

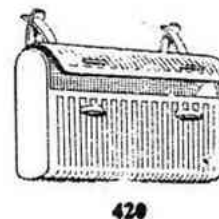
74 Chrome-plated carbon steel racing pattern toe-clip.

73 Extra fine chrome leather Quick Release toestrap fitted with zinc-plated spring roller buckle.



## TOOL BAGS

420 All plastic, in attractive colours of RED, BLUE, MAROON, WHITE OR BLACK.



## THORN CATCHERS

252 Rigid pattern in chrome steel. Fits to brake centre bolt. The simple but effective catcher at the most economical price.





# REG NEW CYCLE ACCESSORIES

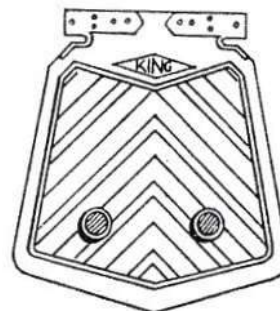
Article

Ref. No.

Description

**213 CYCLE MUDFLAP.**

White plastic 7" x 8" with built-in reflectors.



**213**

**311 HIP FLASK.**

White plastic, capacity 100 cc.



**311**

**274 HANDLEBAR GRIP STREAMERS**

Plastic 10" long in assorted colours.



**274**

**102 HUB SHINERS.**

For standard hubs in white plastic with reflectors.



**102**

**3037 CYCLE FLAG STAFF.**

Chrome plated steel — hub fitting.



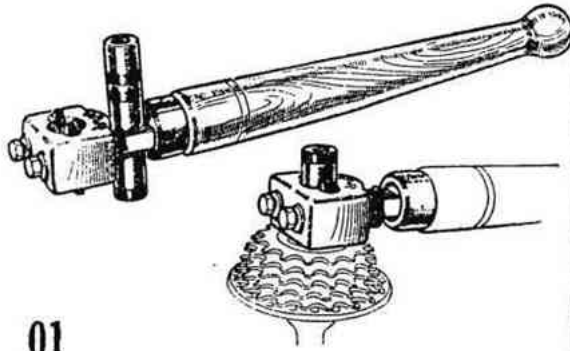
**3037**

# VAR WORKSHOP TOOLS

We are proud to be distributors of V.A.R. tools and unquestionably this firm's products are unrivalled in design, quality of materials and range. There is a V.A.R. tool for every need. Due to shortage of space we are able to list only part of their tremendous tool range, so if the tool you require is not listed here please ask us—it will almost certainly be available.

Ref No.	Description
<b>Freewheel and Sprocket Removers and Tools.</b>	
01	"UNIVERSAL MONOBLOC" Freewheel Remover. For 1, 3, 4 or 5 speeds on axles of 9.5 - 10 - 11 on ordinary or quick release hubs. Fitted interchangeable dogs.
04	"RATIONEL" Sprocket Removing Tool. Utilised with 03 vice enables rapid changing of sprockets without damage.
12	"ENERGIC" Freewheel Jig. Fits in a vice and opens up in the interior of the freewheel so permitting easy repair.
186	"SPECIAL" Freewheel Remover for "MILREMO-SUPREMO-DUBAN-PRIOR" Freewheels. Made in specially treated steel.
186Bis	"COURSE" Freewheel Remover for "MILREMO-SUPREMO-DUBAN-PRIOR" Freewheels when fitted to quick release hubs. Treated steel.
187	"STANDARD" Freewheel Remover. Treated steel.
188	"SPECIAL" Freewheel Remover for 4 or 5 speed "MOYNE-REGINA" Freewheels. Specially treated steel.
210	"AMATEUR" Freewheel Vice. Sliding grips made in special bronze aluminium to be used in a vice.
365	"INTEGRAL" freewheel vice. The first tool which permits the unscrewing of all sprockets from any multiple freewheel. This new vice, thanks to a patented system of holding the freewheel, allows the unscrewing of the last two sprockets on any freewheel. A definite solution also to a never before solved problem of easy dismantling of the freewheel internals. All steel, very robust, with interchangeable treated steel studs.
368	"CARCAN" freewheel vice. Indispensable for unscrewing the last sprocket from the body of MILREMO—ATOM—REGINA—MOYNE freewheels. All steel Protects internally the freewheel threads.
266	"RATIONAL" sprocket remover. Enables the unscrewing of fixed cogs, assuring at the same time absolute protection of the teeth thanks to the total wrap round of the chain. Supplied either with $\frac{1}{2} \times \frac{1}{4}$ or 3/32 chain.

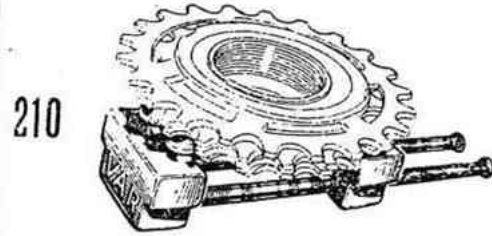
## Freewheel Removers and Tools



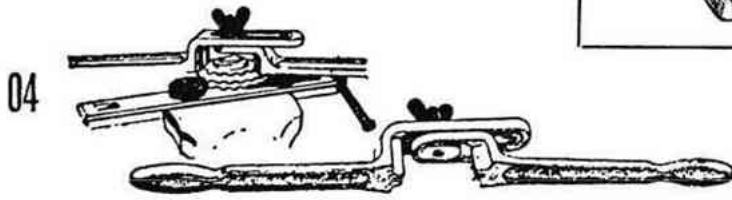
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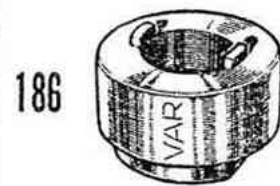
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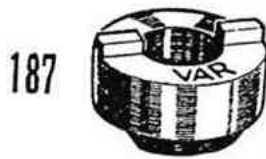
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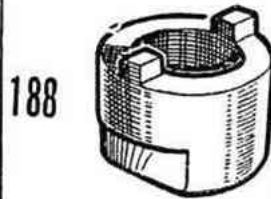
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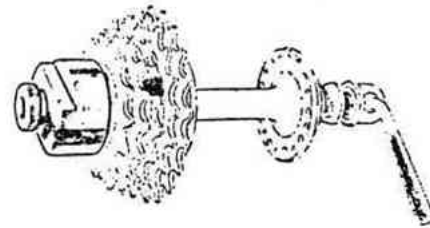


187



188

186 bis

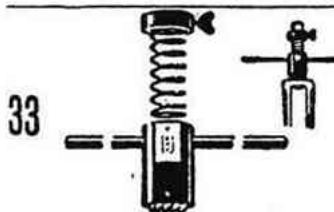
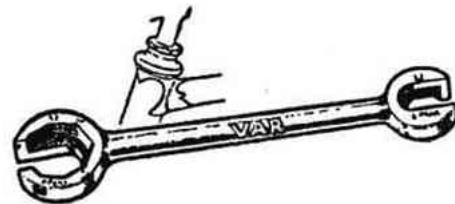


## Reamers, Special Spanners, Taps and Dies



32

65



33



18 bis



42

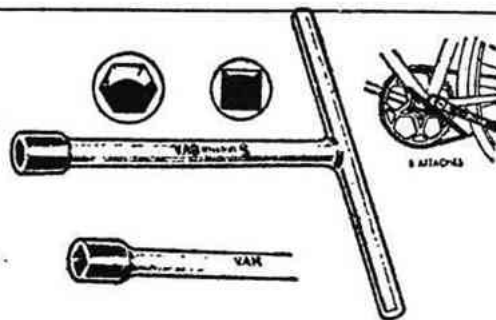


39

41



23



Ref No.	Description
<b>Reamers</b>	
32	"HEAD AND BRACKET REAMER." Patented design with No. 2 and 3 cutters.
33	"FORK CROWN REAMER." Pressure by ring and spring. Supplied with reversible cutter in normal, juvenile or tandem size.

#### Special Spanners

18Bis	"PEDAL SPANNER." Double ended, zinc plated in chrome molybdenum steel, with very thin polished ends.
23	"T-SHAPED" Chainwheel Pin Spanner. Chrome molybdenum steel in sizes 6 and 7 mm. square and 7, 8, 9, 10, 11, 12, 13 or 14 hexagon.
65	"MULTIPANS" Head Locknut Spanner. Chrome molybdenum steel 6 or 8 sided x 32.
95	"ALLEN KEY." Treated steel, all sizes available.
20	"HUB CONE SPANNER." Chrome molybdenum steel with extra flat heads. Delivered in set of 3 (13/14 — 15/16 — 17/18) or singly.
238	"AMATEUR" socket spanner set. Treated steel : 3 sets available. No. 1. Wood handle and 7 sockets. (1 in 7 mm square and 6 hexagon in 7, 8, 9, 10, 12 and 14 mm) No. 2 Metal handle and 7 sockets. No. 3 Both handles and 7 sockets.

#### Taps and Dies

39	"FORK DIE." Cast steel, 1 x 24.
41	"CRANK TAP." Cast Steel, 9/16 x 20. Set of 2 (LH and RH).
42	"BRACKET TAP." Cast steel. Set of 2 (RH and LH). 34, 85 x 24.

#### Chain Rivet Extractor Tools

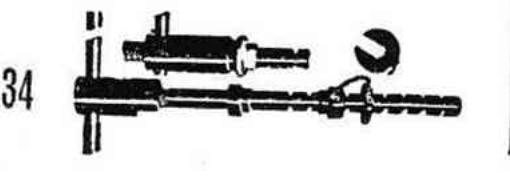
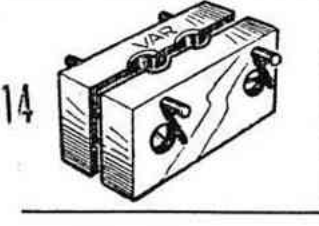
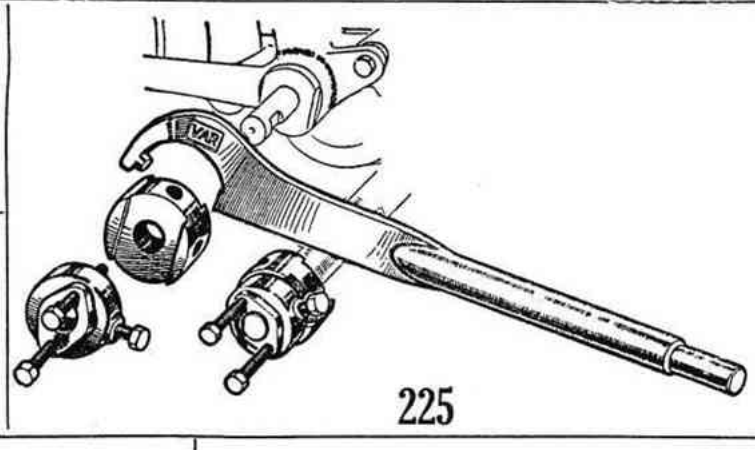
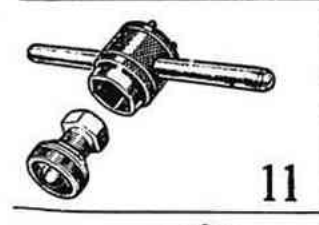
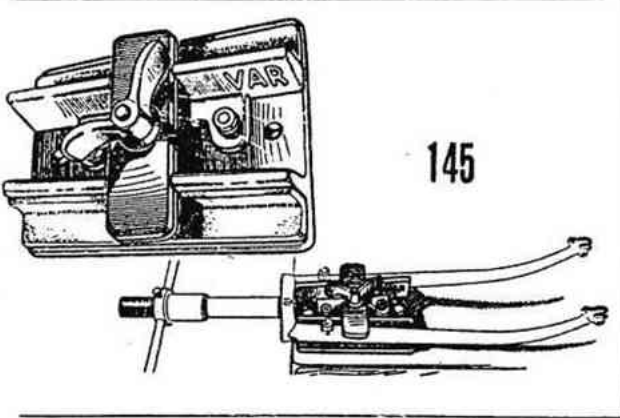
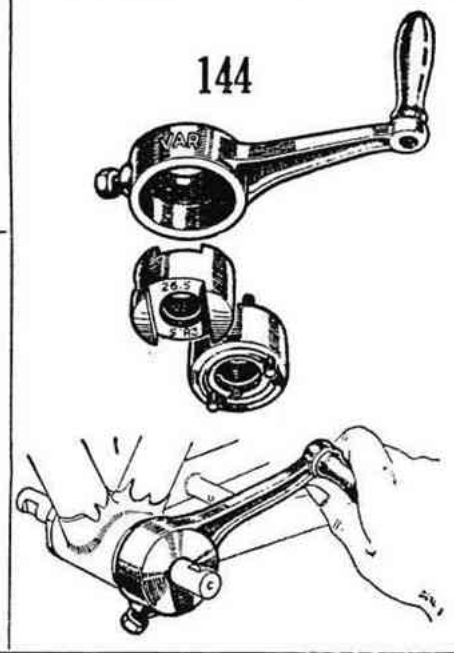
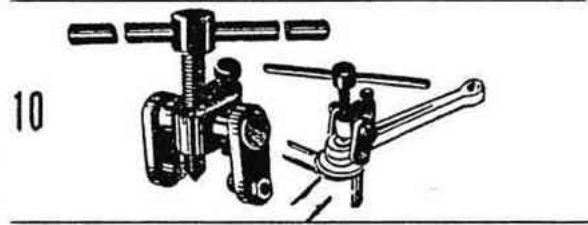
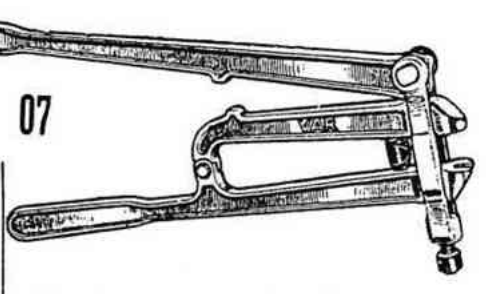
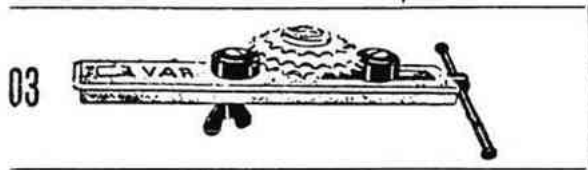
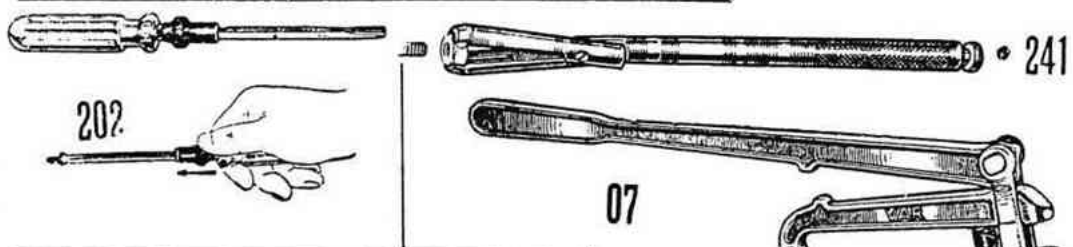
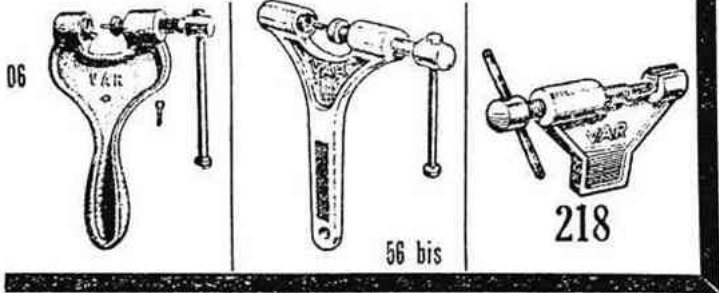
06	"ATELIER VELO" Workshop Tool for $\frac{1}{8}$ and $\frac{3}{32}$ cycle chains. Register fitted with special chain guide. Punches easily interchangeable.
56Bis	"ATELIER CYCLE-MOTO." Similar to 06 but in forged steel and chains size $\frac{3}{16}$ and larger.
218	"AMATEUR." Bronze aluminium with screw punch in treated steel. indispensable for use on the road.

#### Cycle Tools

02	"CALIPER BRAKE SHOE CLAMP." The third hand, indispensable for gripping the brake shoes in position during adjustment of the cable.
03	"ROBUST" Freewheel and Chainwheel Vice. Adjustable holders made in special alloy to avoid damage to the teeth.
07	"SPECIAL CONSTRUCTEUR" Cotter Pin Press. Reinforced, robust and rapid. In high resistance steel.
10	"COSTO" Cottered Crank Drawing Tool. Reinforced studs on quick release stirrups assuring strong extraction.
11	"STRONGLIGHT" Combined Tool Set. Permits the extraction of the cotterless crank, locks the axle screw and tightens dust cap.
14	"SERRAX" Hub Axle Vice. Indispensable for holding firmly all sizes of axles from 7 to 14 without damaging threads.
34	"HEAD CUP PRESS TOOL" for correct setting of head cups. Ultra rapid adjustment by patented system.

# Chain Rivet Extractor Tools

# Cycle Tools

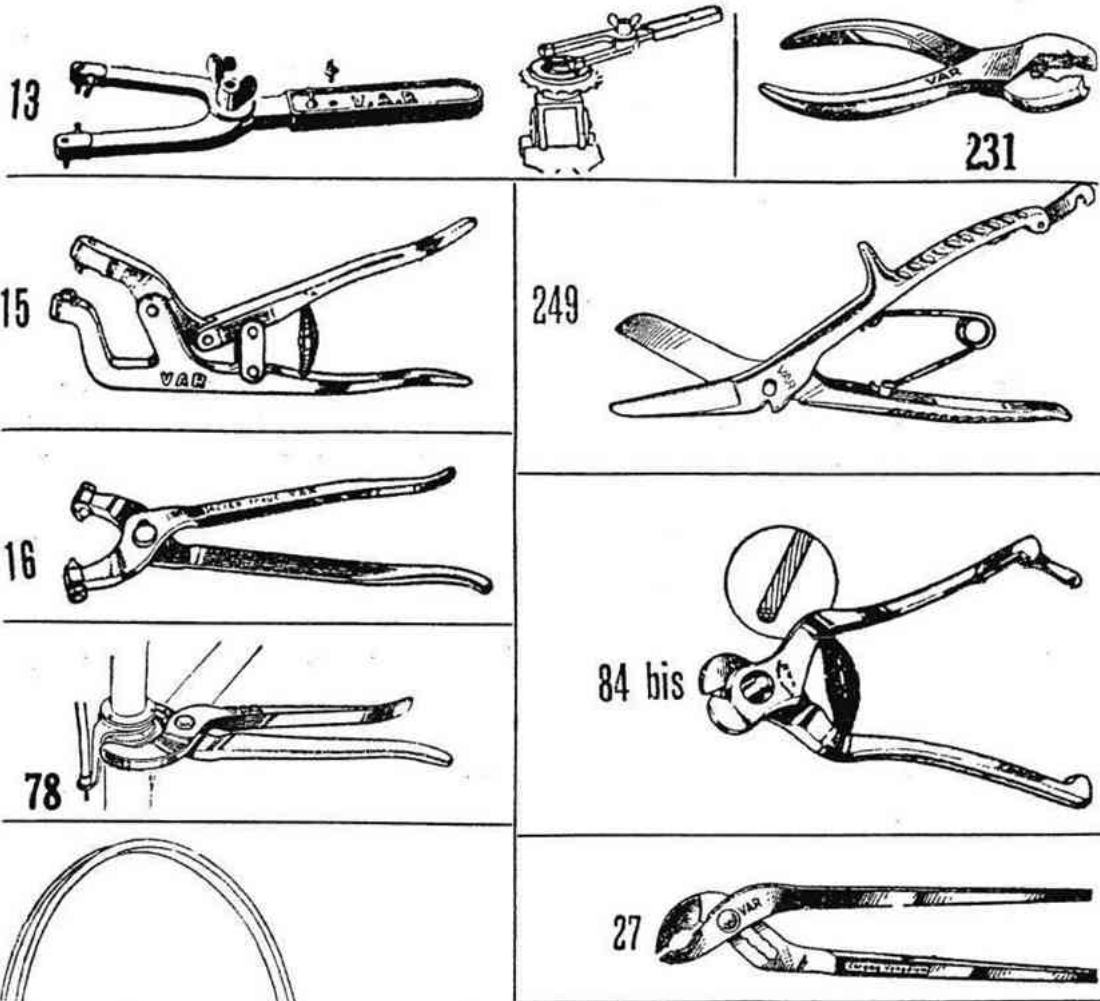


Ref No.	Description
<b>Cycle Tools (Cont.)</b>	
144	"PRESTO" Cup Screwing Tool. Very handy for rapidly screwing-on bracket adjusting cups. Indispensable for the assembler. Supplied with 2 jaws.
144Bis	Spare Jaws for above (all types available).
145	"TIGRE" Fork Vice. Indispensable for holding the fork firmly, permitting every kind of operation to be executed. Enamel is protected by rubber. Suitable all sizes.
202	"AGRIP-VIS" Screwdriver. Firmly holds a screw at the blade end allowing it to be fitted or removed from a place inaccessible to the hand. Insulated handle.
225	"HERCULE" Cycle Bracket Fixed Cup Locking Tool. Enables relocking of an unloosened bracket fixed cup in three minutes without having to dismantle the bracket set.
252	"COURSE" Sprocket Remover. Range 12 to 28 teeth. Very handy for unlocking fixed cogs and freewheel sprockets.
241	"PINCE-ECROU" Nut Gripping Tool. Small and very useful, enables any size nut from 3 to 10 mm. dia. to be held, screwed or unscrewed in any inaccessible place. All nickel steel.
30	"EFFICIENT 61" Bracket cup fitting and removing tool.
63	"MONTEUR" Cotter pin mallet. Specially made for fitting and removing crank cotters without damage. Adopted by all cycle assemblers. Special indestructable copper head in square section. Handle supple and robust.
146	"ROCKET" Fork crown race assembling tool. Operated by hand with a sharp blow down the fork column. Interchangeable brass ring fits the section of the cone of the fork.
22	"PROFESSIONNEL" cotterless BB axle combined tool set for race mechanics. Comprises 3 tools in nickel chrome steel. 22/1 Tool and Tommy bar with studs. 22/2 Crank extractor. 22/3 Special tap for clearing internal threads.

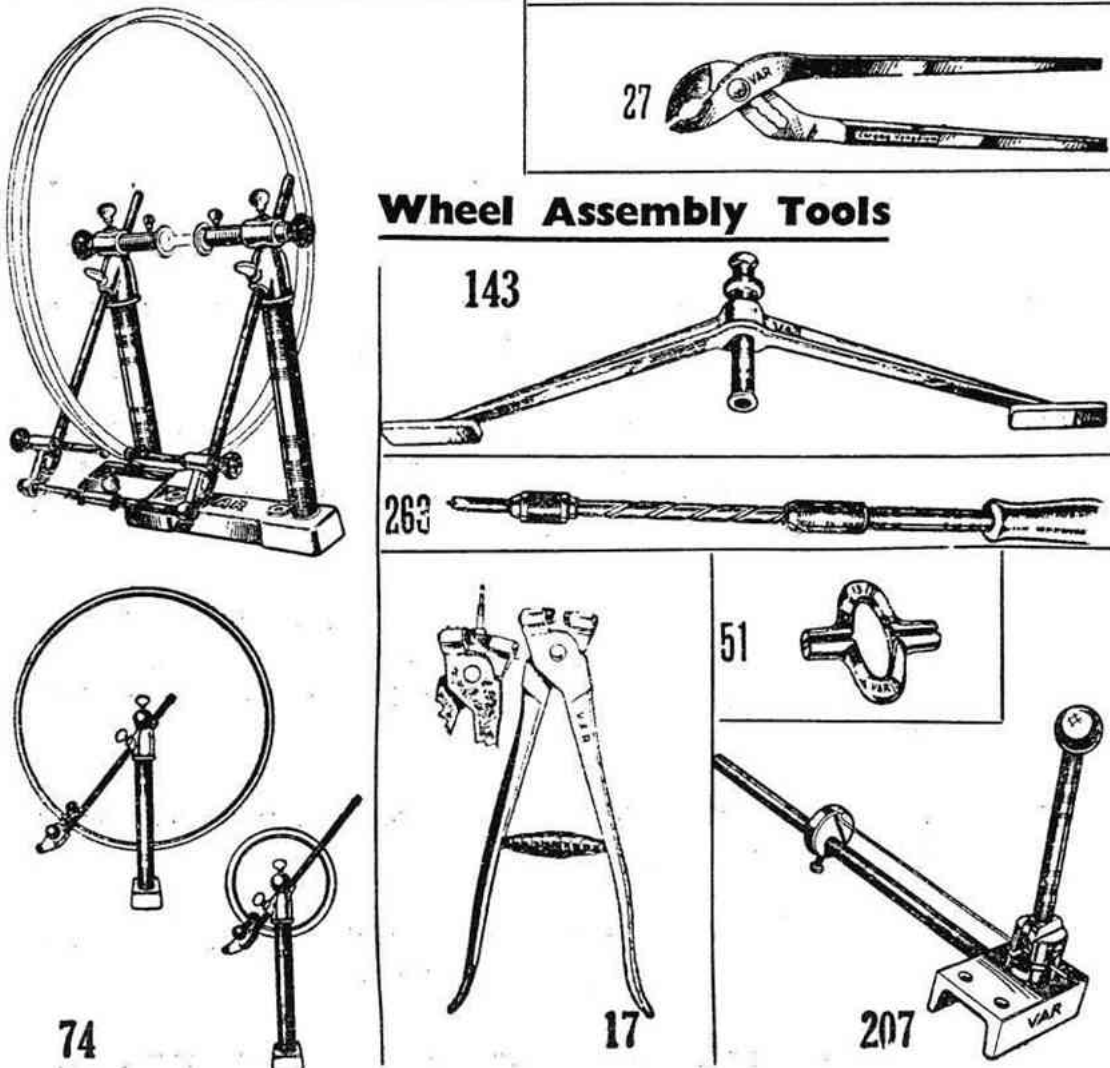
#### **Pincers — Pliers — Cutters**

- |    |   |
|----|---|
| 13 | "CAIMAN" Pincer Pin Spanner for adjusting all locking rings, washers, dust caps, freewheel locking plates with round recesses. Fitted interchangeable cylindrical pins with double positions.         |
| 15 | "PERFO" Pincer Mudguard Punch. Useful for quickly punching holes in mudguards for reflectors, stay eyebolts, etc. Delivered with 5 mm. punch and register but also available for sizes 2, 3 and 4 mm. |

## Pincers, Pliers and Cutters



## Wheel Assembly Tools



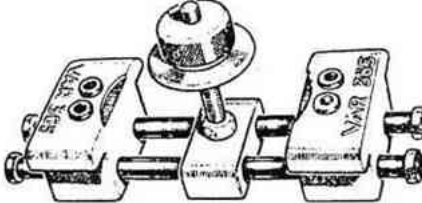

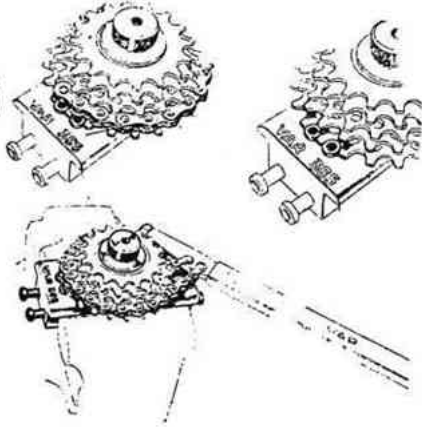


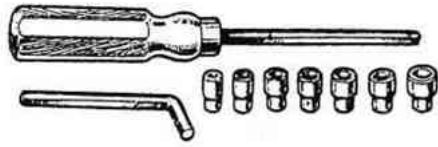
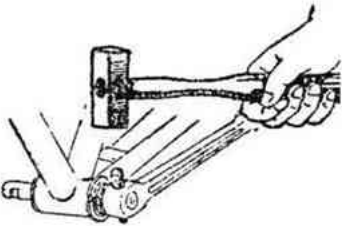
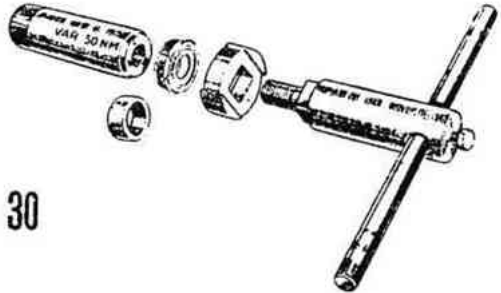
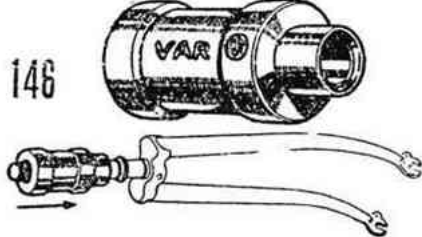
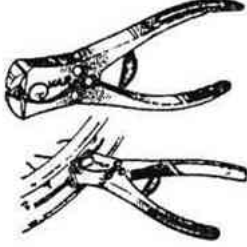
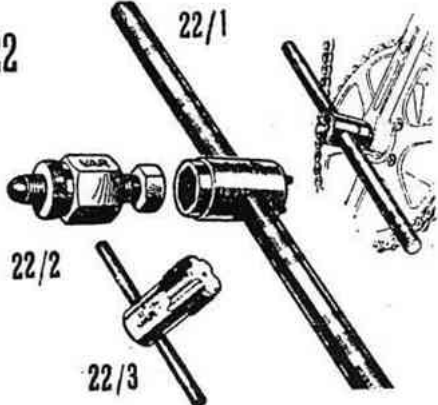
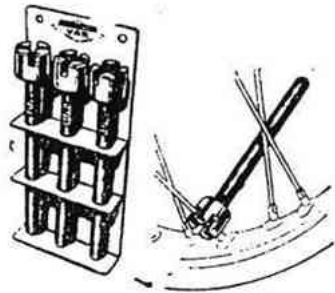
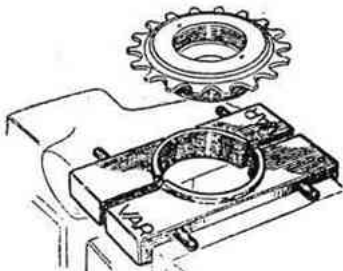
Ref. No.	Description
<b>Pincers — Pliers — Cutters (Cont.)</b>	
16	"DOGUE" Pliers for locking and unlocking with one hand, head or bracket lockrings. Replaceable tempered pegs, locks in two different positions.
27	"MULTIPRISES" Gland Nut Pliers. All chrome superior quality in vanadium steel.
78	"PYTHON" Pliers for top head race adjustment.
84Bis	"COUPE CABLES" Wire Cutters. Fitted with patented triangularly working jaws allowing a clean cutting of any cable without flattening or fraying. Made entirely of nickel plated specially hardened steel.
231	"UNIVERSELLE" Nut Pliers. Very handy for locking all nuts. Grips at the extremity or on the sides.
249	"CROCODILE" Shears. Fitted with special jaws for cutting cartons, rubber, etc.
230	"MOTO" Motor Cycle spoke head cutter, 6 mm cutters fit into well of the rim.

#### **Wheel Assembly Tools**

17	"COUPE-RAS" Spoke Head Cutter. Will trim off spoke heads to the level of the nipple head. Replaceable studs.
51	"PROFESSIONELLE" Spoke Nipple Key. Drop forged, machined grooves for choice of three sizes of nipples.
74	"ATOMIC" Wheel Truing Stand. A new patented apparatus, unique in its design permitting even the novice to centre wheels of all sizes and types rapidly and with precision. Delivered with centering points for both solid and hollow hub axles.
143	"EXACT" Wheel Centering Gauge. Indispensable for controlling the building of a wheel. Enables the wheel to be centred exactly. Instant setting, one hand only required. For use on rims of all types and diameters.
207	"SPOKE CUTTING TOOL." Cuts spokes easily to exact length before threading.
263	"SPEED" Spoke Screwdriver. Special ratchet enables ultra rapid tightening. Fitted interchangeable blade.
52	"PROFESSIONNEL" Spoke nipple keys, set of 3 for motor cycle.



# NEW VAR TOOLS

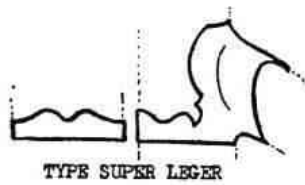
	<p>266 </p>
<p>365 </p>	<p>20 </p>
<p>95 </p>	<p>238 </p>
<p>63 </p>	<p>30 </p>
<p>146 </p>	<p>230 </p>
<p>22 </p>	<p>52 </p>
<p>22/1 22/2 22/3</p>	<p>368 </p>

# V A R TOOLS

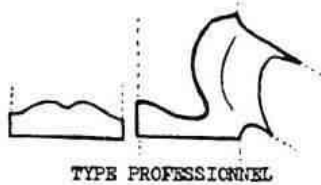
## PRICE LIST

Article Ref.	Retail Price	Article Ref.	Retail Price
<b>FREEWHEEL AND SPROCKET REMOVERS AND TOOLS</b>			
01 ... ..	51/6 Each	02 ... ..	17/- Each
04 ... ..	33/3 "	07 ... ..	82/6 "
12 ... ..	18/9 "	10 ... ..	35/6 "
186 ... ..	13/6 "	11 ... ..	12/3 "
186bis ... ..	18/6 "	34 ... ..	81/- "
187 ... ..	11/6 "	144 ... ..	52/- "
188 ... ..	10/- "	202 ... ..	19/9 "
210 ... ..	8/6 "	225 ... ..	72/9 "
365 ... ..	37/6 "	241 ... ..	47/9 "
368 ... ..	39/6 "	30 ... ..	82/- "
266 ... ..	17/6 "	63 ... ..	31/3 "
03 ... ..	40/- "	146 ... ..	60/- "
252 ... ..	13/9 "	22 ... ..	54/- "
<b>REAMERS</b>			
32 ... ..	£10 "	22/1 ... ..	21/9 "
33 ... ..	£8 "	22/2 ... ..	16/- "
<b>SPECIAL SPANNERS</b>			
18Bis ... ..	25/- "	22/3 ... ..	16/6 "
23 ... ..	12/- "	370 ... ..	23/- "
65 ... ..	22/9 "	<b>PINCERS—PLIERS—CUTTERS</b>	
95 ... ..	2/9 "	13 ... ..	30/- "
20 ... ..	48/3 "	15 ... ..	41/6 "
238 No. 1 ... ..	28/6 "	16 ... ..	35/6 "
No. 2 ... ..	27/9 "	27 ... ..	26/- "
No. 3 ... ..	30/- "	78 ... ..	16/- "
<b>TAPS AND DIES</b>			
39 ... ..	33/3 "	84Bis ... ..	30/- "
41 ... ..	23/3 "	231 ... ..	13/6 "
42 ... ..	95/- "	249 ... ..	47/9 "
380 ... ..	£22 14s.	230 ... ..	52/- "
<b>CHAIN RIVET EXTRACTOR TOOLS</b>			
06 ... ..	32/- Each	<b>VICES</b>	
56Bis ... ..	36/6 "	14 ... ..	34/3 "
218 ... ..	6/9 "	145 ... ..	52/6 "
<b>CYCLE TOOLS</b>			
<b>WHEEL ASSEMBLY TOOLS</b>			
07 ... ..	82/6 "	17 ... ..	34/3 "
10 ... ..	35/6 "	51 ... ..	5/9 "
11 ... ..	12/3 "	74 ... ..	£13 8s.
34 ... ..	81/- "	143 ... ..	66/6 "
144 ... ..	52/- "	207 ... ..	66/6 "
202 ... ..	19/9 "	263 ... ..	50/- "
225 ... ..	72/9 "	52 ... ..	33/- "
241 ... ..	47/9 "		
30 ... ..	82/- "		
63 ... ..	31/3 "		
146 ... ..	60/- "		
22 ... ..	54/- "		
22/1 ... ..	21/9 "		
22/2 ... ..	16/- "		
22/3 ... ..	16/6 "		
370 ... ..	23/- "		

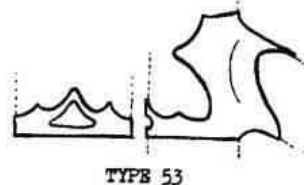
# BOCAMA Lug Sets



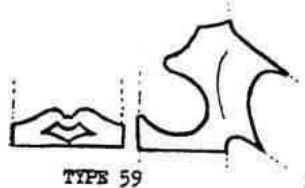
TYPE SUPER LEGER



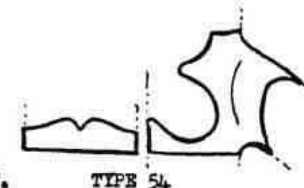
TYPE PROFESSIONNEL



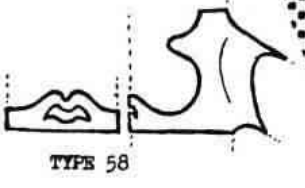
TYPE 53



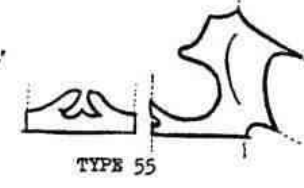
TYPE 59



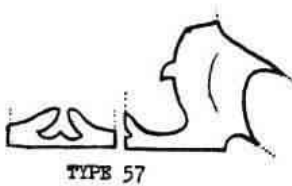
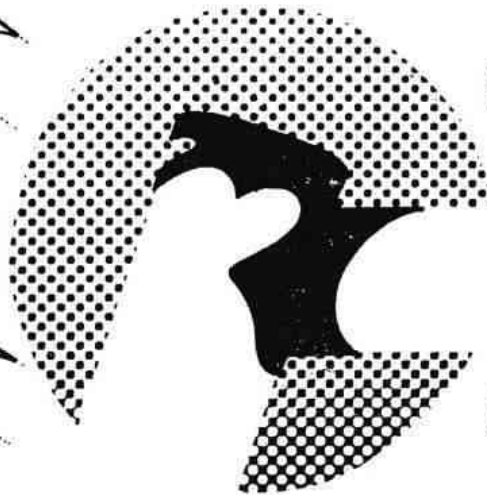
TYPE 54



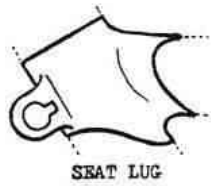
TYPE 58



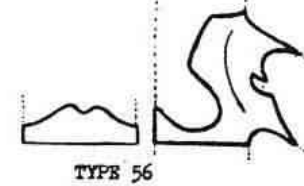
TYPE 55



TYPE 57



SEAT LUG



TYPE 56

The most popular lug sets in Europe today, BOCAMA offers an irreproachable finish and never equalled accuracy. Accurate angles, Concentric borings, exact regularity in the material thickness, minimum allowances, de-oxydated and cleaned finish, all these features add up to near perfection in these vital cycle fitments.

Illustrated are nine of the more popular cut-outs — others are available to special order. Insist on your builder using BOCAMA lug sets — they are the BEST.



## THE FINEST FRAME FROM FRANCE

Designed and constructed by ex-champion ANDRE BERTIN, these frames have been proved in all the leading classics. Successes include: Belgian Road Championships, Circuit du Bresschaut, Paris-Tours, Circuit Flandres, Circuit des Regions Flamandes, Grand Prix Het Volk, Grand Prix des Nations, Paris-Nice, Trophee Le Simplex, Paris-Valenciennes, etc., etc.



**6 Hand-Built Frames at prices to suit all pockets!**

### ROAD MODELS

#### FRAME DESIGN.

Popular Continental square design with 72 parallel head and seat angles. This style of frame serves all purposes of road cycling.

#### CONSTRUCTION.

All brazed with finest Professional Continental steel lugs and forged crown. Fine tapered seat and chainstays, tapered fork blades fitted into solid ends.

#### MEASUREMENTS.

Typical measurements on Road model: Frame size 22", Wheelbase 40½", Chainstays 17", Top Tube 22½". Other sizes of frames have measurements in proportion.



### TRACK MODELS

#### FRAME DESIGN.

Popular parallel 73 head and seat tube angles as used by the BERTIN team with success in all types of track events both indoor and outdoor.

#### CONSTRUCTION.

Entirely all-brazed in Reynolds 531 double butted tubes using special cut-out Continental Professional lugs. Solid two plate crown with reinforced round to round tapered forks and special solid rear track ends. No brazed fittings, pump pegs or guard eyes.

#### MEASUREMENTS.

Typical measurements of this popular track racing design give a wheelbase of 39" and chainstays 16½".

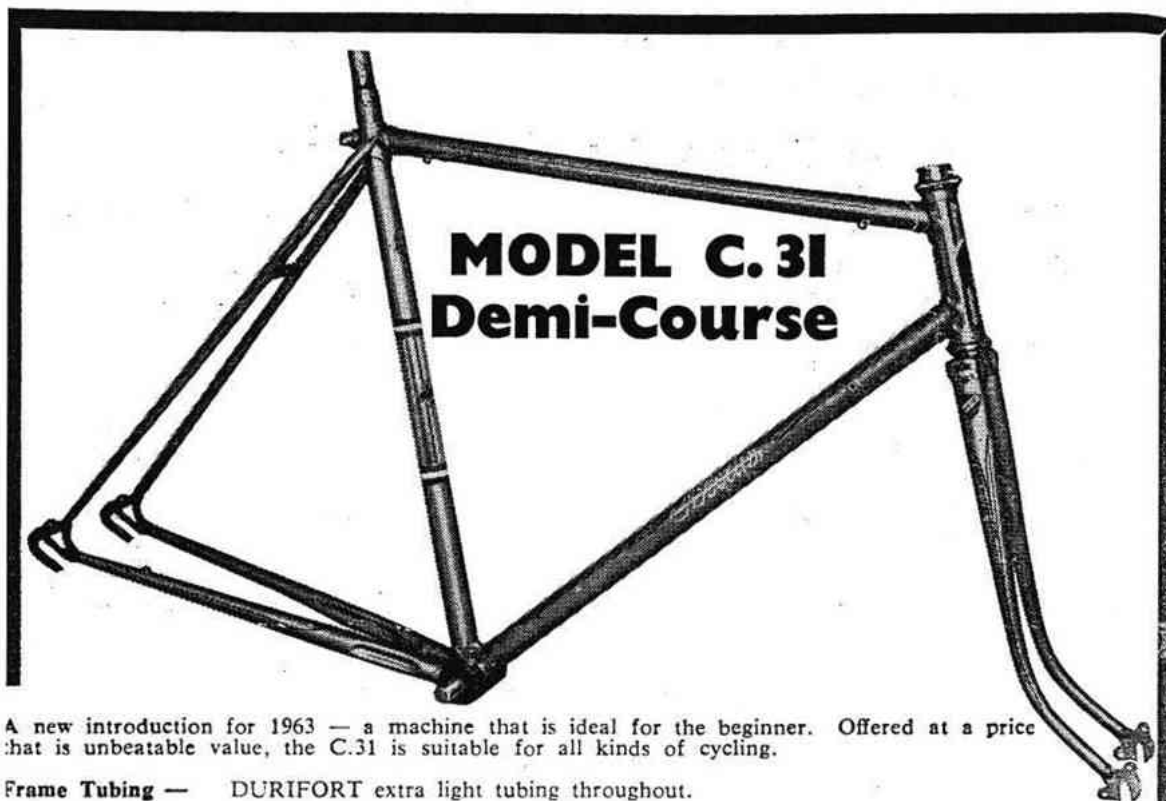
**FINISH.** All BERTIN frames have a superb enamel finish in the colours specified with each model — contrasting seat and head panel — scroll type linings — individual transfers — and attractive name plate in three colours on head tube.

### FRAME SIZES

All models are available in these sizes :—

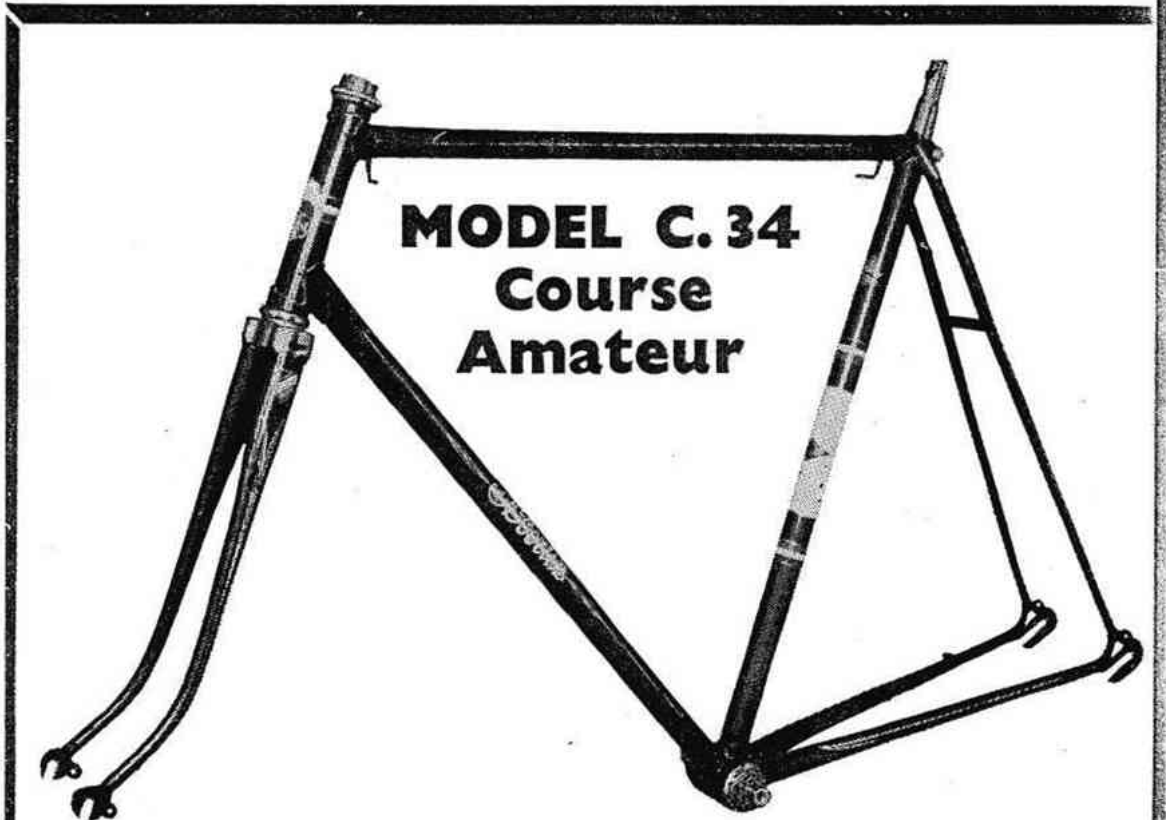
CMS	51	52	53	54	55	56	57	58	59	60	61	62	63
Inches	20	20½	20¾	21½	21¾	22	22½	22¾	23½	23¾	24	24½	24¾

Measurements are taken from the centre of bracket axle to the top of seat lug.



A new introduction for 1963 — a machine that is ideal for the beginner. Offered at a price that is unbeatable value, the C.31 is suitable for all kinds of cycling.

- Frame Tubing** — DURIFORT extra light tubing throughout.
- Head Fittings** — PRIOR chrome micro-adjusting.
- Bracket Fittings** — PRIOR chrome with hollowed axle.
- Finish** — Superb enamel in choice of Transparent ORANGE or Glitter GOLD



The most popular machine in the BERTIN range and one which has been used by hundreds of newcomers to the Sport of cycle racing. Ideal machine too for general club riding and week-ending.

- Frame Tubing** — DURIFORT extra light tubing throughout.
- Head Fittings** — LIGHTRACE "Lelege" chrome micro-adjusting.
- Bracket Fittings** — LIGHTRACE "Lelege" chrome best quality.
- Finish** — Superb enamel in choice of Fire RED — Royal BLUE — Emerald GREEN  
Golden YELLOW — Devon VIOLET — Coral PINK.

**C.36  
VITUS**

**C.35  
REYNOLDS  
/VITUS**

**MODEL  
COURSE  
COMPETITION**



Reasonably Priced competition models with a choice of the best of French (C.36 with VITUS) or British lightweight tubing (C.35 with REYNOLDS).

**Frame Tubing:** C.36 model entirely in France's finest tubing — the ultra-light VITUS. C.35 model has triangular tubes in REYNOLDS with forks and stays in VITUS

**Head Fittings —**  
**Bracket Fittings —**  
**Finish —**

STRONGLIGHT P.3 chrome micro-adjusting.  
STRONGLIGHT model 34 chrome.

Superb enamel in choice of

Model C.36 — Fire RED — Royal BLUE — Golden YELLOW —  
Cyclamen ROSE. Model C.35 — Fire RED — Royal BLUE.

**MODEL C.37  
COURSE SUPER  
PROFESSIONNEL**



Replica of the machines issued to the successful BERTIN racing team and used by BRITISH riders RON COE, JOHN GEDDES, BARRY HOBAN and BERNARD BURNS. Using only the finest materials and the world's best cycle components, ensuring that this is a machine without equal, a machine proved by performance.

**Frame Tubing —**  
**Head Fittings —**  
**Bracket Fittings —**  
**Finish —**

All tubes, forks and stays in REYNOLDS 531 double butted.  
STRONGLIGHT "Competition" super chrome micro-adjusting.  
STRONGLIGHT model 34 chrome.  
Superb enamel in choice of Fire RED or the BERTIN racing colours of Brilliant BLACK with Red decor.

**MODEL C.38 COURSE PISTE**

Track racing model with specification as shown on the first page — a replica of the actual team issue and design by ex path champion ANDRE BERTIN.

**Frame Tubing —**  
**Head Fittings —**  
**Bracket Fittings —**  
**Finish —**

All tubes, forks and stays in REYNOLDS 531 double butted.  
STRONGLIGHT "Competition" super chrome micro-adjusting.  
STRONGLIGHT model 34 chrome.  
Superb enamel in Snow WHITE.

## THE NAME

Signor CINELLI, ex-Italian champion and Italy's No. 1 cycling enthusiast is friend and designer for almost every leading Italian road and track rider. CINELLI has a reputation second to none—a reputation for quality first.



## FOR QUALITY

His machines are produced by hand under the most modern conditions, all employees being specially trained to meet his exacting standards. The superb design and construction is the result of many years' continuous consultation with the Italian champions.

## Look for these exclusive Cinelli features

### ROAD MODELS



**SUPER CORSA** has this exclusively designed fork crown giving utmost rigidity to the steering when cornering at speed. Note the reinforced tangs and liners.

**CORSA** and **SUPER CORSA** have a specially strengthened rear brake bridge designed to give exact brake setting and adjustment.

*All models have the unique seat lug—stay top bolt fixing, giving added strength and preventing whip at the rear ends.*



### TRACK MODELS



**PISTA** has reinforced round fork blades in special crown. This model is fitted with **CINELLI** super chrome security ball head clip.

Note the clean smooth lines of the well tapered lugs—the famous **CINELLI** look!

The superb **CINELLI** solid forged path rear ends—the envy of every lightweight frame builder.

*These features coupled with superb enamel finish and finest mirror chrome plating make **CINELLI** the top standard in cycle construction.*



### FRAME SIZES

CMS	51	52	53	54	55	56	57	58	59	60	61	62	63
Inches	20	20 $\frac{1}{8}$	20 $\frac{1}{2}$	21 $\frac{1}{8}$	21 $\frac{1}{2}$	22	22 $\frac{1}{2}$	22 $\frac{1}{2}$	23 $\frac{1}{8}$	23 $\frac{1}{8}$	24	24 $\frac{1}{2}$	24 $\frac{1}{2}$

### FRAME DESIGN.

Frames are designed with typical measurements as follows:—

Models **CORSA** and **SUPER CORSA**—Frame size 22", Top tube 22", Rear ends 17 $\frac{1}{2}$ ", Front ends 23 $\frac{1}{2}$ ", Wheelbase 40 $\frac{1}{2}$ ", Width of rear ends 4 $\frac{1}{2}$ ", suitable for all types of gear mechanisms. Both at front and rear there is full clearance for all types of guards.

Model **PISTA**—Frame size 22", Top tube 22", Rear ends 16 $\frac{1}{2}$ ", Front ends 22 $\frac{1}{2}$ ", Wheelbase 39". Measurements of other frame sizes vary in proportion to change of size of seat tube.

**NOTE:** MODEL **RIVIERA** is only available in size 22 $\frac{1}{2}$ " Other models in all sizes listed above.

## CINELLI MODEL RIVIERA



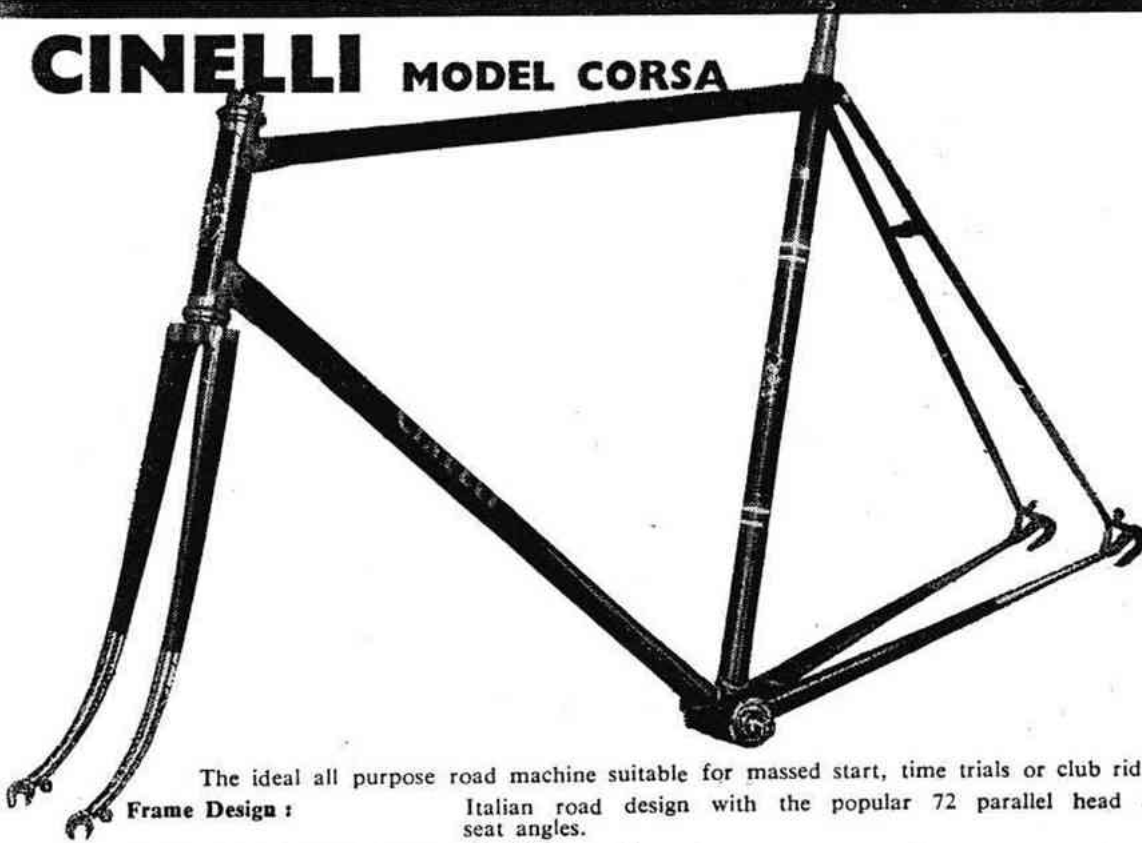
The finest value ever offered in frames on the British market. Perfect for the beginner this frame can be used for all cycling purposes.

**Frame Design :** Popular Italian design and angles this frame has ample clearance for 27 inch wheels with guards.  
**Head and Bracket Fittings :** Best quality chrome.

**Finish :** Attractively enamelled in choice of 6 different colours. Campani RED, Elba BLUE or Italian GREEN, all with WHITE panels, or Grecian WHITE with choice of panels in RED, BLUE or GREEN.

**Chrome :** Finest mirror chrome plating on Front and Rear fork ends, Fork crown, Top and Bottom head lugs.

## CINELLI MODEL CORSA



The ideal all purpose road machine suitable for massed start, time trials or club riding.

**Frame Design :**

Italian road design with the popular 72 parallel head and seat angles.

**Head and Bracket Fittings :**  
**Finish :**

Cinelli Super chrome.  
 Superb enamel in a choice of 3 finishes. Italia GREEN, Star SILVER, Metallic RED. Attractive coloured bands round seat tube.

**Chrome :**

Finest mirror chrome plating on Fork crown, front and rear ends, top and bottom head lugs.



# CINELLI MODEL SUPER CORSA



Replica of the machines used by the Italian professional road aces and the choice of the successful Italian Olympic team. Only the finest components are used.  
**Frame Design:** Like the CORSA design, approved by the champions of the world.  
**Frame Tubing:** Triangle tubes in REYNOLDS 531 with forks and stays in COLUMBUS double butted.

- Head and Bracket Fittings:** CINELLI Super chrome.
- Finish:** Super enamel in a choice of 4 finishes. Grecian WHITE, Mars RED, IVORY, Olympic YELLOW.
- Chrome:** Finest mirror chrome plating on: Full stream-lined front forks, top and bottom head lugs, seat lugs, rear drop-outs and 4 chrome rings on seat tube.

# CINELLI MODEL PISTA



No need to introduce CINELLI track machines, past performances are proof enough of their superior design and quality. CINELLI machines have been the choice of Olympic and World title holders on many occasions.

- FRAME DESIGN:** Proved Italian design 73 parallel head and seat angles. Special features include the reinforced round fork blades, solid forged pattern path ends. Construction gives bare clearance for front and rear wheels.
- FRAME TUBING:** Triangle tubes in REYNOLDS 531 with forks and rear stays in COLUMBUS double butted.
- HEAD AND BRACKET FITTINGS:** CINELLI finest chrome. Head fittings have special security ball head clip.
- FINISH:** Superb enamel in a choice of 2 finishes. — IVORY or Powder BLUE. Olympic bands above and below seat tube badge.
- CHROME:** Finest mirror chrome plating on Front and Rear end tips, top and bottom head lugs, seat lug.

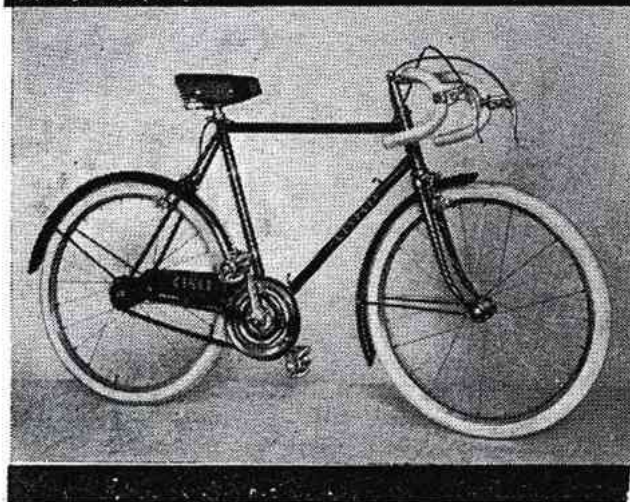
# Italian design is in vogue!!



Italy's finest cycle constructor offers a range of superb juvenile cycles for boys and girls that are both different and practical. Not to be confused with cheaper mass produced imitations, CINELLI quality is unsurpassed.

**2 frame designs - Boys and Girls.**

**3 sizes - suitable for all ages.**



**BOYS' or GIRLS' Standard models are available as follows:—**

14" frame with 14" wheels **£12-12-0**

16" frame with 18" wheels **£13-9-6**

18½" frame with 22" wheels **£14-7-6**

**... or in the new JUNIOR RACING model** Similar to the standard specification but fitted with CINELLI super chrome dropped junior racing handlebars and UNIVERSAL junior racing brake levers.

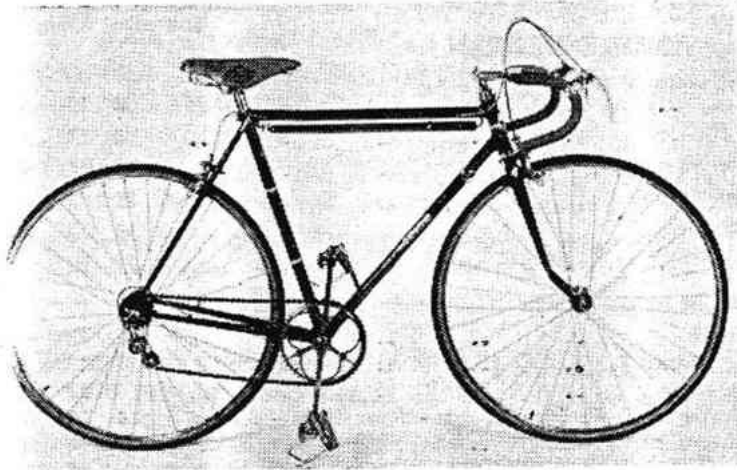
**BOYS' only:—**

16" frame with 18" wheels **£14-15-0**

18½" frame with 22" wheels **£15-12-6**

- ★ **FRAME DESIGN.** Main tubes are welded construction with fork crown and solid fork ends brazed. Girls model has two down tubes giving a more rigid design.
- ★ **FITTINGS.** Ball bearings throughout, detachable cottered cranks.
- ★ **WHEELS.** Rustless alloy End-rick rims on alloy hubs, chrome track nuts with end caps in colour and initialled "C." SUPERGA all white tyres and tubes fitted with easy pump valves.
- ★ **HANDLEBARS.** CINELLI special juvenile incorporated bar and stem with neat clip-less chrome brake levers brazed-on. Special coloured plastic grips with finger groves fitted.
- ★ **SADDLE.** Mattress type with leatherette top coloured to match frame enamel.
- ★ **MUDGUARDS.** Light steel enamelled to match frame colour with raised centre rib chrome plated. Extra strong chrome stays attached to brazed eyes incorporated in fork ends. Girl's model has attractive dress guard in multi-colours.
- ★ **CHAINGUARD.** Made in enamelled metal designed to give total enclosure to chainwheel and full cover over top chain without preventing easy wheel removal. Outside strengthening rib chrome plated. Detachable spring-fitted outside plate is all chrome.
- ★ **PEDALS.** SHEFFIELD chrome juvenile with white rubber treads incorporated.
- ★ **BRAKES.** Two UNIVERSAL lightweight calipers with matching coloured cables. Rear cable on all models is neatly hidden inside frame tubes.
- ★ **STABILISORS.** Detachable rubber tyred type fitted on 14" model.
- ★ **BELL.** Attractive 2-tone picture bell fitted on all models.
- ★ **FINISH.** Red or Blue flamboyant with attractive transfers and famous CINELLI name shield on head badge.
- ★ **WEIGHT.** The CINELLI Juvenile, due to its exclusive lightweight construction and fittings weighs only 20lbs. complete, almost a ¼ reduction from that of other similar sized cycles.

# COMPLETE CONTINENTAL CYCLES



In answer to repeated requests our CONTINENTAL Frame Sets are now available assembled into complete cycles.

However, there will be no stock models available and due to the fact that each order will be individually hand assembled to your own specification there may be a slight delay in delivery.

The specifications of all models will be infinitely variable and accessories can be chosen from any of those listed in the "Extras" section of the price list.

Below is listed the **STANDARD NO. 1 SPECIFICATION** on which the basic price of each model of cycle is based. You will notice that every accessory on this specification has a letter reference in addition to the number of reference 1. Should you wish to vary the specification from Standard for any particular fitment — choose from the list of Extras offered — quote the Reference letter and Number alongside the accessory you wish changed from Standard.

The total price of your cycle will be the Standard No. 1 basic for that model plus the amount quoted against your alternative accessory choice. All prices quoted are inclusive of Purchase Tax.

## STANDARD No. 1 SPECIFICATION

(Available on all Frames except Track Models)

This specification, although the cheapest available is by no means of poor quality. Each fitment has been chosen for its exceptional value and can be recommended for use by the beginner or for the rider who prefers a quality frame assembled with cheaper accessories which can be changed at a later date as his pocket allows.

Ref.	Accessory	Description
A.1	CRANKS	MILREMO "Club 555" super chrome fluted.
B.1	CHAINWHEEL	MILREMO "150" single chrome.
C.1	PEDALS	MILREMO "Club" double sided chrome.
D.1	HANDLEBAR STEM	MILREMO "Grand Sport" super dural.
E.1	HANDLEBARS	MILREMO "Franco Belge" super dural.
F.1	HANDLEBAR TAPE	MILREMO "Piastolux" adhesive glossy plastic.
G.1	HANDLEBAR PLUGS	MILREMO "Astro" patented cone-fitting plastic.
H.1	BRAKES	BALILLA "Corsa" dural racing with QR in levers.
I.1	CABLE CLIPS	REG chrome (5) and plastic double cable clamp.
J.1	SADDLE	IDEALE "Norex" best leather with perforated flaps.
K.1	MUDGUARDS	MILREMO "Maestro" plastic with reflector.
L.1	PUMP	REG model 15a white plastic with coloured hand grip rings.
M.1	PUMP PEGS	REG "Ortelli" chrome.
N.1	CHAIN	BRAMPTON best 3/32 racing.
O.1	FRONT CHANGER	see EXTRAS (10 speed models).
P.1	REAR GEAR	HURET "Tour de France" 5 speed derailleur.
Q.1	FREEWHEEL	MILREMO "All Star" 5-speed.
R.1	SPOKE PROTECTOR	MILREMO "Protecta" coloured plastic.
S.1	HUBS	MILREMO "Cadet" small flange SS chrome.
T.1	SPOKES	ROBERGEL "Etoile" double butted.
U.1	RIMS	MILREMO "Club" super dural 27 inch high pressure.
V.1	RIM TAPES	WOLBER lightweight rubber.
W.1	TUBES	WOLBER "Super Sport."
X.1	TYRES	WOLBER "Super Sport" ultra-light 27" high Pressure.
Y.1	BOTTLE	REG 313 coloured plastic with special holed cap.
Z.1	BOTTLE CAGE	REG 164 Down tube strip cage.

If any of the above fitments do not meet with your approval turn to the page listing the EXTRAS available and order yourself a MADE TO SPECIAL ORDER Cycle.

# FRAME PRICE LIST

Cat. Ref.	Model No.	Model Name	Price complete with head & bracket fittings		
			£	s.	d.
<b>ANDRE BERTIN</b>					
FR/8	C.31	Demi-Course .. .. .	6	19	6
FR/10	C.34	Course Amateur .. .. .	8	12	6
FR/12	C.35	Course Competition (Reynolds/Vitus) .. .. .	14	14	0
FR/14	C.36	Course Competition (Vitus) .. .. .	12	3	6
FR/16	C.37	Course Super Professionnel .. .. .	19	19	6
FR/18	C.38	Course Piste .. .. .	19	19	6
<b>Chrome Plating extras on BERTIN Frames (to special order only)</b>					
	(a)	Forks $\frac{1}{2}$ chromed .. .. .	13	6	
	(b)	Fork Crown chromed .. .. .	13	6	
	(c)	Rear Ends chromed .. .. .	17	6	
	(d)	Chrome a l'Italienne ( $\frac{1}{2}$ Forks - Crown - Rear Ends - 3 lugs) .. .. .	5	10	6
	(e)	All chrome Frame and Forks .. .. .	9	3	6
<b>CINELLI</b>					
FR/28		Model RIVIERA — Standard fork ends .. .. .	8	12	6
FR/30		Model CORSA — Standard fork ends .. .. .	14	17	6
FR/32		Model CORSA — Campagnolo fork ends .. .. .	15	9	6
FR/34		Model SUPER CORSA — Campagnolo fork ends .. .. .	20	9	6
FR/36		Model PISTA — Special Track fork ends .. .. .	20	7	6

See Illustrated pages for full description and specification.

Frames are available in all sizes listed in the size key with the exception of the CINELLI "Riviera" (57 cms. only).

See SPARES SECTION for prices of Replacement Forks

# COMPLETE CYCLES PRICE LIST

The following models are all priced with  
STANDARD No. 1 SPECIFICATION

Variations to this specification are available on all road models and the price can be obtained by the addition of the EXTRAS price (see separate page) to the prices stated below.

Cat. Ref.	Model No.	Model Name	Price with No. 1 Standard Specification (P/T included)		
			£	s.	d.
<b>ANDRE BERTIN</b>					
CY/8	C.31	Demi-Course .. .. .	26	19	6
CY/10	C.34	Course Amateur .. .. .	28	19	6
CY/12	C.35	Course Competition (Reynolds/Vitus) .. .. .	36	5	6
CY/14	C.36	Course Competition (Vitus) .. .. .	33	3	6
CY/16	C.37	Course Super Professionnel .. .. .	40	15	6
<b>Chrome Plating extras on BERTIN Frames (to special order only)</b>					
	(a)	Forks $\frac{1}{2}$ chromed .. .. .	16	2	
	(b)	Fork Crown chromed .. .. .	16	2	
	(c)	Rear Ends chromed .. .. .	1	0	9
	(d)	Chrome a l'Italienne ( $\frac{1}{2}$ Forks - Crown - Rear End - 3 lugs) .. .. .	7	3	9
	(e)	All chrome Frame and Forks .. .. .	11	2	10
<b>CINELLI</b>					
CY/28		Model RIVIERA — Standard fork ends .. .. .	28	7	6
CY/30		Model CORSA — Standard fork ends .. .. .	35	16	6
CY/32		Model CORSA — Campagnolo fork ends .. .. .	36	12	6
CY/34		Model SUPER CORSA — Campagnolo fork ends .. .. .	42	7	6

# EXTRAS ON STANDARD No. 1 SPECIFICATION

## COMPLETE CYCLES

BERTIN and CINELLI Cycle Specifications can be changed from the Standard No. 1 Specification by substituting any of the fitments listed below in this "EXTRAS" Section.

To order — Quote the Cycle Catalogue Reference number and add the references for the change of accessories required, e.g.:—

Reference CY/28 H/2 P8 would refer to a CINELLI "Riviera" Cycle fitted with BALILLA "Corsa 61" brakes and GIAN ROBERT "Super Corsa" derailleur in lieu of Standard No. 1 brakes and derailleur

To calculate the new price — Add the Standard No. 1 basic price of the model to the "extras" prices of those quoted below, e.g.:—

£28 7s. 6d, plus £1, plus 11s. 10d., equals total price (including Purchase Tax) of **£29 19s. 4d.**

Cycle Order Ref.	Description	Extra Price (Including P/Tax)		
		£	s.	d.
<b>CRANKS</b>				
A 2	MILREMO "Special Course" 50 .. .. .	16	0	
A 3	MILREMO "Course" 55 .. .. .	16	0	
A 5	STRONGLIGHT 49D Cotterless .. .. .	4	18	3
A 7	T.A. Cotterless .. .. .	7	9	9
<b>CHAINWHEEL</b>				
B 2	T.A. 205 Single dural .. .. .	19	3	
B 5	MILREMO 250 Double chrome .. .. .	9	6	
B 6	T.A. 2205 Double Criterium .. .. .	2	6	6
B 7	T.A. 2175 Double Professionnel .. .. .	3	8	9
(B 5—6—7 on 10-speed models — NOTE to specify front and rear gear ensembles.)				
<b>PEDALS</b>				
C 2	MILREMO "Champion" dural .. .. .	2	9	
C 5	LYOTARD 45CA SS dural .. .. .	6	9	
C 6	LYOTARD 23MB chrome .. .. .	7	9	
<b>HANDLEBAR STEMS</b>				
D 2	CINELLI No. 1 Road chrome .. .. .	13	9	
D 3	CINELLI No. 1 Road chrome, badged .. .. .	17	3	
D 5	MILREMO "Gran Premio" chrome .. .. .	14	9	
<b>HANDLEBARS</b>				
E 2	CINELLI Road chrome .. .. .	3	7	
E 3	CINELLI Road engraved .. .. .	6	9	
E 5	MILREMO Chrome engraved .. .. .	5	0	
<b>HANDLEBAR TAPE</b>				
F 2	MILREMO "Twilolux" twill .. .. .	No extra		
<b>BRAKES</b>				
H 2	BALILLA "Corsa 61" centre pull .. .. .	1	0	0
H 4	MILREMO "Competition" centre pull .. .. .	15	3	
H 5	MILREMO "Galibier" centre pull .. .. .	1	4	3
H 7	MAFAC "Racer" centre pull .. .. .	1	11	10
H 8	MAFAC "Top 63" centre pull .. .. .	1	19	10
<b>SADDLE</b>				
J 2	IDEALE 41 Sport .. .. .	5	8	
J 3	IDEALE 46 Record .. .. .	7	10	
J 4	IDEALE 59 Professional .. .. .	1	6	0
J 5	IDEALE 88SC Special Competition .. .. .	2	2	8
J 8	UNICA on NITOR 1963 pillar .. .. .	3	12	8
J 9	UNICA on IDEALE Special Competition clip .. .. .	2	6	7

Cycle Order Ref.	Description	Extra Price (Including P/Tax)
		£ s. d.
<b>MUDGUARDS</b>		
K 2	MILREMO "Monarco" celluloid .. .. .	1 2
<b>PUMP</b>		
L 2	REG No. 15 Racing with adaptor .. .. .	2 3
L 5	MILREMO "Silca 505" with connection .. .. .	1 5
L 6	MILREMO "Impero 510" with adaptor .. .. .	8 8
L 7	MILREMO "Impero-Extra 510c" with adaptor .. .. .	16 9
L 8	MILREMO "Super Corsa" with connection .. .. .	3 11
<b>FRONT CHANGER (on 10 speed models only)</b>		
O 1	HURET "Allvit"	
O 5	CAMPAGNOLO "Gran Sport"	
O 8	GIAN ROBERT "Super Corsa"	
	(Prices of above are included with Front and Rear Ensembles—See below)	
<b>REAR GEARS</b>		
P 2	HURET "Allvit 1900" 5-speed .. .. .	4 6
P 3	HURET "Allvit 1960" 10-speed ensemble .. .. .	1 8 11
P 5	CAMPAGNOLO "Gran Sport" 5-speed .. .. .	3 18 0
P 6	CAMPAGNOLO "Gran Sport" 10-speed ensemble .. .. .	7 0 10
P 9	GIAN ROBERT "Super Corsa" 5-speed .. .. .	11 10
P 10	GIAN ROBERT "Super Corsa" 10-speed ensemble .. .. .	2 1 0
<b>FREEWHEEL</b>		
Q 2	MILREMO "Pro MS 66" 5-speed .. .. .	11 1
<b>HUBS</b>		
S 2	MILREMO "Champion" SF dural .. .. .	2 7
S 3	MILREMO "Super Champion" SF QR dural .. .. .	2 4 2
S 4	MILREMO "Sport" LF dural .. .. .	9 8
S 5	MILREMO "Super Sport" LF QR dural .. .. .	2 11 9
S 6	MILREMO "Super Competition" LF QR dural .. .. .	3 10 6
<b>RIMS — Sprint Rims</b> (only to be specified with tubular racing tyres — see below)		
U 2	MILREMO "Course" .. .. .	11 2
U 3	MILREMO "Record" .. .. .	1 9 7
U 4	MILREMO "Weltmeister" .. .. .	1 9 7
U 5	MILREMO "Giro" .. .. .	1 18 9
<b>TYRES</b>		
X 2	MILREMO "Sportivo" .. .. .	8 6
X 3	MILREMO "Cadetti" .. .. .	13 9
X 10	VITTORIA "Vulcan" .. .. .	11 11
X 16	VITTORIA "Competizione" 402 .. .. .	2 1 8
	(Prices on above tyres are for "SPRINTS" and include fitting with SPECIAL RIM TAPES.)	
	NOTE: These Tyres can only be fitted when SPRINT Rims are Specified — See RIM EXTRAS above.	
<b>BOTTLES</b>		
Y 2	MILREMO "Giro d'Italia" .. .. .	8
Y 3	MILREMO "Tour de France" .. .. .	1 2
<b>BOTTLE CAGES</b>		
Z 2	MILREMO "Giro d'Italia" .. .. .	1 2
Z 3	T.A. "Crac" .. .. .	7 2
<b>REDUCTION FOR :—</b>		
	MILREMO "Sport" AV and AR SHORT RACING GUARDS IN LIEU OF "Maestro" .. .. .	7 9

## DISTRIBUTION

HARROGATE is ideally situated for a rapid distribution service.

Freedom from congestion suffered by London and the large industrial centres, Harrogate's close proximity to the A1 North-South motor road and its position on the main railway lines from London to Scotland, Newcastle via Leeds, Bradford, Manchester to Liverpool, ensures prompt clearance and delivery to all parts of Great Britain. Compare these distances by road and see how our claim is justified.

LANDS END	400 miles	South
JOHN O' GROATS	400 "	North
LONDON	200 "	South
EDINBURGH	200 "	North
EAST COAST	60 "	East
WEST COAST	60 "	West

Imports are effected weekly from the Continent through the nearby quick clearance ports of HULL and GOOLE.

Exports are made using the above ports in addition to Liverpool and London.



## BRITISH REGISTERED TRADE MARKS

In order give complete protection and fuller guarantee certain Trade Marks have been registered in Great Britain and these are under our complete control.



A rapidly-increasing range of quality cycling products made in the finest factories of Europe to our special design and offered at the most competitive, controlled prices, backed by our First Class Spares Service and Guarantee.

MILREMO is also registered on our behalf in many overseas countries, including the British Commonwealth.



First introduced to Great Britain from PARIS by us in 1949 these articles represent a quality and design that is unsurpassed.



Another of our introductions, these products are offered at prices which are unbeatable for value.



A range of cycle pumps that are ahead in design and quality.

*Many other Trade Marks are in course of Registration.*

# GEAR TABLE

Chain wheel teeth	19		20		21		22		23		24		25		26		27		28													
	26"	27"	26"	27"	26"	27"	26"	27"	26"	27"	26"	27"	26"	27"	26"	27"	26"	27"	26"	27"												
6	82.4	83.1	84.7	86.0	91.0	94.4	91.2	92.0	97.4	101.2	99.7	103.5	101.8	103.7	104.0	108.0	106.1	110.2	108.3	112.3	110.3	114.7	112.7	117.0	114.8	118.7	117.0	121.3	119.3	123.7	121.3	126
7	76.0	76.9	80.0	81.1	84.0	87.2	81.0	81.6	90.0	91.4	92.0	95.5	94.0	97.6	96.0	99.7	98.0	101.8	100.0	103.9	102.0	105.9	104.0	108.0	106.0	110.0	108.0	112.1	110.0	114.2	112.0	116
8	70.6	72.3	74.3	77.1	78.0	81.0	81.7	84.9	83.3	86.8	85.4	88.7	87.3	90.6	89.1	92.6	91.0	94.5	92.9	96.4	94.7	98.3	96.6	100.3	98.4	102.2	100.3	104.1	102.1	106.0	104.0	108
9	65.9	68.4	69.3	72.0	72.8	75.6	76.3	79.2	78.0	81.0	79.7	82.8	81.5	84.6	83.2	86.4	84.9	88.2	86.7	90.0	88.4	91.8	90.1	93.6	91.8	95.8	93.6	97.2	95.3	99.0	97.0	101
10	61.8	64.1	65.0	67.5	68.3	70.9	71.3	74.3	73.1	75.9	74.6	77.0	76.4	79.3	78.0	81.0	79.6	82.7	81.3	84.4	82.9	86.0	84.5	87.8	86.1	89.4	87.7	91.1	89.3	92.8	91.0	94
11	58.1	60.3	61.2	63.5	64.2	66.7	67.3	69.9	68.9	71.5	70.4	73.1	71.9	74.6	73.4	76.2	74.9	77.8	76.5	79.4	78.0	81.0	79.3	82.6	81.0	84.1	82.5	85.7	84.1	87.5	85.6	88
12	54.9	57.0	57.8	60.0	60.6	63.0	63.6	66.0	65.0	67.0	65.8	68.0	67.9	70.3	69.3	72.0	70.7	73.3	72.2	75.0	73.6	76.3	75.1	78.0	76.0	78.5	78.0	81.0	79.4	82.5	80.8	84
13	51.0	54.0	54.7	56.8	57.3	59.7	60.2	62.5	61.6	64.0	62.9	65.4	64.3	66.8	65.7	68.2	67.0	69.6	68.4	71.1	69.8	72.4	71.2	73.9	72.0	74.5	73.5	76.7	75.2	78.1	76.6	79
14	47.4	51.3	52.0	54.6	54.6	56.7	57.2	59.4	58.5	60.7	59.8	62.1	61.1	63.4	62.4	64.8	63.7	66.2	65.0	67.5	66.3	68.5	67.6	70.2	68.9	71.5	70.2	72.9	71.5	74.5	72.8	75
15	44.9	46.6	47.3	49.1	49.6	51.5	52.0	54.0	54.5	56.6	55.5	57.8	57.0	59.1	58.2	60.4	59.4	61.7	60.6	63.1	61.9	64.3	63.3	65.6	64.6	66.9	65.6	68.1	66.8	69.4	70.7	72
16	41.0	44.6	45.2	47.0	47.3	49.3	49.8	51.6	50.8	52.8	52.0	54.0	53.1	55.2	54.3	56.3	55.4	57.5	56.5	58.7	57.6	59.8	58.8	61.0	59.9	62.2	61.0	63.6	62.1	64.5	63.3	65
17	38.0	41.8	42.3	44.0	44.3	46.3	46.7	48.3	48.7	50.6	49.9	51.8	50.9	52.9	52.0	54.0	53.1	55.1	54.2	56.3	55.2	57.3	56.3	58.5	57.4	59.6	58.5	60.7	59.5	61.8	60.6	63
18	34.2	41.0	41.6	43.2	43.7	45.4	45.8	47.5	48.8	49.6	47.8	49.7	48.9	50.8	49.9	51.8	51.0	52.9	52.0	54.0	53.0	55.8	54.1	56.2	55.1	57.2	56.1	58.3	57.2	59.4	58.2	60
19	30.0	39.5	40.0	41.5	42.0	43.6	44.0	45.7	46.7	46.7	47.8	47.8	48.8	48.0	49.8	49.0	50.9	50.9	51.0	51.0	51.0	51.0	51.0	51.0	51.0	51.0	51.0	51.0	51.0	51.0	51.0	51
20	26.0	35.3	36.6	37.6	38.0	39.6	40.3	42.1	41.8	43.4	42.7	44.4	43.6	45.3	44.6	46.3	45.5	47.2	46.4	48.3	47.3	49.8	48.3	50.1	49.2	51.1	50.1	52.0	51.0	53.0	52.0	54

Any rear ratio not shown on this table can be calculated as follows:—

$$\text{Gear} = \frac{\text{Number of teeth on chain wheel}}{\text{Number of teeth on sprocket}} \times \text{Diameter of rear wheel in inches}$$



for Roadmen . . .



Trackmen . . .



Tandemists . . .



and Tourists.