

T·D·C

CYCLE FITTINGS

JANUARY 1965

ILLUSTRATED
CATALOGUE 01

T·D·Cross & Sons Ltd

Telegrams
FREEWHEEL B'HAM
Telephone
GREat Barr 1166-7-8

'VESEY WORKS'
GREAT BARR
BIRMINGHAM 22A
ENGLAND

(i)

TERMS OF BUSINESS

GUARANTEE	We, T. D. Cross & Sons Ltd., guarantee all our productions against defects in material or workmanship, and will replace all goods which in our opinion are defective in these particulars. No liability will be accepted for consequential loss or damage arising therefrom. Goods manufactured by us which are claimed to be faulty must be returned to us for inspection within a reasonable time.
CARRIAGE (Home)	We pay carriage on all orders value £30 or over. Where goods are sent passenger train at customer's request, carriage is charged.
CARRIAGE (Export)	We pay carriage on orders value £30 or over to English Port only.
DELIVERY	Every effort will be made to keep delivery dates but no liability can be accepted for loss caused through delay or non-delivery. The right is reserved to suspend delivery so long as payment for any goods previously invoiced is in arrear.
CANCELLATION	We cannot accept cancellation of any orders for goods made specially to customers' requirements.
PACKING CASES (Home)	Cases charged at cost but credited in full if returned in good condition, within two months, carriage paid by customer. Where small consignments are concerned cases or cartons are charged at cost and are not returnable.
(Export)	Export cases are free.
EXPORT BUSINESS	Orders are only accepted for shipment and payment through buying houses in England, unless agreed between customer, our Agents and ourselves.
GENERAL	<p>All prices are subject to revision without notice, and orders only accepted subject to the prices ruling at the time of despatch, as per current Price Lists existing at that time.</p> <p>Goods not to be exported to countries covered by our Agents without our permission. (List of Agents and Representatives set out in this catalogue).</p> <p>That in the event of the Purchaser's name being removed from and so long as it shall cease to appear in the "Approved List" as published by the British Cycle and Motor Cycle Industries Association Limited from time to time, any contract shall thereupon be considered as cancelled so far as concerns the supply of any goods not delivered under the contract.</p>
ADVERTISING MATTER	Illustrated Leaflets, Etc. will be supplied free of charge upon receipt of request.
CONDITIONS OF SALE AND RESALE	<p>Articles herein listed and priced as per our current price list where fixed re-selling prices are stated, shall not be re-sold wholesale or retail below the said fixed selling prices.</p> <p>The acceptance of such articles, by any wholesaler or retailer, will be considered acceptance of these conditions.</p>

ESTABLISHED 1870

Members of

The British Cycle and Motor Cycle Industries Association Limited



INDEX

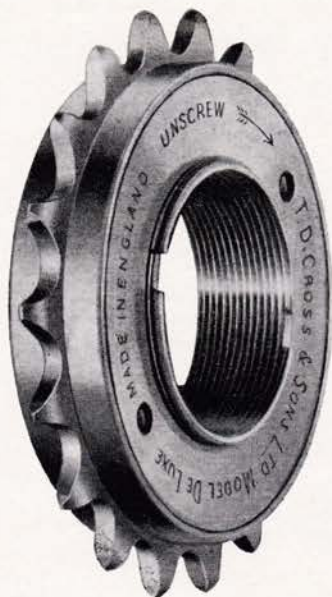
Page

(i)

TERMS	OF BUSINESS	Page
FREEWHEELS	STANDARD	2
	MINIATURE	2
	MOPED	3
	3 SPEED	3
	REMOVERS	3
	4 SPEED	4
	5 SPEED	4
HUB SPROCKETS, HUB LOCK RINGS and HUB SPACERS	STANDARD	5
	LIGHTWEIGHT	5
	DISPLAY BOARDS (Hub Sprockets)	6
BRACKET CUPS	STANDARD	7
BRACKET CUPS AND LOCK RINGS	LIGHTWEIGHT	7
BOTTOM BRACKET ASSEMBLY UNIT	7
BRACKET AXLES	STANDARD	8
	MINIATURE	8
	LIGHTWEIGHT	8
LAMP BRACKETS	STANDARD	9
	MINIATURE	10
HEAD FITTINGS	STANDARD	10
	MINIATURE	10
	"K" SERIES	11
	"S" SERIES	12
	"J" SERIES	12
CONTINENTAL	"X" SERIES "PRIMA"	13
	"H" SERIES "ITALIA"	13
CARRIER	14
HEAVY CARRIER	14
SPANNERS	15
PAWLS AND SPRINGS	16
AGENTS AND REPRESENTATIVES	17

For Standard Cycles

Please Note: T.D.C. FREEWHEELS
can be supplied 18 teeth $\frac{1}{2}'' \times \frac{3}{32}''$



A.10C A.10D
A.10A A.10B

FREEWHEELS T.D.C.

Ref. Nos. A.10C & A.10D—GREEN Cartons
Model De-Luxe—Ball Bearings

Made in the following sizes:

18 teeth	$\frac{1}{2}'' \times \frac{3}{32}''$	Ref. No. A.10C
18, 19, 20 and 22 teeth	$\frac{1}{2}'' \times \frac{1}{8}''$	Ref. No. A.10C
18, 19, 20 and 22 teeth	$\frac{1}{2}'' \times \frac{1}{16}''$	Ref. No. A.10D

The washer or outer plate of these Freewheels is marked after De Luxe—BS

Ref. Nos. A.10A & A.10B—RED Cartons
Model De-Luxe—Two full Rows of Balls

Made in the following sizes:

18 teeth	$\frac{1}{2}'' \times \frac{3}{32}''$	Ref. No. A.10A
16, 17, 18, 19 and 20 teeth	$\frac{1}{2}'' \times \frac{1}{8}''$	Ref. No. A.10A
22, 24, 25 and 26 teeth	$\frac{1}{2}'' \times \frac{1}{8}''$	Ref. No. A.10A
16, 17, 18, 19 and 20 teeth	$\frac{1}{2}'' \times \frac{3}{16}''$	Ref. No. A.10B
22, 24, 25 and 26 teeth	$\frac{1}{2}'' \times \frac{3}{16}''$	Ref. No. A.10B

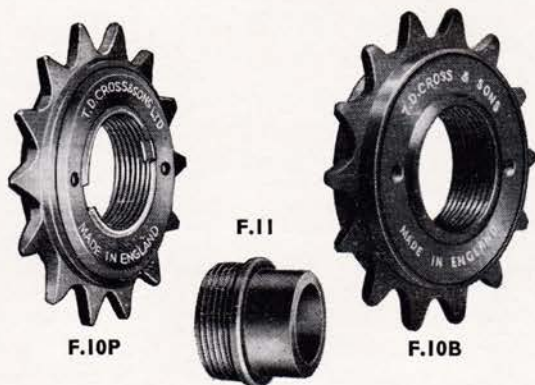
The washer or outer plate of these Freewheels is marked after De Luxe—AB

- Made throughout of Finest Steel
- All Parts perfectly hardened
- Easy Running Sure Action

T.D.C. FREEWHEELS

The Sturdy Pawls and Springs fitted in T.D.C. Freewheels make them suitable for Motorised Cycles and Carrier Cycles.

For Miniature Cycles



F.10P

F.11

F.10B

FREEWHEELS AND ADAPTORS

Ref. No. F.10P—FREEWHEELS T.D.C.
GREEN Cartons

Miniature PLAIN Bearing

Size: 14 teeth $\frac{1}{2}''$ pitch for $\frac{1}{8}''$ wide chains

Ref. No. F.10B—FREEWHEELS T.D.C.
RED Cartons

Miniature BALL Bearing

Size: 14 teeth $\frac{1}{2}''$ pitch for $\frac{1}{8}''$ wide chains

To suit Standard Miniature Hubs or our Miniature Adaptors F.11

Ref. No. F.11—ADAPTORS

Size: $\frac{3}{8}''$ bore $\frac{1}{16}''$ straight hole through boss

WHEN ORDERING PLEASE STATE REFERENCE NUMBERS AND SIZES

Moped



A10A

FREEWHEELS T.D.C.

Ref. No.—A10A—RED Cartons

made in the following sizes:

18T x 1/2" x 1/8" central teeth

20T x 1/2" x 1/8" central teeth

These Freewheels are specially designed with four pawls and springs to offset continual friction when in use on motorised cycles and contain two full rows of ball bearings.

3-Speed Flush Back



A.50

FREEWHEELS T.D.C.

Ref. No.—A.50—BLUE Cartons

Made in the following sizes:

16, 18, 20 teeth—1/2" pitch for 1/8" wide chains (Standard Ratio)

FOR ALL DERAILLEUR GEAR CONTROLS

The Perfect "Clubmans" Freewheel

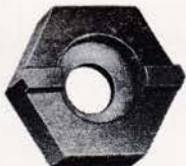


FREEWHEEL REMOVERS

Ref. No.

A.12 To remove Standard and 3, 4 and 5 speed Freewheels take off Hub Spindle Nut and fit Remover with pegs inserted in Freewheel, then lock Remover with Hub Spindle Nut—hand tight—and turn left hand with flats provided.

A.100/1 To remove A.100 3 speed, A.150 4 and 5 speed Freewheels, take off Hub Spindle Nut and also distance piece, then insert the three keyways of the Remover in Freewheel and turn left hand with flats provided.



A.12



A.100/1

WHEN ORDERING PLEASE STATE REFERENCE NUMBERS AND SIZES

Continental 4 Speed

A.150—4 Speed

Continental 5 Speed

A.150/FB—5 Speed

The T.D.C.
"Continental"
Freewheels

FREEWHEELS T.D.C.Ref. No.—**A.150—4 Speed****BLACK and WHITE Cartons**

Made in the following sizes:

14, 16, 18, 20 teeth $\frac{1}{2}$ " pitch for $\frac{1}{8}$ " wide chains14, 16, 18, 20 teeth $\frac{1}{2}$ " pitch for $\frac{3}{32}$ " wide chains

20 teeth Sprockets with lightening holes

Fitted with Two Full Rows of Balls, Three Pawls and Springs

* * *

FOR ALL DERAILLEUR GEAR CONTROLS**FREEWHEELS T.D.C.**Ref. No.—**A.150/FB—5 Speed Flush Back****BLACK and WHITE Cartons**

Made in the following sizes:

14, 16, 18, 20, 22 teeth $\frac{1}{2}$ " pitch for $\frac{3}{32}$ " wide chains15, 17, 19, 21, 23 teeth $\frac{1}{2}$ " pitch for $\frac{3}{32}$ " wide chains

21 teeth and upwards with lightening holes.

Fitted with Two Full Rows of Balls, Three Pawls and Springs.14T and 15T Top Cogs fixed. Other Cogs can be supplied from 16T to 28T with no extra charge, but please quote Code **FBC/Tooth Size** when ordering. Replacement Bodies please quote **FBB/14T** or **FBB/15T**.Cogs for former boss type Freewheel can be supplied, but please quote **BTC/Tooth Size**. Also replacement Bodies (complete assembly): please quote **Code BTB**.

* * *

FOR ALL DERAILLEUR GEAR CONTROLS

* * *

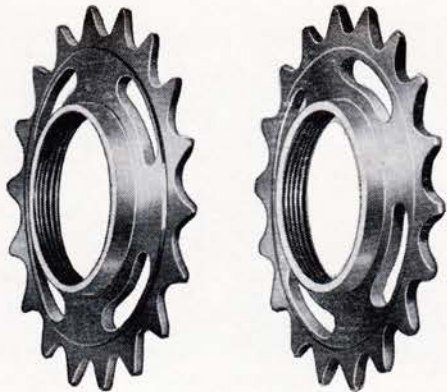
The T.D.C. "Continental" Freewheel is supplied from these Works as a carefully adjusted Complete Unit. This ensures Truthness and Concentricity and, as one of the Oldest Freewheel Manufacturers in the World, we are convinced this policy guarantees the "Perfect" Freewheel.

SPECIAL FEATURES WORTHY OF NOTE—

- Fitted with 3 Sturdy Pawls and Rustless Springs
- Two even ballraces of maximum diameter
- Fitted with two full rows of balls
- Precision Cut Teeth to ensure Easy Gear Changing
- Simplicity of Design
- Made throughout of finest steel
- All parts perfectly hardened
- Easy Running—Sure Action

WHEN ORDERING PLEASE STATE REFERENCE NUMBERS AND SIZES

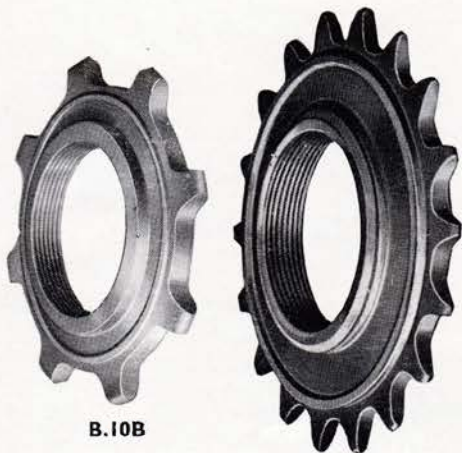
T.D.C. Flangeless Offset



B.17A

B.17

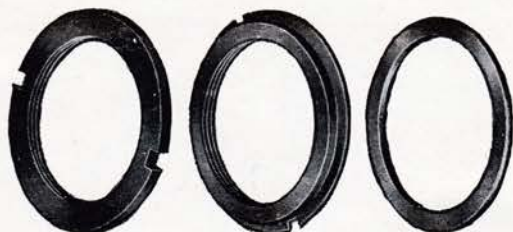
T.D.C. Flanged Offset



B.10B

B.10A

T.D.C. Hub Spacers and



B.12

B.13

B.14

HUB SPROCKETS

Ref. No.—B.17A—Lightweight

Made in the following sizes:

12, 13, 14, 15, 16, 17, 18, 19, 20, 21, 22 teeth

$\frac{1}{2}$ " pitch for $\frac{3}{8}$ " wide chains

18 teeth and upwards have elongated Lightening Holes

Ref. No.—B.17—Lightweight

Made in the following sizes:

12, 13, 14, 15, 16, 17, 18, 19, 20, 21, 22 teeth

$\frac{1}{2}$ " pitch for $\frac{1}{8}$ " wide chains

18 teeth and upwards have elongated Lightening Holes

HUB SPROCKETS

Ref. No.—B.10A For $\frac{1}{2}$ " \times $\frac{1}{8}$ "

Made in the following sizes:

12, 13, 14, 15, 16, 17, 18, 19, 20, 22, 24 teeth

$\frac{1}{2}$ " pitch for $\frac{1}{8}$ " wide chains

Ref. No.—B.10B For $\frac{1}{2}$ " \times $\frac{3}{16}$ "

Made in the following sizes:

12, 13, 14, 15, 16, 17, 18, 19, 20, 22, 24 teeth

$\frac{1}{2}$ " pitch for $\frac{3}{8}$ " wide chains

Ref. No.—B.10A For 1" \times $\frac{1}{8}$ "

Made in the following sizes:

6, 7, 8, 9, 10 teeth 1" pitch for $\frac{1}{8}$ " wide chains

Ref. No.—B.10B For 1" \times $\frac{3}{16}$ "

Made in the following sizes:

6, 7, 8, 9, 10 teeth 1" pitch for $\frac{3}{8}$ " wide chains

HUB LOCK RINGS

Ref. No.—B.12

FOR LOCKING ALL SPROCKETS OVER 12T

$\frac{1}{2}$ " pitch and 6T 1" pitch

Ref. No.—B.13

RECESSED ON BACK FOR LOCKING SPROCKETS

12T $\frac{1}{2}$ " pitch and 6T 1" pitch

Ref. No.—B.14

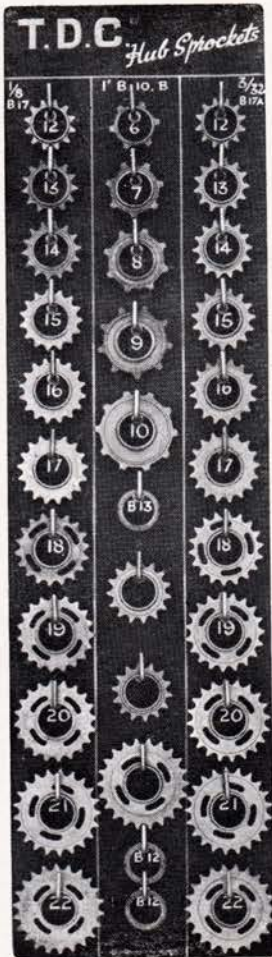
PACKING OUT WASHERS WITH HUB THREAD CLEARANCE

Attractive Display Boards

T.D.C. HUB SPROCKETS

AND LOCK RINGS

A choice of 4 assortments as shown below:



Board 831A



Board 83A

Board No. 831A

159 Assorted Sprockets:—
B.17 $\frac{1}{2}'' \times \frac{1}{8}''$ **B.17A** $\frac{1}{2}'' \times \frac{3}{32}''$
 SPROCKETS SPROCKETS
 6 only 12T 3 only 12T
 6 " 13T 3 " 13T
 6 " 14T 6 " 14T
 6 " 15T 6 " 15T
 6 " 16T 6 " 16T
 6 " 17T 9 " 17T
 12 " 18T 12 " 18T
 6 " 19T 9 " 19T
 6 " 20T 6 " 20T
 6 " 21T 6 " 21T
 6 " 22T 6 " 22T

B.10B $1'' \times \frac{3}{16}''$
 SPROCKETS

3 only 6T 3 only 8T
 3 " 7T 3 " 9T
 3 only 10T

LOCK RINGS

18 only **B.12** 6 only **B.13**

Board No. 831B

100 Assorted Sprockets:—
B.17 $\frac{1}{2}'' \times \frac{1}{8}''$ **B.17A** $\frac{1}{2}'' \times \frac{3}{32}''$
 SPROCKETS SPROCKETS
 3 only 12T 3 only 12T
 3 " 13T 3 " 13T
 3 " 14T 3 " 14T
 3 " 15T 3 " 15T
 6 " 16T 3 " 16T
 6 " 17T 3 " 17T
 12 " 18T 6 " 18T
 6 " 19T 3 " 19T
 6 " 20T 3 " 20T
 3 " 21T 3 " 21T
 3 " 22T 3 " 22T

B.10B $1'' \times \frac{3}{16}''$
 SPROCKETS

2 only 6T 2 only 8T
 2 " 7T 2 " 9T
 2 only 10T

LOCK RINGS

18 only **B.12** 6 only **B.13**

Supply from Stock

T.D.C. HUB SPROCKETS

from one of these attractive display boards

Board No. 83A

144 Assorted Sprockets:—
B.17 $\frac{1}{2}'' \times \frac{1}{8}''$ **B.17A** $\frac{1}{2}'' \times \frac{3}{32}''$
 SPROCKETS SPROCKETS
 6 only 12T 3 only 12T
 6 " 13T 3 " 13T
 6 " 14T 6 " 14T
 6 " 15T 6 " 15T
 6 " 16T 6 " 16T
 6 " 17T 9 " 17T
 12 " 18T 12 " 18T
 6 " 19T 9 " 19T
 6 " 20T 6 " 20T
 6 " 21T 6 " 21T
 6 " 22T 6 " 22T

HUB LOCK RINGS

18 only **B.12** 6 only **B.13**

Board No. 83B

90 Assorted Sprockets:—
B.17 $\frac{1}{2}'' \times \frac{1}{8}''$ **B.17A** $\frac{1}{2}'' \times \frac{3}{32}''$
 SPROCKETS SPROCKETS
 3 only 12T 3 only 12T
 3 " 13T 3 " 13T
 3 " 14T 3 " 14T
 3 " 15T 3 " 15T
 6 " 16T 3 " 16T
 6 " 17T 3 " 17T
 12 " 18T 6 " 18T
 6 " 19T 3 " 19T
 6 " 20T 3 " 20T
 3 " 21T 3 " 21T
 3 " 22T 3 " 22T

HUB LOCK RINGS

18 only **B.12** 6 only **B.13**

THE BOARDS ARE OF REINFORCED HARDBOARD, WITH HOOKS FITTED AND SIZES AND CODES CLEARLY MARKED

Size:

39 inches \times 10 $\frac{1}{2}$ inches approx.

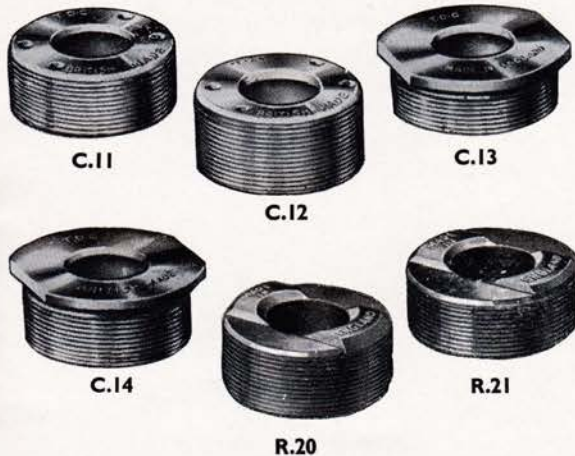
Weight:

831A & 83A ... 23 lbs. approx.
831B & 83B ... 19 lbs. approx.

THE BOARDS ARE **FREE** WITH ANY ASSORTMENT

WHEN ORDERING PLEASE STATE REFERENCE NUMBERS

Standard Cycle



T.D.C. BRACKET CUPS

Standard Pattern

Ref. No. for
 C.11 $\frac{9}{16}$ " long, Right Hand Thread (Peg Holes) (BW1) } Cotterless
 C.13 $\frac{9}{16}$ " long, Left Hand Thread (Spanner Flats) (BW7) } Brackets

Standard Pattern (Deep)

Ref. No. for
 C.12 $\frac{11}{16}$ " long, Right Hand Thread (Peg Holes) (BW2) } Cotterless
 C.14 $\frac{11}{16}$ " long, Left Hand Thread (Spanner Flats) (BW8) } Brackets

REDUCED FINISH CUPS

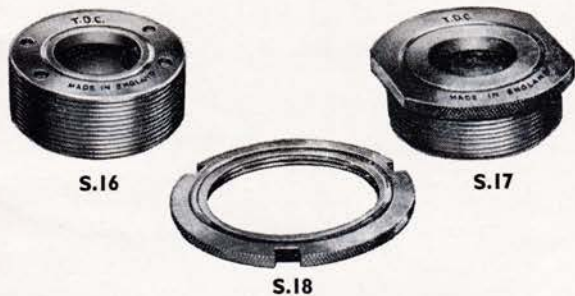
S.C.11 }
 S.C.12 } Dimensions and Hardening as standard, but not ground
 S.C.13 } on ballraces and only supplied in Black or Zinc finish.
 S.C.14 }

Note: Cups C.11 & C.12 also suit Cottered Brackets
 C.12 & C.14 can be supplied .015 oversize with Lock
 Rings to suit.

To Suit Raleigh

Ref. No. for
 R.20 Right Hand Thread (Spanner Flats) } for Cotterless
 R.21 Left Hand Thread (Spanner Flats) } Brackets
 Finish: High Class Chromium or Black

Continental Lightweight



T.D.C. BRACKET CUPS

Ref. No. for
 S.16 $\frac{9}{16}$ " long, Right Hand Thread, (Peg Holes) } To suit
 S.17 $\frac{9}{16}$ " long, Left Hand Thread, (Spanner Flats) } Cotterless
 S.18 Locking Ring } Brackets

SPECIAL FEATURES—

GROUND BALLRACES · LIGHT IN WEIGHT · ATTRACTIVE
 DESIGN · FIRST-CLASS CHROMIUM FINISH

CARTONING

For Factors—One Set per Carton.
 For O.E. and Export Bulk Packing—(See Current Price List)

Standard Cycle



BRACKET LOCK RINGS

Ref. No. for
 C.15 For Locking Bracket Cups C.11 or C.12 (BW9)
 R.22 For Locking Bracket Cups R.20
 S.C.15 Standard Lock Rings to suit S.C.11 and S.C.12 Cups.

T.D.C. Bottom Bracket Assembly Unit

Supplied as a complete replacement Unit to slide into B.B. Shell for
 easy repair. To fit reamer bracket $1\frac{7}{8}$ " with tolerance of + .005.
 Also for cycle assembly and eliminates stripping of frame when
 B.B. has faulty threads.

Units supplied with our standard C.16/4, C.16/5 and C.16/9
 axles. Please quote codes BBU/4, BBU/5 and BBU/9 when
 ordering.



WHEN ORDERING PLEASE STATE REFERENCE NUMBERS AND FINISH

Black or Chrome Finish**T.D.C. BRACKET AXLES**

Ref. Nos.

- C.16/1** $1\frac{1}{2}$ " C.L. without G.C.C. for Cottered Brackets (BW11)
C.16/2 $1\frac{1}{2}$ " C.L. without G.C.C. for Cotterless Brackets (BW15)
C.16/3 $1\frac{1}{2}$ " C.L. with G.C.C. for Cottered Brackets (BW10)
C.16/4 $1\frac{1}{2}$ " C.L. with G.C.C. for Cotterless Brackets (BW14)
C.16/5 $1\frac{1}{2}$ " C.L. with G.C.C. for Cotterless Brackets with extra length each end. (BW 2C)
C.16/6 $1\frac{5}{8}$ " C.L. with G.C.C. for **Miniature** Cycles (BW 20)
C.16/7 $1\frac{1}{2}$ " C.L. with G.C.C. for Cottered Brackets $\frac{1}{8}$ " longer than Standard on L.H. side.
R16/8 Similar to Raleigh Pattern A.8.
C.16/9 $1\frac{5}{8}$ " C.L. without G.C.C. for use with Derailleur Gears (BW23)
R16/10 Without G.C.C. Similar to Raleigh Pattern A.16
R16/11 With G.C.C. similar to Raleigh Pattern A.16
C.16/14 $1\frac{3}{4}$ " C.L. with G.C.C. for Cottered Brackets, $\frac{7}{16}$ " longer on L.H. side for Carrier Cycles (BW3)
C.16/15 $1\frac{3}{4}$ " C.L. with G.C.C. for Cottered Brackets (BW12)
C.16/16 Continental Axle—with lightened ends (BW5B)
C.16/17 $1\frac{1}{2}$ " C.L. G.C.C. for Cotterless Brackets to suit cycles with balloon tyres.

S.C.16/4 } Dimensions and Hardening as standard **C.16/4** and **C.16/5**
S.C.16/5 } but ends of axle not ground and only supplied in Black or Zinc finish.

● ACCURATELY GROUND ● PERFECTLY HARDENED ● HIGH CLASS FINISH
 Special Axles for Miniature, Standard & Motorised Cycles made to order—Quantities only

All B.B. Axles set out in these Tables are shown in FRACTION & MILLIMETRE SIZES

Ref. No.	A		B		C		D	
	ins.	mm.	ins.	mm.	ins.	mm.	ins.	mm.
C.16/1	$1\frac{1}{2}$	35	$1\frac{5}{8}$	49	$1\frac{5}{8}$	33.5	$4\frac{3}{8}$	117.5
C.16/2 & S.19/2	$1\frac{1}{2}$	35	$2\frac{1}{16}$	52.5	$1\frac{5}{8}$	33.5	$4\frac{3}{8}$	121
C.16/3	$1\frac{1}{2}$	43	$1\frac{5}{8}$	49	$1\frac{5}{8}$	33.5	$4\frac{1}{16}$	125.5
C.16/4 & S.19/4	$1\frac{1}{2}$	43	$2\frac{1}{16}$	52.5	$1\frac{5}{8}$	33.5	$5\frac{1}{16}$	129
C.16/5 & S.19/5	$1\frac{1}{2}$	44.5	$2\frac{1}{16}$	52.5	$1\frac{5}{8}$	36.5	$5\frac{1}{16}$	133.5
C.16/6 Miniature	$1\frac{5}{8}$	41.5	$1\frac{3}{4}$	42	$1\frac{5}{8}$	34	$4\frac{3}{8}$	117.5
C.17/7	$1\frac{1}{2}$	43	$1\frac{5}{8}$	49	$1\frac{5}{8}$	36.5	$5\frac{1}{16}$	129
R.16/8	$1\frac{5}{8}$	43.5	$2\frac{7}{16}$	62	$1\frac{5}{8}$	32.5	$5\frac{7}{16}$	138
C.16/9 & S.19/9	$1\frac{5}{8}$	36.5	$2\frac{1}{16}$	52.5	$1\frac{5}{8}$	33.5	$4\frac{3}{8}$	122
R.16/10	$1\frac{7}{16}$	36.5	$2\frac{3}{16}$	55.5	$1\frac{5}{8}$	34	$4\frac{3}{16}$	126
R.16/11	$1\frac{1}{2}$	46	$2\frac{3}{16}$	55.5	$1\frac{1}{2}$	34	$5\frac{1}{16}$	135.5
C.16/14	$1\frac{1}{2}$	43	$2\frac{1}{16}$	62	$1\frac{1}{2}$	43	$5\frac{1}{16}$	148
C.16/15	$1\frac{1}{2}$	43	$2\frac{1}{16}$	62	$1\frac{1}{2}$	36	$5\frac{1}{16}$	141
C.16/16	$1\frac{1}{2}$	42	$2\frac{1}{4}$	57	$1\frac{1}{2}$	33	$5\frac{1}{16}$	132
C.16/17	$1\frac{1}{2}$	40.5	$2\frac{1}{16}$	52.5	$1\frac{1}{2}$	40.5	$5\frac{1}{4}$	133.5

T.D.C. BRACKET AXLES

Ref. Nos.

WITHOUT G.C.C.

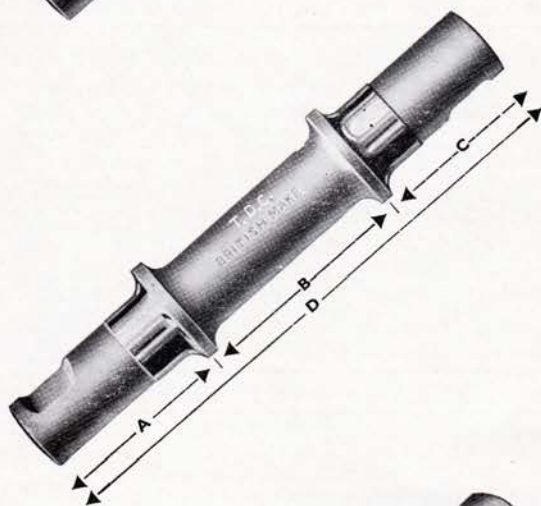
- S19/2** $1\frac{1}{2}$ " C.L.
S19/4 $1\frac{1}{2}$ " C.L.
S19/5 $1\frac{1}{2}$ " C.L. with extra length each end
S19/9 $1\frac{1}{2}$ " C.L. for use with Derailleur Gears

● ACCURATELY GROUND ● PERFECTLY HARDENED ● SPECIALLY LIGHTENED
 ● FIRST CLASS CHROMIUM FINISH

CARTONING: FOR FACTORS ONE AXLE PER CARTON. FOR O.E. AND EXPORT BULK PACKING
 (See current Price List)



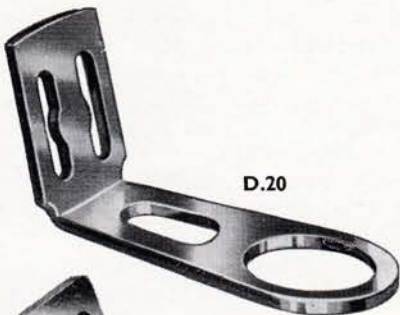
C16



S19

Continental**Lightweight**

WHEN ORDERING PLEASE STATE REFERENCE NUMBERS AND FINISH

Lamp Brackets**T.D.C. HEAD FITTINGS**

D.20



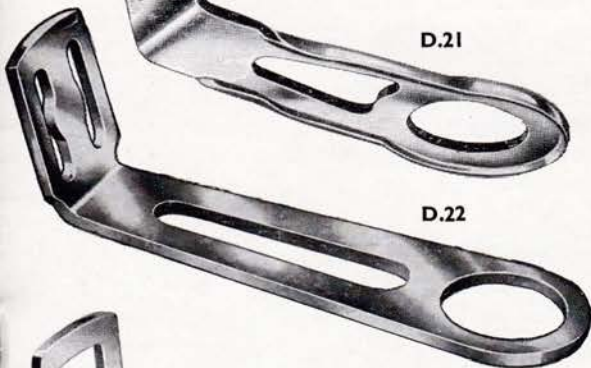
D.21



D.22



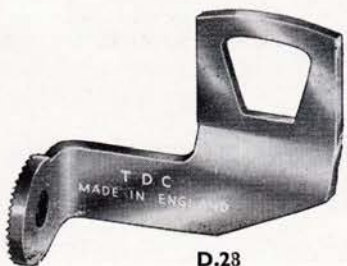
D.23



D.25



D.28



D.21

*Ref No.***D.20**STANDARD PATTERN FOR 1" COLUMNS
Made from 10 Gauge Metal**D.21**GIRDER TYPE. STRONG AND ATTRACTIVE
Made from 11 Gauge Metal for 1" Columns**D.22**EXTENDED PATTERN
Made from 10 Gauge Metal for 1" Columns**D.23**STANDARD PATTERN BUT LARGER SLOT
TO TAKE YOKE AND HINGE BRAKES
Made from 10 Gauge Metal for 1" Columns**D.25**FOR FORWARD EXTENDED HANDLEBARS
Made from 10 Gauge Metal**D.27**STANDARD PATTERN FOR 1" COLUMNS
WITH TAG
Made from 10 Gauge Metal*Finish:* **Chrome or Black****D.28**FOR FRONT FORK, DEEP SERRATED EARS
Correctly aligned to ensure upright lamp
Made from 11 Gauge Metal*Finish:* **Chrome or Self Colour****WHEN ORDERING PLEASE STATE REFERENCE NUMBERS AND FINISH**

Standard Cycle



Miniature Cycle



T.D.C. HEAD FITTINGS

LOCK NUTS

Ref. No.

- D.10 ROUND PATTERN PEGHOLE ADJUSTING
- D.12 HEXAGON PATTERN 1.200 ACROSS FLATS
- D.24 HEXAGON ON TOP PATTERN 1.200 ACROSS FLATS
- D.13 DOMED PATTERN WITH SPANNER SLOTS

The above to suit 1" x 24 T.P.I. Columns

SCREWED RACES

Ref. No.

- D.15 FLAT PATTERN FOR EXPANDER HEADS
- D.16 CURVED PATTERN FOR EXPANDER HEADS

The above Screwed 1" x 24 T.P.I.—for $\frac{1}{8}$ " Balls

LUG RACES

Ref. No.

- D.18 STANDARD PATTERN FOR $\frac{1}{8}$ " BALLS

CROWN RACES

Ref. No.

- D.19 STANDARD PATTERN FOR $\frac{1}{8}$ " BALLS

DISTANCE PIECES

Ref. No.

- D.14 STANDARD PATTERN FOR 1" COLUMNS
- D.32 STANDARD PATTERN FOR 1" COLUMNS WITH TAG

RACE SEATINGS

Ref. No.

- D.30 TOP RACE SEATING STANDARD PATTERN TO FIT 20 GAUGE TUBING
- D.31 BOTTOM RACE SEATING STANDARD PATTERN TO FIT 20 GAUGE TUBING

Finish: Chrome or Black—D.18 Lug Race—Self Colour

T.D.C. HEAD FITTINGS

LOCK NUTS

Ref. No.

- F.12 HEXAGON PATTERN MINIATURE
- F.18 ROUND PATTERN PEGHOLE ADJUSTING MINIATURE

SCREWED RACES

Ref. No.

- F.13 FLAT PATTERN MINIATURE

The above to suit $\frac{7}{8}$ " x 24 T.P.I. Columns

LAMP BRACKETS

Ref. No.

- F.16 MINIATURE (10 Gauge for $\frac{7}{8}$ " Columns)

HEAD DISTANCE PIECES

Ref. No.

- F.17 MINIATURE for $\frac{7}{8}$ " Columns

LUG RACES

Ref. No.

- F.14 MINIATURE for $\frac{1}{8}$ " Balls

CROWN RACES

Ref. No.

- F.15 MINIATURE for $\frac{1}{8}$ " Balls

Finish: Chrome—F.14 Lug Race—Self Colour

The K Series**T.D.C. HEAD FITTINGS****THE SUPER SET**

K.10

THE STANDARD SET

★D.12



K.11



K.12



K.13



K.13



K.14



K.14



K.15



K.15

THE SUPER SET

Ref. No.

- K.10 OCTAGON LOCK NUT
- K.11 DECAGON SCREWED RACE
- K.13 TOP RACE
- K.14 BOTTOM RACE
- K.15 CROWN RACE

THE STANDARD SET

- ★D.12 HEXAGON LOCK NUT
- K.12 ROUND KNURLED SCREWED RACE
- K.13 TOP RACE
- K.14 BOTTOM RACE
- K.15 CROWN RACE

★ Any Standard T.D.C. Lock Nuts can be fitted with the standard set

**SPECIAL FEATURES**

- Lock Nuts 1 inch 24 T.P.I.
- All these fittings are hardened except Lock Nuts
- K.13 and K.14 suitable for 20 or 22 gauge tubing
- All ballraces for $\frac{5}{32}$ " balls or $\frac{5}{32}$ " ball cages
- Supplied in chrome finish only

T.D.C.

Head Fittings

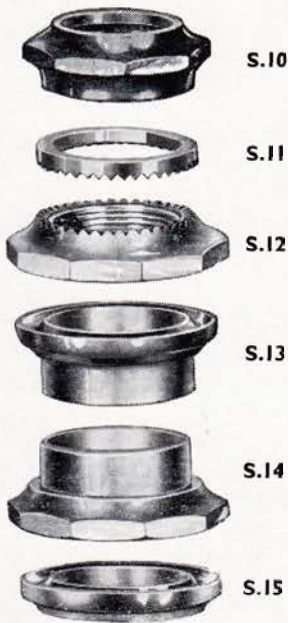
BUILD

Perfect Heads

CARTONING

FOR FACTORS ONE SET PER CARTON
FOR O.E. AND EXPORT BULK PACKING
See Current Price List

WHEN ORDERING PLEASE STATE REFERENCE NUMBERS

Continental S Series

THE SET OF
SIX PIECES

T.D.C. HEAD FITTINGS

Ref. No.

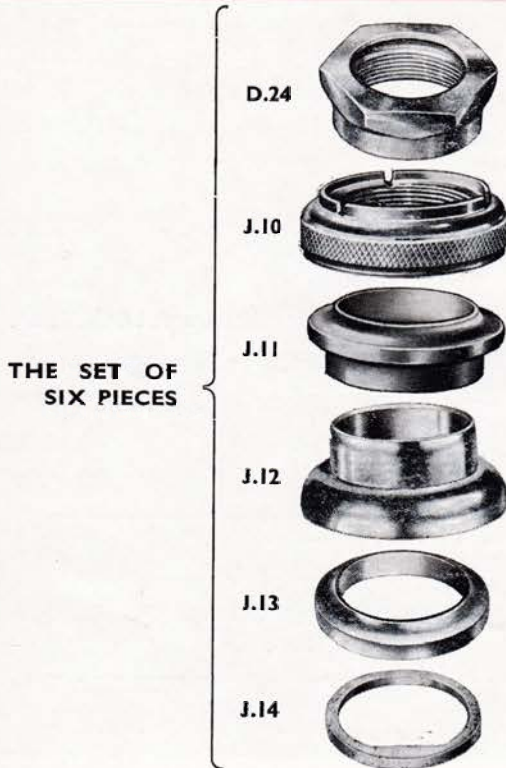
- S.10 OCTAGON LOCK NUT, 1" x 24 T.P.I.
- S.11 DISTANCE PIECE SERRATED 1" clearance
- S.12 DECAGON SCREWED RACE SERRATED 1" x 24 T.P.I. "V" Race for $\frac{5}{32}$ " Balls
- S.13 TOP RACE WITH STEM for 20 or 22 gauge tubing "V" Race for $\frac{5}{32}$ " balls
- S.14 BOTTOM RACE WITH STEM for 20 or 22 gauge tubing "V" Race for $\frac{5}{32}$ " balls
- S.15 CROWN RACE "V" Race for $\frac{5}{32}$ " balls

SPECIAL FEATURES:

DEEP SERRATED DISTANCE PIECES AND SCREWED RACES
SPECIALLY DESIGNED $\frac{5}{32}$ " "V" SHAPE BALLRACES TO ENSURE
PERFECT HEAD ADJUSTMENT
SUPERIOR CHROMIUM FINISH

CARTONING

FOR FACTORS ONE SET PER CARTON
FOR O.E. AND EXPORT BULK PACKING
See current Price List

Continental J Series

THE SET OF
SIX PIECES

T.D.C. HEAD FITTINGS

Ref. No.

- D.24 LOCK NUTS TO SUIT 1" x 24 T.P.I. COLUMNS
- J.10 SCREWED RACES TO SUIT 1" x 24 T.P.I. COLUMNS
- J.11 TOP RACES WITH STEM FOR 20 or 22 GAUGE TUBING
- J.12 BOTTOM RACES WITH STEM FOR 20 or 22 GAUGE TUBING
- J.13 CROWN RACES
- J.14 DISTANCE PIECES

BALL RACES FOR $\frac{5}{32}$ " BALLS

Finish: Chrome or Gun Metal Black

CARTONING

FOR FACTORS ONE SET PER CARTON
FOR O.E. AND EXPORT BULK PACKING
See current Price List

WHEN ORDERING PLEASE STATE REFERENCE NUMBERS AND FINISH

Continental X Series

British
Quality
Combined
with
Continental
Elegance

**T.D.C. HEAD FITTINGS****The "Prima"
Continental**

Ref. No.

- X. 9** Octagon Locknuts 1"×24 T.P.I.
X.10 Screwed Races for $\frac{5}{32}$ " Balls 1"×24 T.P.I.
X.11 Top Races with Stem for $\frac{5}{32}$ " Balls for 20 or 22 Gauge Tubing
X.12 Bottom Races with Stem for $\frac{5}{32}$ " Balls for 20 or 22 Gauge Tubing
X.13 Crown Races for $\frac{5}{32}$ " Balls
X.14 Head Distance Pieces D type

- Precision made from the finest steel
- 1"×24 T.P.I. ball races for $\frac{5}{32}$ " Balls
- Supplied for 20 or 22 Gauge Tubing
- Packing (for Factors) per set in attractive cartons
- Superb chromium plated finish

Continental H Series

T.D.C.
Head
Fittings
Build
Perfect
Heads

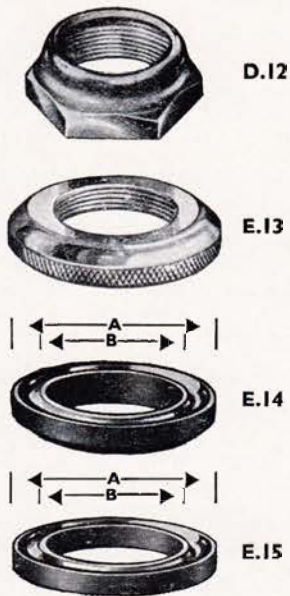
**T.D.C. HEAD FITTINGS****The "Italia"
Continental**

Ref. No.

- H.24** Lock Nuts (Hexagon on top) 1.2 across flats 1"×24 T.P.I.
H.10 Screwed Races for $\frac{5}{32}$ " Balls
H.11 Top Races with Stem for $\frac{5}{32}$ " Balls for 20 or 22 Gauge Tubing
H.12 Bottom Races with stem for $\frac{5}{32}$ " Balls for 20 or 22 Gauge Tubing
H.13 Crown Races for $\frac{5}{32}$ " Balls
H.14 Head Distance Pieces D type

- Precision made from the finest steel
- 1"×24 T.P.I. ball races for $\frac{5}{32}$ " Balls
- Supplied for 20 or 22 Gauge Tubing
- Packing (for Factors) per set in attractive cartons
- Superb chromium plated finish

WHEN ORDERING PLEASE STATE REFERENCE NUMBERS

Carrier Cycle**T.D.C. HEAD FITTINGS**

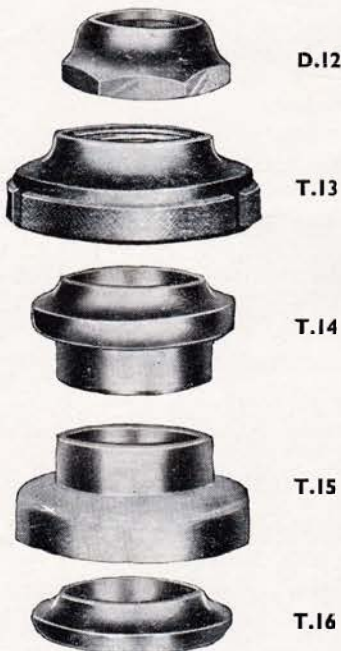
Ref. No.

D.12 LOCK NUTS

HEXAGON 1.200 ACROSS FLATS

E.13 SCREWED RACESFLAT PATTERN FOR $\frac{3}{16}$ " BALLS

The above to suit 1" x 24 T.P.I. Columns

E.14 CROWN RACESFOR $\frac{3}{16}$ " BALLS**E.15 LUG RACES**FOR $\frac{3}{16}$ " BALLS*Dimensions of:***E.14 CROWN RACE** **A** 1.568+003—003**B** 1.062+001—001**E.15 LUG RACE** **A** 1.581+001—001**B** 1.059+003—003*Finishes:* **D.12, E.13, Black or Chrome**
E.14, E.15, Black only**Heavy Carrier****T.D.C. HEAD FITTINGS**

Ref. No.

D.12 LOCK NUTS

HEXAGON 1.200 ACROSS FLATS

T.13 SCREWED RACES3 SLOTS FOR SPANNER FOR $\frac{1}{4}$ " BALLS**T.14 TOP RACES with stem**FOR 20 GAUGE TUBING FOR $\frac{1}{4}$ " BALLS**T.15 BOTTOM RACES with stem**FOR 20 GAUGE TUBING FOR $\frac{1}{4}$ " BALLS**T.16 CROWN RACES**FOR $\frac{1}{4}$ " BALLS*Finish:* **Chrome****WHEN ORDERING PLEASE STATE REFERENCE NUMBERS AND FINISH**

Assorted Spanners

T.D.C. SPANNERS

Ref. No.

M.10 PEG AND CONE SPANNER
FROM 13 GAUGE METAL

M.11 COMBINED SIX-WAY SPANNER
FROM 11 GAUGE METAL

M.12 TENSION SPANNER
FROM 10 GAUGE METAL

M.13 FOUR-HOLE SPANNER
FROM 10 GAUGE METAL

M.14 HEAD AND LOCK RING SPANNER
FROM 10 GAUGE METAL

SPECIAL FEATURES:

- PERFECTLY HARDENED
- HIGH-CLASS PLATED FINISH
- LIGHT IN WEIGHT

NOTE:

All these spanners supplied carded, one dozen of any type per card, as illustration below.

May also be supplied not carded, and bulk packed for export or original equipment.



WHEN ORDERING PLEASE STATE REFERENCE NUMBERS

For T.D.C. Freewheels

T.D.C. PAWLS & SPRINGS

A.14

PAWLS

Ref. No.

8 To suit T.D.C. Standard De-Luxe Freewheels, **A.10A, A.10B, A.10C, A.10D**, 18 teeth and upwards.

8A To suit T.D.C. Standard De-Luxe Freewheels, **A.10A, A.10B**, 16 and 17 teeth, also **A.100** 3 speed Freewheels and **A.150** 4 and 5 speed Freewheels.

8B To suit T.D.C. Miniature Freewheels **F.10B** and **F.10P**.

8C To suit T.D.C. **A.50** 3 speed Freewheels

SPRINGS

Ref. No.

10**10A****10B****10C****Ref. No. A14****BOX OF ASSORTED PAWLS AND SPRINGS FOR T.D.C. FREEWHEELS**

This box contains 6 dozen assorted Pawls and 6 dozen assorted Springs to suit all types of T.D.C. Freewheels:

A.10A, A.10B, A.10C, A.10D, A.50, A.100, A.150, F.10B, F.10P

HOME**MIDLAND AREA
AND CENTRAL COUNTIES****LONDON, HOME COUNTIES
AND SOUTHERN ENGLAND****SCOTLAND, NORTH OF ENGLAND
NORTHERN IRELAND AND EIRE****REPRESENTATIVES**

Messrs. ALLAN MORGAN LTD.,
Kippen Butlers Lane,
Four Oaks, Near Birmingham.

Mr. Cleminson,
Messrs. CLEMINSON'S AGENCIES Ltd.,
14/15, Criterion Mews, St. John's Villas, London, N.19

Mr. H. M. G. GIRVAN,
1093, Argyle Street, Glasgow, C.3

OVERSEAS AGENCIES AND REPRESENTATIVES

AFRICA East Messrs. Ross & Co. (East Africa) Ltd.,
Nairobi, Kenya Colony. Box 150
Also at: Dar-Es-Salam. Box 351
Zanzibar. Box 232
Mombasa. Box 650
Kampala. Box 1152
Kisumu. Box 775
(Controlled by: Messrs. Brown Bros. (Overseas) Ltd., London).

AFRICA South Messrs. Stonley, Whissell (Pty) Ltd.,
524-525, Maritime House, Loveday Street,
Johannesburg. P.O. Box 7627.

AUSTRALIA Victoria, S. Aus. and Tasmania Messrs. Kemsley & Co., Pty. Ltd.,
'Millburn' House, 316, Queen Street,
Melbourne, CI, Victoria.
P.O. Box 1862Q, Melbourne.

New South Wales Messrs. Kemsley & Co. Pty. Ltd.,
Wales House, 66, Pitt Street,
G.P.O. Box 10, Sydney.

Queensland Messrs. Kemsley & Co. Pty. Ltd.,
116-124, Wickham Street, Brisbane.
P.O. Box 4, Broadway.

Western Australia Messrs. Kemsley & Co. Pty. Ltd.,
New Zealand Chambers, 105, St. George's
Terrace, Perth. P.O. Box L. 893

CEYLON Messrs. F. G. Low & Co.,
P.O. Box 331, Mackinnons Buildings,
Colombo.

CONGO Messrs. Stonley, Whissell (Pty.) Ltd.
524-525, Maritime House, Loveday Street
Johannesburg, South Africa.
P.O. Box 7627

DENMARK Mr. N. Lundgren, Kompagnigaarden,
Kompagnistraede 34, Copenhagen, K,
Denmark.

EGYPT, SUDAN AND CYPRUS (Controlled by: Messrs. Brown Bros. (Overseas) Ltd.,
London).

GREECE Messrs. H. W. Guggenheim Ltd.,
264, Broad Street, Birmingham, I
Tel: Mid 6093/4

HOLLAND Mr. W. H. A. Wapenaar,
Heemsteedse Dreef 258, Heemstede.

INDONESIA Messrs. Brown Bros. (Overseas) Ltd.,
New Inn Broadway, Great Eastern Street,
London, E.C.2.

IRAN Mr. M. Marcarian,
Ave. Takhte Jamshid, Nr. Fisherabad,
No. 1 Kuche Besharat, Teheran, Iran.

ISRAEL Messrs. "Cyclesport" J. Kratka,
42, Ha'aliya Street, Tel-Aviv.

NEW ZEALAND Messrs. Kemsley & Co. (N.Z.) Ltd.,
P.O. Box 1794, Wellington, C.3.

PAKISTAN Messrs. Singleton, Benda, & Co. Ltd.,
Plantation House, 31, Fenchurch Street,
London, E.C.3.

PORTUGAL Messrs. C. J. Chambers & Co. Ltd.,
3 Largo Moinho de Vento, Oporto.
(Apartado 69)

PORTUGUESE EAST AFRICA Messrs. Stonley, Whissell (Pty) Ltd.,
524-525, Maritime House, Loveday Street,
Johannesburg, South Africa.
P.O. Box 7627

RHODESIA Zambia, Southern Rhodesia and Nyasaland Messrs Stonley, Whissell (Pty) Ltd.,
524-525, Maritime House, Loveday Street,
Johannesburg, South Africa.
P.O. Box 7627

SINGAPORE and MALAYA Messrs. Brown Bros. (Overseas) Ltd.,
New Inn Broadway, Great Eastern Street,
London, E.C.2.

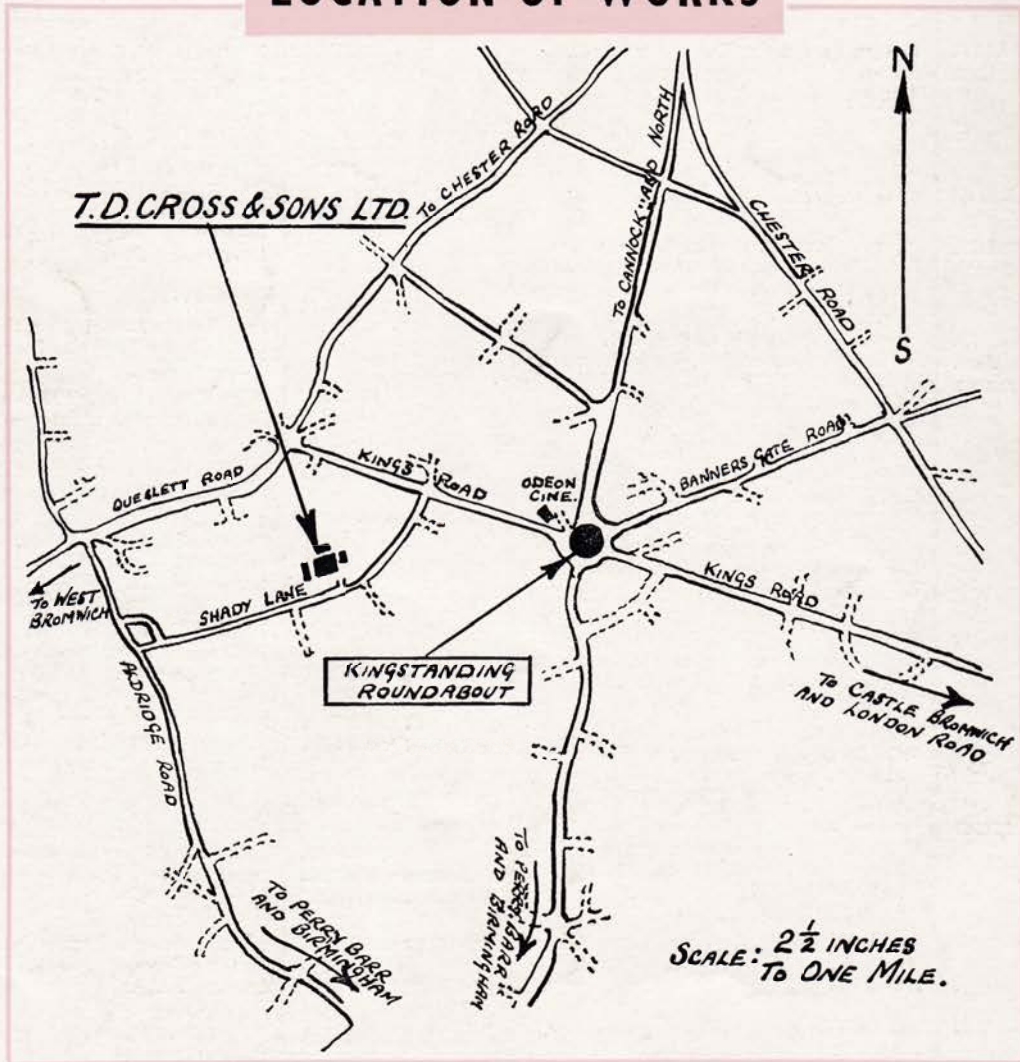
VENEZUELA Mr. Felix Kalinhoff, Apartado 6046.
Caracas, Venezuela.

OUR AGENTS AND REPRESENTATIVES ARE AT ALL TIMES AT YOUR SERVICE

T.D.C.

T. D. CROSS AND SONS LTD.

LOCATION OF WORKS



T. D. CROSS & SONS LTD. "VESEY WORKS" GREAT BARR BIRMINGHAM, 22A