

# THE NAME THAT POINTS TO VICTORY



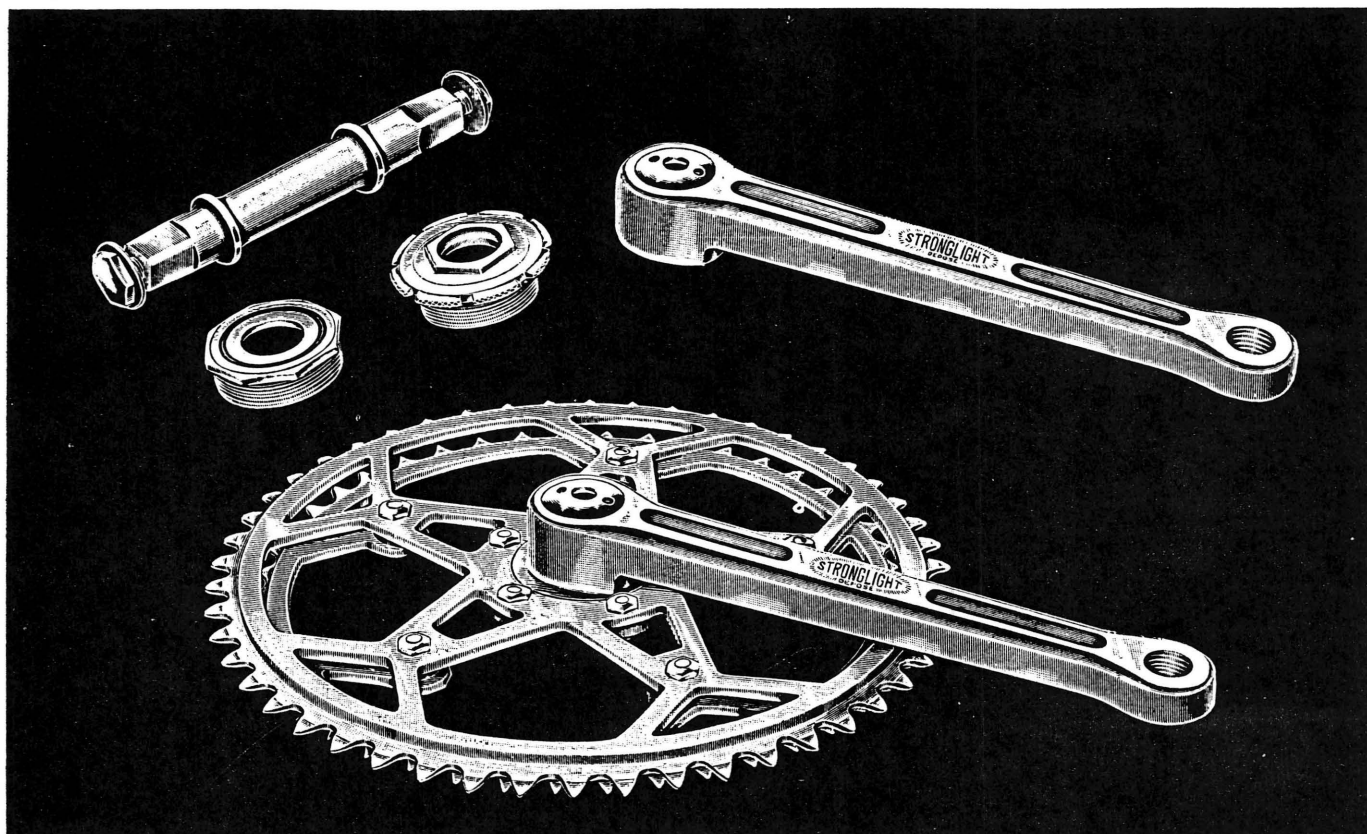
TRADE MARK REGISTERED IN GREAT BRITAIN No. 752272



ETABLISSEMENTS

## VÉROT ET PERRIN

51 AVENUE DE ROCHETAILLÉE  
SAINT-ÉTIENNE (LOIRE) - FRANCE



No. 49 D

## STRONGLIGHT CRANKS, TYPE 49D—COTTERLESS—DURAL STRONGLIGHT DOUBLE CHAINWHEELS, TYPE 49D—DURAL (For chain $\frac{1}{2}'' \times \frac{3}{32}''$ )

This set is specially designed for Racing.

The cranks and the rings are made from forged and hardened high resistance light alloy.

The cranks are made to fit a Stronglight Cotterless Bottom Bracket Axle. This axle is made from high quality steel.

**CRANKS :** Pedal thread to take British Dimension pedal.  
Crank arms are available in lengths of  $6\frac{1}{2}''$ ,  $6\frac{3}{4}''$  and 7 inch.

**CHAINRINGS :** Outer Rings Ref. 12 available 49, 50, 51, 52 teeth, delivered with all screws.

Inner Rings Ref. No. 12BIS is available 44, 45, 46, 47, 48 teeth, delivered without any screws.

### Screws and Nuts :

Ref. No. 10—Set of one screw and bush (Ring No. 12 to crank).  
Ref. No. 12 Ter.—Set of one screw, washer and bush (ring to ring).

### Assembling and Dismantling :

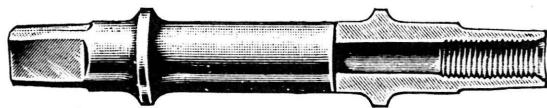
A special tool is provided—See Page No. 3.

**NOTE :** Type 49 D cranks may be used for track or road racing with a single ring type 32 or type 49D outer (Ref. No. 12). In this case cotterless axle type 32C should be used.

Type 49D cranks are delivered per one pair boxed (one right hand without screws, one left hand). Necessary screws are delivered with outer Ring, Ref. No. 12.

With this set we deliver our Axle, Ref. No. 32R.

SEE ALSO Pages 3 and 6.



Cotterless Axle ref. 32R is delivered with double chainwheel sets type 49 and type 57.

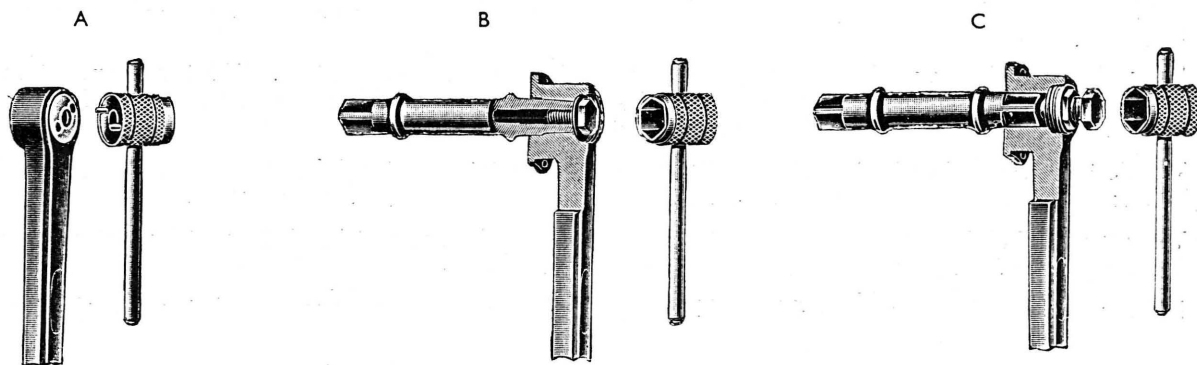
If a shorter axle is required, suitable for double chainwheel, fit Axle Ref. No. 97.

If shorter axle is required for use with set type 49 fitted with single ring, (track or road), fit axle ref. 32C.

If these sets are fitted with triple rings, fit axle ref. 97/TR1.

#### SPECIFICATION—COTTERLESS AXLES

SET Type	Axle Ref.	Total Length	Left Side	Centre	Right Side
Type 49—Single Ring	32C	113	27,5	55	30,5
Types 49 and 57—Double Ring	32R	120	28,5	55	36,5
Types 49 and 57—Double Ring	97	117	28,5	55	33,5
Types 49 and 57—Triple Ring	97/TR1	125,5	28,5	55	42



## STRONGLIGHT EXTRACTOR TOOLS FOR COTTERLESS BOTTOM BRACKET SETS

### Fitting of cotterless cranks to Axle

- (1) Unscrew dust cap from crank using tool as shown on Illustration A.

- (2) Lubricate with light vaseline inside of crank, inside and outside of axle. This is to minimise friction as the Axle is drawn into the crank.

Fit crank to Axle and push gently by hand.

**DO NOT HAMMER OR USE TOOLS OTHER THAN THOSE WE PROVIDE.**

Lubricate axle screw with vaseline, and screw it into the axle, making sure that the threads are not crossed and that no forcing is necessary.

Use tool as shown in illustration B, and screw-in axle screw as far as it goes without excessive forcing.

- (3) Screw-in dust cap to crank as shown in illustration A.  
**NOTE : Most important.**

After a few hours cycling, tighten axle screw again.

From time to time and **before every race**, check and tighten axle screw.

This precaution is necessary to avoid damaging the cranks.

- (4) To withdraw cranks, unscrew dust cap as in Para. 1 above. Insert withdrawing tool as shown in illustration C.

Before inserting this tool, lubricate all threaded parts with vaseline and lubricate also the threaded part inside the Head of the crank. Take the greatest precautions when using the withdrawing tool and do not force otherwise you may strip the withdrawal threads in the head of the crank.

If the crank is jammed, tap gently to loosen using a wood or plastic instrument.

- (5) To insert pedal, lubricate with vaseline both the pedal axle threads and the threads on the crank.

Pedals are threaded right hand and left hand. Make sure the correct pedal is screwed into the correct side crank. Screw in gently and make sure you are not crossing the threads. Then screw in pedal axle fully.





## "SUPER-COMPETITION"

### TYPE 57

This is undoubtedly the most advanced design in Racing Chainwheel Sets made to-day in any Country.

Most racing men know that in any of the standard sets, to withdraw the rings for altering teeth sizes or for replacing, it is necessary to withdraw the pedal and in many cases to withdraw the crank from the Bottom Bracket Axle. Nuts and Bolts are usually damaged in the process since in all such sets the traction effort is applied on these Nuts and Bolts and they must perforce be tightened to maximum. In most racing sets there are 10 complete sets of Nuts and Bolts subjected to this traction effort, and all of these have to be withdrawn when a ring has to be changed.

In modern racing, changing rings to get desired gearing is effected regularly and in sets other than the **STRONGLIGHT** "Super Competition", it is a lengthy job. With the new **STRONGLIGHT** "Super Competition" Type 57 this problem hardly exists.

Five sets of Nuts and Bolts only are used and these assemble the two independent rings to the specially designed Type 57 Crank.

Crank and Rings concentricity, which is an absolute necessity in racing sets, is achieved with the greatest possible precision in the Type 57 Set, not only through careful manufacture but primarily as a result of the revolutionary design of the new crank.

"Type 57" Cranks are machined to precision limits and so are "Type 57" Rings. This is necessary since the rings must fit precisely on the shaped shoulders on the arms of the crank. These shoulders bear the full traction effort and the screws are used mainly for securing the rings to the crank.

This design ensures also absolute ring rigidity and the very minimum ring deformation under pedalling. The gap between the two rings is designed to take a  $\frac{3}{32}$ " chain and this gap will remain constant.

This set as all **STRONGLIGHT** products, is made of the very best materials. It is specially designed for the discriminating rider for whom only the best is good enough.

Riders who have already got **STRONGLIGHT** Type 49 Cotterless Set, may convert their set to the Type 57 by purchasing One Right Hand Crank Type 57 together with two rings in the teeth combinations required.

#### RINGS "TYPE 57"

Made of high quality dural, these rings are machined to precision limits. The inner and outer rings are interchangeable and are available for chain  $\frac{1}{2}" \times \frac{3}{32}"$  in the following teeth sizes :

40, 44, 45, 46, 47, 48, 49, 50, 51, 52, 53, 54 Teeth.

These rings can be built up in any teeth combinations as required.

**CRANKS :** Type 57 Cranks are available in lengths of  $6\frac{1}{2}$  inch,  $6\frac{3}{4}$  inch, 7 inch.

#### Screws and Nuts

Each set is composed of one screw, one washer and one bush. Referred to as one set screw/washer/bush Type 57.

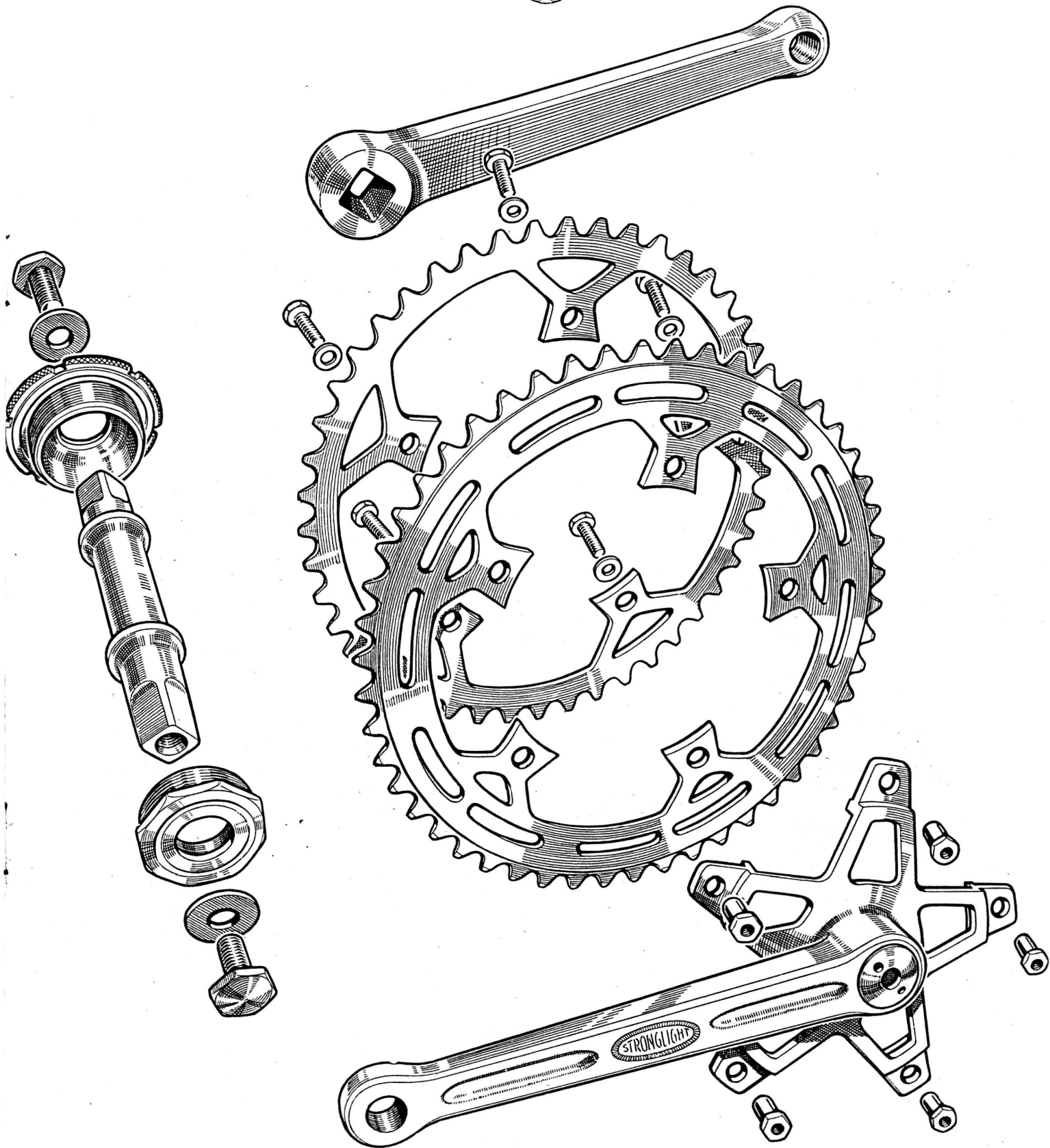
Right hand cranks are supplied complete with 5 such sets.

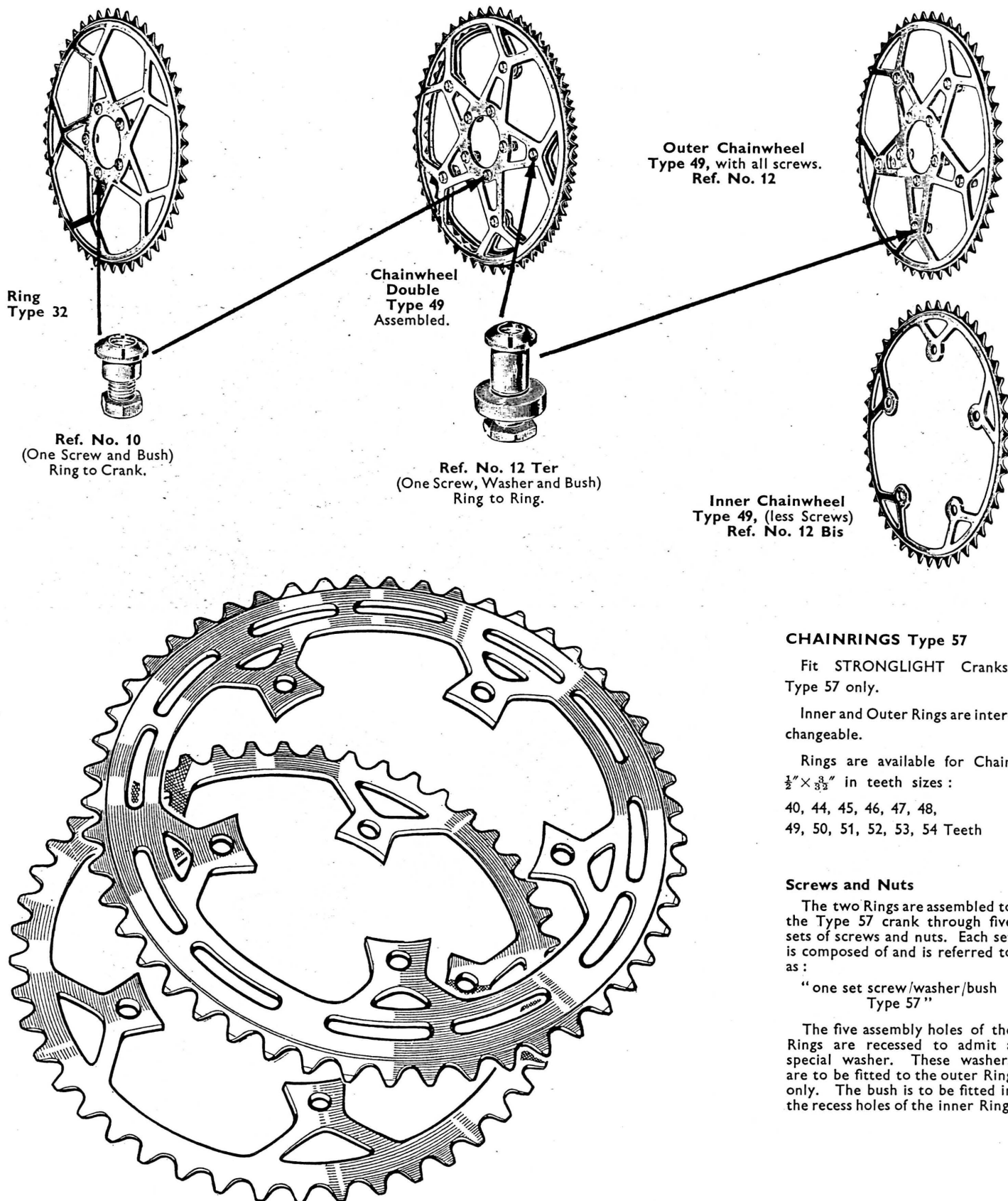
Weight of the assembly complete 28-oz. approximately.

**Fitting of Cranks :** same as for Type 49, using Extractor Tool Type 49/57 as shown on Page 3.

**NOTE :** Type 57 cranks are delivered per one pair boxed (one right hand with all screws, one left hand). When a complete set is ordered, the composition is as shown on Page 5, with Cotterless Axle, Ref. 32R

SEE ALSO pages 3 and 6





Outer Chainwheel  
Type 49, with all screws.  
Ref. No. 12

Ring  
Type 32

Ref. No. 10  
(One Screw and Bush)  
Ring to Crank.

Chainwheel  
Double  
Type 49  
Assembled.

Ref. No. 12 Ter  
(One Screw, Washer and Bush)  
Ring to Ring.

Inner Chainwheel  
Type 49, (less Screws)  
Ref. No. 12 Bis

#### CHAINRINGS Type 57

Fit STRONGLIGHT Cranks,  
Type 57 only.

Inner and Outer Rings are inter-  
changeable.

Rings are available for Chain  
 $\frac{1}{2} \times \frac{3}{8}$ " in teeth sizes :

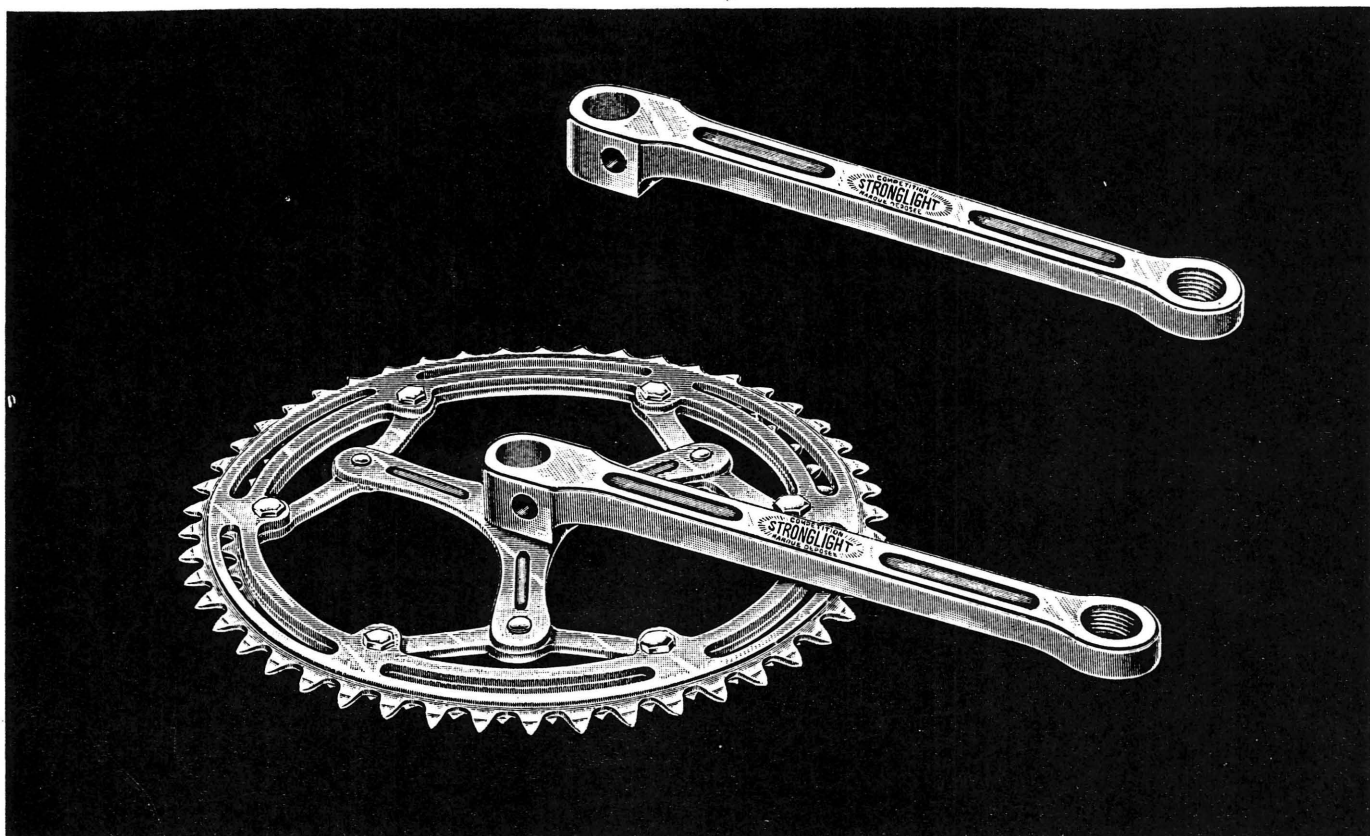
40, 44, 45, 46, 47, 48,  
49, 50, 51, 52, 53, 54 Teeth

#### Screws and Nuts

The two Rings are assembled to  
the Type 57 crank through five  
sets of screws and nuts. Each set  
is composed of and is referred to  
as :

"one set screw/washer/bush  
Type 57"

The five assembly holes of the  
Rings are recessed to admit a  
special washer. These washers  
are to be fitted to the outer Ring  
only. The bush is to be fitted in  
the recess holes of the inner Ring.



No. 55

## STRONGLIGHT "COMPETITION" CRANKS No. 55

This is a 3-arm solid forged crank set made of high resistance steel with HEAVY SECTION.

It has been specially designed for racing.

The clearance on the right hand crank is such that it permits the use of a 3-arm Double chainwheel as well as a Single chainwheel.

No. 55 Cranks are available in lengths of  $6\frac{1}{2}$ ",  $6\frac{3}{4}$ " and 7 inch.  
Weight per pair : Approximately 20-oz.

These cranks are delivered Boxed per one pair (one right hand with screws, one left hand).

**Screws :** For assembling crank to ring are referred to as Crank Screws type 54/55.

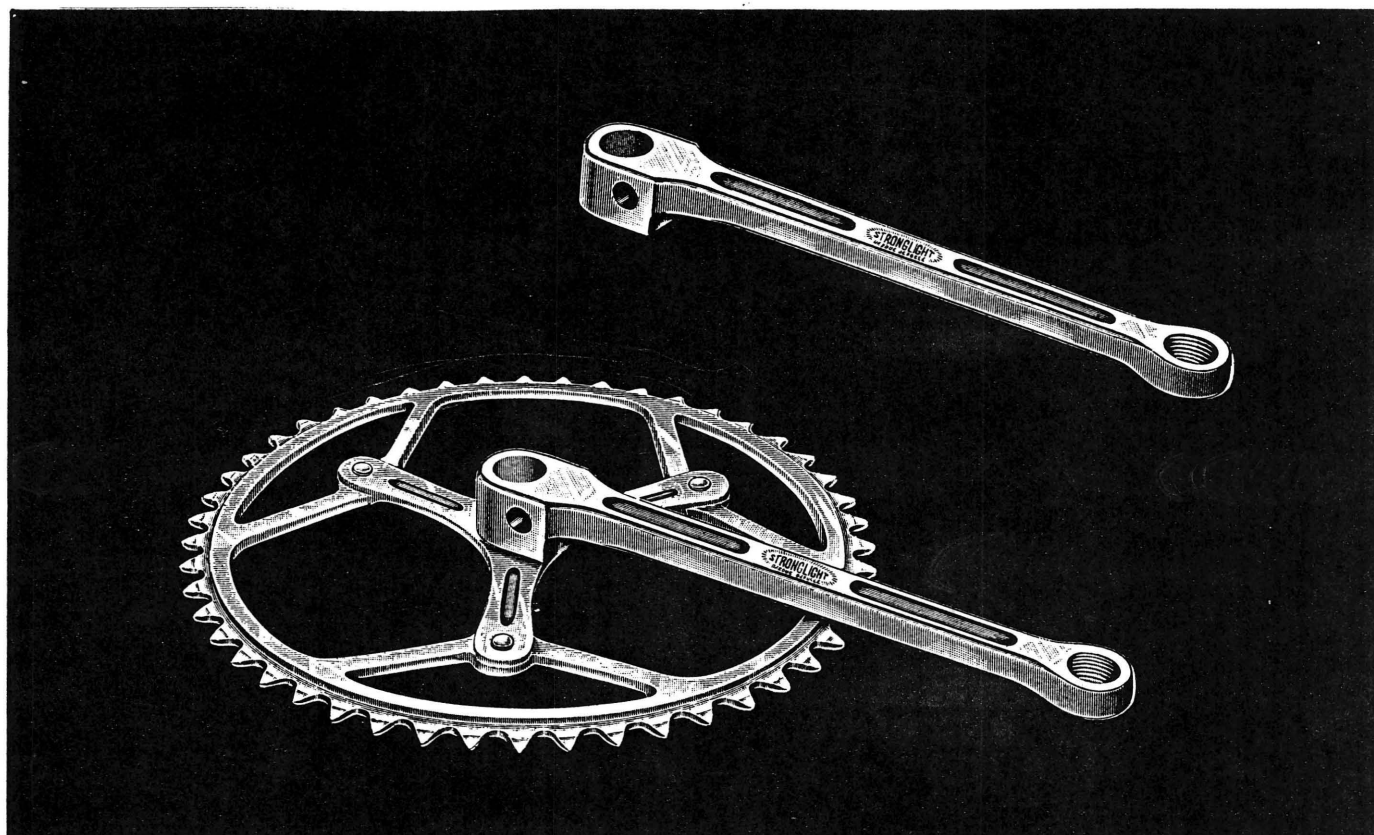
### DOUBLE CHAINWHEEL

This is a 3-arm all steel, chromium plated double chainring for chains  $\frac{1}{2}$ "  $\times$   $\frac{3}{8}$ ", (Double chain rest).

Inner and outer rings are assembled by a screw and bush, and both rings are interchangeable. Rings are available in Teeth sizes : 45, 46, 47, 48, 49, 50, 51, 52, 53, 54 Teeth.

Weight of one Double chainwheel assembled, approximately 16-oz.

**NOTE :** These double chainwheels can also be fitted to our Cranks No. 54.



No. 54

## STRONGLIGHT "STANDARD" CRANKS No. 54

This is a 3-arm solid forged crank set made of high resistance steel, with LIGHT SECTION.

It is equally suitable for Touring and Racing and whenever a reduced weight in a steel crank is required.

The clearance on the right hand crank permits the use of a 3-arm single or double chainwheel.

No. 54 cranks are available in one length only :  $6\frac{3}{4}$ ". Weight per pair 18-oz.

These cranks are delivered Boxed, per one pair, (one right hand with screws, one left hand).

**Screws :** for assembling crank to ring are referred to as Crank screws Type 54/55.

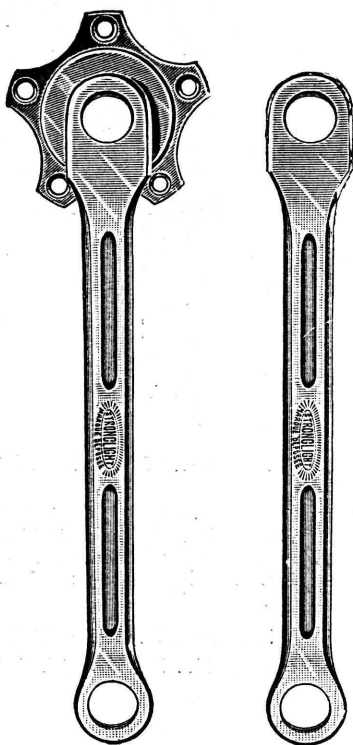
### SINGLE CHAINWHEEL

High quality steel, chrome plated, this 3-arm chainring will fit our Cranks Type 52, 54 and 55. These rings are available for chain  $\frac{1}{2} \times \frac{1}{8}$ " and for chain  $\frac{1}{2} \times \frac{3}{32}$ " in all of the following teeth sizes : 44, 46, 47, 48, 49, 50, 52 Teeth.

Average Weight : 8-oz.

These rings are delivered in attractively printed paper sachets. One ring per sachet.





No. 45

### CRANKS 5-PIN "COMPETITION" No. 45

This is a 5-pin solid forged crank set made of high resistance steel with,

**HEAVY SECTION :** Specially designed for Road and Track Racing, these cranks are available in lengths of  $6\frac{1}{2}$ " and  $6\frac{3}{4}$ ".

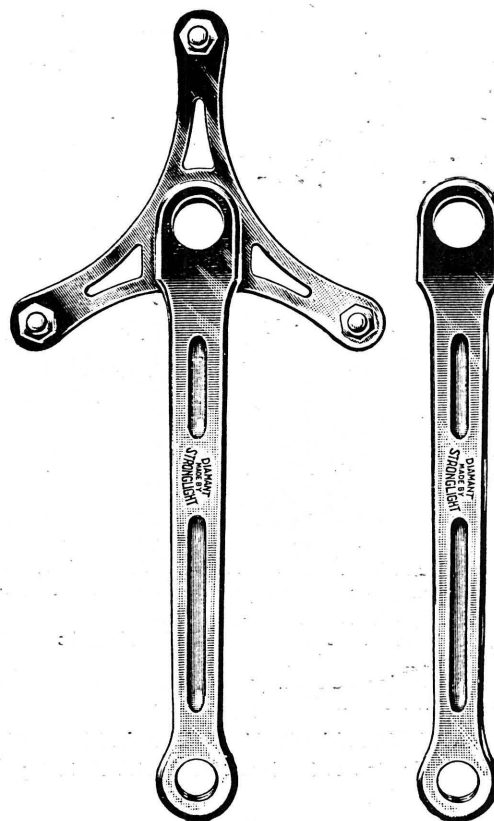
**NON GEAR CASE CLEARANCE.**

Weight per pair : 21-oz.

No. 45 cranks are delivered boxed per one pair (one right hand and one left hand, without screws).

#### CHAINWHEELS

No. 45 cranks will take chainwheels single and double type 142 and 542 (See page 10).



No. 52

### CRANKS 3-ARM "DIAMANT" No. 52

This is a steel crank set 3-arm fitting. Available in one length only,  $6\frac{3}{4}$ " with gear case clearance.

Designed to give complete satisfaction for all bicycles not used in Racing.

Weight per pair : 24-oz.

Type 52 cranks are delivered per pair in printed paper sachet per one pair.

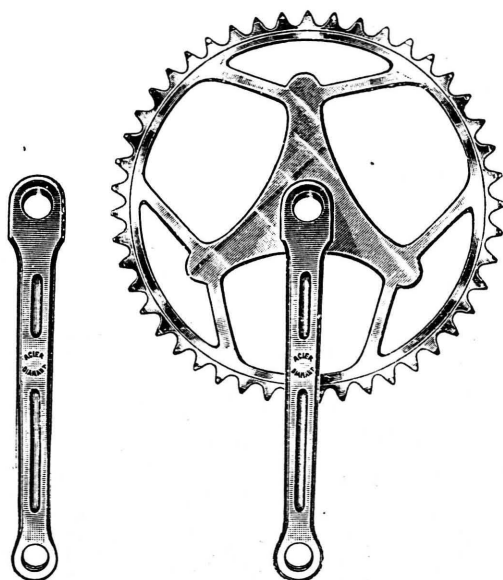
(One right hand with screws, and one left hand).

**Screws :** These are referred to as CRANK SCREWS "DIAMANT" No. 52.

One set consists of one screw and bushed nut.

#### CHAINWHEELS

Cranks No. 52 will accommodate 3-arm rings same as Cranks No. 54 and No. 55.

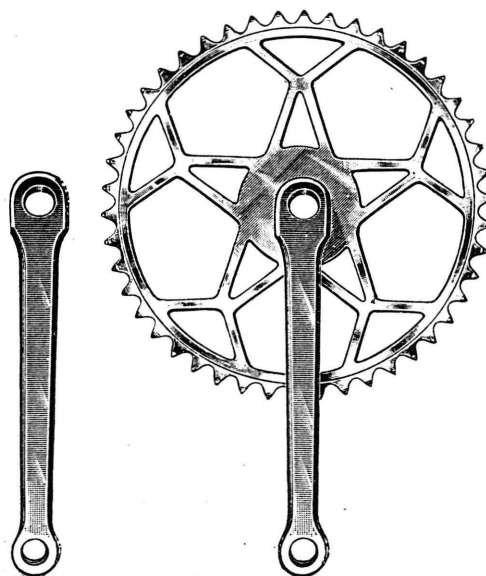


#### STRONGLIGHT CHAINRING AND CRANK SET No. 11

Crank made of "ACIER DIAMANT" with gear case clearance. Chainring with single chain rest is rivet fixed to the crank by a patented process. Cranks are available in lengths of  $6\frac{1}{2}$ " and  $6\frac{3}{4}$ ". Rings are available in 44, 46 or 48 teeth for chain  $\frac{1}{2}$ "  $\times$   $\frac{1}{8}$ ". The design of the ring is a 3-arm pattern as shown on illustration. Average weight : 30-oz.

#### STRONGLIGHT CHAINRING AND CRANK SET No. 12

Same specification as Set No. 11 but with chainring made for double chain rest.



#### STRONGLIGHT CHAINRING AND CRANK SET No. 111

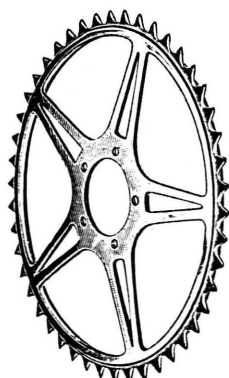
Similar construction to Set No. 11. Chainring with single chain rest available in 44, 46, 48 Teeth for chain  $\frac{1}{2}$ "  $\times$   $\frac{1}{8}$ ". Length of cranks  $6\frac{1}{2}$ ",  $6\frac{3}{4}$ ", 7". Drilled for Bottom Bracket Axle  $\frac{5}{8}$ " and  $\frac{3}{8}$ " diameter cotter pins. Pedal Threading :  $\frac{9}{16}$ "  $\times$  20 F.W. Average weight : 31-oz.

#### STRONGLIGHT CHAINRING AND CRANK No. 112

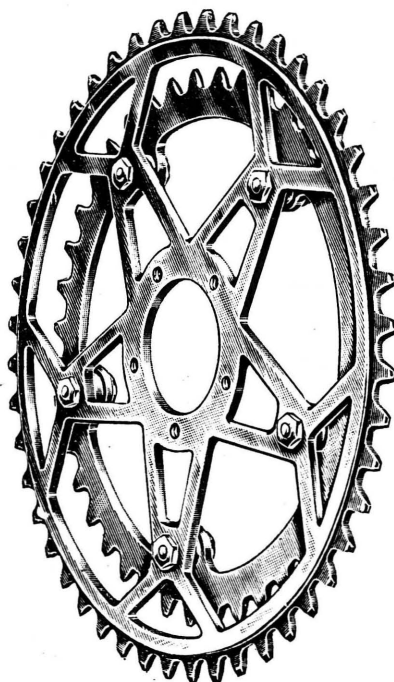
Same specification as Set No. 111, but with chainring made for Double chain rest.

## 5 PIN CHAINWHEELS

—STEEL—



No. 142



No. 542

#### Type No. 142—Single

This is a single chainwheel, steel, chrome plated, 5 pin fitting, suitable for cranks No. 45.

This chainwheel provides a double chain rest and is available in Teeth sizes :—

44, 46, 47, 48, 49, 50 Teeth for both chain  $\frac{1}{2}$ "  $\times$   $\frac{1}{8}$ " and  $\frac{1}{2}$ "  $\times$   $\frac{3}{32}$ ".

Weight : Average  $9\frac{1}{2}$ -oz

#### Type No. 542—Double

This is a Double chainwheel, Steel, chrome plated, 5-pin fitting, suitable for cranks No. 45.

Available for chain  $\frac{1}{2}$ "  $\times$   $\frac{3}{32}$ " only.

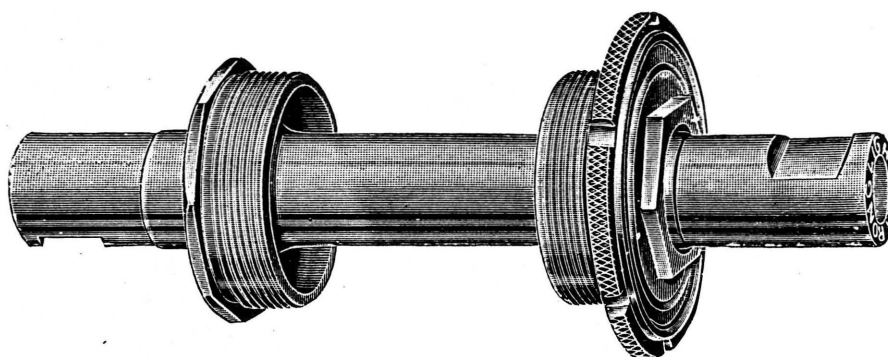
Inner and Outer rings are assembled by screws and bushed nuts.

Various Teeth combinations available.

Weight : Average complete 15-oz.



## BOTTOM BRACKET ASSEMBLY TYPE 34



No. 34

A Bottom Bracket assembly is one of the components which takes the greatest punishment in Cycle Racing.

If the set is unsatisfactory, the bearings will be pitted rapidly or the axle will break or get deformed.

Thus, to make a Bottom Bracket set that will give entire satisfaction as to lightness of weight, reliability of bearings and strength of axle, considerable experience in manufacture is required.

The Stronglight Bottom Bracket Set No. 34 has proved its quality in many major racing events. The No. 34 set is made from a top grade Nickel Chrome Steel Alloy.

The Axle is hollow from end to end to reduce weight.

The fixed cup is Octagonal, the adjustable cup is hexagonal.

Both cups are designed for minimum weight.

Weight of the complete assembly : 10-oz.

Threads and Dimensions of set to British sizes.

### LENGTH OF AXLES

Various lengths of axles are available as shown in table on this page.

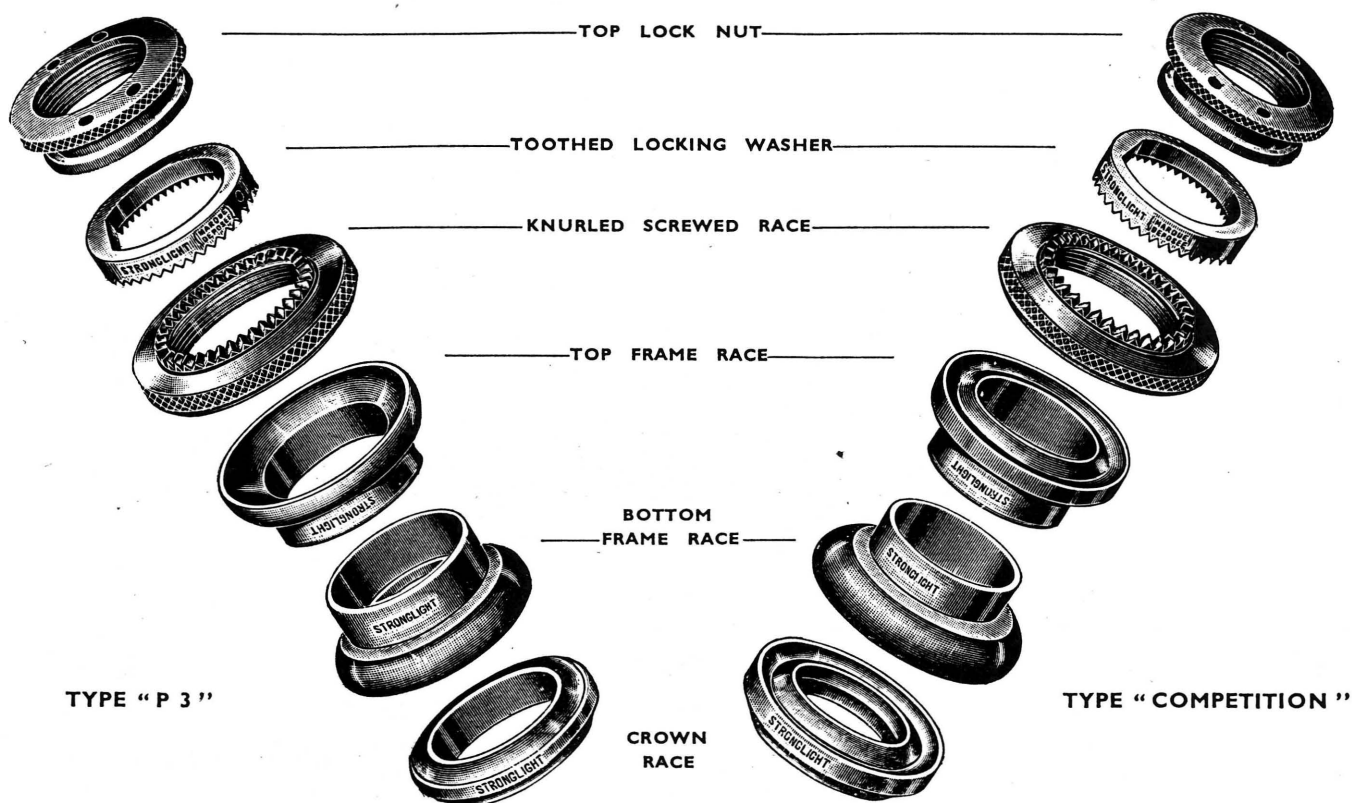
Two lengths are most commonly used.

Axle length 125 m/m for use with single chainwheel and length 132 m/m for use with Double chainwheel.

LENGTHS OF AXLES TYPE 34

Total Length m/m.	Left Side	Centre	Right Side
125	33,5	55	36,5
127	33,5	55	38,5
130	34,5	55	40,5
132	34,5	55	42,5
135	36	55	44
Tandem 68 AV (130)	41	55	34
— 68 AR (141)	41	55	45
— 72 AR (141)	39	59	42

ALL SIZES IN MILLIMETERS.



## STRONGLIGHT HEAD SETS

STRONGLIGHT Head Sets are made of the highest quality nickel chrome steel. Bearing surfaces are precision ground and hardened to limit tolerances. STRONGLIGHT Head Sets are made to fit British bicycles, using standard dimension Head Tubes of  $1\frac{1}{4}$ " diameter, gauge 20 and steering column 1 inch threaded 24 threads to the inch.

### Type "P. 3"

This is a high quality conventional bearing Head Set, suitable for all good class machines, including Racing bicycles. Weight complete : 4-oz. This set is made to take steel balls  $\frac{5}{32}$ " diameter

### Type "Competition"

This is a high quality Head Set using V type bearings.

This type of bearing is particularly suited for longer life and this set is recommended for Racing bicycles especially machines engaged in tough Stage Racing.

V type bearings are difficult to manufacture and require the greatest care in grinding as tolerances must be very small. Type "Competition" Head Set is made as a precision engineering component. Weight complete : 6-oz. This set is made to take steel balls  $\frac{5}{32}$ " diameter.

### Fitting of Head Sets.

To get the top quality results that may be expected from our Head Sets, it is necessary to take certain essential precautions when fitting. Ensure that the fork is well constructed, and that the fork column is perpendicular to the fork crown.

Ensure that the Crown Race of the Head Set is well seated and is fitted square to the fork column. Fit the remaining parts of the head set, including the knurled screwed race. This latter part should be screwed in without overtightening.

If the head set is correctly fitted the fork will move easily from left to right without any play in the bearing and without jamming at any point. If this required result is not achieved, the Head Set may not be considered as correctly fitted.

Fit the remaining components and lock the assembly with the TOP LOCK NUT.

### NOTE :

Before fitting Head Set, make absolutely sure that all bearing surfaces are wiped dry and clean, then lubricate with light bearing grease.



## HEAD SETS AND BOTTOM BRACKET SETS

A finely shaped Handlebar Bend, an attractive stem, a "racy" frame, a Simplex gear, these are "exciting" items which, not unnaturally, attract and hold the attention of Cyclists.

However, Head Fitting assemblies and Bottom Bracket sets are not usually in the class of "exciting" lines, and quite wrongly, since the quality of a bicycle depends on these products. Imagine what will happen to the racing Cyclist if in the middle of a race the steering develops "play" or the Bottom Bracket set gets loose, or the axle bends. No immediate repairs can be made like replacing a tyre or changing a wheel, the bicycle must be changed. Whilst this can be done and is usual practice in International Professional racing, the amateur competitor can hardly afford to do it. Hence, the amateur must perforce rely very heavily on the outstanding quality of the Head Fitting set and the Bottom Bracket set fitted to his machine.

### ***CAN a cyclist identify a Quality set by looking at it?***

The answer is most unlikely. A Head set can look very attractive in design, beautifully chrome plated and be second rate in actual use. A Bottom Bracket axle can look solid and "business-like" and yet it may bend as the Cyclist applies his full pedalling power in a moment of final intense effort. Many makers will claim the use of special steel in the manufacture of these items and claim quite rightly that this gives superiority to their product. However, the story does not end there. It is not enough to use special steel, to make a good Head set and Bottom Bracket set. The design of the bearings, the angle at which the steel balls roll, play a very important part in the ultimate quality.

But above all, the degree of hardening of the bearing surfaces will "make or break" a reputation.

Head sets and Bottom Bracket sets designed for Competition must be just right. If the hardening goes too far, the bearing race will shatter like a nut shell, if not hard enough, the steel balls will begin indenting the ball race and very soon the set will be useless.

Precision equipment is used by some manufacturers to obtain that "just right" state, but as in the case of all machines the quality of the end product will depend largely on the men who operate them. There is also the question of the quality of the Steel Alloy used. The "Right" hardening is only right if the steel used is absolutely in accordance with the original test specifications, and with to-day's conditions, this is by no means a simple affair.

Thus the manufacturer of such items has a serious problem to keep the quality of his product beyond reproach.

Special steel, precision ground bearings, "just right" hardening, qualified labour with years of experience, all this adds up to high cost of the finished product.

The Cyclist has but one sure way to guide him in his choice and that is, that he purchases a Head set and a Bottom Bracket set that has already achieved a reputation for quality.

STRONGLIGHT Products have enjoyed this high reputation for quality for over twenty years.

Results from international class racing is our testimonial and the Customers' best guarantee that this high reputation is well deserved.







## STRONGLIGHT WIN THE HOUR SPEED RECORD 1957

The world record for the hour won by Roger Riviere on STRONGLIGHT has brought up an intriguing question in the World of Cycling. "Has the track equipment improved over the years or has the quality remained static?"

The answer is by no means a simple one since whilst the quality of some equipment has not changed much over the years, other components have been drastically improved although such improvement may have passed unnoticed to the non-initiated.

From the start, track riders have understood the necessity of using ultra light-weight equipment allied with the optimum in rigidity, a problem which is by no means a simple one as you will readily appreciate. Modern techniques in processing steel and light alloy have considerably improved in recent years, and the benefits of such techniques have been incorporated in the manufacture of STRONGLIGHT products.

An examination of the winning machine of Roger Riviere with which he beat the record at 46 km. 923 in 60 minutes, tells its own story. It is equipped with STRONGLIGHT special steel "Competition" Head Set, STRONGLIGHT Alloy Cranks and Chainrings and STRONGLIGHT Cotterless Bottom Bracket Set.

We all know the importance of the effort imposed on the chainwheel and crank set in track racing and it is of course to the credit of STRONGLIGHT that our material was used throughout. What is more important is the fact that Riviere has used the STRONGLIGHT ALLOY SET, thus proving dramatically what we ourselves have always known, which is that STRONGLIGHT ALLOY Components give the optimum in rigidity allied to the minimum in weight. In Great Britain, alloy cranks and rings are establishing their supremacy on the track after passing through a period of suspicion which was earned through the years by material which did not give satisfaction and which was DEFINITELY NOT STRONGLIGHT.

It is now 20 years since the great French Champion Archambaud won the record of the hour on STRONGLIGHT ALLOY cranks and rings.

Archambaud, Anquetil, Riviere, Louison Bobet, these are names that cannot be lightly dismissed, they trusted STRONGLIGHT equipment, it never failed them.

The same equipment, continually improved over the years is available throughout the British Commonwealth.

The following important factor concerning chainwheel and crank sets must be brought to the attention of the discriminating cyclist.

In road racing, using an extra flexible chain and a Derailleur gear, a slight eccentricity on the chainwheel and crank, though not by any means satisfactory, could be overlooked as the transmission system is flexible, but in track racing, where the chain length is adjusted to optimum, and where there is no room for unwanted flexibility, an imperfection in the concentricity of the chainwheel and crank becomes a major disaster. Thus such specialised equipment as STRONGLIGHT Cotterless must perforce be treated as a precision engineering product and the price is naturally affected.

STRONGLIGHT Victories are not limited to the Track.

Through the years STRONGLIGHT products won a most impressive honours list, including nineteen World Championships, twenty-seven Championships of France, The Tours of France, of Belgium, of Spain, and many other major victories.

These victories in such major racing events are the very best testimonial for our products, and the best guarantee that with STRONGLIGHT you have the very best.

You will readily appreciate the value of this assertion when you learn of the following facts:—

**Head Sets :** Most makes of Head Sets are unsuitable for racing cycles. It is a matter of common knowledge amongst Tour de France mechanics that Head Sets not specially made for Racing cannot last more than a few stages in the "Tour de France".

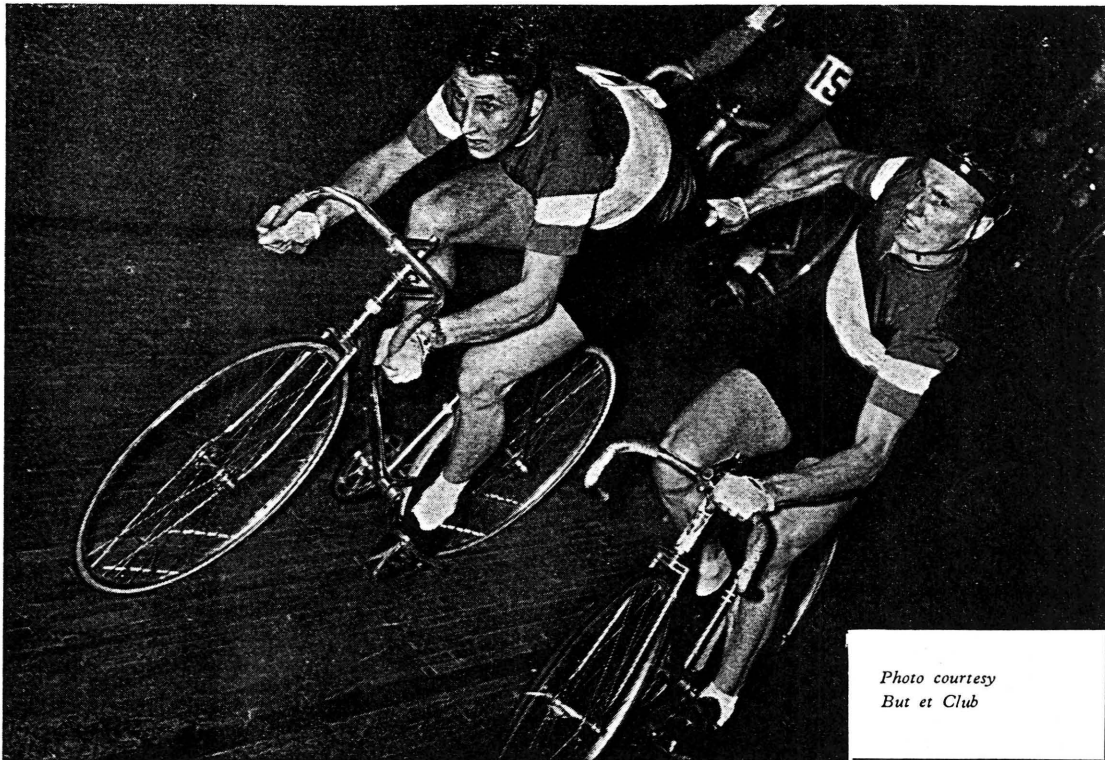
For this reason, Champions fit STRONGLIGHT.

**Bottom Bracket Sets :** Same comment as above.

**Cranks :** You may think that any "good" steel crank will do for racing. If you do, you will undoubtedly learn differently from experience. In the Tour de France, riders have broken their cranks, bent them, stripped the threads (with Pedal falling off). As a result of these misfortunes, the field of choice in racing cranks has been considerably narrowed and the great majority of Champions fit our products. Amongst Riders in the "Tour de France" about 80% fit STRONGLIGHT.



## STRONGLIGHT INTERNATIONAL VICTORIES 1957



*Photo courtesy  
But et Club*

JACQUES ANQUETIL AND ANDRE DARRIGADE WIN THE 1957 PARIS SIX DAY RACE  
using STRONGLIGHT Type 49D Set and "Competition" Head Fitting.

**STRONGLIGHT CHAMPIONS HAVE WON MANY VICTORIES, THE MOST PROMINENT ONLY ARE LISTED BELOW.**

Tour de France

Hour Record

Bordeaux-Paris

Tour of Belgium

Fleche-Wallonne

Liege-Bastogne-Liege

Week-End Ardennais

Grand Prix Stan Ockers

criterium National

Belgian Championship

Swiss Championship

Tour of Sweden

World Road Championship

World Sprint Championship

World Pursuit Championship

Olympic Games

Paris 6 Day

Criterium des Vainqueurs

French Road Championship

Paris-Nice

Grand Prix des Nations

Tour of Romandy

Challenge Desgrange-Colombo

Route de France

STRONGLIGHT HAVE WON 19  
WORLD CHAMPIONSHIPS AND  
27 FRENCH CHAMPIONSHIPS



STRONGLIGHT HAVE WON  
EVERY TOUR DE FRANCE  
FROM 1952 TO 1957

# STRONGLIGHT

CHAMPIONS



**JACQUES ANQUETIL**

WINNER OF THE TOUR DE FRANCE 1957



**LOUISON BOBET**

WINNER OF THE TOUR DE FRANCE 1953-54-55

LISTED HERE ARE JUST A FEW OF THE CHAMPIONS WHO PLACE THEIR FAITH IN STRONGLIGHT :

Anquetil  
Bobet  
Brankart  
Barbosa  
Brun  
Bedwell  
Clerici

Cerami  
Cestari  
Darrigade  
Dotto  
Deledda  
Elliott  
Forestier

Faggin  
Fantini  
Gauthier  
Graf  
Graczyk  
Hassenforder  
Impanis

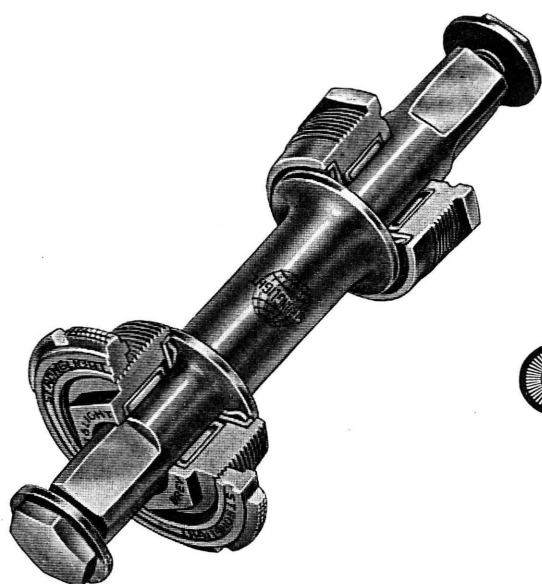
Janssens  
Lauredi  
Mirando  
Monti  
Privat  
Planckaert  
Padovan

Robic  
Riviere  
Rohrbach  
Stablinski  
Schotte  
Van Steenberg  
Vannitsen

Van Cauter  
Vlayen  
Varnajo  
Van Genechten  
Walkowiak

## THE NAME THAT POINTS TO VICTORY

## ROULEMENT DE PÉDALIER STRONGLIGHT A AIGUILLES



T 160



T 260

**TYPE 160** - SANS CLAVETTE - pour Garnitures **STRONGLIGHT 49 D** et **SUPER COMPÉTITION 57**

**TYPE 260** - STANDARD

Axes en acier au nickel chrome, à grands flasques rectifiés - Cuvettes avec cages et butées à aiguilles incorporées - Organe de haute précision et de grand rendement. Les cuvettes sont exécutées dans les 3 dimensions usuelles internationales : Française - Anglaise - Italienne.

AXE type <b>160</b>	Longueurs	AXE type <b>260</b>	Longueurs
	m/m		m/m
Axe piste.....	111	Axe piste.....	123
Axe simple plateau..	114	Axe simple plateau..	127
Axe double plateau..	120	Axe double plateau..	132
Axe triple plateau..	125,5		

N. B. Bien respecter les instructions de montage. (Notice jointe à chaque pédalier)



**VEROT ET PERRIN**  
**SAINT-ÉTIENNE - FRANCE**

**STRONGLIGHT BOTTOM BRACKET SET WITH NEEDLE ROLLER BEARING**  
**NADELLAGER - INNENANTRIEB - STRONGLIGHT**  
**JUEGO PEDALIER STRONGLIGHT A RODILLOS**  
**SERIE DI MOVIMENTO STRONGLIGHT A RULLI**

**MODEL 160** - For use with cotterless **STRONGLIGHT** crank sets **49 D** and **SUPER COMPETITION 57**  
**MODEL 260** - STANDARD

Axles made from nickel chrome steel with large bearing surface precision ground. Both cups incorporate a complete needle roller bearing Assembly.

This set is available to fit bicycles with Bottom Bracket shells made to British - French - Italian dimensions.

**NOTE** This is a component of High precision and Quality. We recommend that you read carefully our fitting instructions.

**TYPE 160** - Ohne Keil - für **STRONGLIGHT** Garnituren **49 D** und **SUPER COMPETITION 57**  
**TYPE 260** - STANDARD

Achsen aus chromnickelstahl mit geschliffenen Flanschem Lagerschalen mit eingebauten Nadellagern - höchste Präzision und hervorragendem Erfolg. Die Lagerschalen werden in 3 internationalen Abmessungen hergestellt . französisch - englisch - italienisch.

**N.B.** Bitte die Montageanleitung beachten - (Jeder Lieferung beigelegt)

**TIPO 160** - Sin clavetas - para equipos **STRONGLIGHT 49 D** y **SUPER COMPETICIÓN 57**  
**TIPO 260** - STANDARD

Ejes en acero cromo niquel, con grandes aletas rectificadas - Cazoleta con caja y topes de los rodillos incorporados - Accesorio de alta precisión y gran rendimiento - Las cazoletas son fabricadas en las tres medidas normales internacionales : Francesa - Inglesa - Italiana.

**IMPORTANTE** - Atenerse a las instrucciones de montaje (se acompaña hoja de instrucciones en cada juego de pedalier)

**TIPO 160** - Senza bietta - per Guarniture **STRONGLIGHT 49 D** e **SUPER COMPETITION 57**  
**TIPO 260** - STANDARD

- Perti in acciaio al nickel cromo a grandi corone rettificate
- Rulli incorporati in gabbie reggisplinta
- Pezzi di alta precisione e rendimento
- Tutti i particolari sono nelle dimensioni usuali internazionali Francese - Inglese - Italiano

**N.B.** Osservate le istruzioni di montaggio (volantino unito ad ogni giuoco)

AXLE MODEL 160	ACHSE TYPE 160	EJE TIPO 160	PERNO TIPO 160	L
				$\frac{m}{m}$
For track racing . . . . .	Für Bahn . . . . .	Para Pista . . . . .	Per pista . . . . .	111
For Use with single ring . . . . .	Für Einfach-Kettenrad . . . . .	Para simple plato . . . . .	Per ingranaggio semplice . . . . .	114
For Use with double rings . . . . .	Für Doppelkettenblatt . . . . .	Para doble plato . . . . .	Per doppio ingranaggio . . . . .	120
For Use with triple rings . . . . .	Für Dreifachkettenblatt . . . . .	Para triple plato . . . . .	Per triplo ingranaggio . . . . .	125,5
AXLE MODEL 260	ACHSE TYPE 260	EJE TIPO 260	PERNO TIPO 260	L
				$\frac{m}{m}$
For track racing . . . . .	Für Bahn . . . . .	Para Pista . . . . .	Per pista . . . . .	123
For Use with single ring . . . . .	Für Einfach-Kettenrad . . . . .	Para simple plato . . . . .	Per ingranaggio semplice . . . . .	127
For Use with double rings . . . . .	Für Doppelkettenblatt . . . . .	Para doble plato . . . . .	Per doppio ingranaggio . . . . .	132



**VEROT ET PERRIN**  
**SAINT-ÉTIENNE - FRANCE**



STRONGLIGHT

Strongright cranks, type 49D--cotterless  
Stronglight double chainwheels, type 49D--dural  
Super-competition type 57  
Competition cranks No. 55  
Standard cranks No. 54  
Bottom bracket assembly type 34  
Head sets Type "P3", "Competition

Stronglight win the hour speed record 1957  
Stronglight international victories 1957  
Stronglight champion

JACQUES ANQUETIL, LOUISON BOBET

etc.

,etablissements  
VEROT et PERRIN

51 Avenue de Rochetaillée  
Saint-Etienne (loire)  
FRANCE

*Handwritten signature: J. Verot*



# STRONGLIGHT

