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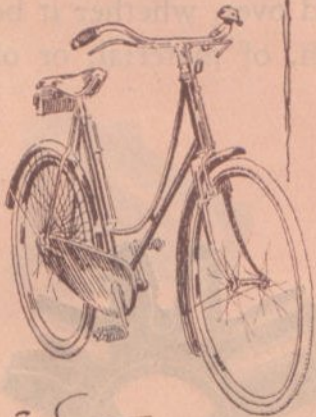
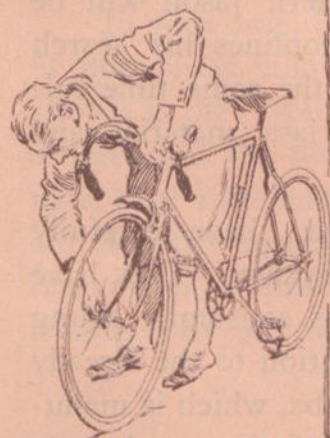
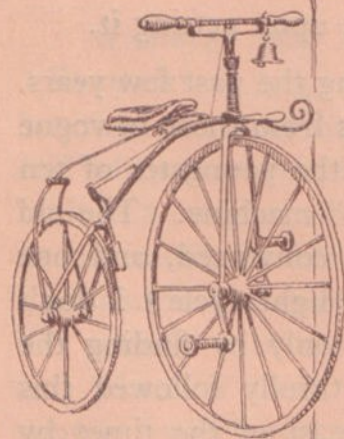
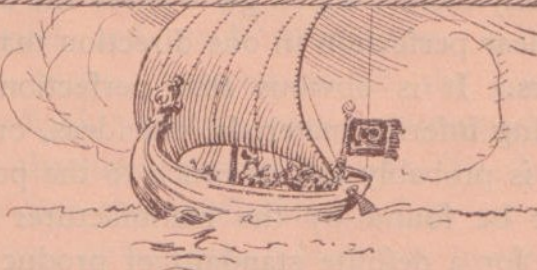
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# THE MODERN BICYCLE



To John Cyclist Esq



*Oliver Street Works,  
Birmingham*

Dear Mr. Cyclist,

According to tradition, many hundreds of years ago Jason and Medea set off with their Argonauts in quest of the Golden Fleece which was supposed to be guarded by the sleepless dragon at Colchis.

The world has witnessed a continual search for the secret of the transmutation of gold, the elixir of youth, perpetual motion, just as to-day there are thousands of manufacturers and cyclists in quest of the Perfect Bicycle. From the time of the old hobby horse, cycle construction has passed through many bewildering changes until there practically remains nothing but the original suggestion of two wheels and some means of connecting them up.

The Perfect Bicycle according to most people is yet a thing of the future and it must be conceded that any claimant to perfection automatically admits finality in research, and it is neither in the interests of the manufacturer nor of the user that this admission should be made. Assuming, therefore, that the Perfect Bicycle is

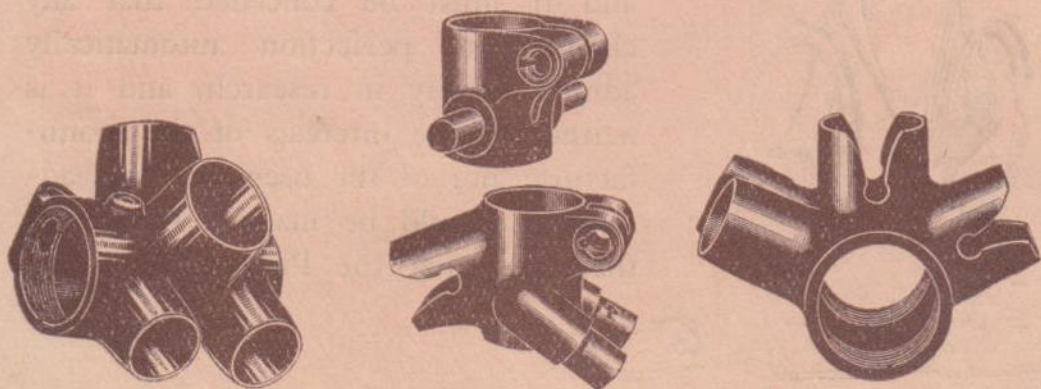
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not yet discovered the quest of the keen cyclist of to-day is for the "best yet."

There are many factors which go to make the best in anything, as what may be near perfection in one direction may be deplorably deficient in others. It is obvious that perfection can never be reached by utilising inferior materials, old ideas, or careless workmanship. What is probably just as much to the point, the perfect article can never be found by the manufacturer who ignores a growing demand for a definite standard of production, or fails to realise that there is an increasing tendency in the mind of the modern cyclist to know what he requires, and to insist upon getting it.

The bicycle has so changed in detail during the past few years, that the cyclist of to-day has far different views from those in vogue 30 years ago. To-day the staid veteran and the youngster of ten have their choice in a light and "less-trouble" machine. The old advocates of the "dreadnought" have been convinced, and one rarely hears the remark "Why should I use a light cycle? I don't want to race." All this goes to prove, that only by finding the manufacturers who have consistently and faithfully followed this evolution through all its stages and kept abreast of the times by constantly revising their models to satisfy modern requirements, can perfection even be approached. The modern Jason will be decidedly nearer his "Golden Fleece" if he confines his search to these progressive manufacturers, who are at the same time fulfilling the other conditions in regard to high class material and workmanship.

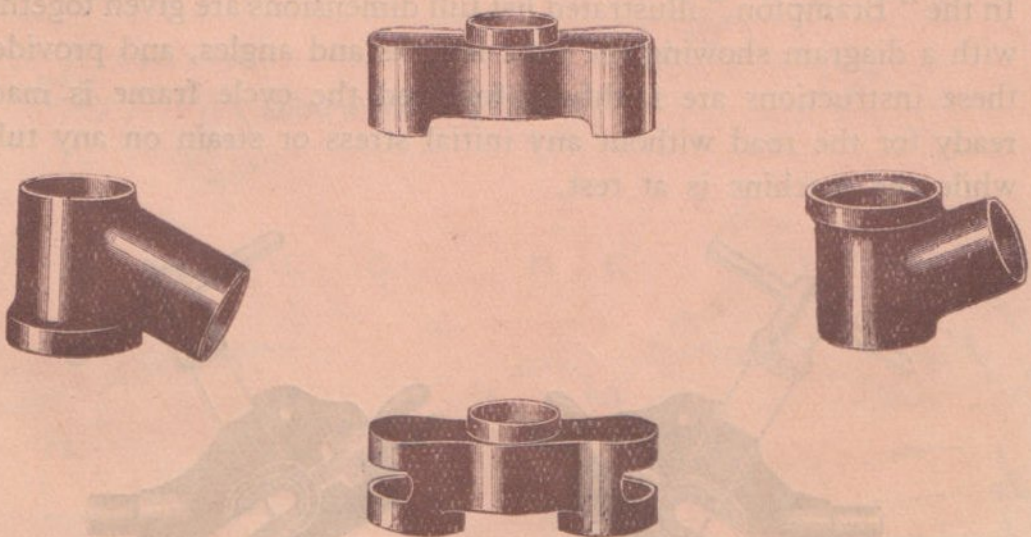
For many years Brampton Brothers, Ltd., have carefully considered the fancies and ideals of the modern cyclist. They have a staff of keen and hard-riding cyclists which is constantly riding and reporting on the latest improvement or addition to the already extensive range of Lugs, Fittings, Pedals and Hubs, which is manufactured by them, and the result is a range of fittings and cycle accessories which cannot be excelled the World over, whether it be judged from a standpoint of quality, of finish, of material, or of completeness.

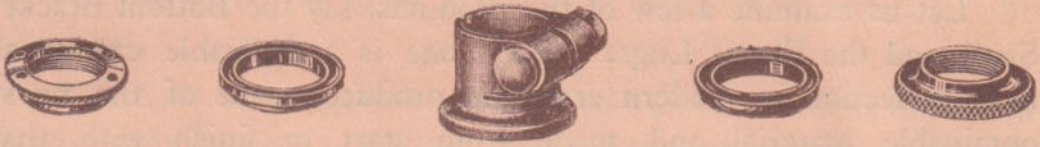


Let us examine a few of the products, say the Bottom Bracket Shell, and the Frame Lugs. Each one is a malleable casting as near perfection as modern craft can produce, made of the finest obtainable material and made from start to finish with that meticulous care which characterises all the goods produced by the Company. Each separate part is accurately machined and finished to give absolutely correct angles. The latter factor, combined with the fact that malleable castings are simpler to braze than any other type of lug goes a long way towards producing the perfect frame.

Whatever may be your choice of a frame there is a set of "BRAMPTON" Lugs to build it, and it may be here stated, that no less than 20 sets of frame fittings are listed in the illustrated catalogue and when one considers that most of the sets are capable of being built in a range of sizes it is scarcely conceivable that your particular desire cannot be fulfilled. It is not our intention to lay down any hard and fast rules as to the best style of frame to adopt, this choice lies entirely with the rider, our part is simply to supply the parts and whatever these may be, a guaranteed set of fittings can be supplied which will produce as good a machine of its type as it is possible to evolve.

In your case, being probably a keen rider and a member of one or more clubs, your thoughts must naturally turn to what is popularly known as the "RACER" or light roadster. There is no fundamental difference in the two, the difference lies merely in the substitution of light steel rims and tyres in place of "rags and timber," perhaps a *little* better sprung saddle and various slight modifications. Your frame then is precisely the same as the "RACER" and you may wonder why the racing man affects this particular style.



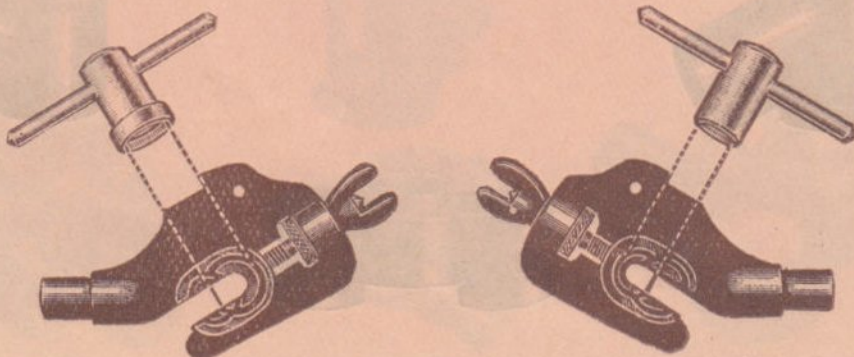


In the accompanying diagram you will see noted various measurements and angles. Long experience and exhaustive research have proved that by embodying these details the racing man may attain and maintain his high speed with greater ease. You probably do not wish to race but you choose a modified racing mount because, as you logically argue, that which, in a bicycle, enables the racing man to do "evens" will also enable you to do your 14 miles per hour with a correspondingly less output of energy.

You will note the parallel top rail, which apart from bestowing a handsome and balanced appearance to the machine enables the maximum amount of head tube to be used and this, in turn, gives steadier and easier steering. The seat and chain stays are straight and round tapered giving added strength where necessary, and lightness where exceptional strength is not required. The seat stay eyes swivel on the seat lugs to enable the builder to build any size of frame, and the whole is then brazed up to eliminate any chance of the stays becoming loose, and, speaking generally to make a rigid back triangle.

It is quite obvious that when a builder is confronted with a set of lugs which are incorrectly bored he is compelled to "pull" the tubes, and the result is a frame in which the component tubes are never at rest. At the same time dangerous stresses and strains are imposed upon the tubes by this method.

With the "Brampton" system this danger is quite eliminated provided a reliable builder is called upon to assemble the frame. In the "Brampton" illustrated list full dimensions are given together with a diagram showing the tube lengths and angles, and provided these instructions are faithfully followed the cycle frame is made ready for the road without any initial stress or strain on any tube while the machine is at rest.



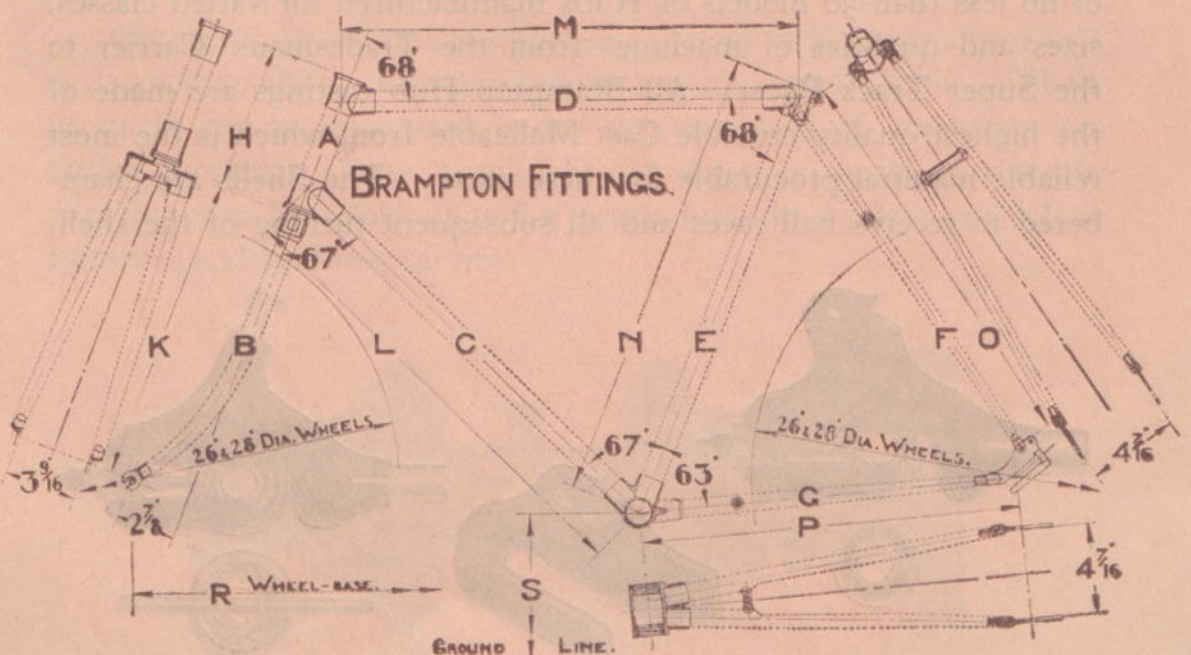


The perfect bicycle should give to road shocks but not to driving pressure, and it must be clear that if a tube which should be dead straight to resist a downward pressure is brazed up slightly bowed the result will be a whippiness where it is undesirable. On the other hand, a fork which is designed to give to road shocks may be too rigid if incorrectly designed or assembled.

Brampton Lugs are designed to give a maximum of strength at the brazing junctions whilst still being light in weight. For the super-critic there is made a set of cut-away and fish-tailed Lugs which give a minimum weight consistent with the standard of safety. A large variety of Crowns is offered including the flat top "D" type, and the flat top round for  $\frac{7}{8}$  in. and 1 in. fork blades, the narrow sloping top and the double plate for oval blades.

It is doubtful whether any manufacturer has gone more deeply into the question of Quick Release Fork Ends and many types have been evolved and marketed.

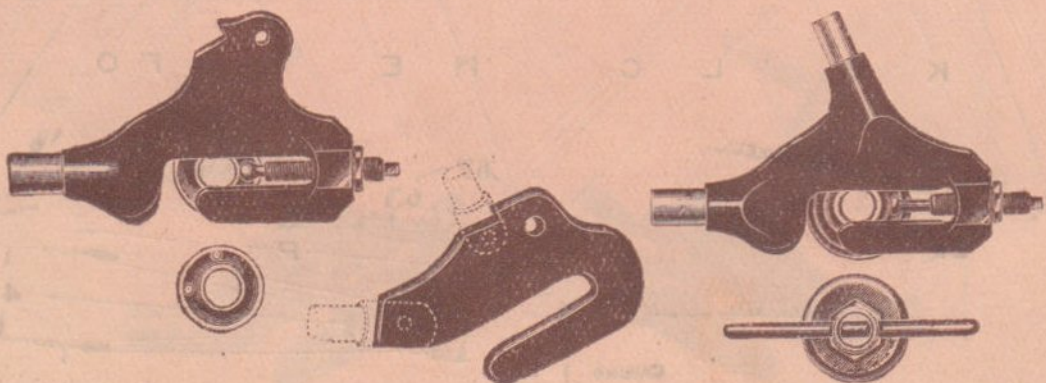
The latest model, the 9S is considered "Quickest of all Quick Releases" there being no loose parts, no fumbling with washers, the wheel is simply turned and the spindle wing nuts tightened up. In addition, the single grooved and three grooved Chain Adjuster Sets can be supplied, and for those who prefer to ride with no chain adjusters at all, and to depend solely upon the spindle nuts, there is the 9U.



Seat Lugs and Rear Fork Ends are so supplied that any size of frame may be built, and the result will be a brazed up Seat Stay Cycle. Lug Sets are manufactured which will enable the builder to supply a cycle with round and "D" tubes, straight round tapered seat and chain stays, cranked round tapered chain stays, in fact, every model which is likely to be called for to-day.

Let us now consider the question of bearings and Bracket Axle, for, as you know, the smooth and easy running of a bicycle depends to a very large extent on the quality and accuracy of these very vital parts. In the Works a rigorous supervision of the preparation and treatment of the raw material is exercised to ensure maximum durability of the finished article. Brampton quality Axles are made from selected low carbon Mild Steel, and carburised by a special process. The core and case are re-heated in such a manner as to produce an Axle with great deflection and minimum liability to fracture under shock. The races are ground, and guaranteed truly accurate. The unique range of Brampton Axles now comprises 44 different sizes, providing a model suitable for every modern bicycle in use. Brampton Bracket Cups are made in patterns and sizes to meet every possible requirement. They are manufactured from low carbon Mild Steel, specially carburised and heat treated. The threads are guaranteed to size, so that no difficulty whatever is experienced when assembling. The Head and Crown Races both for Clip and Expander Head are likewise made so that each individual part leaves the works with the Brampton guarantee of quality and accuracy.

Our bicycle is now a frame well built with first class tubes and complete with all the frame internals. Our attention is now turned to the Wheels for which Brampton Brothers, Ltd., offer you a choice of no less than 30 models of Hubs manufactured for varied classes, sizes and qualities of machines from the Tradesmen's Carrier to the Super Track Racer. All Brampton Hub castings are made of the highest quality crucible Cast Malleable Iron, which is the most reliable material procurable for these parts. The Shells are chambered to receive ball races and all subsequent turning of the shell,





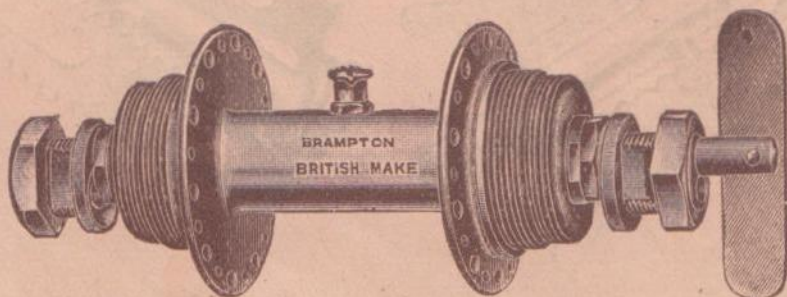
flanges, etc., is done with the cones and balls in position. The result is a Hub in which every part is running in perfect relation to the ball races. Brampton Hubs are fitted with special quality case-hardened cones and cups, dustproof washers, and best quality steel balls.

In the matter of Pedals, again a very full range is offered, Single Rubber, Divided Rubber, Rat-Trap, Rubber - cum - Rat - Trap, and the new Racing Model. All Brampton Pedals are made with hardened spindles, cones and cups and with best quality steel balls. There are patterns and sizes for every class of machine and all are superbly finished, either heavily plated, and polished, or in "ALL-BLACK."

Finally, we come to the question of the driving mechanism, and here it may be said that the adoption of the roller type of chain was the result of decades of practical experience and as yet Engineering Science has failed to evolve any principle superior for Power Transmission on bicycles.

The keen cyclist realises that his chain is one of the vital parts of his machine, and as such demands a certain amount of attention. The chain is, in fact, a series of bearings, and in an average cycle chain there are over one hundred bearings each composed of three parts, and all these parts in a "BRAMPTON" Chain are manufactured to very fine limits and heat treated. Considerable skill and extensive research are necessary to produce a chain which will stand up to modern requirements. It must be remembered that the chain is subjected to really tremendous snatching impulses, particularly in the case of the fixed wheel rider and also that it runs at a disadvantage when compared with the "protected" bearings on a bicycle.

Brampton Brothers Ltd., have one factory in Birmingham which is devoted solely to the manufacture and testing of Chains. Their products are manufactured under the very best of conditions by skilled workmen, from absolutely the finest material procurable and they can be relied upon for great durability, sweet and silent running, and faultless service.



We have endeavoured, Mr. Cyclist, in these few words to convey to you that Brampton Brothers, Ltd., claim a place in that class of manufacturers which realise that you will no longer walk into a cycle shop and demand a bicycle as you might ask for a bundle of firewood. We realise that you know there is a "best yet" and like Jason of old, you are out to find it. It is our endeavour to meet the wishes of the discerning cyclist and although we do not manufacture complete frames or bicycles, we can supply a vast number of parts of a quality which will materially assist you in your search. It is in your interests to specify "Brampton" goods.

Faithfully yours,

**BRAMPTON BROS. LTD.**

