A.J. STEVENS & Co., Ltd., I. :

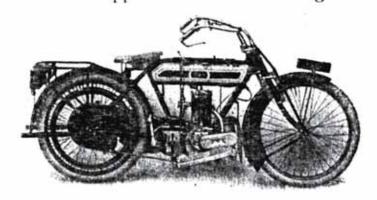
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# OUR FOREWORD.

N placing our Catalogue for the 1913 season in the hands of the public we are sensible of somewhat mixed feelings, of which the outstanding are, firstly, those of real pleasure and gratitude that the past year has contained for us such a universal and spontaneous thorus of approval and praise from those members of the riding public who have placed their confidence with us and our products; secondly, those of genuine regret that owing to the limited capacity of our works we have been the innocent cause of disappointment to a still greater

number of prospective riders, whose orders we have been reluctantly compelled to reuse; and, thirdly, a sense of satisfaction in that the coming season will see not only a notable increase in our works output, under an endeavour to the more nearly approximate the gratifying and ever-increasing demand for our machines, but also



that an inspection by those interested of the real advance and distinctive features incorporated in these our latest models, will do far more towards openly justifying our claims of a maintained all-round superiority over our competitors, than will volumes of unsupported personal claims on our part, although we owe it both to ourselves and those who are yet strangers to the A.J.S. models, that we should carry those interested through the main points of the Company and its productions.

Before passing into such, however, we would take this opportunity of expressing our sincere thanks to users of our machines who have so cindly conveyed to us their appreciation of our efforts; we assure them that personal and voiced approval of such a nature is encouragement far above the mere disposal of one's output-which, however necessary and material to a firm's well-being, tells them little of the manner of its reception by the public, and is in any case prosaic, mechanical and expressionless. Where there is voiced approval it is a personal compliment to ourselves and denotes an enthusiastic owner, besides bringing us more into personal touch with our clientèle; and this knowledge is more than gratifying to those whose personal interest in their products-from the engineering point of view-is not one whit less than that held by the ultimate private owner. We know our machines to be the equal of any and the superior of most-in fact, in their particular class we are satisfied that they yield pride of place to none-but we should not be the enthusiasts we have ever been, if we did not welcome the knowledge that those who use the product of our hands are equally satisfied with its service at their hands.

To those who have, through delay in ordering, been unable to secure delivery of our machines, we have pleasure in stating that while we regret their position as keenly as they, and apologise for our failure to supply, the matter of greatly increasing our output has been in hand for some time past, and we quite hope this season to be adequately equipped to face what has hitherto been an overwhelming demand upon our resources.

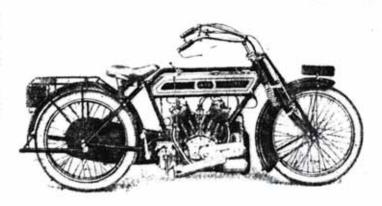
servative nature as capital is limited, but we have felt that we were serving the best interests of both rider and industry alike by retaining sole control of this Company's policy to the exclusion of a body of outside shareholders, whose sole concern might possibly lie in the size of the dividend to the detriment of the goal for which we have worked steadfastly since entering the industry, viz., that of the perfect motor cycle. That such a production has yet to be evolved we are well aware, but hitherto we have spared neither pains nor expense in our search for this ideal, and from our policy it would be impossible for us to deviate -we say this in no self-satisfied spirit, for ignoring the obvious commercial results of a policy which dictates the jettisoning of quality and workmanship in favour of profits, we are, each one of us, too closely and personally concerned with the attainment of the ideal to bestow any attention or time on anything but the best possible, or to suffer the mere prospect of inflated profits to deflect us from our purpose-and the question of extending our works has consequently been delayed until we could see our way clear to carrying this out without in any way sacrificing control of its policy. The deficiency in this respect we hope to make good at the earliest possible moment, and we look forward to supplying the future demand for our models with a minimum of delay to our clients. While sincerely thanking all such for their support in the past, and trusting our policy will merit a continuance at their hands, we would respectfully draw the attention of readers to the detailed description of the many new and improved features to be found in our present models.

# A Retrospect of the A.J.S. Machines and their Sponsors.

Although it was not until the date of the Motor Cycle Show in 1909 that we came before the motoring public as manufacturers of a complete motor cycle, the gratifying manner in which the reputation of our models has won for us in three short years a position second to none in the industry, may undoubtedly be largely traced to the fact that the firm has existed from the earliest days of motoring as a well-established engineering concern, all the principals of which have been cradled, as it were, in the engineering trade from their infancy.

Prior to the passing of the Motor Car Act in 1898—by which date the firm, as general engineers, had already made a good name for itself—so alive were its members to the potentialities of the motor cycle (the evolution of which was at that time just beginning to receive attention and encouragement on the Continent), that they constructed a machine in which was embodied the *then* advanced practice of disposing the engine in the frame. Happily for their enthusiasm and pains the passing

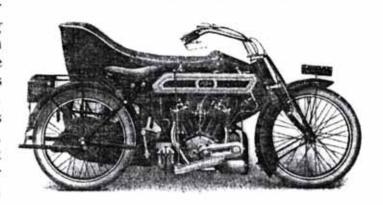
of our now historic Motor Car Act at this time removed the disability of experimenting with it upon the public highway at 5 m.p.h. behind a red flag, and they were thus in the proud position of being the first firm to place an English-made motor cycle on the road—at least, this claim has never been controverted, neither is it conceivable that



appearance and antics created no small stir locally. It is hardly necessary to say that the machine was not chain-driven, but its very existence proved the interest and keenness of its makers regarding the future of the movement.

However, from that date onward the firm devoted its energies to the design and manufacture of both engines and gear boxes for the general motor trade, building up a very sound and far-reaching reputation in the industry for the real excellence of its products, early examples of which may frequently be met with to-day giving perfect service. In this connection it is interesting to recall that as far back as 1904 Mr. G. Barnes

secured, with one of our motor cycle engines at the Canning Town track, the first British hour record, compiling the creditable total of 49 miles 800 yards in the 60 minutes. The fact that our products led the trade 9 years ago is, we would submit, as eloquent of our past experience as our consistency of merit when viewed alongside the results our machines achieve to-day.



#### The A.J.S. Machines.

#### Previous Growth and Effort.

Meanwhile a watchful eye was being kept upon the slow but steady growth of the motor cycle movement, spare moments being devoted to consideration of design and experimental productions of one kind and another, in all of which the firm's practical experience in motor car practice was invaluable to them in an avoidance of weakness or other defect in design.

By the season of 1909 we were convinced that we had evolved a machine which was not only in advance of others for real efficiency, but that from the point of view of simplicity and other qualities it marked a similar step forward. True we marketed a belt-driven model in addition to our chain transmission, but it was more in the nature of an introductory model and a last tribute to a form of transmission which (though enjoying popularity) was, in our judgment, doomed to be succeeded in the near future by more practical notions. How far we were correct in our diagnosis the present trend, with its marked increase in copyists of our method, will undoubtedly convince. Our 2-speed chain-driven model then placed on the market more than justified itself and us, its reception at the hands of the public being emphatic and the demand far exceeding our productive capacity. This signalised the first successful attempt on the part of any firm to design and manufacture a bottom-bracket gear box on car lines throughout and embody it in a machine, in conjunction with chain transmission, in such a manner as to convince the public of the real advantages which such a combination offered over the thenprevailing belt-driven machines with fixed gears, and these two points have remained our outstanding features from that date, results incontestably showing the superiority of this combination when evolved by experienced designers.

#### The Twin Model's Introduction.

Up to and during the 1911 Season we confined our output to the needs of the solo rider; but that year saw the rapid growth of the call for a model adequate to cope with the additional work and strains occasioned by the use of a side-car for passenger work-which was at that time pushing its way to the front through the improvement of the sidecar and the social advantages offered by its attachment. We therefore lost no time in pushing forward the twin model to which we had already been devoting much attention in anticipation of such demand, a season's further work and road trial sufficing to finish what we had begun. motor cycle show held at Olympia saw the introduction of what proved to be for us a further highly gratifying success which was both instantaneous and overwhelming, the demand immediately far exceeding our humble Imitation is a form of flattery at once sincere and encouraging, and we are experiencing it to-day from all quarters, but experience must inevitably hold the advantage, and we possess a lead which places us in what is doubtless, to our competitors, an envious position; for chain drive and the bracket gear will inevitably carry all before it in the long run, particularly in the passenger class where the need for a positive form of transmission is most acutely felt.

### Present Policy and Practice.

Up to last year we had contented ourselves with the provision of a 2-speed gear box, the conditions controlling the industry up to the time the 1912 models were designed calling, in our judgment, for no more than two speeds. But last season saw a phenomenal increase in both the general use and weight of the side-car attachment; so serious did the latter factor prove, that it became necessary for either the engine power to be graded in sympathy or for provision to be made to meet the additional load by a larger range of gears.

The former palliative, if employed to the exclusion of the latter, is to our mind quite unnecessary and wasteful—even futile, while beyond a certain point it would become positively dangerous, and the case has been amply met in the production of our new 3-speed gear box, which is designed on precisely the same lines as its predecessor and retains to the user that necessary margin of reserve which spells comfort when approaching a precipitous ascent. At the same time our power units have been somewhat advanced in b.h.p., improved design and a slight increase in cubical capacity accounting for the results under this head.

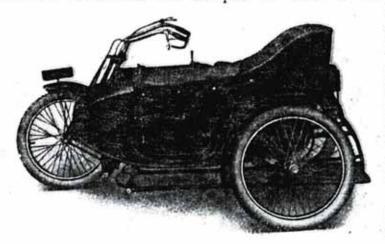
The engine improvements in detail, together with those in connection with the other features of note—including gear box, chain case, new rear brake (on the twin model only), increased clutch area, &c.—will be found dealt with in another part of this catalogue. All the above improvements naturally spell extra expense in manufacture, and the prices of the machines have relatively stiffened somewhat, but we are confident that in adopting such a course we shall, while following the dictates of sound engineering principles, be but voicing the wishes of those thinking riders who realise that faultless construction stands pre-eminently first in the evolution of the perfect motor cycle, and that though initial cost may thereby be enhanced, there can be no comparison whatever between the road service obtained from a cheaply-produced machine and one that embodies all that is best; the latter is not only a continual joy to the rider, but is the infinitely sounder investment as regards performance, cost of upkeep, and ultimate value in the second-hand market.

We would emphasise, too, that our aim has, so far as concerns detail of design, always been directed towards increasing the simplicity and accessibility of the mechanism demanding the user's occasional attention; extreme ease of adjustment and the quality known as "fool-proof" are our guiding stars in going forward with improvements from time to time, for not only is the novice always with us in the rapid advance of the motor cycling movement, but common-sense dictates that even the most expert is justified in looking for relief from the annoyance and irritation to which inaccessibility and difficulty of adjustment gives rise, especially when the necessity for such a fault is obviously non-existent. For a full appreciation of the niceties of such points, and the need for modification and improvement, the machine's designers must also be it riders, and it is doubtless owing in a great measure to the fact that this maxim is observed among all the heads of the firm producing the A.J.S. machines that their reputation on this count alone stands unrivalled.

Ever willing to assist users in any difficulty with their machines, we make a point of dealing personally, and at length, with the replies to queries of this nature; a satisfied user obviously forms the best advertisement, even as a dissatisfied customer perhaps forms the worst, but apart from the commercially logical aspect, the pride we take in our creations forbids us to rest content until we are satisfied that any rider in trouble has been able to give his machine the necessary attention. We hope, however, that a study of our handbook on the management of A.J.S. motor cycles will free users from the trouble of referring to us for assistance; the explanations are in detail and simply treated, and only trouble of an exceptional nature should call for additional instruction.

#### The A.J.S. Side-car.

We have this season introduced a special side-car for use in conjunction with our passenger model, and we have no hesitation in offering this as a product which stands as far in advance of its kindred as does the A.J.S. machine for which it is intended; the chassis is all that a side-car chassis should be, while the body—to the design of which we have devoted special attention—is unique in that it is built entirely of steel with



electrically-welded joints and seams, a construction which represents the only way to secure the desirable combination of maximum lightness and immunity from warping, rattle, and eventual disintegration under hard road usage. For touring purposes its equal does not exist, the degree of locker capacity and personal comfort provided being the last word in such matters, while the finish of

the whole is fully up to the standard of A.J.S. quality—than which we feel no more need be said as a guarantee to those who know our work.

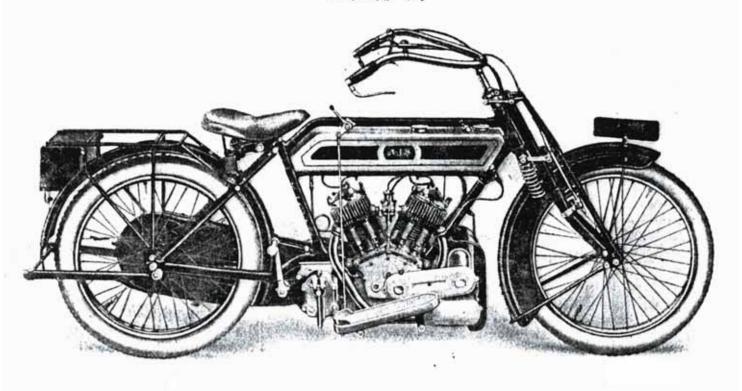
We would refer readers, for further details concerning this attachment, to the illustration and specification of same appearing in our Side Car List.

A perusal of our past successes, both in open and closed competitions, our unsolicited testimonials (a few of which appear at the end of this catalogue), together with the opinion of any friend or acquaintance who

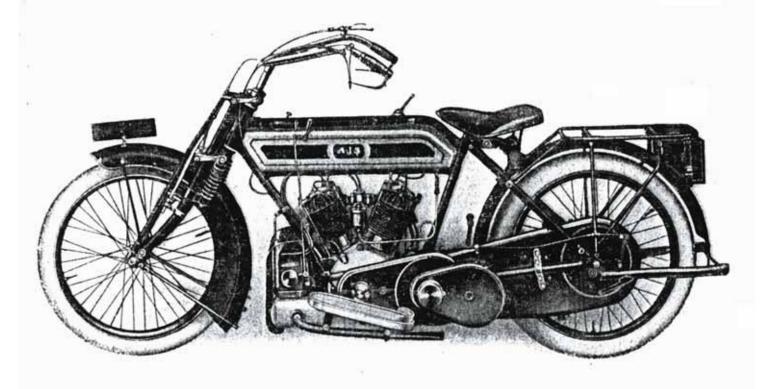


# 6 h.p. Passenger Machine.

Model D.



Fitted with Three-speed Gear, Free Engine Clutch, and Enclosed Chain Drive.



Price - 69 Guineas complete.

# SPECIFICATION.

# 6 h.p. Three-speed Passenger Machine

#### Model D.

Engine.

Twin Cylinder, 74 × 81 m/m, Bore and Stroke, 696 c.c. capacity. Cylinders set at 50°. All Valves mechanically operated and interchangeable. Valve Tappets are adjustable.

Carburetter.

"Amac" Multiple Ict.

Ignition.

"U.II." high tension Magneto, Enclosed Chain Drive, and protected by a wide metal shield.

Tank.

Improved design with rounded edges. Made with one Longitudinal Seam and supported from the bottom on brazed-on brackets. Enclosed Oil Pump (Rotherham). Petrol Injectors, Filter and extra large transparent top fillers. Petrol capacity, 21 gallons. Oil, 11 quarts.

Chains.

"Hans Renold" Motor Cycle Chain, §-in. pitch, §-in. wide.

Stands.

"Kick-up" type, fitted to Fork Ends of back wheel. Stand also

fitted to front wheel.

Oarrier.

Improved design. Built of Steel Tube with all joints flush and electrically welded.

Forks.

Latest Pattern Model A "Druid." Heaviest Pattern.

Wheels.

Fitted with 650 x 65 Flat Base Rims. Hubs extra heavy, fitted with improved Disc adjusting bearings. The adjustment of the hubs cannot be disturbed when removing or replacing a wheel.

Saddle.

Brooks' l'atent B 170. Pan Seat, 301-in. from ground.

Brakes.

Front, Latest "Bowden" Patent, operated by Lever on Handle Bar. Back, extremely powerful, enclosed Internal Expanding Brake, operated by Foot Pedal on left side of machine.

Tool Case.

Special Design. The case is best quality leather, and is protected from the weather by a metal case forming the back Number Plate.

Tools.

A full kit of first quality Tools is provided in Tool Roll.

Foot Boards. New design, with handsome Rubber Matting, and polished Aluminium Bead with Heel Rest.

Gear Box.

New design Three-speed Bottom Bracket Gear, fitted throughout with Ball Bearings. Operated by Gear Lever on Top Tube. Gear ratios, 43-74 and 121 to 1.

Starting.

Improved design "Kick-down" Starting Device, enclosed in Chain Case. The Engine can be started without leaving the saddle and with back wheel on the ground.

Free Engine Clutch.

Improved design Multiple Plate. twice the original friction surface. Five plates are now fitted, giving Operated by lever on the handle bar. The only correct position.

Chain Cases

Entirely enclose the chains, and are Dust, Mud and Waterproof. Important Note.—The Back Wheel, Clutch, Sprockets, Chains and Kick Starter can be removed without dismantling the Chain Case.

Tyres.

Hutchinson 650 x 65 Light Car Rubber Studded Non-Skid, on flat base rims.

Finish.

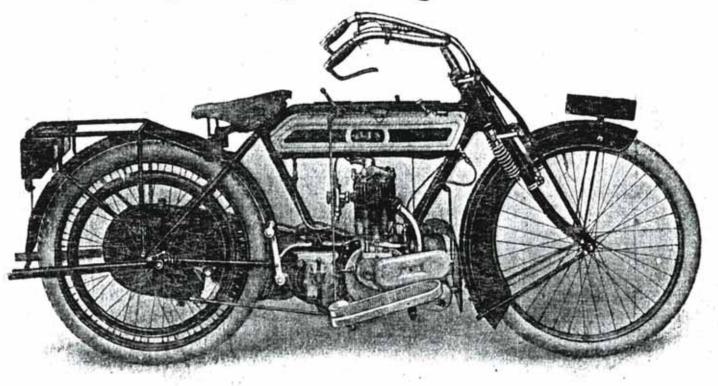
Black Enamel, four coats on one special coat of Rust Preventative. All usual parts heavily Nickel-Plated, excepting the Rims and Hubs, which are Enamelled to save cleaning. Tank, Aluminium, with Black Panels, and Lined Green.

Wheelbase.

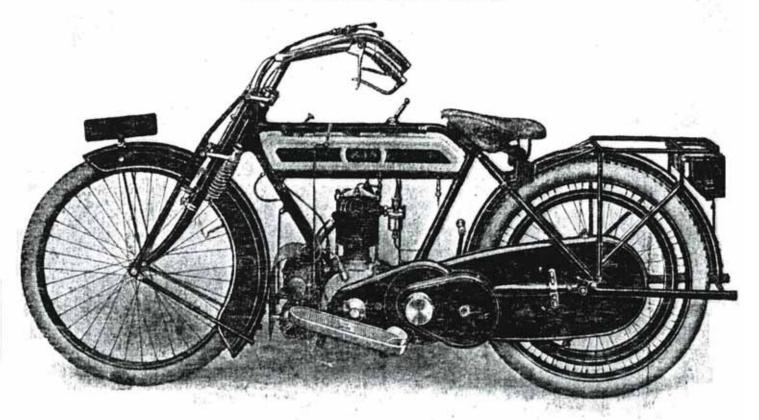
4-ft. 9-in. Weight. 255 lbs. Crank-case Clearance. 51-in.

Number Plates. Fitted ready for numbering.

Rear Light. A Reflecting Rear Light is fitted to back of machine. 2<sup>3</sup>/<sub>4</sub> h.p. Lightweight. Model B.



Fitted with Two-speed Gear, Free Engine Clutch, and Enclosed Chain Drive.



# Price - 46 Guineas complete.

THREE-SPEED GEAR, FIVE GUINEAS EXTRA.

## SPECIFICATION.

# 23 h.p. Lightweight.

#### Model B.

Engine.

Single Cylinder, 70 x 91 m/m, Bore and Stroke, 349 c.c. capacity. All Valves mechanically operated and interchangeable. adjustable.

Ignition.

"U.II." high tension Magneto, Enclosed Chain drive, and protected by a wide metal shield.

Carburetter.

"Amac" Multiple Jet.

Tank.

Improved design with rounded edges. Made with one Longitudinal Seam and supported from bottom by brazed-on brackets. Enclosed Oil Pump. Petrol Injector. Filter and extra large transparent top Fillers. Petrol capacity, 11 gallons. Oil, 1 quart.

Chains.

"Hans Renold" Motor Cycle Chain, gin. pitch, 1-inch wide.

Stands.

"Kick-up" type, fitted to fork ends of back wheel.

also fitted.

Carrier.

Built of Steel Tube, with all joints flush and Improved design. electrically welded.

Forks.

Latest Pattern Mcdel D "Druid."

Wheels.

26 x 21-in. beaded edge rims.

Saddle.

Improved design. Height from ground, 30-in.

Brakes.

Front, latest pattern Bowden Patent, operated by lever on handle bar.

Foot brake to back wheel.

Tool Case.

The case is best quality leather and is enclosed in Special design.

metal case forming Number Plate.

Tools.

A full kit of tools is provided in tool roll.

Foot Boards.

New design, with handsome rubber mattirg and polished Aluminium

Bead with Heel Rest.

Gear Box.

New design Two or Three-speed Bottom Bracket Gear, fitted throughout with Bill Bearings. Operated by Gear Lever on Top Tube. Gear ratios, 5½ and 10½ to 1 (Three-speed 5, 7½ and 12 to 1).

Starting.

Improved design "Kick-down" Starting Device, enclosed in Chain The Engine can be started without leaving saddle and with back wheel on ground.

Free Engine. Improved design Multiple Plate, operated by lever on handle bar. The only correct position.

Chain Cases Entirely enclose the Chains, and are Dust, Mud and Waterproof. Important Note.—The Back Wheel, Gear Box, Clutch, Sprockets, Chains and Kick Starter can be removed without dismantling the Chain Cases.

Tyres.

Hutchinson 26 × 21-in. Heavy Rubber Studded.

Finish.

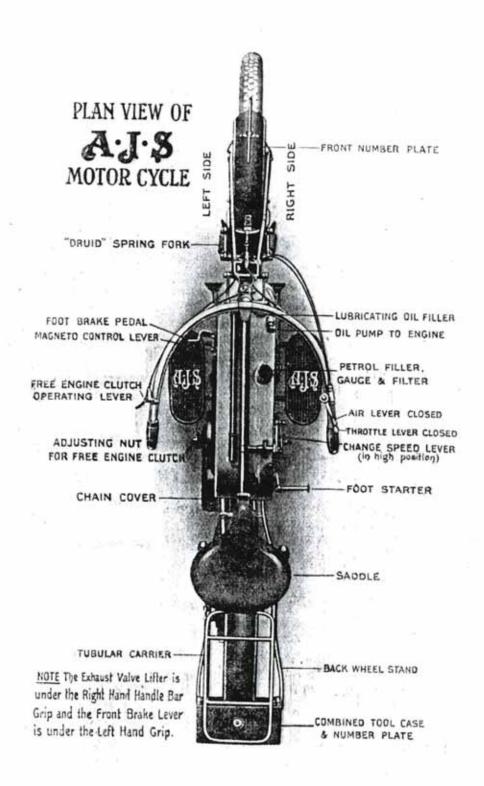
Black Enamel, four coats on one coat of special Rust Preventative. All usual parts heavily Nickel-Plated, excepting the Rims and Hubs which are Enamelled to save cleaning. Tank, Aluminium, with Black Panels, lined Green.

Wheelbase. 4-ft. 4-in. Weight, 150 lbs. Crank-case Clearance. 6-in.

Number Plates. Fitted ready for numbering.

Rear Light. A Reflecting Rear Light is fitted to back of machine.

# A:J:\$



# "The Perfect Motor Cycle."

# Special Features and Constructional Details

of the A.J.S. Models.

In compiling the following remarks on the Constructional Details of our machines, we give special prominence to the four cardinal points which have served to build up the A.J.S. reputation, viz.:—Engine, Transmission, Simplicity (both in construction and adjustment), and Ease of Control. These features undoubtedly form the heart of a machine, and upon their reliable and efficient character the good name of any mount broadly speaking-stands or falls. At the same time, refinements and aids to general comfort have been embodied in other parts of our models wherever such have been found possible or expedient.

#### Engine.

While having introduced no radical alterations to our power units for the present season, we have slightly increased the cubical capacity of each, which, in conjunction with the following improvements in general design, gives results which it will indeed be hard to beat for general practical road use; the horse power is materially increased, flexibility and slow running are most marked, while a high speed is there for the asking, although—as our clients are aware—we have never allowed this feature to become a fetish with us to the exclusion of qualities far more important in a touring vehicle where hard and constant use is demanded with the minimum of attention. All the world is a compromise, and in no case does this truth apply with greater force than in the production of a motor cycle engine for all-round road work. Vibration has been still further eliminated from the higher speeds attainable, resulting in a power unit which, in its class, is still unapproached for smooth working by any of our rivals, while those who know our machines and their remarkable silence will appreciate the statement that to-day the A.J.S. is more conspicuous than ever in this respect. Several details have combined to this end, including a re-designed and larger silencer with a tube extension, larger valves (these are made from nickel steel, and no case of valve breakage has been recorded against us during last season), a stream line design of both inlet and exhaust ports of increased diameter abolishing all obstructions to an uninterrupted ingress or egress of gases, eccentrically disposed balance-weights on flywheels, long valve and tappet guides, the employment of but a single rocker arm in the timing case, and the adoption of a special alloy for certain of the bushes, indefinite

wear being thus obtained; moreover we are convinced of the superiority of plain bearings for internal combustion engines, and we employ these throughout, past results proving our contention on this point. Here, as in other respects, we base our policy on the experience acquired by the best designers of motor car engines; they have, despite the more favourable conditions under which the multi-cylindered car

engine works, found the use of ball bearings unsuited to the work. Where the destructive action of a rapidly alternating load weight is absent, and a fairly smooth and regular load is to be carried, there is nothing better than the ball bearing if it is of adequate dimensions, and we fit such throughout to our gear box.

A.J.S. 6 HP ENGINE.

The piston, which is of a special alloy and unbreakable is drilled around its lower wall for the purposes of lightness and lubrication;

it has a flat top and the employment of but two rings has been found ample. The gudgeon pin is a good "push-in" fit in its housing, thus preventing any possibility of distorting the piston through undue tightness; a dowel-pin fitting obviates any tendency for it to revolve, and a snap-on ring of deep section serves to retain it in position; this design abolishes all possibility of the troubles possible with set-screws. The pin is hardened and ground, being also drilled throughout its length for lightness. The cylinder head follows our usual practice and is detachable, a feature enabling us to produce a marfactle

#### SPECIAL FEATURES, &c.-Continued.

Our method of fixing the cylinders and heads by means of holding-down bolts and cross-members renders these parts far easier and quicker of removal than that of the usual practice, and makes for a "cleaner" job of the cylinder bases; we do all possible to produce a unit containing as few crevices as possible for the retention of dirt, and to this end refrain from following the accepted principle of casting the firm's title upon the crank-case; the practice is moreover commercially superfluous in our case as we do not supply our engines to other firms. They are found only upon the A.J.S. machines.

Very stout timing wheels, integral with large cams cut from the solid, large diameter crank pin, and a special method in our twin model of mounting the connecting rods on the crank pin-whereby both members are given the maximum bearing surface, are some of the more important minor features now embodied in our models, while there are many lesser points making for the convenience of the user and the general efficiency of the unit which have received close study and attention; their detailed mention is, however, unnecessary.

We should like to say a word concerning the thoroughness of our engine tests. Prior to the bench test proper, each complete unit is "run in" for several hours at moderate speed by independent power in the assembling shop; after this christening it is fixed upon the specially constructed bench for test under its own power, which, we may mention, has to reach and maintain a standard set up by ourselves, and far in excess of the nominal rating. The test is by fan brake in conjunction with meter and is continued for several hours, a notable point in connection being that no artificial means of inducing a special draught of air upon the engine is employed—the unit is, in actual fact, working under much more trying conditions than are experienced in road practice, and the results speak for themselves on the overheating question. Finally, every machine receives its searching road test at the hands of one of the principals, it being felt that this work demands more interested and conscientious attention at the hands of the rider than one can necessarily demand from an employee.

Last season's experience has brought to light nothing to modify our view Magneto. of the superior qualities of the U.II. magneto-consequently we again

pin our faith to this make, and in so doing supply what has proved itself to be the acme of efficiency under all conditions; it is as near perfection as anything can be in the motor cycle, and needs less attention than any other system we have tested.

It is really waterproof-in contrast to some which are waterproof in name only-and will run for many thousands of miles without reminding one of its existence on the machine, vaseline being the lubricant employed, and the bearings being so constructed that this is retained almost indefinitely. Cleaning and adjustment is recommended after 15,000 to 20,000 miles, and its accessibility and simple design allow of complete attention in the course of a few moments.

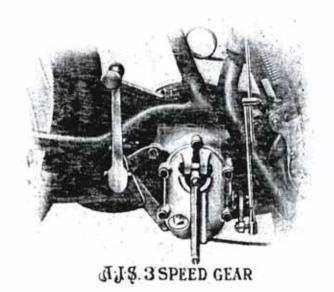
Our method of carrying the magneto on its cradle allows of an exceptionally ready adjustment of the chain drive, at the same time automatically ensuring perfect alignment of the latter; locking nuts and retaining plate are at the side of the cradle, in full view for ready treatment—we do not ask riders to grope blindly in the dirt and darkness of the underside for the necessary adjustment of chain tension.

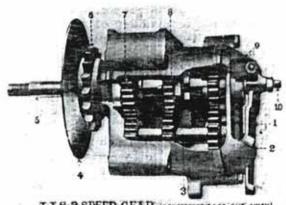
## 3-speed Bottom-Bracket gear is on pre-Gear Box and Clutch.

Our new model change-speed cisely similar lines to our 2-speed models of last season, the inclusion of

an additional ratio having called for no increase in number of parts, while the overall dimensions and weight are but slightly in excess of the smaller unit.

For our 6 h.p model the mechanism has been given a large reserve of strength and retains throughout the characteristics of its predecessor, being built on car lines, as is also the lightweight model. intelligent inspection of this gear box serves to emphasise the pitch of excellence at which the motor cycle of to-day



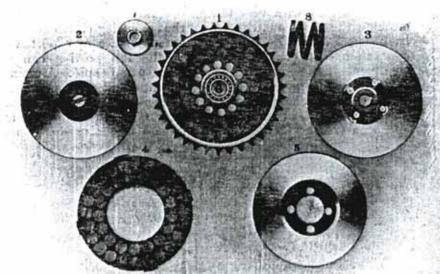


(I.J. S.3 SPEED GEAR (PORTION OF CASE CUT A

are and accuracy bestowed on their production, the closeness of the work being every whit the equal, if not the superior, of that obtaining in a car gear box. Ball bearings are employed throughout for the shafts, which are short and . stiff and of large diameter, the result being absence of "whip" and unpleasant Filled to the top of the gear humming. oil sump with lubricant it requires no other attention, and to maintain a clean exterior we provide for the invisible escape of surplus oil from the shaft end. Engagement of middle gear is by sliding pinion, and the high and low by means of dog clutches, the latter wheels remaining.in mesh.

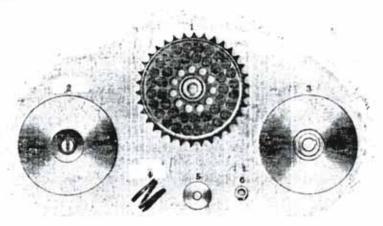
The clutch is mounted on an extension of the primary shaft outside the box, and is composed of plates provided with cork insets engaging with alternate steel discs keyed to the shaft but free to move laterally upon it; the pair of cork members-one of which is the driven chain sprocket- are mounted idly upon it, but transmit the drive thereto

when engaged by the alternately disposed plates Engagement and release of the members is effected by means of an operating pin working within the drilled shaft; this is actuated by cable from the handle bar, the pin thrusting back the outside clutch and spring by means of a cross-key working within the slotted The system is simplicity itself and the wearing qualities unequalled, one of the merits of cork as a clutch medium being that it is almost impossible for it to burn or seize through slipping, while for sweetness of engagement there is nothing better. On the



ALS 6 HP CLUTCH PARTS.

score of its wearing qualities we might remark that during the three years we have fitted our present clutch system we have never had to renew the cork insets on any machines from reasons of wear. Our practice of fitting handle bar control for the clutch is admittedly right and is universally appraised, but we stand almost alone on this point. The delicacy of manipulation required for satisfactory clutch operation is such, that, on a motor cycle, the foot is incapable of imparting it owing to its being constantly under the influence of road shock and consequent jerkiness; moreover the foot is possibly at the moment of clutch use in great demand for either operation of the brake or for maintaining equilibrium of the outfit by contact with the ground-if riding solo.



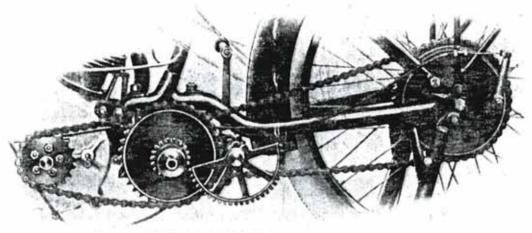
Last season we employed ... only 50% of the present clutch surface to be found in our twin model; it proved ample for all ordinary purposes, but to meet present tendencies and the increased horse power of our unit we have made assurance doubly sure by the provision of this 100% increase of area. This does not apply to our lightweight model which remains unaltered in this respect. A further feature in our transmission on the single

sprocket being mounted on a sleeve between fibre discs and held in frictional engagement therewith by a coil spring similar to that employed for the clutch proper, the adjustment being alike in each case; chain drive in the case of a single cylinder engine demands a slipping medium to absorb harshness or jerk, and there are two ways of providing it, viz., by a cushion form of drive or by the infinite slip method. We adopt the latter as being, in our judgment, unquestionably the better in every way, the cushion drive being undeniably positive although allowing a very limited "give" before transmission occurs; moreover, a certain modicum of rebound succeeds each impulse, destroying smoothness of action. The slipping clutch offers none of these disadvantages. It is there to do what it is required to do (viz., impart to the efficiency of the chain drive the sweetness of an elastic form of transmission, without the rider being conscious of its inclusion on the machine) and does it, but can at any moment be virtually converted into a positive drive by screwing home the adjuster. Hitherto we have fitted our twin with the slipping clutch, but experience has shown its incorporation to be totally unnecessary where the evenness of torque obtainable on a twin cylinder is concerned. We therefore, as above stated, now confine this detail to our  $2\frac{\pi}{4}$  h.p. model.

### Fully Enclosed Chains.

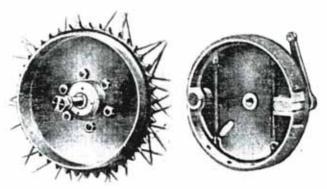
The problem of providing efficient dustproof and watertight chain cases lies not so much in the bare attainment of the feature as in ensuring that their provision affects, in no marked degree, the general accessibility of parts which should remain easily get-at-able, and we are glad to say that we have obtained this desirable end in the cases we are fitting to our 1913 models; while serving to afford complete protection to the transmission

and kick starter mechanism, their design enables every part requiring periodical inspection to be laid bare in a very few moments. The front of the case is removed by merely slacking the pins round its edge, thus exposing clutch and kick starter, while removal of the back wheel entails only the detachment of the rear portion and the uncoupling of brake connections and chain. If required the top portion can be taken off in a trice, while treatment of the lower half is just as easy and rapid. Aluminium dust caps, easily removable, cover the adjusting nuts to both clutches, and with mention of these we exhaust the various points where the accessibility question can possibly run counter to the principle of enclosing the drive which, apart from rendering the transmission silent, imparts indefinite life thereto and secures the maximum of work with the minimum of attention.



J.J.S. TRANSMISSION.

Rear Drum Brake. . . This feature, which we introduce for 1913, is undoubtedly one of the most important innovations, from the point of view of the rider's absolute safety; its adoption is confined to our twin model and provides a very powerful instrument for emergency, while it can on the



ALIG INTERNAL EXPANDING BRAKE

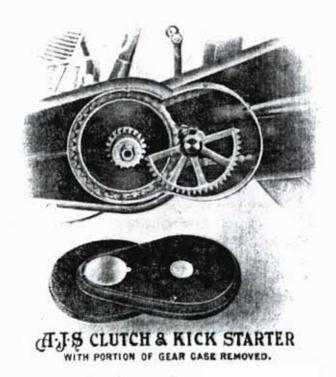
other hand be used with great delicacy of engagement, being very sweet in action. It is cable-operated by foot pedal on the left side of the machine, is of large diameter, and the camoperated wide slippers are Ferodo-lined and expand internally upon a powerful drum carried integral with the chain sprocket on the rear hub. The mechanism is very stoutly constructed and follows the best car engineering practice; it requires no attention beyond very infrequent adjustment which is effected in a moment. With a brake of this nature one's sense of security is never in doubt

## Kick Starter.

This device, as before mentioned, shares with the chains the advantages of working under a full measure of protection

from dust and other abrasive road matter. It is operated by the right foot through a spring-controlled crank, the shaft being mounted in a bracket carried behind the gear box, and the position afforded being a natural and comfortable one for the rider to adopt for this purpose. Attached to the other end of the shaft is a toothed quadrant, engaging with a gear wheel mounted upon the outer clutch plate.

This fitting finds a place on both our models as standard.



#### Carburettor.

We pin our faith to the AMAC multiple jet carburettor which has served our riders so well since we adopted it. The improved model provides a measure of automaticity which tends to render it extremely simple of manipulation to the novice, while its construction and principle allows for a large

range of adjustment at the hands of the expert if he be so inclined, the choice of jets, and corresponding barrel valves of special shape, being so proportioned that while the best results can be achieved by a skilful use of the air lever in conjunction with the throttle, use of the latter alone, with the air lever fully open, will yield results equal to those of many 2-lever carburettors demanding the intelligent use of both levers.

#### General.

Other features which go to make up our machine, and are worthy of a passing mention, are as follows:

(1) LARGE CAPACITY TANKS, which are now supported from the bottom upon brazed-on cross-brackets to the middle tube. The oil pump is a "Rotherham," and petrol inspectors are supplied in both models.

Incorporated with the petrol filler is our new patent gauge and filter, which shows at a glance from the saddle, through the transparent filler-cap, how the rider is faring for fuel.

- (2) MUDGUARDING has received much attention and the new models will be found to afford a full measure of protection in this respect. The rear guard of the twin model is of extremely wide section, while the forward one carries deep valances; the magneto is, in addition, protected by a large shield which keeps it clear of mud and dust-and, incidentally, water-although, as already stated, it is indifferent to the question of rain or accidental drenching.
- (3) SILENCE is a feature upon which we have always centred much attention, and it is not to be wondered at that, in the circumstances, there are few machines on the market which can approach us on this count. We do not obtain our results at the expense of power, our machines' performances both in open competition and private use showing this plainly. Many other makes of machine giving off more than double the noise do not

#### SPECIAL FEATURES, &c.-Continued.

We have re-designed and increased the dimensions of our silencer, which, disposed under the magneto cradle, is out of the way and forms no eyesore.

- (4) RIMS AND TYRES are of a stronger pattern than on last year's passenger model, the former being of light car type with flat base, and the 650 × 65 mm. Hutchinson light car tyres may be relied on to give the best service. Tyres of 2½-in, section are retained on the lightweight model.
- (5) EASE OF CONTROL is a point we have always kept in the foreground and it is still receiving every attention, as a perusal of the foregoing should prove, and we say unhesitatingly that our models are far simpler and steadier to handle than the majority. Apart from the points to which we have already given prominence, the question of correct weight distribution is of vital importance to this end, as matters of balance and stability materially affect ease of control, and with the weight disposed centrally in the machine we claim to have it in the right place, obviating that seeling of instability at low, and uncontrollability at high speeds, to which an incorrect disposition of weight so frequently The rear wheel is the wrong place for a gear box; it exposes it to undue shock, gives the rear tyre and wheel itself an unnecessary share of the total weight of machine and rider, and robs the two-wheeler of a considerable measure of stability and ease of control which its presence in the bottom bracket would ensure. We need say no more on the point than to state that Mr. Henry Sturmey, whose interests and sympathies are closely allied with the hub gear for pedal cycles, has openly stated-in the technical press-his opinion that the rear hub is the wrong place for the gear when wiblied to a motor cycle.
- (6) STANDS for front and rear wheels, specially strong in build; a rear carrier of new design, capable of supporting a great weight; a very low saddle position, and special design of rear tool case and container—these are additional points which, in the A.J.S., evidence our determination to turn out a motor cycle that for real utility and hard and prolonged service takes its stand in the van of the industry. A perusal of the specifications of both our models, together with a study of the illustrations, will, we trust, make clear any point omitted from the foregoing.

#### Choice of Machine.

A final word. We have in this catalogue used the term "passenger model" when referring to our twin machine. This is merely to emphasise that it is eminehtly fitted for this class of work, as opposed to our lightweight which is essentially a solo mount; while the latter is, we claim, the machine par excellence for the soloist who desires a handy mount capable of going anywhere (but is not anxious to make a prodigiously high average speed), it is out of the question for serious side-car work. On the other hand, our twin model is the ideal solo machine for those riders who desire all the attributes of a highclass mount-speed, flexibility, and ample power with marked docility; this model is just as handy to control solo as when harnessed to a side-car, a feature of the engine being its pulling qualities at very low speeds, besides its ability to turn over very fast. While for all-round touring solo work the standard passenger gear ratios (giving 42 to 1 on top) are quite suitable, allowing a speed of 50 m.p.h. without unduly pushing the engine, we supply alternative engine sprockets giving a higher set of ratios when desired. In a nutshell, the matter is summed up by the statement that while the 23 h p. model is a go-anywhere solo mount, capable of any amount of hard work in this capacity and possessing a flexibility allowing of speeds from 4 m.p.h. to 40 m.p.h. or over, the 6 h.p. twin possesses that latent power and speed which, though but seldom called upon, is dear to the heart of many a keen solo rider who chafes at the limitations imposed by the smaller model.

In all the most important Reliability Trials, Hill Climbs, etc., the A.J.S. has always been consistently successful in spite of the fact that the majority of the awards have been gained by private owners. The intending purchaser will save much disappointment and money if he avoids the class of Motor Cycle that only succeeds when driven by a skilled Trade Rider, on a machine almost invariably made for the purpose. Whether driven by expert or amateur the A.J.S.—in the words of a delighted owner—is "A DEAD CERTAINTY."

Up to the time of publishing this List the A.J.S. has been awarded:—

Eighteen Silver Cups. Sixty Gold Medals.

Thirty-seven Silver Medals. Twenty-six First Prizes.

Ten A.C.U. First-class Certificates

and numerous other awards of which we do not know the naturo.

- A.C U. Quarterly Trial, July 23rd, 1910. Highest Award, 1st Class Certificate.
- M.C.C. 12 hours Reliability Trial, August 1st, 1910. Two Silver Medals.
- A.C.U. Quarterly Trial, October 12th. 1910. Highest Award, two 1st Class Certificates (The only team of Lightweights to finish).
- M.C.C. 24 hours Mid-Winter Reliability Trial, December 27th and 28th, 1910. Highest Awards, Three Gold Medals.
- A.C.U. Quarterly Trial, Janury 28th, 1911. Highest Award, 1st Class Certificate.
- Irish Reliability Trial, January 28th, 1911. Full Marks.
- M.C.C. London to Land's End and back Reliability Trial, April 14th to 17th, 1911. Silver Medal.
- A.C.U. April Quarterly Trial. Highest Awards, Two 1st Class Certificates. (Only four other machines out of 42 competitors gained First Class Certificates).
- Leicester and District M.C.C. Hill Climb, May 18th, 1911. First on time and formula. First Prize.
- M.C.O. London to Edinburgh Reliability Trial, June 2nd & 3rd, 1911. Two Gold Medals.
  Birmingham M.C.O. Reliability Trial, Birmingham to Land's End and back, June 3rd, 4th, and 5th, 1911. Two Gold Medals.
- A.C.U. Tourist Trophy Race in the Isle of Man, June 30th, 1911. Two machines entered and Two finished Fifth and Sixth in Single Cylinder Class. Mr. J. D. Corke (an amateur rider) was the Third private owner to finish.
- A.C.U. (Midland Centre) Hill Climb at Wenlock. Qained First Place and Gold Medal.
- A.O.U. (Midland Centre) Speed Trials, Sutton Park. Second Place in Unlimited Class, and Third Place in Lightweight Class. Awarded Silver Medal.
- A.C.U. Quarterly Trial, July 22nd, 1911. Highest Awards, Two 1st Class Certificates.
- Manchester M.C.C. Hill Climb. Gained First Prize and Silver Cup awarded by Messrs. The Triumph Cycle Co, Ltd.
- Newcastle and District Motor Cycling Club 400 Miles Reliability Trial, August 5th and 7th, 1911. Awarded "N.S.U." Cup.
- A.C.U. Six days 1,000 Miles Reliability Trial, August 14th to 19th, 1911. Two machines entered and two awarded Silver Medal.
- Leicester and District Motor Cycle Club Hill Climb, September 28th, 1911. First on Time and Formula.
- Liverpool Auto Cycle Club Reliability Trial, October 7th and 8th. 1911. Awarded The Club Gold Medal and The Fifty Guinca Challenge Cup. (The A.J.S. was the only machine to make a Non-Stop Run and Climb all the Hills on the course).
- A.C.U. Quarterly Trial (Midland Centre) October 14th, 1911. Again awarded Two First Class Cortificates. Extract from "Motor Cycling."—"The A.J.S. Machines, as usual, came through with clean sheets, thus bringing to a close a remarkable run of successes for the present year."
- Bristol Bicycle and Motor Club Reliability Trial and Speed Judging Competition. The A.J.S. First.
- Sutton Coldfield A.C. Two Days Reliability Trial, December 16th and 17th, 1911. Bronze Medal.
- M.C.C. Winter Run, London to Exeter and back, December 26th and 27th, 1911. 5 h.p. and 8ide-car. Gold Medal.
- North West London M.C.C. Open Trial London-Gloucester, December 30th, 1911. Silver Cup.
- Herts County A.C. Quarterly Reliability Trial, January 20th, 1912. Made Non-Stop Run. The Surrey & Streatham Motor Cycle Clubs 150 Miles Reliability Trial, February 3rd 1912. Made Non-Stop Run. Awarded Silver Medal.
- Sutton Coldfield A.C. Open Reliability Trial, February 17th, 1912. 5 h.p. Machine and Side-car, made Non-Stop Run. Awarded Silver Medal; also 2½ h.p. Machine made Non-Stop Run and Awarded Silver Medal.

The last of the Paragraph of the Walter Cont.

- New Zealand M.C.C. Two Days Reliability Trials, March 12th, 1912. 21 h.p. A.J.S. secured the only Non-Stop Certificate. Was first on formula, and made fastest time in the Hill Climb. Also Second Place in Petrol Consumption Test.
- Manchester M.C.C. Reliability Trial, April 5th, 1912. Private Owner secured the Liewellyn Cup and 1st Prize.
- M.C.C. London—Lands End—London Reliability Trial, April 6th and 8th, 1912. 5 h.p. Machine and Side-car, Awarded Gold Medal. 2½ h.p. awarded Silver Medal.
- Liverpool A.C.C. Reliability Trial, April, 13th, 1912. Awarded Certificate for finishing to schedule time and climbing all hills on course.
- Wolverhampton M.C.C. Reliability Trial. Awarded Two Gold and One Silver Medals.
- Wolverhampton M.C.C. Two Days Reliability Trial, April 27th and 28th, 1912. Gained First Prize for best Amateur performance. Second Prize, and also First Prize for best performance of a Side-car Machine.
- Streatham and District M.C.C. Hill Climb on Titsey Hill, April 27th, 1912. 21 h.p. gained Second Place.
  - Newcastle and District M.C.C. All Night Run to Edinburgh and back, April 27th, 1912.

    Awarded Silver Medal.
  - Mersey M.C.C. 24 Hours Trial, May 3rd and 4th, 1912. Awarded Gold Medal.
  - Mid-Staffordshire A.C. Reliability Trial, May 18th, 1912. 5 h.p. and Side-car First in Order of Merit and awarded Gold Medal.
  - M.C.C. London to Edinburgh, May 24th and 25th, 1912. Awarded Three Gold Medals.
  - M.C.U. London to Edinburgh—London, May 24th and 25th, 1912. Awarded Two Gold Medals.
  - Birmingham M.C.C. Birmingham-Land's End-Birmingham, May 24th and 25th, 1912.
    Awarded 5 Gold Medals.
  - Hamilton and District M.C.C. Hill Climb, June 22nd, 1912. 5 h.p A.J S. awarded First and Second Prizes.
  - Cork and District M.C.C. Hill Climb, July 3rd, 1912. Sido Car Class-5 h.p. A.J.S., First.
  - Dublin and District M.C.C. Hill Climb, July 6th, 1912. Gained First Place and made Fastest Time.
  - Maidenhead and District M.C.C. Reliability Trial. Awarded First Prize.
  - Glasgow M.C.C. 12 hours Trial, July 6th, 1912. J. Bell, 5 h.p. and Side-car. The only one to make a Non-Stop Run.
  - Wolverhampton M.C.C. Reliability Trial, July 21st, 1912. Awarded Silver Challenge Cup and Gold Medal.
  - Scottish Six days 1,000 miles Trial, July 22nd to 27th, 1912. Mr. A. Downie, 27 h.p. A.J.S. awarded Gold Medal and Special Prize for the Best Performance of a Lightweight.
  - Newcastle and District M.C.C. Two days Reliability Trial, Aug. 4th and 5th, 1912, 3 h.p. A.J.S. and Side-car, awarded Gold Medal. 2½ h.p. A.J.S. awarded Silver Cup.
  - A.C.U. Six Days 1,000 Miles Trial, Aug. 12th to 17th, 1912. Five machines entered and all gained Gold Modals; also the Silver Cup for the Best Performance of an Amateur on the Test Hills.
  - Gordon Roberts Reliability Trial (Newcastle), Aug. 24th and 25th, 1912. 21 h.p. awarded First Prize (value 5 Guineas). 5 h.p. and Side-car awarded Second Prize.
  - Bevan Gould Reliability Trial and Hill Climb (Newcastie), Sept. 22nd, 1912. Reliability Trial—2½ h.p. awarded Silver Cup and Silver Tankard. Hill Climb—2½ h.p. awarded Silver Challenge and Silver Medal.
  - Bristol B. and M.C. Reliability Trial, Sept. 21st, 1912. 2} h.p. awarded First Prize.
  - Stockport M.C.C. Speed Trial, Sept. 21st, 1912. 2} hp. awarded First Prize.
  - Sheffield M.C.C. Reliability Trial, Sept. 14th, 1912. Awarded Two Silver Medals.
  - Liverpool M.C. Open Reliability Trial. Sept. 28th, 1912. 27 h.p. awarded Special Gold Modal and a further Special Prize for Best Performance of a Lightweight.
  - South Australian M.C.C. Reliability Trial, 1912. 5 hp. awarded First Prize.
  - Mersey M.C.C. Hill Climb, Pen-y-Ball, Oct. 12th, 1912. 23 h.p. makes Fastest Time, First on Formula, awarded Two Gold Medals and Special Prize for Best Performance of a Novice.
  - Stockport M.C.C. 100 miles Reliability Trial, Oct. 13th, 1912. 21 h.p. Second for Talbot Cup and awarded the only Gold Medal.
  - Liverpool A.C.C. Hill Climb at Rivington Pike, Oct. 19th, 1912. 6 h.p. and Side-car awarded Silver Medal.
  - Essex M.C. Reliability Trial, Oct., 1912. 5 h.p. and Side-car gains highest award, Silver Medal.
  - Bradford M.C.C. Reliability Trial, Oct. 19th, 1912. Two Amateur Riders on 2½ h.p. and 5 h.p. and Side-car finished to time and made Non-Stop Runs. Awarded Silver Medal.
  - Stockport M.C.C. Hill Climb, Oct. 12th, 1912. 2} h.p. awarded Gold Medal.
  - Essex M.C. Speed-Judging Competition, Oct., 1912. Private Owner awarded Silver Medal.

- M.C.C. London—Exeter—London Winter Run, Dec. 27th-28th, 1912. Awarded Four Gold Medals and One Silver Medal.
- Edinburgh M.C.C. Reliability Trial, Feb. 15th, 1913. 6 h.p. and Side-car awarded Gold Medal.
- Sutton Collegeld M.C.C. One day Trial, Feb. 15th, 1913. Two 5 h.p. awarded First Amateur Prizo-Silver Cup and Two Silver Medals.
- A.C.U. Spring One day Trial, Mar. 1st, 1913. 6 h.p. and Side-car awarded First Class Cortificate and Silver Medal. The only Private Owner to gain a F.C.C. and Medal.
- Wolverhampton M.C.C. One day Trial, Mar. 9th, 1913. Awarded First Prize—Gold Medal; also gained First and Second Amateur Prizes.
- M.C.O. London—Lands End—London Reliability Trial, Mar. 22nd, 1913. 6 h.p. and Side-car and 21 h.p. awarded Two Silver Medals.
- Cumberland and Westmoreland M.C.C. Reliability Trial, Mar. 21st, 1913. 21 h.p. Finished on time, awarded Bronze Medal. Motor Cycling, April 1st, says "This was one of the best performances."
- Cathcart M.C C. Easter Reliability Trial, 1913. Six Machines entered and gained Three Gold Medals, One Special Gold Medal and Three First Class Certificates.
- Wolverhampton M.C.C. Hill Climb, March 30th. 1913. 23 h.p., Winner of 350 c.c. Class. 23 h.p., Winner of 500 c.c. Class. 6 h.p., Winner of Side-car Class. Awarded Three Silver Medals.
- Liverpool M.C.C. Reliability Trial, April 13th, 1913. Awarded First Prize for the best performance of an Amateur.
- Birmingham M.C.C. Open Trial for Passenger Machines, April 12th, 1918. Awarded Three Silver Medals.
- Leicestershire and District M.C.C. Hill Climb, April 17th, 1913. 6 h.p. Awarded Third Prize in Side-car Class.
- Bristol M.C.C. Open Reliability Trial, April 19th, 1913. 6 h.p. and Side-car awarded Silver Cup and Silver Medal for the best performance of an Amateur.
- Cheltenham M.C.C. Hill Climb, April 19th, 1913. Awarded Three First Prizes and the H.E Steel Challenge Cup for the best performance on Formula.
- Mersey M.C.C. Open Hill Climb, April 19th, 1913. Awarded First and Second Prizes, Gold and Silver Medals.
- Sheffield University M.C.C. Hill Climb, April 19th, 1913. 6 h.p. and Side-car made Fastest Time and First on Formula. Awarded Silver Medal.
- M.C.C. London-Edinburgh Reliability Trial, May 9th and 10th, 1913. Awarded Four Gold Medals.
- M.C.C. London-Edinburgh-London Reliability Trial, May 9th and 10th, 1913. Awarded two Gold Medals.
- Glasgow M.C.C. Hill Climb, May 17th. 6 h.p. wins Class 3 for Touring Machines not exceeding 600 c.c. 6 h.p. wins Class 5, tor Passenger Machines.
- A.C.U. International Tourist Trophy Race, Isle of Man, June 4th and 6th, 1913. W. Heaton on his 21 h.p. A.J.S. held the following positions during the Junior Race: 1st Lap, 4th, 2nd Lap, 4th; 3rd Lap, 3rd; 4th Lap, 3rd; 5th Lap, 3rd; 6 Lap, had a succession of punctures delaying him 45 minutes, in spite of which he finished ninth.
- Bristol B. & M.C.C. Open Hill Climb, June 28th, 1913. 23 h.p. gains Three First Places, one 2nd and one 3rd. Awarded Three Gold Medals, One Silver, and One Bronze,
- Helensburgh M.C.C. Consumption Test, June 25th, 1913. 21 h.p. Awarded First Prize.
- Newcastle and District M.C. Bevan Goold Reliability Trial and Hill Climb, June 29th, 1913. Mr. G. Raper, 2 h.p. A.J.S. was awarded Silver Challenge Cup and Silver Tankard for Reliability, and Silver Challenge Cup and Club Silver Medal for the Hill Climb.

#### WE HAVE NO FAILURES.

IMPORTANT NOTE.—Over 50% of the above successes have been achieved by genuine PRIVATE OWNERS, and in every case (excepting in the "T.T." Race) only standard machines were used exactly as sold to the Public.

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### A few Letters received from satisfied rigers.

To print all the appreciative letters we receive from our friends would require a large volume, so we will content ourselves with reproducing a few, such as we receive by

> NEWCASTLE-ON-TYNE, September 4th, 1912.

Dear Sirs,

As you are aware, I have been riding one of your 5 h.p. machines with a side-car since last May, and have taken part during that time in three reliability runs, namely, the London to Edinburgh (400 miles), the Newcastle and District Motor Club's Annual Reliability Trial (420 miles), and Newcastle and District Motor Club's Gordon-Roberts Reliability Trial (300 miles).

In all these events your machine has been successful in gaining a Gold Medal, and in the last event beat every machine except one, a 21 h.p. A.J.S., ridden by Mr. G. W. Raper.

The machine has had well over 4,000 miles hard work, and I have entered for the Newcastle and District Motor Club's Bevan-Goold Twelve Hours Trial on September 15th.

Yours faithfully, LAURENCE AUSTIN.

P.S.—There are now a number or your machines in this neighbourhood, and wherever one goes they receive nothing but praise.

> BIRMINGHAM. October 31st, 1912.

Dear Sirs.

In these days of competition, when articles are made primarily for profit and not use, it is very gratifying to deal with a firm who have combined the two. In March, 1911, I purchased a 2½ h.p. chain drive, two-speed A.J.S. Its total mileage stands at 17,905, and, though the mileage is so great. I am still using it to the tune of 300 miles per week in my business as a commercial traveller, and the freedom from worry over my previous machine—a well-known make—induces me to tender my congratulations. Friends said "Do not have the complications of a variable gear." Up to date neither myself or anyone else has seen inside the gear box. I have washed the cork clutch with petrol once; I have broken one exhaust valve, and have had two new sets of chains. Magneto has never failed me once, and it has only been adjusted once. The drive is ideal, and only last week a friend of mine tried the machine in the dark, and when he returned he said, "Your belt seems to Where is the harsh drive I was warned was customary with chains?

I am getting out my list of costs, and if it interest you should be pleased to send them on to you.

As I want you to look over my machine before winter, would you let me know if it would be convenient for you to do same the second or third week in November, as I could best spare it then.

Again congratulating you upon the excellence of your motor bicycles.

Yours faithfully, R. F. POOLE.

WALLINGTON.

Dear Sirs,

You will recollect that I wrote you about the valves of my 6 h.p. A.J.S. I am pleased to tell you that I overcame the trouble by changing the brand of oil,

I have now completed 2,700 miles with only one road stop, a puncture in the back tyre.

The engine is the easiest starter I have ever seen, one dig of the foot starter invariably sets her going without priming the cylinder, however long she has been standing. In free engine she ticks over as slowly and silently as a six cylinder car, yet takes such hills as Westerham and Peblecombe on middle gear with heavy side-car and passenger, and will do 45 on the level.

In short, I am simply delighted with your magnificent machine, and consider it the nearest approach to a real "no trouble" motor cycle extant. Your truly, T. L. KEMP.

KIRKHAM, January 6th, 1913.

I purchased one of your A.J.S. Motor Cycles in October last, and up to now it has given me much pleasure to ride, not having had a single stop. I have been 1,300 miles and the way it darts up hills on top gear is really wonderful. I cannot speak too highly of your machine.

FRED GARLICK.

LANDORE.

January 24th, 1913.

Gentlemen.

It gives me great pleasure to write you re my 5 h.p. A.J.S., of which I took delivery in August, 1912. I have done over 4,000 miles with side-car and over the worst roads and through the most vile weather I have ever riden through, but hail, rain, sleet or anything else makes no difference to the bike which simply glories in her work.

I have not had a single mechanical stop yet, and the original tyres are still on, the studs have not gone yet. On my tour last August I climbed Lynton, Lynmouth, Porlock and the hills round Combe Martin in the run with passenger and luggage, and it simply romps up the biggest hills down here in

South Wales.

BEWDLEY.

28th January, 1913.

Dear Sirs, I expect you are quite used to receiving compliments on your machines, but I cannot help writing to thank you once more for what I feel sure is THE Side-car Machine of the market.

The way she pulls up hills caused an expert friend of mine, who was in the side car, to exclaim, "I would never have believed such a machine existed." No trouble, no noise, no dirty crankcase, no slipping belt, no pushing up hills, no vibration, everything simply perfect, and what is more, perfectly simple. Make what use you like of this letter, but only above the name of

Yours truly,

"A MAN WHO OWNS ONE"

CANNOCK.

ist March, 1913.

Dear Sirs,

As I am about to dispose of my 1912 5 h.p. machine and secure one of your new 6 h.p. models I feel I must express the entire satisfaction I have had with my old mount. Although quite a novice I had enough confidence in my machine to enter the London Edinburgh Reliability Trial last Whitsuntide, in which I succeeded in gaining a Gold Medal.

I then tried my luck in a Trial organised by the Wolverhampton M.C.C., and won the only Gold Medal given in the side-car class.

I then entered the most strenuous event of the year, the M.C.C. Winter Trial from London to Exeter and back, and again-thanks to my trusty A.J.S.-I was awarded a Gold Medal.

I use my machine solo, as well as with the side-car, in all weathers and it has never yet failed me Wishing you the success you so much deserve.

Yours respectfully,

W. HEWSON.

EDGBASTON.

23rd March, 1913.

Dear Sirs.

Your will doubtless be pleased to learn of my complete satisfaction in the 2½ h.p. lightweight A.J.S. upon which I recently made a 400 mile journey. The behaviour of the machine was, I may say at once, a surprise of the most pleasant description, for good as I expected the A.J.S. product to be, I was unprepared for the degree of merit exhibited from first to last. I ran through from Birmingham to Ramsgate in ten hours running time, despite thick fog at each end which pulled down the average speed tremendously, so that the 190 miles covered in that time in no way represents the machine's real capacilities, while very treacherous road surfaces still further prevented any serious endeavour to get the best out of the small engine, one of the outstanding points in connection with the run being that only upon one occasion was the low gear demanded.

The return run was accomplished in eight hours running time, under conditions not altogether favourable to the machine's best effort, a bitter N.E. wind considerably retarding progress at times, while "all out" was never indulged in at any time

The machine gave absolutely no trouble throughout and accounted for 30 miles in one hour on a section of the return journey, which you will observe gives an average, over the 190 miles, of nearly 24 m.p.h. I am by no means a lightweight rider, and on this occasion scaled 12 stone, in addition to a considerable bag of impedimenta on the carrier. I spared the machine in no way notwithstanding which the behaved splendidly, and I admit to being actorished. she behaved splendidly, and I admit to being astonished.

My congratulations on a very fine little product. If the 1913 model is better it must be good indeed. Yours faithfully,

P. H. MEERS.

FROME.

18th April, 1913

Dear Sirs. Thanks for Book of Instructions, etc., to hand, and for your promise to send complete Spares List when printed.

I may add to what I have previously written that my son was 17 years of age when he took delivery of the 2½ h.p. 1912 A.J.S. Two-speed Model, that he was a complete novice only having ridden a pedal bicycle previously, that he had not even the assistance of a local agent to explain the points of your machine, that he ran it straight off after a few minutes' study of the levers, etc., on a 25 mile journey against time owing to falling light in a hilly district, and without a stop, that up to date he has done about 4.000 miles in all weathers without any mechanical trouble or breakage whatever—having cleaned the engine twice, dismantling it without assistance, that he repeatedly runs from here to Bristol and vice versa including some miles of tram lines and principally on top gear on the hills, and once towed a stranged friend from Bristol to Frome taking all gradients, some 1 in 8, on top gear without a stop and stranded friend from Bristol to Frome taking all gradients, some 1 in 8, on top gear without a stop and has never yet met a hill in his wanderings which the machine has not taken successfully.

It was essential my son should have a reliable machine to be of any use to him, and I think the above facts prove you have supplied his want.

The petrol consumption works out from a kept record at 95 miles per gallon, which considering the hilly district, the luggage invariably carried, and a 6 ft. 2 in, rider combined is not at all bad.

Wishing you the success you richly deserve.

Yours faithfully,

C. H. SPACKMAN.

P.S .- I must add in addition that your unfailing courtesy and straighforward dealings should be also recorded.

BRISTOL, April 20th, 1913.

Dear Sirs, You will be very pleased to hear that I won the £5/5/0 Silver Cup for the best performance in the expert and general class unconnected with the trade for driving side-car, cyclecar, or tricar, in the Bristol Open Trial. In fact, I was the only man with a passenger combination to get through in that class, and also won a Silver Medal. It was absolutely non-stop, except for a stop of less than 1/100 second at a right angle bend at the foot of a hill, and then the engine did not stop, and I only had to put the brakes on as I nearly went into a wall, as I was not prepared for the corner and was rushing along at 25 m.p.h. on top gear.

The engine ran beautifully all the time, and I have already ridden the machine over 100 miles

to-day (solo) and feel no ill effects.

That bad hill which I spoke to you about was included at the end of the Trial, but the machine took it splendidly on the bottom standard gear. I like the hum which the engine emits when driving all

out on bottom gear.

In conclusion. I must say that your 6 h.p. model is by far the best and most reliable machine that that I have ever ridden. I expect you will see in next week's "Motor Cycle" that the course was very severe; I am all the more pleased at getting through as it is the first Motor Cycle Trial of any description that I have entered for.

Yours faithfully, WALTER H. SHAW.

BRISTOL

May 27th, 1913.

Dear Sirs, In the Summer Trial of the Bristol M.C.C. to the top of Porlock Hill and back I was the only competitor to take a side-car and passenger to the top, and was only so seconds out at the top and 30 seconds early at Bristol on the return, and so have qualified for a Silver Medal, as we were allowed a five minute error.

The machine roared up the two bad hairpins at the bottem and did not falter in the slightest. I

changed up into second gear while still on the r in 8 gradient.

I have been 3,400 miles in the ten weeks I have had the machine, and 1,620 in the last three weeks without any trouble and that in my spare time only. Since writing you before I have only had one puncture. I have yet to find a hill that I am unable to climb with side-car.

Yours faithfully, WALTER H. SHAW.

WEST HARTLEPOOL, 28th May, 1913.

Dear Sirs,

Kindly send me, by return of post, two petrol injector taps suitable for my 6 h.p. A.J.S.

I am exceedingly pleased with my machine, and have just been awarded 2nd prize and special side-car prize in the N.E.A.A. Reliability Trial with a total error of 33 seconds. The weight of passenger and self was over 22 stones, and I only used the lowest gear on Sutton Bank. Two other West Hartlepool A.J.S.'s and side-cars entered and we finished 2nd, 6th and 10th, out of thirty entries, and were the first three side-cars to finish; none of us had the slightest trouble.

Yours faithfully.

Yours faithfully, E. FORSLIND.

LOWESTOFT, May 28th, 1913.

I make no apology in tendering you my hearty congratulations on the many wins, too numerous to mention, of the A.J.S Motor Cycle during the past few weeks. The A.J.S. figures very prominently in practically every trial with monotonus regularity, and, judging merely from these really wonderful performances, together with considerable personal experience, I am persuaded that the initials imply:—"Any Journey Sure," which is surely "A Joyful Sensation," and upon "asking the man who owns one," he naturally admits it—"A Judicious Selection."

I am contemplating overhauling my 1911 A.J.S., having the cylinder re-bored and new rings fitted, and I shall be glad if you will let me have your price for the above.

I am, Gentlemen, Yours faithfully

LEWIS E. RICHARDS.

WESTON-SUPER-MARE,

June 1st, 1913. Gentlemen. I should like you to know how much I appreciate your promptness and courtesy in despatching the piston

for my 1913 twin last week.

I only wired you after three o'clock on Wednesday afternoon, and piston was despatched before 9.15 on Thursday morning, and had I been ready for it could have been on the road again at 10 o'clock.

To a commercial traveller who uses a machine for business purposes only, this saving of time is of the greatest importance, coupled with the no trouble A.J.S. qualities.

Machine has to date run 5,953 miles by Cowey, and without letting me down once.

I would just like to add that on Friday, after I had finished business at Minehead, Ltook a run to Porlock, and she took the whole outfit up with plenty in hand. Am running a Canoclet, had my wife as passenger, and machine was in ordinary touring trim, with spare full tin of petrol and usual spares, total weight 71 cwt., and against a head wind, and I had never seen Porlock before. Coming home we touched 48 on the flat. Am

using a 28 jet.
Wishing you the success that you certainly deserve.

Yours truly,

Y. C. JOLLY.

WEST HARTLEPOOL, 3rd June, 1913.

Dear Sirs, I am pleased to inform you that on Sunday I won 1st prize in a Reliability Trial over a very difficult course on one of your 6 h.p. machines. There were three of your machines entered, and two of them were in the first four, and the only reason why the other one was out of the competition was because he lost himself. but during the whole of the journey not one of us had any occasion to do any adjustments whatever, and I consider the man who rides one of your 6 h.p. machines with a side-car is free from trouble and worry. It is the finest combination I have had yet, and I have now had some 14/15 different motor cycles.

Yours faithfully,

W. T. WALTON, Jung.

Dear Sirs,

I should like to write you a few lines concerning the A.J.S. 6 h.p. Motor Cycle for 1913, as I have already had a 6 h.p. Combination Motor Cycle of other make but could not find satisfaction, so on the good advice of Mr. Sutton, the manager of Messrs, Nelson & Co., Motor Engineers, Llandudno, I purchased one of your 6 h.p. models with side-car, and that when Mr. Sutton recommended me this he certainly sold me a motor cycle. I have now covered nearly 3,000 miles, and am glad to say that up to the time of writing I have never been obliged to go to a garage for repairs, and the repair sheet is quite clean except for the price of fuel, which is very economical. The advantages of the independent clutch and gear are satisfaction themselves, and the machine will go anywhere on the normal gear. In fact I never use the low gear except in very congested traffic. The manner in which the back wheel comes out for replacement of a new cover is simplicity itself. The kick starting device is a geat advantage. One kick-down and the engine starts, a thing which is greatly advantageous to the handle starting.

I should think that anyone buying a A.J.S. Motor Cycle invests on a big bag of "satisfaction and reliability.

I shall be pleased to see this letter published in the "Motor Cycle," as I think one half the motor cycle world do not know the pleasure of riding an A.J S., and, as for myself, I am a motor cyclist who is very far from being keen on roadside troubles. Yours faithfully, S. TOWNSEND.

CORK.

June 14th, 1913.

Gentlemen,

I cannot refrain from writing to you again about my 6 h.p. A.J.S., she's a treat. She's a demon for hills, nothing seems to stop her; and as to speed, well, I can get 50 with a side-car out of her.

I think some figures will interest you. I have not yet spent a penny on repairs, though I have been 1,000 miles. Petrol consumption works out at 57 miles per gallon, that is, dividing the mileage by amount of petrol used. When I got the machine first she had a 29 jet in the carburetter, and she ran on this for nearly 300 miles, doing about 30 miles per gallon. As this was not good enough, I put in a 25 jet. It seems to make no difference in speed, etc., so you see the 29 jet has pulled down my average very much. The machine is now doing about 70 miles per gallon with side-car and passenger. I have a "Canociet" side-car, which is no fairy as regards weight; then it has a wind screen, which must cause a lot of resistance.

Up-to-date the machine has cost me to run, 40/- for oil and petrol (the only expenses), which works out at not quite d. per mile.

Now to show you what the machine with side car and passenger will do. The other week and I started from here at 4.48 for Skibbereen, 54 miles away, and got there (over awful roads against rain) by 7.10. On Monday morning we left Skibereen at 8.45 and came back by a different and grand road arriving at Cork at 10.40—1 hour and 55 minutes for 54 miles!!! Not bad going, and there are some levely hill en route, one is 4 miles long; she roared up it at about 37 miles per hour.

Reliability Trials I hate, and never do any good, as I always arrive to soon, especially at secret checks. I bought the machine for pleasure, and hate been tied down to a crawling 20 miles per hour. You see I am at work all the week, so like a good "blind" on Saturday afternoon.

I have not had a moment's trouble; the chain drive is IT. I once filled up the gear box with oil; never

had a puncture yet (which I think speaks volumes for the Hutchinson tyres you fit).

One thing about your engine, you cannot over heat her and she never gets tired. We came up from Cross-haven the other afternoon (13 miles in 25 minutes) and without a stop went right for St. Patrick's Hill, a hill in town with a gradient of 1 in 3\frac{3}{2}. This hill has been the Waterloo of several English trade riders. We went up it well, and when we came down a policeman cautioned me not to go up at that rate again, or else it would be a case for the police court.

Our club had a race meeting in Garryvoe Strand last Wednesday. I went in for the side-car flying half-mile and tied for first place with a 8 h.p. W——. We both did the half-mile in 38 and 3/5 seconds or about 45 miles per hour. I think it was very good for my 690 c.c. machine to tie with the other

which I think is about 990 c.c.

Sorry did not do better in the T.T. but I think you did very well for your first time and I trust you will have better luck next year if you go in. After all, yours are touring and reliable machines, not racers, and I think the public don't care two straws about a machine lapping at 56 miles per hour. What we all want is a machine that will not break down miles from no-where, and one that will take you along at a good pace. I can get over 50 miles per hour out of my machine with passenger, which is good enough, and not overheat,

stick at hills or other such annoyances.

My machine is acknowledged to be the neatest and nicest turn-out round here. The control is perfect, the clutch under your hand is far superior to the foot one. Once I start going about my machine "Hopit"

I cannot stop, but suppose I'll have to now, as you'll be getting sick of this epistle.

Yours very truly, B. HERBERT CLIBBORN.

DEVONPORT, 22nd June, 1913.

I am much obliged for your letter of the 18th June. I have received the gear operating lever, for which I thank you, and I am returning the first one you sent me under separate cover.

The machine has been behaving splendidly. It has had some real hard work in Ireland. A week or two ago I drove it from Glengarriff to Killarney and back (via Windy Gap) over most terrible roads and bad hills with a heavy side-car, a 12 stone passenger in the car and myself (13 stone) in the saddle, a 10 stone passenger on the carrier, and about a hundredweight of luggage in the car, the machine took practically everything on top or second gear, the total weight, including machine and side-car, could not have been far-if at all-short of 8 cwt., and I consider this a splendid performance. The engine never knocked and never overheated. Of course, I did not force it and was content with a moderate speed. I feel sure it has not done it the slightest damage for it has been running without a murmur ever since.

You may make use of this letter if you wish to do so.

Yours faithfully C. RADCLIFFE.

### ASK THE MAN WHO OWNS ONE!

PAYMENT. One-third Cash with order and balance against invoice when machine is ready for delivery.

CARRIAGE. Free on Rail Wolverhampton.

RAILWAY TRANSIT. All goods are sent per Goods Train except otherwise ordered, and are signed for by the Railway Company as being in good condition. All Machines should, on arrival, be carefully examined, and if damaged, signed for as such, and an immediate claim made on the carriers.

#### Guarantee.

We give the following guarantee with our motor cycles, instead of the guarantee implied by statute, or otherwise, as to the quality or fitness of such machines for the purpose of motor cycling; any such implied guarantee being in all cases excluded. In the case of machines which have been used for "hiring out" purposes, or from which our trade mark or manufacturing number has been removed, no guarantee of any kind is given or is to to be implied.

We guarantee, subject to the conditions mentioned below, that all precautions which are usual and reasonable have been taken by us to secure excellence of materials and workmanship, but this guarantee is to extend and be in force for three months only from date of purchase, and damages for which we make ourselves responsible under this guarantee are limited to the replacement of any part which may have proved defective. We undertake, subject to the conditions mentioned below, to make good at any time within three months any defects in these respects. As motor cycles are easily liable to derangement by neglect or misuse, this guarantee does not apply to defects caused by wear and tear, misuse or neglect.

The term "misuse" shall include amongst others the following acts:

- 1. The attaching of a side-car to the motor cycle in such a manner as to cause damage, or calculated to render the latter unsafe when ridden.
- II. The use of a motor cycle, or of a motor cycle and side-car combined, when carrying more persons, or a greater weight, than that for which the machine was designed by the manufacturers.

Any motor cycle sent to us to be plated, enamelled, or repaired, whether the repairs are required for the purpose of making good the defect before referred to or otherwise, will be repaired upon the following conditions. i.e. we guarantee that all precautions which are usual and reasonable have been taken by us to secure excellence of material and workmanship, such guarantee to extend and be in force for three months only from the time such work shall have been executed, and this guarantee is in lieu and in exclusion of any common law or statute warranty, and the damages recoverable are limited to the cost of any further work which may be necessary to amend and make good the work found to be defective.

### Conditions of Guarantee.

It a defective part should be found in our motor cycles, or in any part replaced, it must be sent to us carriage paid, and accompanied by an intimation from the sender that he desires to have it repaired free of charge under our guarantee, and he must also furnish us at the same time with the number of the machine, the name of the agent from whom he purchased, and the date of the purchase, or the date when the alleged defective part was replaced, as the case may be.

Failing compliance with the above, no notice will be taken of anything which may arrive, but such articles will lie here at the risk of the senders, and this guarantee, and any implied guarantee shall not be enforceable.

We guarantee only those machines which are bought either direct from us or from one of our duly authorised agents, and under no other conditions.

We do not guarantee the specialities of other firms, such as tyres, saddles, chains, lamps, etc., or or any component part supplied to the order of the purchaser differing from our standard specification, supplied with our motor cycles, or otherwise,

## The Term "Agent."

is used in a complimentary sense only, and those firms whom we style our agents are not authorised to advertise, incur any debts, or transact any business whatsoever on our account other than the sale of goods which they may purchase from us; nor are they authorised to give any warranty or make any representation on our behalf other than those contained in the above guarantee.

IMPORTANT NOTICE.—We do not supply Engines or Gear Boxes to other manufacturers. They are only genuine when fitted to A.J.S. Motor Cycles.