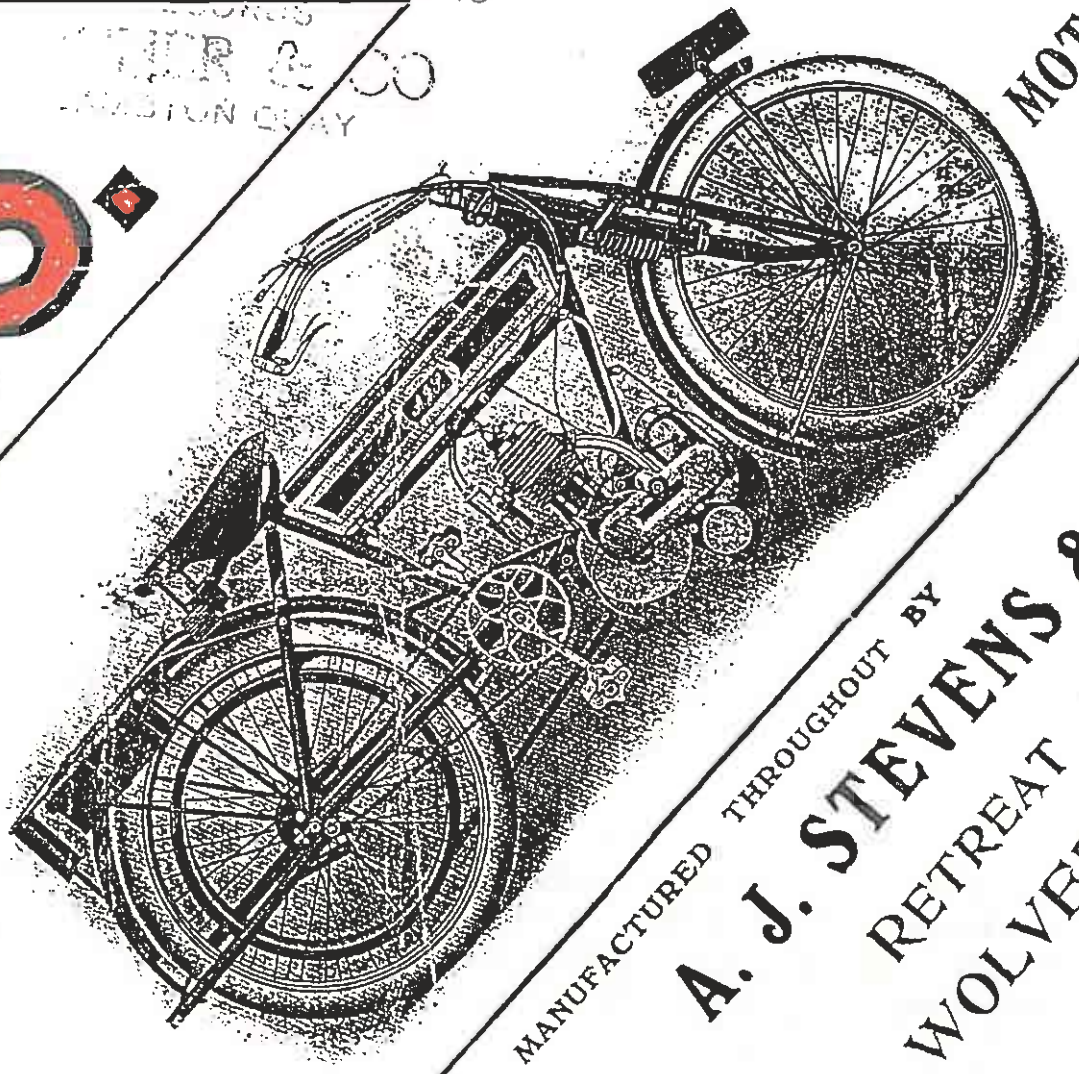
THE

A.J.S.

MOTOR CYCLE.



THE "Sensible" Lightweight

MANUFACTURED THROUGHOUT BY

A. J. STEVENS & Co. Ltd.,

RETREAT STREET,

WOLVERHAMPTON.

Telegrams:
"HOPIT,"
Wolverhampton.

INTRODUCTION.

We have much pleasure in presenting herewith illustrations and specifications of A.J.S. Motor Cycles for 1911. We thank our numerous Patrons for their past support, and respectfully solicit a continuance of same. The name **STEVENS** in connection with the manufacture of Petrol Engines is known throughout the world. It is worthy of note that an engine designed and manufactured by us was the first to hold the British Hour Record, no less a distance than 49 miles 900 yards being covered. Considering this record was made as far back as 1904, the performance was a very creditable one. This proves that our machines are in no way experimental.

The following are a few of our victories:—

M.M.C. Run, London to Edinboro', May, 1909	**Highest Award, Gold Medal.**
A.C.U. 24 hours run, London to Plymouth and back, 1909,	**Certificate.**
A.C.U. Six days, 1,000 miles Reliability Competition, 1909,	**Certificate and Silver Medal.**
(Not a single mark lost for reliability.)	
M.C.C. 24 hours ride, 1909	**Highest Award, Gold Medal.**
M.C.C. Easter Run, 1910, London to Land's End and back,	**Highest Award, Gold Medal.**
M.C.C. Run, May, 1910, London to Edinboro'	**Highest Awards, two Gold Medals.**
A.C.U. Quarterly Reliability 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 Reliability Trial, October 12th, 1910 ..	**Highest Award, two 1st Class Certificates.**
(Ours were the only Team of Light-weights to finish.)	
M.C.C. 24 hours Mid-winter Run, Dec. 27th & 28th, 1910,	**Highest Awards, three Gold Medals.**
(A splendid performance considering the bad weather and 13 hours darkness.)	
A.C.U. Quarterly Trial, January 28th, 1911	**Highest Award, 1st Class Certificate.**
(First in Hill Climbing on Titsey and Westerham).	
Irish Reliability Trial, January 28th, 1911	**Full Marks, 60.**

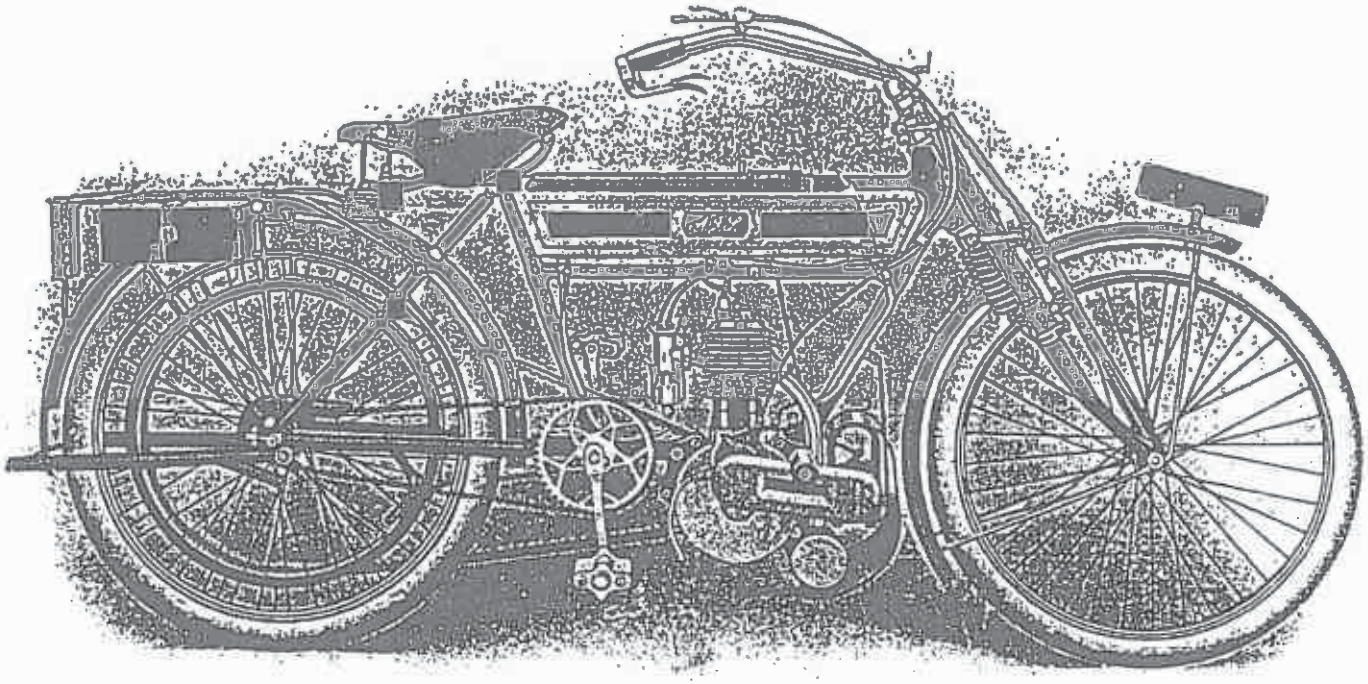
Since its introduction the success of the A.J.S. Motor Cycle has been phenomenal, and is now in the front rank for Reliability, Hill Climbing, Soundness of Construction and Sterling Value. Nothing but the best enters into its construction, and the workmanship is of the highest class. The A.J.S fills the ever increasing demand for a Motor Cycle that is Medium in Price, Medium in Weight, Economical in Up-keep, and which gives that sense of security and satisfaction only experienced by the possession of a first-class mount. Every single-geared machine is capable of climbing a hill with a 1 in 6 gradient without assistance. The Two Speed Model will climb any hill, and either Model will attain a speed of 40 miles per hour. Can any reasonable person want more?

ACCESSIBILITY. In some makes of Motor Bicycles it is necessary to remove the Carburetter, Silencer, Magneto, and even the Petrol Tank, before the Engine can be taken out for inspection. When it is necessary to remove an A.J.S. Cylinder for cleaning purposes it can be detached without disturbing any other parts. The Engine, Carburetter, Silencer, Magneto, and on the Two Speed Model, the Gearbox, can be removed by withdrawing two bolts and disconnecting the Oil and Petrol Pipes. These are points which the Purchaser should certainly bear in mind when placing his order.

GENERAL. All A.J.S. Motor Cycles are made under the direct supervision of our principals. It has not been our aim to create a vast output, but to produce a first-class machine complete with every refinement at a reasonable price. Our Works are here at the disposal of the Purchaser, we invite inspection. We have numerous Testimonials, but as the space in this Catalogue is limited, we are not publishing same, and shall be pleased to show the originals to intending Purchasers when visiting our Works. Any other information than that contained in the Catalogue will be gladly given on receipt of enquiries.

A. J. STEVENS & Co. Ltd.

THE A.J.S. LIGHTWEIGHT 2½ H.P. Model A.



DESCRIPTION.

ENGINE. Single Cylinder, 2½ H.P. 70×76 M/M. Interchangeable M.O. Valves. Large Diameter Fly Wheels Improved Adjustable Pulley.

CARBURETTER. Brown & Barlow, latest design.

IGNITION. U.H. high tension Magneto, protected by wide Mud Shield.

TANK. Strongly made with One Longitudinal Seam, Enclosed Oil Pump, Petrol Injector, Filter and Gauge.

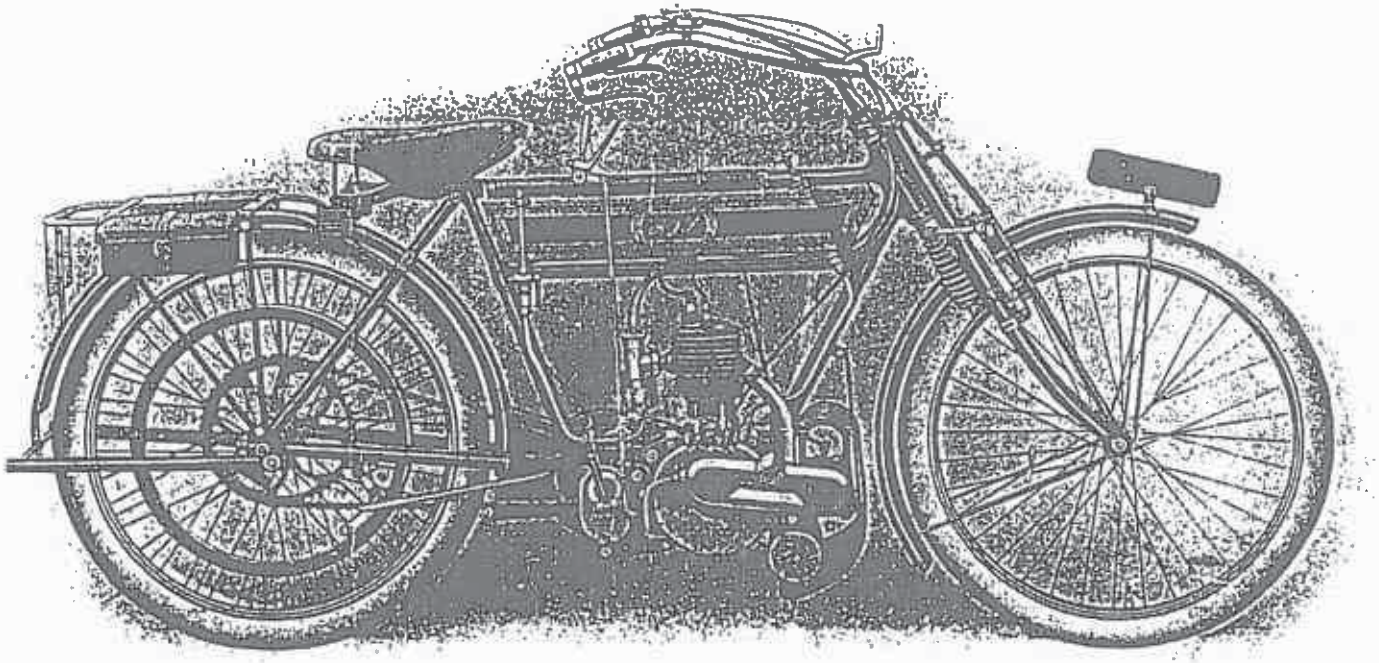
BELT. Best quality Rubber, V Section.

STAND. Kick up, fitted to Fork Ends. The back Wheel can be taken out without removing the Stand.
CARRIER. Tubular attached to Frame by Brazed Lugs on back Stays.
FRAME. Neat design with low sitting position.
FORKS. Druid Spring, Girder Pattern.
WHEELS. 26×2 in., fitted with Hutchinson Tyres, Brooklands Non-Skid Pattern.
HANDLE-BAR. Made of High Carbon Steel Tubing. Linered in Centre.
SADDLE. Brooks' best quality Motor Cycle.
TOOL BAGS. Two Pannier, one fitted to each side of Carrier.
BRAKES. Front Bowden Patent. Back, operated by Foot Pedal.
NUMBER PLATES. Fitted ready for numbering.
TOOL ROLL. Containing Pliers, Screwdriver, Wrench, Oilcan, Valve Cap and Magneto Spanner.
FINISH. Black Enamel, four Coats on one special Coat of Rust Preventative, all usual parts heavily Nickel Plated, Tank Aluminium with Black Panels and Lined Green.
WEIGHT. Approximate 115 lbs.

We reserve the right to deviate from the above, in minor details, without notice.

THE A.J.S. LIGHTWEIGHT, 2½ H.P. Model B.

Fitted with Two-Speed Gear Box, Clutch, Free Engine and Chain Drive.



DESCRIPTION

The Engine, Carburetter, Ignition, Tank, Stand, Tyres, Carrier, etc., are exactly as Model A. It will be noticed from the illustration that there are no pedals or pedalling gear, in their place a neat Two-Speed **Gear Box giving free Engine, also Clutch operated from Handle Bar** is fitted. This gear was designed by us eight years ago, and many hundreds have been supplied and fitted even to 8 H.P. Tricars. We can produce gear boxes of this design which have been running well over seven years and still giving great satisfaction. We point the above facts out so that customers will know that our gear is not experimental, but a well-tried article.

CHAINS, Hans Renold, heavy driving, protected by Metal Guard. Although not shown in illustration, an additional pair of foot rests are fitted underneath Gear Box. This machine on low gear will start up every time at a walking pace in about 6 to 8 feet.

WEIGHT, approximate 125 lbs.

For a full description of Gear Box, see page 6.

We reserve the right to deviate from the above, in minor details, without notice.

Reprint from MOTOR CYCLING.

Extract from Description of the 1911 2½ h.p. Two-speed Chain driven A.J.S. Motor-bicycle.

A two-speed gearbox is placed snugly under the bottom bracket of the machine behind the engine. The same lug holds both gearbox and engine, and by means of a slotted bolt hole the tension of the engine chain can be adjusted when necessary.

The transmission system is designed on well-tried lines, and particular care has been taken in order to absorb the harsh kicks of the engine and prevent them being felt by the rider. To begin with, the driving sprocket is not keyed on to the engine shaft, but is held there by a friction plate. A fibre washer can be pressed up against the sprocket, and a spring is locked up against the fibre. The amount of slip between the fibre and the sprocket can be set as desired. The fibre is slightly lubricated by the provision of grooves cut in the plate that presses it on to the sprocket.

A neat chain case protects the Hans Renold driving chain, which is ⅝ in pitch, and $\frac{3}{16}$ in. width. This chain drives the countershaft on which is mounted the large sprocket. On both faces of this sprocket are fitted a number of corks, and when in position, the sprocket is held between two plates, the outer one of which can be forced out of engagement with the sprocket by means of a lever operated by a Bowden wire from the handlebar. When the outer plate is pushed away from the cork-faced sprocket against the spring on the countershaft, the clutch is out, as the sprocket is disconnected from the drive to the back wheel. The parts of the clutch are shown in the sketch.

The cork clutch is operated in conjunction with the gear lever, which is placed to the rear of the right hand side of the tank. The gears have ratios of 5½ to 1 and 10½ to 1, and are brought into action by movement of dog clutches. When neither intermediate dog is in gear, a neutral position results. The lay shaft is fitted with plain bearings, but the other has ball bearings of a substantial pattern.

The gear lever works in a quadrant, the back position being top, the middle being neutral, and the forward low. When it is desired to change gear, the clutch lever on the left handlebar is raised for an instant and the gear lever pulled back into top. The clutch is then released again, and the machine takes up the drive with remarkable sweetness

There are several other excellent features of these little machines. The front mudguard stays are so constructed that when one wishes to remove the wheel it is impossible for the stays to become entangled in the axle. The stays are also devoid of bridges and nuts, as they are fastened to the underside of the guard. The rear wheel is not made inaccessible by the interposition of a number of stays, etc., as the construction of the luggage-carrier and rear number-plate allow them to be abolished altogether. The 70 m/m. by 76 m/m. engine is fitted with mechanically-operated valves, one cam being used to operate both valves. A chain-driven U.H. magneto is fitted in front of the engine, and is held by a bracket which is entirely separate from the silencer underneath it. Indeed, by undoing a nut and removing a bolt, it is possible to remove the silencer altogether to clean it when necessary. The two-speed model will be listed at 44 guineas.

The chain guard can be easily removed by undoing two wing nuts, and it is perhaps worth noting that an ordinary shoe-pattern brake is fitted to the offside of the back wheel, where a special belt rim is situated for the purpose. The weight of the two-speed A.J.S. comes out at about 125 lb. and the belt-driven model at about 110 lb. On the latter model an adjustable pulley is fitted, the standard gear being 5½ in 1. On the inside rim of the pulley is cut a groove, which prevents the oil exuding from the bearings when they become a trifle slack. The crankcase of the engine is devoid of excrescences, and should be easy to clean when necessary, but on the machine we noticed there was no sign of oil issuing from valve tappets or timing-gear. A full range of these machines were shown at Olympia.

On the road the two-speeder proved itself a remarkable hill climber. We saw it take Mr. A. J. Stevens up 1 in 8 on top and low speed. Then it started from a standstill on a 1-in 6 gradient, and flew up a by-lane which must have been 1-in-8 at the least. Of course, this was done on low speed. After this, we tried the machine ourselves, and certainly could not denote the faintest sign of harshness in the drive, whilst the ease of changing gear was delightful. We feel convinced that this little machine has great prospects in front of it, as it is powerful, light, and able to go anywhere, in spite of its miniature proportions. The long experience of the brothers Stevens should guarantee its excellence.

TERMS OF BUSINESS.

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

CARRIAGE. In all cases to be paid by Customer.

PACKING. Crate for 1 Machine, **3/-**
" " 2 Machines, **5/6**
Cases for Export, 1 Machine, **10/6**
" " 2 Machines, **12/6**
" " 3 " **15/-**

RAILWAY TRANSIT. All goods are delivered free on rail, Wolverhampton, in good condition and signed for as being so by the Railway Companies, who then become the agents of the purchaser. All Machines should, on arrival, be carefully examined, and if damaged, signed for as such, and an immediate claim should be made on the Carriers.

GUARANTEE.

We guarantee that all material used in the construction of **A. J. S. Motor Cycles** is the best obtainable, and we undertake to fully replace any defective part caused through faulty Material or Workmanship, but in no case do we undertake any contingent liability. It must be understood that the parts for replacement must be sent to us Carriage Paid, with Owner's name and address attached, and accompanied by an intimation that the same is sent for replacement free.

We cannot of course guarantee specialities of other firms, such as Tyres, Belts, Chains, Saddles, &c., but we undertake to use our best endeavours with Manufacturers of these articles to get same replaced if faulty. We of course only use Accessories of the very best makes.

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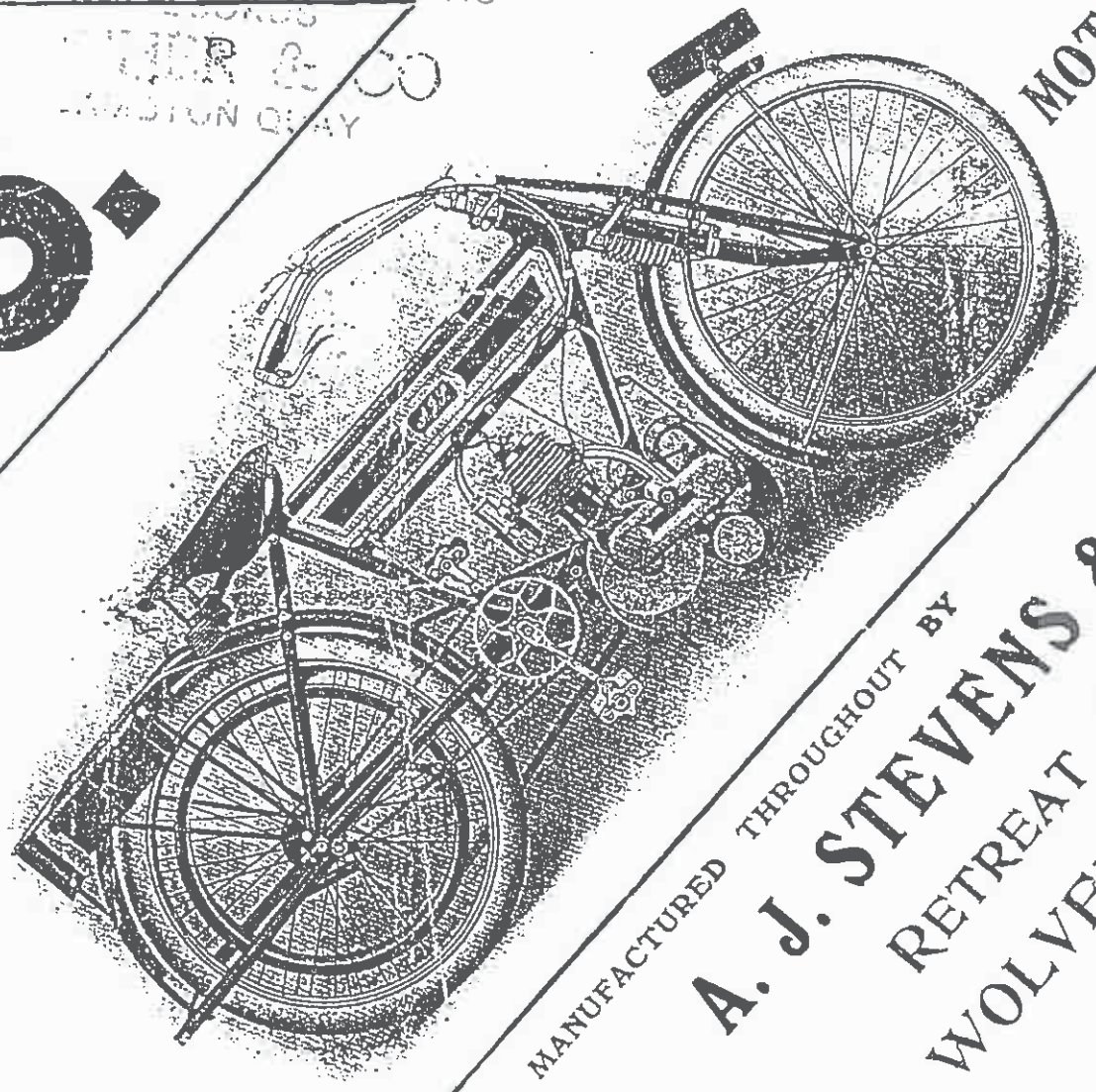

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