

AJS

1921

**SPEED SCOUNTERSHAFT GEARED
CHAIN DRIVEN**

Motor Cycles

FOREWORD.

THOSE who have followed the fortunes of the A.J.S. Motor Cycles since their inception know that their supremacy has been attained by sheer merit alone, consequent upon the determination of its designers and builders to produce "something better." Each year has seen improvements, the 1921 A.J.S. making yet another step forward in advance, and we feel confident that the new Model will maintain our traditions for constructional excellence and design. The reputation of the A.J.S. was never higher than it is at the present time, and the pride and confidence placed by us in our products is shared by our riders. The records of satisfactory service and successful achievements of the past will, we know, be again excelled during the coming season.

ALTERATIONS FOR 1921.

The engine is now 7 h.p., and roller bearings to the big ends of the connecting rods are also incorporated. The cooling arrangements of the cylinders have received further attention, and deeper and more numerous radiating fins are embodied both on the cylinder barrel and the detachable heads. Another refinement is the new gear box adjustment by means of which the box can now be readily moved backwards or forwards for correct chain tension. This is done by the fitting of a draw bolt, the head of which is carried outside the rear end of the bottom bracket, and is easily manipulated, giving the most minute adjustment.

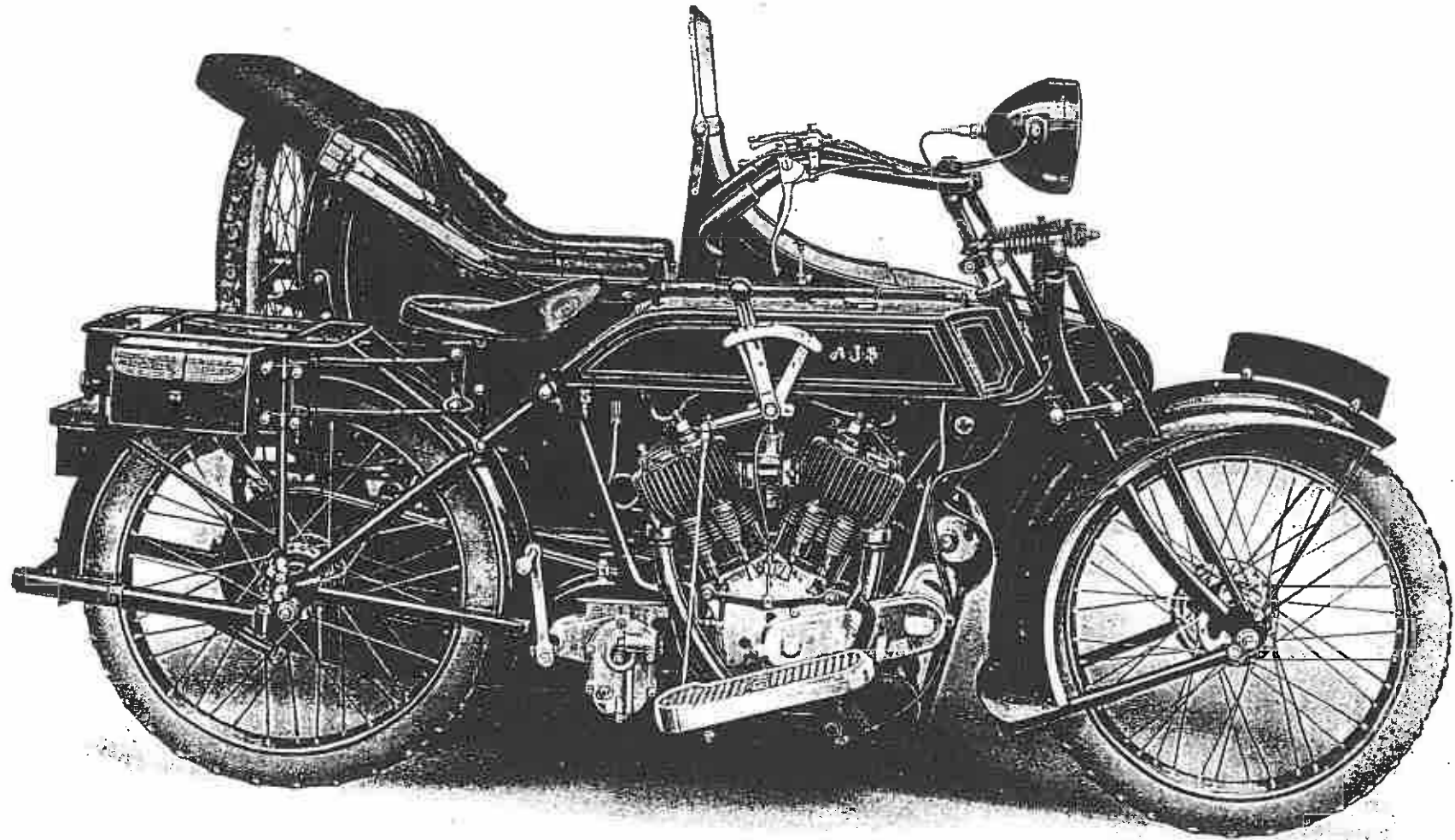
IMPROVED TYPE FRONT BRAKE.

The old stirrup rim type front brake is now superseded by a really effective pattern on the same lines as our noted rear brake, which is of the internal expanding type. This introduction will meet a long felt want. It is operated by pedal on the right hand side of the machine.

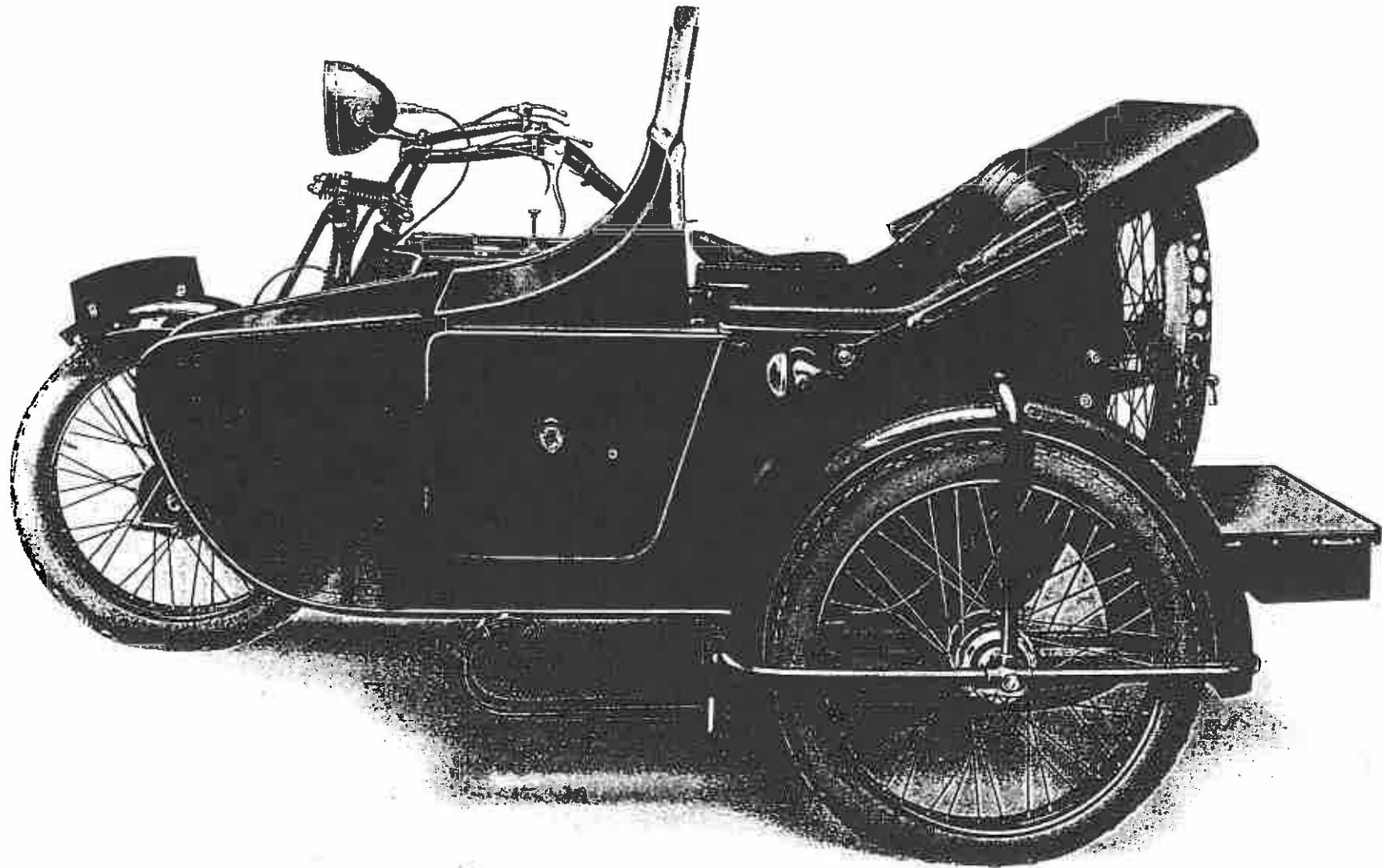
NEW SADDLE.

On the 1921 models we are standardising the new Brooks B 600 laminated leaf spring saddle, which we have proved under exhaustive tests to be the most comfortable saddle yet devised, and the nearest approach to the luxury of a spring frame.

A. J. STEVENS & CO. (1914) LTD.



MODEL "D" A.J.S. 7 h.p. Passenger Combination
Fitted with "Lucas" Electric Lighting Set, and Hood.



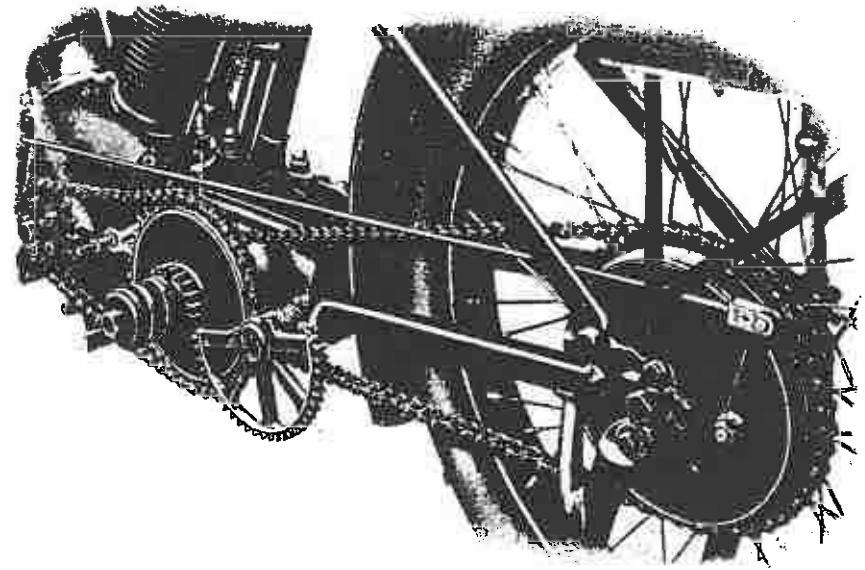
MODEL "D" A.J.S. 7 h.p. Passenger Combination
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Transmission.

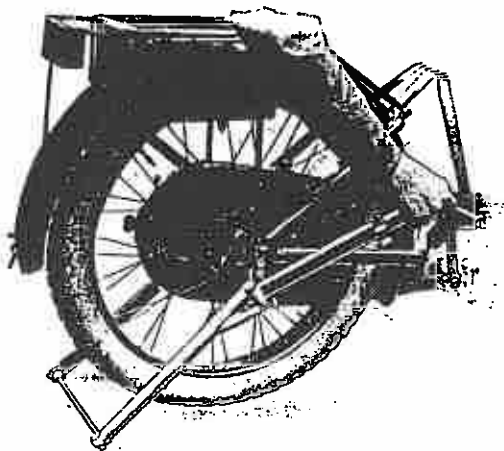
Perfect Power Transmission has been associated with the A.J.S. for the past 14 years, and our ideal system still asserts its superiority and proved reliability. The drive from Engine to gear box and thence to back wheel is by chain, which runs under perfect conditions in entirely enclosed and protected weather-proof Cases. Hans Renold chains are employed throughout, and the transmission can be inspected without disturbing the chain cases, or any mechanism.

A.J.S. Mudguarding.

Particular attention has been directed to this important part of Motor Cycle equipment, and we have no hesitation in saying that for general efficiency and neatness no better will be found on the market. The front guards are of exceptional and generous dimensions. The guard is fitted with widely "flared" side valances, which increase in effective width right down to their base, where they meet the bottom valance and effectively combat splash from all directions. The guard is built round the fork blades and constitutes a well thought out and workmanlike job. The rear guard is on similar generous lines, being 7 in. wide, and carried well down over the rear wheel.



A.J.S. Transmission. Chaincases removed.
This view also shows the large diameter Brake Drum.



A.J.S. Patent Rear Stand, showing how
Lever is brought into action.

Rear Stand.

An important feature, and one that will be appreciated by all riders, is our "Protected" Design of Rear Stand. This Stand entirely abolishes the old fatiguing procedure necessary to jack-up the machine. No herculean efforts are now required to haul up the dead weight of the motor cycle, the action being easily performed with the aid of a neat Lever, which is part of the Stand. The Lever is hinged, and when not in use is folded back parallel with the Stand.

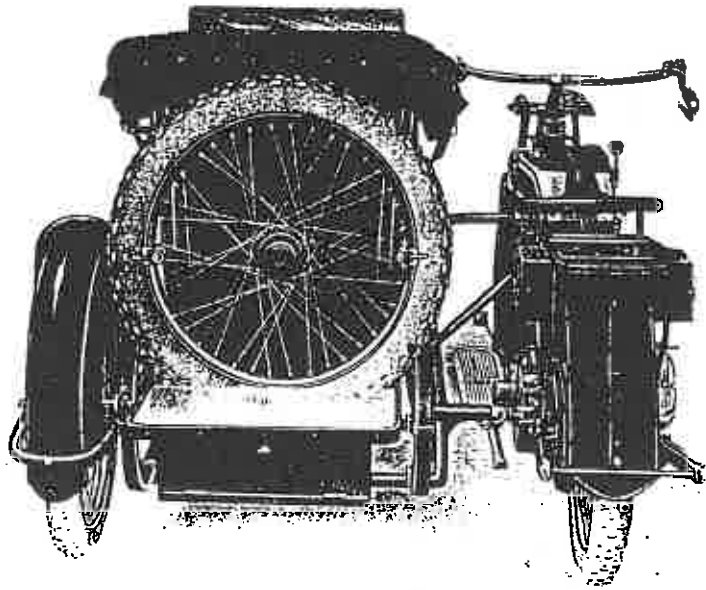
Internal Expanding Front and Rear Brakes.

This Brake provides a means of control unsurpassed by any other make of machine. It gives absolute safety, and whilst it provides a most powerful instrument for emergency usage, it can be employed equally with the greatest delicacy owing to its remarkable sweetness of action. The Rear Brake is operated by Foot Pedal on the left hand side of the machine and the Front by Pedal on right hand side.

The Frame.

The A.J.S. Frame is not a frame in name only, it is a scientific construction which eradicates all the weaknesses of the usually accepted type of frame. It is built with entirely straight tubing throughout, NO bent tube entering into its construction. It is given a margin of strength which will allow for overloading, without departing from its correct alignment or suffering fractures.

7 h.p. A.J.S. Sidecar Combination.



Rear View

SHOWING HOW THE SPARE WHEEL IS CARRIED.

THIS Illustration shows how the Spare Wheel of the A.J.S. Interchangeable Detachable Wheel system is carried. The Wheel is supported upon two brackets fixed to the rear of the body of the Sidecar. The brackets incorporate a pair of quickly removable clips which grip the rim of the Wheel and support it clear of any portion of the body or chassis. In addition to this desirable feature the Wheel is entirely out of the way of both passenger and driver, is perfectly protected from deterioration whilst not in use, and readily accessible when required by simply unscrewing two fly nuts. This illustration also shows the spacious rubber-covered luggage grid, with tool locker underneath.

Meritorious Performances made by the A.J.S. during 1920.

Reliability.

A.C.U. English Six Days' Trials. 5 Gold Medals. Five 6 h.p. A.J.S. Sidecar Combinations started—Five finished.

London—Edinburgh Reliability Trial. 5 Gold Medals, 4 Silver Medals.

Liverpool M.C.C. Reliance Cup Trial. Highest Awards for Sidecars obtained.

West Midland Open Reliability Trial. Awarded B.S.A. Challenge Cup, Castle Challenge Cup, and 5 Gold Medals.

Scottish Six Days' Trial. Gold Medal and Silver Medal.

Dublin 24 Hours' Trial. Awarded Special Gold Medal.

Liverpool M.C.C. 24 Hours' Trial. Awarded Rudge-Whitworth Cup and 4 Gold Medals.

Birmingham M.C.C. Victory Cup Trial. 6 Silver Medals.

Essex M.C.C. 24 Hours' Reliability Trial. Gold Medal—One 6 h.p. Combination entered.

The above represent only a few of the successes achieved by the A.J.S. in Reliability and Speed Trials this season

The Awards gained by the A.J.S. during 1920 are as follow:

15 CHALLENGE CUPS. 20 RECORDS.
86 GOLD MEDALS. 39 SILVER MEDALS.
26 BRONZE MEDALS.
90 FIRSTS. 51 SECONDS. 21 THIRDS.



THE JUNIOR TOURIST TROPHY
Won by the A.J.S. twice
in succession

Speed.

FIRST 2 $\frac{3}{4}$ h.p. Motor Cycle in the world to officially attain 80 m.p.h. This was accomplished by H. R. DAVIES on Brooklands, Oct. 19, 1920, over the Flying Kilo, which he covered in 27.8 secs., equalling a speed of 80.47 m.p.h.

12 Class Records and 8 International Records also stand to the credit of the 2 $\frac{3}{4}$ h.p. A.J.S. this year, making 20 RECORDS IN ALL.

81.8 m.p.h. put up by H. R. DAVIES on a 2 $\frac{3}{4}$ h.p. A.J.S. at Clipstone Drive Open Speed Trials. Time, 22 secs. for the Flying $\frac{1}{2}$ -Mile.

Derby, Notts & Sheffield M.C.C. Open Speed Trials, Chatsworth Park. 19 Gold Medals.

York & District M.C.C. Hill Climb at Sutton Bank. 7 FIRSTS, 1 Second, 1 Third, 6 Gold Medals, 2 Silver Medals, 1 Bronze Medal.

Bristol M.C.C. Open Hill Climb. 2 FIRSTS, 3 Seconds, and Fastest Sidecar Time of the day (any capacity).

Sutton Coldfield and N. Birmingham M.C.C. Hill Climb, Style Cop. 4 FIRSTS, 2 Seconds, and Fastest Time of the day.

Luton & South Beds Speed Trials. 5 FIRSTS, 6 Seconds, & Fastest Solo Time up to 1100 c.c.

M.C.C. Brooklands Championship Race. 350 c.c. Class won by Kaye Don, 2 $\frac{3}{4}$ h.p. A.J.S.

M.C.C. Brooklands Race Meeting. 350 c.c. Scratch Race, won by Major Axford, 2 $\frac{3}{4}$ h.p. A.J.S.

Leicester & District M.C.C. Hill Climb, 5 FIRSTS.

To enumerate all the awards gained by the A.J.S. during the past eleven years would require a large volume