PILGRIMAGE TO——MECCA

FOR years I have wanted to visit the Scott motorcycle factory at Shipley. But Yorkshire is a long way from London and a journalist's spare time is strictly limited; so, until a week or two ago, I had not been able to achieve a Scott lover's ambition.

The Editor's old two-speeder gave me the opportunity. As many South-Eastern Centre clubmen will know, I have made considerable use of the old model; and the greater the mileage the machine covers the more I become convinced that it is still capable of really hard motoring, despite its 22 years. Also, the Scott people would certainly like to see such a well-preserved specimen of one of their earlier masterpieces. . . ! And it was high time we discovered what the 1946 Scott was going to look like and when it was going to appear. I had been hearing, too, a lot of rumours about a revolutionary two-stroke design that was being discussed in whispers up in Yorkshire. Yes, there were several reasons for going to Shipley!

On a Monday evening, when that particular week's issue was safely "to bed" and the Editor was in a nice cheery, receptive frame of mind, I put the proposition to him. He gave his blessing to the venture, and, in June, with the Scott's previous month's "basic" saved up, the trip was on.

At 3 o'clock on a pouring wet afternoon I set off from Bowling Green Lane. Over the Islington stone setts, the old Scott bumped a bit, for, my one real anxiety being punctures, I had pumped up the beaded-edged tyres really hard. Like any other Scott, this one wasn't really happy until it could get into its stride along the de-restricted Great Cambridge Road. I buzzed along there at—I suppose, in the absence of a "speedo"—a steady "50." Because a silencer had been fitted in addition to the normal expansion box, the exhaust note was so quiet that it was completely drowned by the swish of the tyres over the waterlogged road and the whirr of the chains.

One advantage of these early models is the fact that the oil adjusters, on each side of the tank, are immediately in front of the rider, so that I was able to get through Cheshunt, Hoddesdon and Ware without leaving an offensive trail of smoke. Then came that stretch of beautiful, fast, undulating road that leads to Royston.

A queer way of heading North? Actually, I have found that, to take the Cambridge road to Royston and then cut along A14 to join A1 at Alconbury Hill is swifter, by day, than following the Great North Road all the way from London.

Hot Scott!

All was well through Stilton and Newark until Doncaster, where I noticed water bubbling and hissing round the cylinder-head gland nuts. The packing rings—quite possibly the original ones—had gone. A great pity, because the last 30 miles were hilly.

I had to halt for water, and the old two-stroke was seriously overheating by the time I reached my hotel in Leeds.

It was 9.20 p.m. I had stopped on the road for a meal, again for petrol, and twice for water; and another odd 20 minutes at least. So six hours for 197 miles betters the 30 m.p.h. average at which I had been aiming. I had used almost exactly 3 gallons of petrol, and oil, quite a lot of which goes to lubricate the two-speed gear, averaged about 1 pint for 130 miles.

Next morning, the old Scott arrived at the Shipley works, travel-stained and sprayed with rust from the leaking cylinder heads. It was not at all pretty to look at, but the commissionaire found it very interesting, and Mr. Rigg, Scott's sales director, when he came out of his office, positively pounced on it. . .

"How long did it take you? No trouble? Oh, dear, dear, yes—packing glands gone! We'll see Harry Langman about that!"

And so we saw Harry Langman.

There was the old T.T. rider in his shop, surrounded by heaps of unfinished castings, trays of pistons, con.-rods and other Scott parts. He was superintending the overhaul of one of the few three-cylinder models that ever reached the public. What an immense piece of machinery it looked!

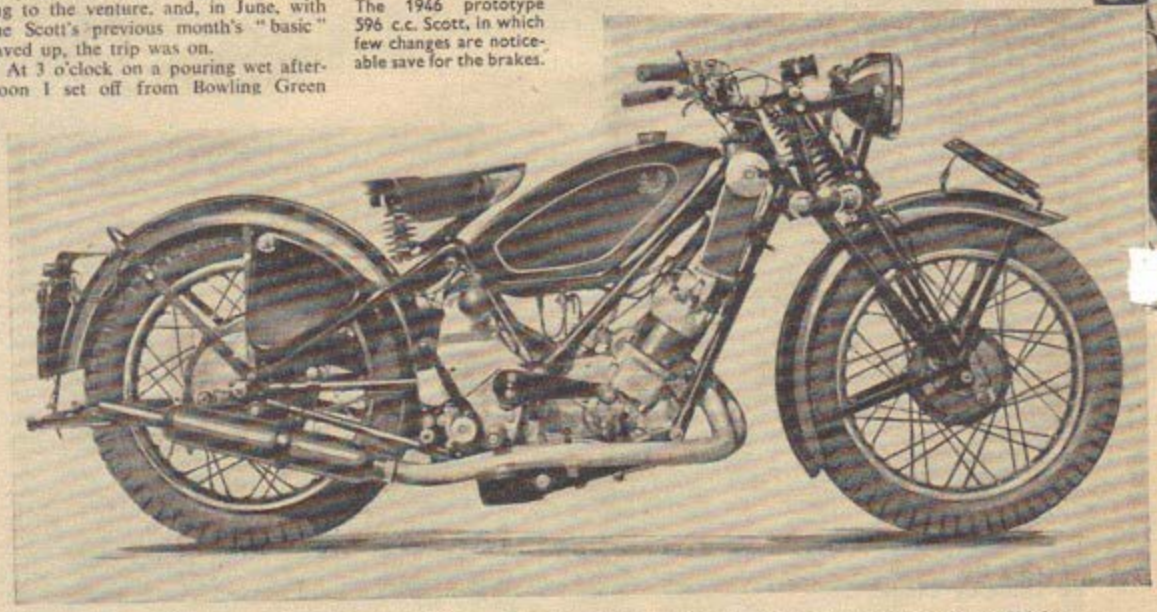
"How d'ye do?" said Harry. "How's Graham?

"Ah! yes, one of the old 532s—1924—yes, late 1924."

Between them, Harry Langman and Mr. Rigg, who joined the great Alfred A. Scott as a lad in 1907, were soon covering the history of the marque from those remote days onwards.

I hadn't been there long before I discovered that the spirit of the late Alfred A. still dominates the whole Shipley concern. When his name is mentioned everyone — metaphorically speaking — raises his hat and stands in silence.

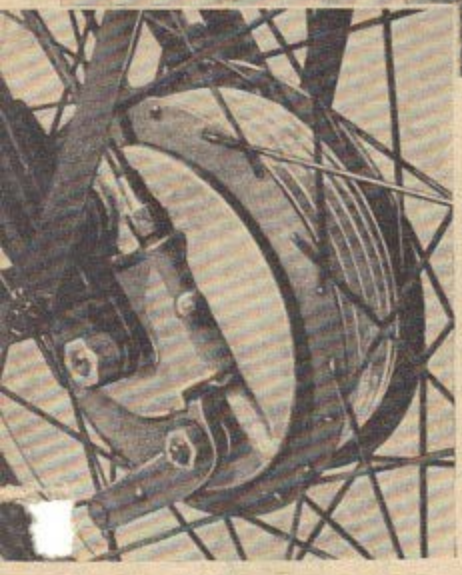
And if the spirit of this great man remains, so does the tradition of fine engineering which he built up. If they could see some of the precision work that Scotts have carried out during the war, those Scott fans who have been



The 1946 prototype 596 c.c. Scott, in which few changes are noticeable save for the brakes.

CYRIL QUANTRILL

Visits the Scott Works on a Veteran Machine and Returns on This Year's Model



The handling of the 1946 model on wet roads was found to be well up to Shipley standards. (Left) The new front hub with its dual brakes.

wondering when a new model would issue from the Yorkshire stables would understand why the reappearance of this well-loved design has been so long delayed.

To find out what is happening about the new machine, I bearded Bill Cull, the designer, in his den.

Cull is a Yorkshireman, and, like all Yorkshiremen, he is forthright. He told me quite a lot about a design he had, already planned to the last nut and bolt, which, if it went into production, would undoubtedly make two-stroke history. But then he told me that there was little likelihood of this design going into production, this year, next year, or, perhaps, ever.

Apart from the time that would be needed for development, there still remain supply difficulties, and cost would be another very big factor. So the whole design is filed away. In the meantime, he has been busy getting the Scott, as we know it, back into production. I had a look at the prototype.

The new wheels are the most obvious improvements. Each has two large non-adjustable journal bearings, carried on a steel centre. These centres are housed in cast-aluminium hubs, webbed internally for lightness and strength, and with cooling fins on their outside diameters.

The front hub has two separate brakes, each of 6 ins. diameter, with ¾-in. wide linings. One cable, running over a pulley, carried in a neat junction-box mounted on the front forks, automatically exerts equal pull on each brake when the handlebar-operated cable raises the pulley yoke. As the box is packed with grease, the operation is smooth and light.

A detail point is the incorporation of a stop on each cam lever, to prevent the cams from rocking past the "off" position under the pull of the springs when the brake is in the "off" position.

The Smith speedometer drive is by worm gear, housed in the cast-aluminium off-side front brake plate; pegs, on the driven wheel of the gear, mate with the hub.

There is one rear brake, on the off side, operated by a cross-over shaft from the near-side brake pedal. This brake is 8 ins. in diameter, with 1-in. wide linings. On the drive side of the wheel there is a large-diameter cush hub, having 10 rubber blocks. The attachment of the cush hub to the wheel and of the sprocket to the cush hub is secured by self-locking nuts. This detail is clearly illustrated on the next page.

Tyres are Dunlop Universal, 19 ins. by 3.50 ins. rear and 19 ins. by 3.25 ins. front.

The power-unit is basically the 1939 standard job, with one double Pilgrim oil pump mounted on the off-side crankcase door. It will be supplied only in the 596 c.c. capacity, 73 mm. bore by 71.4 mm. stroke. An Amal carburetter is used, and ignition and lighting are by Lucas Magdyno.

The gearbox is the famous Scott three-speed pattern, with foot-change mounted on an extension of the gearbox casting. Ratios on the prototype machine, with a 21-tooth rear-drive sprocket, are 4.19, 5.54 and 8.9 to 1. This is the close-ratio box, now modified to give a slightly lower bottom gear.

Another 1946 feature is the fitting of Brampton forks. There is an alteration to the rake, aimed to improve the steering, and in a short ride over the moorland roads I discovered that the navigation of this model is indeed truly excellent.

"Try the brakes while coasting," Cull had said; so I did. Together, they stopped the machine smoothly and remarkably quickly. But, individually, I found the front "stoppers" rather too smooth and the rear one inclined to lock the wheel.

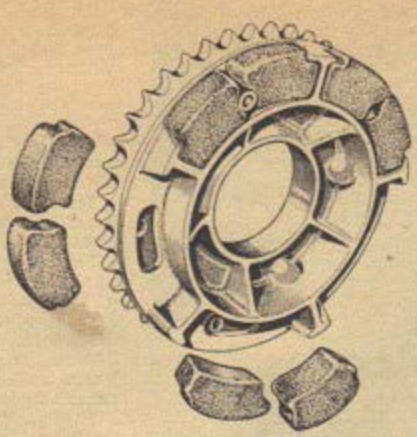
Back at the works I told Mr. Cull that I thought the engine was rather rough, judged by Scott standards, and mentioned my first impressions of the brakes.

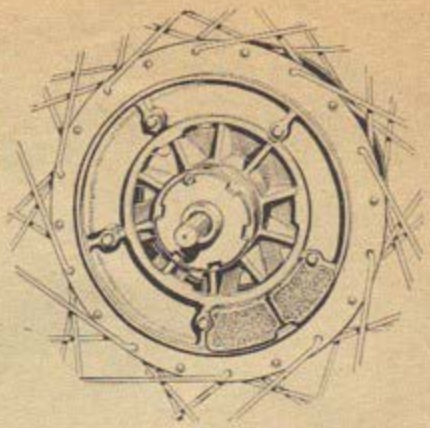
"Well, that's what we want," he said, "a bit of candid criticism. I should have warned you about the motor, of course; it's been knocked up from bits of this and that, without any attention to clearances—case of getting something assembled quickly. And we haven't finished playing with the brakes yet.

"Now I'll introduce you to Mr. Milner, and he'll take you for a ride in The Car."

He took me for a ride, indeed! We went through those winding lanes at a gait that a "Wog" taxi-driver would hesitate to emulate. The car is a much-abused sports chassis in which the three-cylinder engine (oh, yes! they haven't finished playing with that yet, either!) is going through its development tests.

I can only tell you that this engine has improved vastly; that it incorporates a device for metering petroil mixture which would convince anyone that this system of lubrication is the only practicable one for two-strokes; and that—sad to tell—it is planned to develop it





The cush-drive rear hub, partly dismantled, showing the rubber shock-absorbing elements interposed between the vanes on the hub and those on the sprocket member. The webbing of the aluminium hub body can be seen.

solely as a car engine at present.

At tea I met Mr. R. A. Vinter, the managing director, and was put through quite an inquisition. What did I *really* think of the new machine? These Yorkshire people certainly go in for plain speaking, and I did my best to cope with a barrage of questions.

Mr. Vinter was extremely interested to hear that I had arrived on the old two-speeder. "You'd better leave it here," he suggested, "and have it checked over by Harry Langman."

"That would be very nice, I agreed, and I *could*, of course, get back by train . . . "

"By train? What's wrong with borrowing the new model? You can give it a real caning and then come back and tell us just how bad you think it is."

The London Limited.

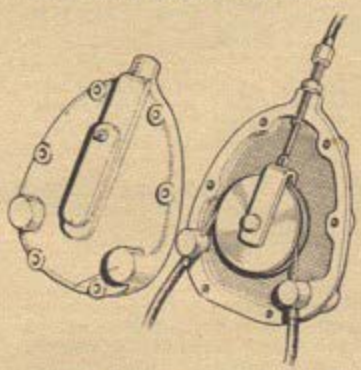
So I borrowed it. After visiting one or two friends in Yorkshire, I left Harrogate at 11.30 p.m. and, stopping at Newark and Stevenage for petrol and a cup of tea and a smoke, I was indoors at Purley—just 222 miles away—by 5 a.m.

It had been a beautiful moonlit night, with only occasional patches of mist in the hollows to slow me up, and as I burbled through deserted London in the early morning, I told myself, for the hundredth time, that this particular job of work has its compensations.

When I arrived back at Shipley, just over a week later, 900 of the hardest possible miles had gone on the "clock" on the 1946 Scott. Although, as I have said, this model is by no means a production job, for our own records it was put through all of that gruelling ordeal which results in a "Motor Cycling" road test chart and graph.

At an informal conference with the Scott directors, I gave them the figures I had obtained and my impressions of the model. And while the "round table" was on, I presented them with two pet ideas of my own, which had been developing in the grey matter all the week.

Please would they seriously consider,



How the dual front brakes are balanced. The control cable passes from one brake to the other over an enclosed pulley, mounted on the forks.

when the "three" was ready, making a sidecar outfit, built as such and incapable of being divorced from the "chair." It would provide a high-performance model for which the demand at present greatly exceeds the supply.

And, please, would they also use petroil lubrication on the '47, or, at the latest, the '48 machines, or else provide some means of adjusting the oil pump settings from the saddle?

So far as the 1946 machines are concerned, I was assured that the production models, when they start coming through, will have engines of fairly high performance, that the brakes will be really super (on my experience of the experimental ones I think they will be) and that there would be an opportunity to give one an unbiased road test.

Then, collecting the two-speeder—looking smarter than it has looked for a long time—I set off home. At Grantham, it being dark, and getting cold, I stopped for a cup of tea. Half an hour later I was ferreting in and out of the dozens of lorries parked in the square, trying to find the model.

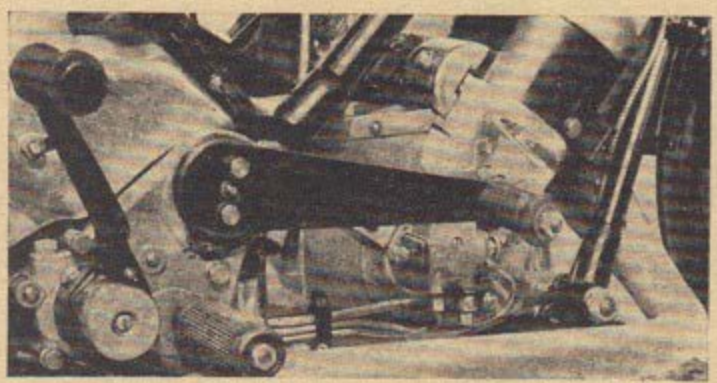
Surely no one would have stolen it! I asked a lorry driver. "Seen anyone with an old motorcycle?"

"No, chum. Better go to the police station."

And there, so help me, was the poor old Scott: not stolen, but in protective custody! It turned out that I had for-

gotten to refit the licence-holder, and a policeman, seeing the machine standing unlicensed and unilluminated in a corner of the lorry park had assumed it to be lost, stolen or strayed. When I'd explained, and the appropriate form had been completed, I could have gone on my way, but for the "Booth" lighting, of the most primitive type, which adorned "XU 840"! The local constabulary opined that it was ingenious, but not altogether legal.

And being one of those cautious customers, who believes that a hint is better than an entry in a copper's notebook, I spent the remaining hours of darkness in a shelter opposite the police station. My sole companion was a dear old tramp, who woke up at my footfall to "borrow" my last match and to tell me where an honest bob could be earned hay-making!



The positive-stop, foot-change operation of the Scott gearbox.