

### **The Silk Oil Pump.**

The reliability of the Pilgrim Pump fitted to most Scotts is somewhat dubious, not I hasten to add because of its design, but because of the duty it is asked to perform. The problem is that for the very small quantity of oil the pump has to operate on the very tip of the cam, which consequently wears very rapidly.

The Best & Lloyd pump which was fitted to some earlier Scotts, still has the problem of not being designed for very low oil flows but, since the flow is controlled hydraulically, the mechanical action of the pump is not affected.

The Silk Engineering Scott has always been fitted with a Best & Lloyd pump and has never had any oiling trouble. When we started supplying the Silk Crankshafts there were enquiries about the best type of oil pump, and since the Best & Lloyd is no longer available, and we could not recommend the Pilgrim, we had to design a pump. The first of these pumps was seen at the Rally last September on John Hoble's machine. The design is based on the B. & L. principle and for the uninitiated we give the following description:-

It is a piston pump in which the piston and cylinder rotate together through a 35 to 1 reduction worm and wheel, from the engine in the same manner as the Pilgrim. The axial motion of the piston is obtained from a stationary ring which has a cam profile cut on its inside diameter. A pin on the piston engages with the cam. The cylinder is provided with a single port for oil flow which for half a revolution is open to the oil inlet and for the other is open for the oil outlet. The piston motion is timed such that it is moving up while the inlet is connected to the cylinder and down when the outlet is open. This condition, unfortunately gives considerably more flow than is necessary for the Scott. To enable the flow to be reduced the piston drive cam is made adjustable. This makes it possible to time the cylinder port relative to the piston movement such that the flow in either direction is caused. It can be seen that if for half the piston stroke in each direction the inlet (or outlet) is open the quantity of oil drawn in will also be pumped out, and hence the net flow will be zero. This means that it is possible to set the pump to give a net flow of any desired amount between zero and maximum, and that under all flow conditions the mechanical action remains unaltered.

The Silk pump uses this principle but incorporates modern techniques for reducing wear and has the inlet and outlet connections positioned to suit mounting on the right hand crankcase door of the Scott engine. It is in fact a direct replacement for the Pilgrim unit. The tell tale, which was a feature of the Best & Lloyd pump has been deleted since all it does is provide another joint to leak — for those who like to watch the oil going into the engine — transparent feed pipes are supplied. Also included is a connection for an oil feed to the carburettor if this is required.

If your appetite has been whetted — further details can be obtained from Silk Engineering, 61 Netherfield Road, Sandiacre, Notts.

### **NEWS FROM SOUTH AFRICA**

#### **(Jo'burg - Durban run)**

There were five Scotts amongst the 60-odd competitors and according to Oliver Barnett all did well, and he reports "so far as I know, not a single Scott had to have a spanner touch the whole way." Oliver was placed 4th with a time error of 21 mins. 37 secs. Neil Smith was placed 9th.