



NSU "CAVALLINO"

An Italianate Sportster from Germany's
Biggest Moped Factory

AT first glance, one could be forgiven for assuming that the NSU "Cavallino" had been designed and built in Italy, that traditional home of the sports-style moped. This machine has all the hallmarks which one normally associates with Italian machinery. Sleek and sporty in appearance, it is also highly practical, and has the red and white decor currently favoured beside the Mediterranean.

For all its Southern styling, however, the "Cavallino" is also unmistakably an NSU. It is, perhaps, just to say that there are but few concerns who could mass-produce such a machine successfully, and NSU is one of them. Thus the well-tried "Quickly" two-stroke engine is immediately familiar, and the design and clean manufacture of such parts as the full-width hub brakes all point to Neckarsulm as the "Cavallino's" home town.

This was the first opportunity I have had of trying the three-speed gearbox which NSU introduced mid-way through last year. It is really sweet. Gear selection with this new box is smooth and positive, and it is almost impossible to miss that middle "cog" which, on some machines, is elusive. Since the clutch operation is up to the same standard, control of the machine proved to be a real pleasure.

Like all sports models, the "Cavallino" felt a little cramped at first, until I had accustomed myself to the rather bunched-up position. However, the use of a dual seat means that the rider has ample space in which to vary his posture during a longish run, and thanks to this I found the machine quite comfortable over distances which had proved distinctly

tiring on certain more conventional machines.

Hand in hand with comfort went good control. The NSU frame is structurally unusual, consisting of twin tubes disposed one above the other to form an open beam. Equipped with telescopic front forks and a swinging-fork rear end—both of which were efficient and well damped—this frame provided excellent steering. Though the handlebars are of stubby, clamped-on sports pattern I had no difficulty with low-speed control, and at higher speeds, downhill, the machine rode as if the tyres had been stuffed with the downiest down obtainable, yet steered to an inch.

No engine has a reputation to surpass that of the "Quickly" unit—with which the

Point-to-point transport for a modern age—the helicopter and the moped. But a "Cavallino" costs only 100 halfpennies per hour to run, while the S.55 costs £100!

"Cavallino" is equipped—and it would be a harsh critic indeed who would, or could, fault the manner in which this unit churns out the power. Like most German engines nowadays it is governed to a top speed which is comparatively low, thereby satisfying the German regulations. This speed, however, is for all practical purposes the cruising speed, and I soon discovered that the "Cavallino" was happy to cruise indefinitely at "25 m.p.h. plus," even though it was impossible to push it along at more than 30 m.p.h. on level roads. All the familiar "Quickly" characteristics were there . . . the smoothness of output, quietness of operation, flexibility and formidable top-gear pulling power. Added to these, however, was a new hill-climbing capacity for, with the lowest of the three gears in use, really steep hills could be tackled. True, the machine drew the line at a climb of 1 in 4, approached from a short run, but even this was surmounted by the judicious use of pedal assistance. Unlike some sports jobs, the "Cavallino" has pedals which can be used, the gearing being so arranged that a pedal boost can be given from roughly 15 m.p.h. in top, 10 m.p.h. in second, of five m.p.h. in third. Though both my arms had to be held in a somewhat ungainly position to permit the requisite knee clearance, I found that this arrangement was quite effective, and that it would be practical to pedal the NSU in the event of engine failure.

Effective brakes are a very necessary part of the make-up of a moped lacking, as the type does, engine braking power. In this respect, I thought that the "Cavallino" is an advance on previous machines from this factory which, on several occasions, I have criticised on this score. True, the rear brake still requires a deal of pressure on the pedals to bring it into action; on the other hand, the front brake is very powerful indeed, giving an immediate response to light lever pressure. Unfortunately, the roads were damp when my test panel figures were obtained.

Finally, lights. This machine has the most fantastic lighting set I have yet encountered—far and away the best moped lamps I have ridden behind. Though of small diameter, the headlamp throws a long, powerful and brilliant beam which gives illumination as good as the twin headlamps of many cars, and better than that obtainable from the average motorcycle set. And it will produce this performance at speeds as low as 10 m.p.h. in second gear. It is features such as this that mark out the "Cavallino" as a production machine head and shoulders above most mopeds in its class.

CENTAUR.

VITAL STATISTICS

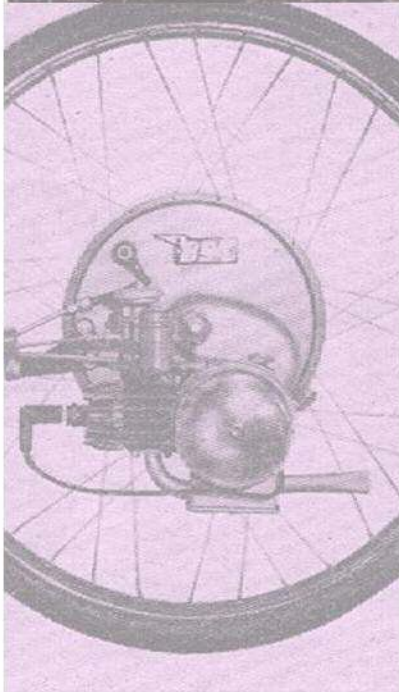
HOW THE NSU PERFORMS

Speed:			
Maximum,	32 m.p.h. in 26 sec. from rest.		
Flying 1/10th mile,	28 m.p.h.		
Standing 1/10th mile,	18.5 m.p.h.		
Acceleration:			
0-10 m.p.h.	3.5 sec.	0-25 m.p.h.	16 sec.
0-15 m.p.h.	6 sec.	0-30 m.p.h.	22 sec.
0-20 m.p.h.	9 sec.		
Economy: At 20 m.p.h., 130 m.p.g.; at 25 m.p.h., 105 m.p.g.; at 30 m.p.h., 90 m.p.g.			
Hill-Climbing:			
Time for hill,	1 min. 38 sec.		
First gearchange (top to 2nd) at	0.2 miles.		
Second gearchange (2nd to bottom) not required.			
Test hill 0.5 miles long; max. gradient	1 in 10.		
Average gradient	1 in 16.		
Braking:			
At 20 m.p.h.	25ft.	Rear	33ft.
At 25 m.p.h.	56ft.		62ft.
At 30 m.p.h.	82ft.		77ft.
Pedalling:			
Comfortable speed,	6 m.p.h.		
Tester's Rating:	awkward to pedal.		
Tester's Weight:	200 lb.		

THE NSU AT A GLANCE

Engine: NSU two-stroke; 40 mm. bore x 39 mm. stroke 49c.c.; c.r. 5.5 to 1; 1.3 b.h.p. at 5,000 r.p.m.
Gearbox: In unit with engine; three speeds, with handlebar twist grip control; gear primary and chain final drives; kick starting.
Frame: Welded-up from steel tubes and pressings; telescopic front forks; swinging fork rear end.
Tank: 2½ gal. capacity.
Lights: Head and tail lamps fed direct from flywheel magneto-generator.
Wheels and Brakes: Both brakes 3½-in. internal-expanding; rims chromium-plated; rust-proof, heavy-gauge spokes; 2-25-in. x 23-in. Phoenix tyres.
Equipment: Tool kit; tool box, tyre pump; centre stand; horn, head lock.
Finish: Red and white enamel, with chromium plated details.
Weight: 118 lb.
Makers: NSU a.g., Neckarsulm, Germany.
Concessionaires: NSU (Gt. Britain) Ltd., 7 Chesterfield-gardens, London, W.1.
Price: £99 19s. 11d.

IceniCAM Information Service



www.icenicam.org.uk