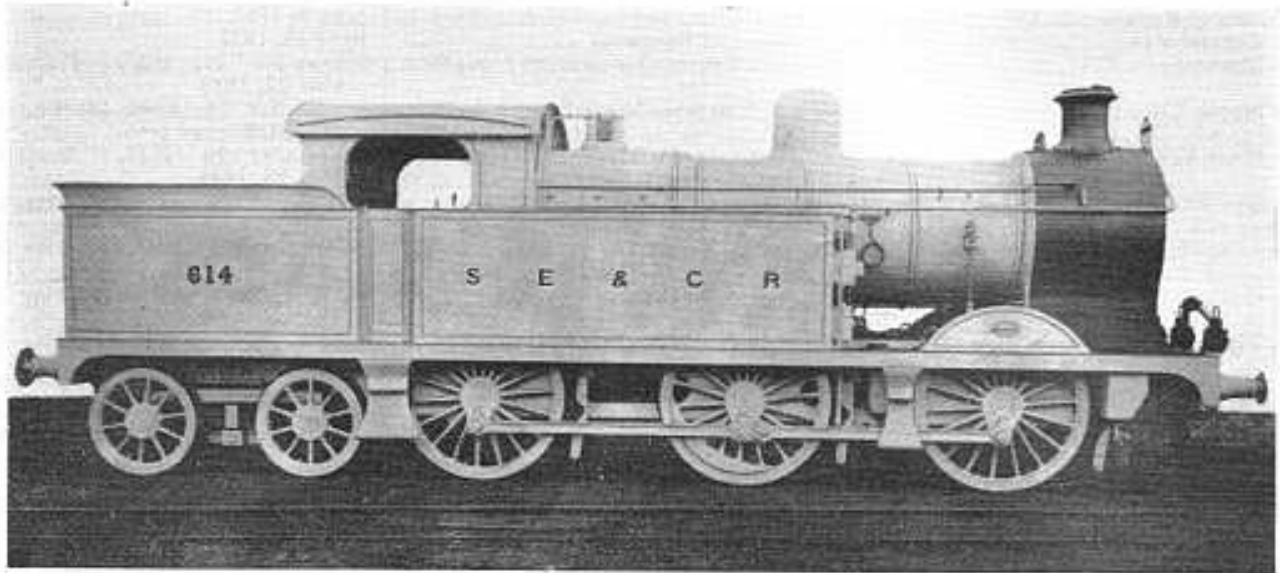


# The "J" Class 0-6-4 Tanks of the S.E.C.R.

By D. L. BRADLEY



The fifth and last of the South Eastern & Chatham Railway "J" class 0-6-4 tank engines, No. 614, painted grey for official photograph in December, 1913

THE last class of locomotives built by Mr. Harry S. Wainwright for the South Eastern & Chatham Railway, before his retirement because of ill health, consisted of five large and handsome superheated 0-6-4 tanks. They were numbered 129, 207, 597, 611 and 614, and placed in traffic by Ashford Works during the final quarter of 1913. Known as the "Js," these engines were quite different from any seen hitherto on that railway or, indeed, on any other line south of London.

They were intended for use on the outer suburban trains to Tonbridge, and the Hastings expresses, where their six coupled wheels should have been a distinct advantage on the banks. This they were, but they did not seem to allow the engine to run freely on the descents from Polhill and Sevenoaks tunnels, possibly because of their relatively small diameter of only 5 ft. 6 in. This caused the removal of all five from the Hastings line and a return to Ashford Works, where several minor modifications were made in an attempt to improve their performances.

On re-entering traffic, No. 207 was given a series of test runs on the smartly-timed 12 noon Hastings to Charing

Cross express, but once again the results showed the class to be "too short in the legs" for really fast running, although the steep banks were no problem at all. The "Js" were then set to work on the heavy suburban trains between Redhill and London, but they also ran to Tonbridge *via* Redhill, to Dorking, and also on the Tadworth branch. The new "L" class 4-4-0s of 1914 were found capable of handling the fast Hastings line trains and were thus fortunately able to fill the gap left by the six-coupled tanks; Nos. 764, 766, 767, 768 and 769 were stationed at Hastings for these services.

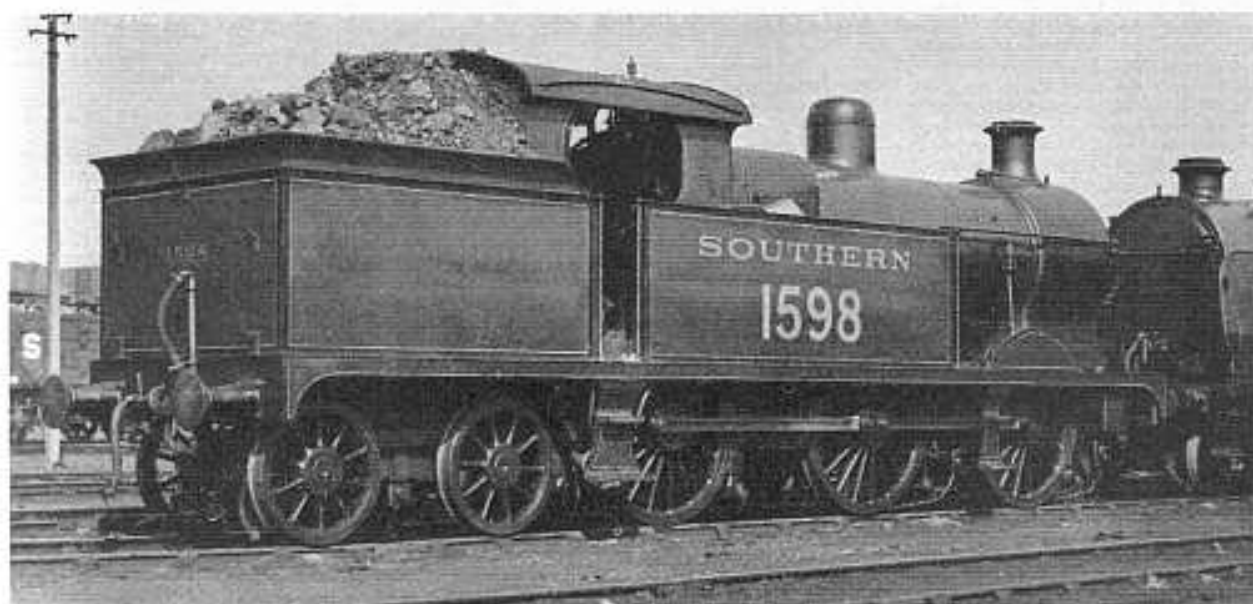
The principal dimensions of the "J" class 0-6-4 tanks were cylinders  $19\frac{1}{2} \times 26$  in., driving wheels 5 ft. 6 in., with a coupled wheelbase of 16 ft. 6 in., and bogie wheels 3 ft. 7 in. The boiler was 4 ft.  $5\frac{3}{4}$  in. diameter and 10 ft.  $7\frac{1}{2}$  in. in length, with a pressure of 160 lb.; total heating surface was 1,233 sq. ft. The water capacity was 2,000 gal. and weight in working order 70 tons 14 cwt.

Like the Wainwright "E" class 4-4-0s of 1905-8, these tank engines had Belpaire fireboxes, while the cabs were of the standard "pagoda" pattern, as fitted to the "H," "P" and "R1" classes.

They were the first S.E.C.R. locomotives to be built with piston valves and superheaters (although two "Es," Nos. 36 and 275, had been so fitted experimentally in 1912) and were also the first Wainwright engines to have painted and not polished brass dome covers. When new, Wakefield mechanical lubricators as well as Stone's fuel economisers, and spark arrestors, were carried, but later sight feed lubricators were substituted and the other apparatus removed altogether.

these engines, Mr. Wainwright had toyed for some time with the idea of producing a class of six-wheel radial tanks having  $18\frac{1}{2} \times 26$  in cylinders, 5 ft. 2 in. driving wheels and a modified "C" class boiler which, if proceeded with, would have been known as the "N" class.

Early in the first world war, because of an enormous increase in workmen's traffic, the "Js" were sent to work the Mid Kent line services to Addiscombe Road, Croydon. Originally, of course, they had all been painted in the Wain-



Southern Railway No. 1598, formerly S.E.C.R. No. 611, in 1935

S.E.C.R. No.	Date Built	Southern Railway Nos.			B.R. No.	Withdrawn
129	10/1913	A129.	A596 (5/1927).	1596	31596	9/1951
207	10/1913	A207.	A595 (3/1928).	1595	31595	4/1951
597	11/1913	A597.		1597	31597	10/1950
611	11/1913	A611.	A598 (9/1927).	1598	31598	1/1951
614	12/1913	A614.	A599 (4/1928).	1599	31599	10/1949

Apparently the Schmidt-pattern superheater tried on No. 275 gave the best results in traffic, because the German type was used in the "Js" in preference to the Robinson pattern carried by No. 36. Much later, in Southern Railway days, Maunsell superheaters were fitted to all the class when heavy repairs were required by the Schmidt apparatus. In common with all other Ashford-designed locomotives since the autumn of 1878, the Stirling patent steam reversing gear was fitted, the cylinders of which were bolted to the leading end of the right-hand side-tank to avoid an overheated cab in summer and to give the footplatemen more elbow room. Before constructing

wright light green livery, with raised brass numerals rivetted to the rather large bunkersides and the company's initials painted in red-shaded gold across the sidetanks, but again the war caused a change: from 1916 onwards this pleasant livery gave way to an unlined funeral grey, with large white numerals on the side tanks and oblong cast metal plates lettered S.E. & C.R. on the bunkers.

After the war the "J" class 0-6-4 tanks were regularly used on the 1.5 p.m. fast train from Charing Cross to Hastings, the 5.25 p.m. to Wadhurst and the 6.35 p.m. to Tunbridge Wells. On Sundays No. 129 was often rostered

for the 11.15 a.m. Charing Cross to Wadhurst and the 1.5 p.m. return working on which the Stirling 4-4-0s Nos. 222 and 458 were also to be seen from time to time, thus giving a touch of excitement to a usually quiet day. The post-war timings were not so tight as those of 1914 and the "Js" managed them quite easily.

The 1923 grouping of railways saw all five entering Southern Railway stock, to shortly have an "A" added to their numbers and to appear painted a darkish green. The same year also saw Nos.

added as detailed in the table on page 537. The vast electrification schemes carried out by the Southern Railway in the London suburban areas and elsewhere caused the transference of the whole class during the early 1930s to Ashford, whence they normally worked to Tonbridge, Margate and Victoria *via* Maidstone East. As the electric line was extended towards Maidstone, they did not normally work west of that town, although for a time in 1936 on Sundays one of them often was rostered for the 9.35 a.m. Ashford to Bromley, the 11.17



Photo]

[D. L. Bradley

**No. 31595 in British Railways livery in September, 1950. The class became extinct in 1951, on the withdrawal of No. 31596**

597, 611 and 614 sent to Tonbridge, to be followed two years later by No. 129, for use on the slower Hasting line trains, but they were also to be seen regularly in the London area. From time to time Tonbridge sent them down to Hastings on goods trains, on which they performed quite creditably although the loads handled were not more than twenty or so wagons.

During 1927, and again in 1928, a certain amount of renumbering took place, while after 1931, as they passed through shops for routine repairs, the "A" prefix was omitted from these new numbers and in its place one thousand

a.m. Bromley to Gillingham, the 1.25 p.m. Gillingham to Victoria and the 7.5 p.m. Victoria to Ashford. During 1936-7, No. 595 (*ex*-No. 207) was again used on the Hastings line freight duties, but was soon relieved of these by the more powerful and suitable "N1" class Moguls.

War again in 1939, with its shortages of labour and materials, saw the dark green livery of more peaceful times giving way to an uninspiring plain black with the numerals painted in green lined gold on the bunkersides. All, however, survived this indignity and also the bombing, and, still at Ashford, entered

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the service of British Railways in 1948 to have 30,000 added in due course to their numbers, which thus became 31595 to 31599. Two, Nos. 31595 and 31596, received the added honour of being adorned with the British Railways lined black livery as used on secondary passenger locomotives, in which they looked extremely smart and efficient.

Their days, however, were numbered, and the arrival in Kent of large numbers of Brighton-built London Midland Region-type class "4" 2-6-4 tanks finally sealed their fate, with the last, No. 31596, going for scrap in September, 1951, thus rendering the 0-6-4 wheel arrangement extinct on British Railways. As a class the five "J" class tanks suffered more

than their fair share of hot boxes, while the boiler was not such a free steamer as that carried by the smaller "Hs," which class was generally preferred by the footplatemen in post-war days. If Mr. Wainwright had remained longer in office at Ashford Works, more would probably have been built and any faults of design cleared up.

The cylinders had tailrods for many years, the ends of which passed through the leading buffer beams to be housed in dainty covers, but these were removed from 1939 onwards on all five, excepting No. 31595, and the holes left in the buffer beams plated over; similarly the snifting valves carried behind the chimneys until 1945 were also declared unnecessary and disappeared as the engines passed through shops.