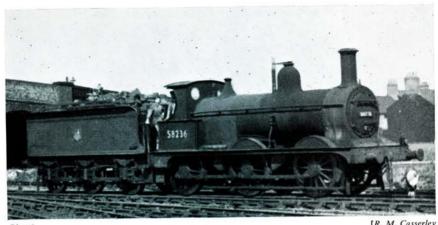
070

Pre-Grouping Locomotives on British Railways—2

By H. C. CASSERLEY



Photo] [R. M. Casseriey
No. 58236, one of the last two of the Midland class "2" 0-6-0s retaining a
Johnson boiler, at Horninglow, Burton-on-Trent

THE table given in the previous instalment of this article showed that the railway with the largest number of pre-grouping locomotives now running is the Midland. Of its total of some three thousand engines absorbed into the L.M.S.R. system at the grouping, no less than 881 are still at work nearly When one a third of a century later. considers, moreover, that this total refers only to engines of actual pre-grouping origin, and is apart from the several hundred engines of Midland Railway design built subsequent to the amalgamation, it will be readily understood how it is that on many parts of the former L.M.S.R. system there is such a strong Midland element among the locomotives to be seen.

Dealing now in detail with the various classes still in existence, we find that, as on most lines, the express passenger engines have fared the worst in the matter of survival. All of the famous Midland Compounds have now gone (although many of their L.M.S.R.-built successors still remain), as have all 80 of the Johnson Belpaire "700" 4-4-0 class. Of the earlier Johnson 4-4-0s of the rebuilt "483" class, however, 79 are still in service.

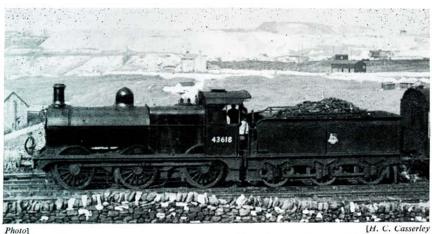
All of these have been rebuilt twice—in the early 1900s with large non-superheater boilers, and from 1912 onwards with superheaters and raised running plates. The survivors are now to be found scattered all over the old M.R. system, chiefly in the Midlands, and mostly are used on local stopping trains and station pilot duties, and the like. A few are to be found at such sheds as Crewe and Stafford, on the former London & North Western Railway. Here, again, a considerable number of similar engines of post-grouping construction do not fall within the scope of this review.

By far the most numerous pre-grouping class, however, is the Johnson standard 0-6-0, of which the first was built in 1875. The design was continued by its originator with slight modifications throughout his career until 1903, and perpetuated by his successor, Deeley, in a somewhat enlarged form until 1908, by which time a total of 935 engines had Ignoring for a moment been reached. the last 70 engines brought out by Deeley, with larger boilers, the original 865 Johnson-built locomotives were all of practically identical design, except that a few had 4 ft, 11 in, driving wheels instead of the 5 ft. 3 in. provided on the majority of the class. They constituted one of the earliest examples of standardisation as we know it today, the only other comparable instances being found in some of Webb's designs on the L.N.W.R. during the same period.

These Midland engines form a most interesting class. At the 1907 renumbering, the original Johnson engines became Nos. 2900 to 3764 and the enlarged Deeleys 3765 to 3814. The final batch, turned out in 1908, carried the numbers 3815 to 3834. From 1904 onwards, Deeley set about rebuilding the Johnson engines with his own larger boilers, thus converting them from what in later days

taining the classification "2." Since that date practically all of the remainder of the smaller-boiler engines have been similarly treated. A few, however, have retained the old round-top boiler and spring safety-valves over the dome, so characteristic of the Johnson period, until recent times, and two of them remain in this form today. Rebuilding from class "2" to "3" ceased during the 1930s, and in a few cases engines which had received class "3" round-top boilers reverted to class "2" with Belpaire.

All of these 865 engines were still working at the time of the grouping in 1923 and 594 of them passed into the hands of British Railways in 1948, some

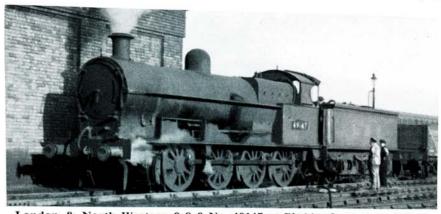


The most numerous class of pre-grouping locomotives still running: a Midland Railway class "3" 0-6-0, No. 43618, at Ladmanlow, on the Cromford & High Peak Railway

became known as class "2" to class "3." Eventually, about half of the Johnson engines were so converted, mainly the later-built ones, the earliest series remaining for some reason untouched; rebuilding among the middle group, from about the 3200s to the 3400s, was more or less evenly divided. All of these initial rebuilds, as well as the new 1903-8 engines, at first carried round-top boilers, but Sir Henry Fowler later provided them with Belpaire fireboxes, in which condition all of the survivors now are.

In 1917, No 2933 was provided with a small Belpaire boiler, with Ramsbottom safety valves over the firebox, still re-

200 of the smaller class "2" variety and about 390 of the larger-boiler class "3." At the present time, 336 of the latter are still in active service, and as such they constitute the most numerous pregrouping class of any railway still at Of the smaller-boiler engines there are still some 125 left in service. These, incidentally, do not follow the general renumbering rule of the addition of 40000, but were completely renumbered into a new series, 58114-58310. This was to avoid confusion with the class "3" engines with which their numbers were formerly mixed, as a result of the rebuildings which had taken place. It is a somewhat remarkable fact, too, that the



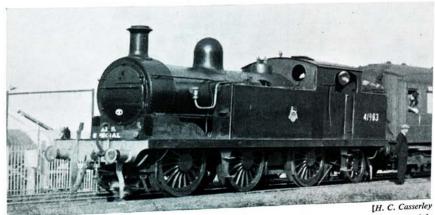
London & North Western 0-8-0 No. 49147 at Plodder Lane, near Bolton

majority of these survivors are among the oldest engines of the whole class.

The initial 120 engines, turned out in 1875-6, consisted of batches of thirty by each of the well-known builders Kitson, Dübs, Beyer Peacock, and Neilson and it is no small tribute to these firms that so many of their locomotives have lasted for so long. The Neilson batch deserves particular mention, as of these thirty engines, formerly Nos. 2990-3019, no less than 23, now numbered between 58165 and 58187, are still running. Now nearly eighty years old, while not quite the oldest engines in service on British Railways, as there are one or two other odd examples of a year or two earlier which will be mentioned later in this series, they are by far the oldest class still running in any considerable numbers.

The successors of the Johnson/Deeley 0-6-0s were Sir Henry Fowler's class "4" goods, of which the original two, Nos. 3835/6, were built in 1911. No more were turned out until 1917, when construction was resumed and continued steadily. By 1922 they had reached No. 4026, and of these 192 engines only one, No. 43862, has so far been scrapped. The numerous additions to the class by the L.M.S.R. right up to 1940, totalling another 575 engines, do not of course fall within this review.

Of Johnson's other standard designs, for as previously mentioned he was



Photos]
London, Tilbury & Southend 0-6-2 tank No. 41985 at Thames Haven with a special train

class "4" 0-6-0s of the standard Midland design in 1922, and these have now become Nos. 44557-44561 in the L.M.S.R. series. The only surviving class which was peculiar to the Somerset & Dorset is the 2-8-0, which although of Fowler's design and possessing essentially Midland features was never adopted by that company. Five engines were built at Derby in 1914, and a further six with larger boilers by Stephenson in 1925, but all of these except one are now identical with the original series. The eleven engines, Nos. 53800-53810, are all still at work on their native system.

Turning now to the London & North Western, we find that this railway has suffered most severely of the four major concerns as they existed at the time of the grouping. These four, the L.N.W.R., M.R., G.W.R., and N.E.R., all possessed at the time some three thousand engines We have already seen that about 881 Midland locomotives still remain, and the North Eastern is not so very far behind with 774. The Great Western's total is 506, but the L.N.W.R. can muster only 289, and practically all of these are of one type-the 0-8-0s of classes "G2" and "G2A." The latter series largely comprises rebuilds of older types, some of which started life as 0-8-0 or 2-8-0 compounds with three or four cylinders. The final series, class "G2," was built new in 1921 and 1922, and apart from later conversion Belpaire fireboxes, remains substantially The older engines have since as built. been altered to conform, and all may now be regarded for practical purposes as of the same class. They are numbered between 48895 and 49454, and are to be found on most parts of the old L.N.W.R. system on freight and shunting work.

There is little doubt that F. W. Webb was a locomotive engineer of no mean capability, but he has the misfortune to be remembered far more by his failures than by his successes. So much has been written about his unfortunate compounds that the fact that he built large numbers of very successful simple engines sometimes tends to be over-looked. Four of his standard classes, of which large numbers were constructed in each case, demand our attention by virtue of there being a few—albeit a very few—survivors still in existence,

although in three cases they do very little work now and cannot last much longer. Of his 18-in. 0-6-0s, popularly known as "Cauliflowers," four are still left at the time of writing, Nos. 58394, 58409, 58412 and 58427. All of these have received Belpaire boilers.

The 4 ft. 6 in. 0-6-2s generally referred to as "Coal Tanks," once a class of 300, are now represented by three engines only, Nos. 58904, 58925 and 58926, while the 5 ft. $8\frac{1}{2}$ in. 2-4-2 tanks have been reduced to two, No. 46604, which potters about on odd jobs around Warwick, and 46616, in South Wales. These last two classes are remarkable in the way that they have remained almost unaltered throughout their existence. Apart from the provision of Ross pop safety valves and of course a different style of painting and numbering, they remain practically in the identical condition in which they emerged from Crewe works from sixty to seventy years ago. Even the style of chimney remains unaltered; this at least usually undergoes a few changes in the course of an engine's lifetime.

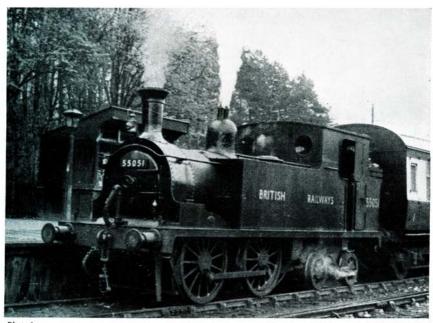
Of Webb's 0-6-0 saddle-tanks, known as "Special" tanks, there are still four actively employed in the carriage works at Wolverton, and as one at least of these has recently received a new boiler it seems that this class at any rate is unlikely to become extinct for some years to come. Lastly, there remains one 0-4-2 pannier-tank, No. 47862, survivor of a class of twenty engines sometimes referred to as "Box Tanks" on account of their somewhat square shape. This engine is used in Crewe Works.

Closely associated with, and in latter days worked by, the L.N.W.R., was the North London. From this line there are still nine of its small fleet of 0-6-0 tanks; these survivors are divided between the widely diverse surroundings of the London dock area around Poplar and the more salubrious air of the Derbyshire moorlands on the Cromford & High Peak line.

The Lancashire & Yorkshire Railway although nominally amalgamated with the L.N.W.R. a year before the grouping, was unaffected so far as its locomotive stock was concerned, this remaining completely separate until absorbed into the L.M.S.R. system. Like the L.N.W.R., all of its passenger tender engines have now gone, most of them for a great many years, but of the once-numerous fleet of



Caledonian Railway "Dunalastair IV" class 4-4-0 No. 54454 at Forfar



Photos] [H. C. Casserley
No. 55051, one of the only two former Highland locomotives still in service,
at Dornoch, the terminus of the branch from The Mound

sturdy little 2-4-2 tanks, at one time used extensively on main-line duties, there are still 37 survivors. The engines of Barton Wright, who was Locomotive Superintendent of the L.Y.R. from 1876 to 1887, are still to be found in the shape of six of his 0-6-0 tender engines, and a further 77 of the same class which were later converted to saddle-tanks.

His successor, J. A. F. Aspinall, built large numbers of 0-6-0 tender engines. of which 150 are still at work, some rebuilt with Belpaire boilers and superheaters, but most of them unconverted. Of a later development of the same class turned out by Hughes, however, there are only five survivors, Other engines dating from the Aspinall period are 23 0-4-0 saddle-tanks used mainly for dock shunting at Liverpool, Goole and elsewhere; a few, however, have worked on parts of the system other than the Lancashire & Yorkshire since the amalgamation. There are also four outside cylindered 0-6-0 tanks with short wheelbases, used at Liverpool docks. One other "Lanky" engine must be mentioned, the diminutive Wren, used on the 18-in. gauge works system at Horwich. Wren is now the only one left of several similar engines; a small diesel engine is standby at Horwich when it is not available.

Most of the stock of 136 engines acquired by the L.M.S.R. from the Furness Railway at the grouping went during the early years of the amalgamation, but five of its more modern 0-6-0s have managed to outlive their lessfortunate sisters of the same class. All but one of these now carry L.Y.R. boilers.

Of the three Scottish railways which came into the L.M.S.R. group, one, the Glasgow & South Western, no longer figures in the list of survivors, while the Highland is represented by only two. The Caledonian, on the other hand, stands at the opposite extreme in that of the 1,070 locomotives handed over to the L.M.S.R. at the amalgamation, 559 are still in active service today. represents the highest percentage (although not the highest actual total), of any railway in the country, of pre-grouping locomotives still at work. Doubtless the secret of the comparatively long life of so many engines from such lines as the Caledonian and the Midland is robust

simplicity of design, combined wit soundness of construction, a high degre of standardisation, and, last but no least, economical running, both from th point of view of maintenance and fuconsumption.

Fifteen of McIntosh's final series of "Dunalastair IV" 4-4-0s are still a work, together with 47 of the late Pickersgill design of the same when arrangement, but apart from these w find that as on other lines the expres passenger engines have vanished, an none of the several varieties of 4-6formerly found on the Caley are now i existence. Of the McIntosh 0-4-4 tanks 60 still remain in traffic; this figure doe not include the ten additional engines Nos. 55260 to 55269, built in 1925 to th old C.R. design. McIntosh also buil large numbers of 0-6-0 tanks for shunting of two designs. Of the larger class, Nos 56230-56376, all but eight are still a work, while the whole of the smalle outside-cylinder class, Nos. 56151 to 56175, remain in traffic. There are also 11 of the smaller 0-4-0 saddle-tanks popularly known as "Pugs."

The remainder of the Caledonian stock consists of 0-6-0 tender engines, divided into three classes. Briefly, they are 15of Drummond design, built from 1883 to 1897, 81 McIntosh engines turned ou between 1899 and 1909, and 29 Pickersgil machines of 1919 and 1920. Most o the above classes remain very largely in the condition in which they were built but the appearance of many of the Drum mond and McIntosh engines has been somewhat spoiled during recent years by the addition of plain stovepipe chimneys The review of L.M.S.R. pre-grouping engines is completed by the two High-land survivors, Nos. 55051 and 55053 small Drummond 0-4-4 tanks built in 1905 and retained for working the Dornoch branch.

(To be continued)

Missouri Pacific Wholly Diesel

The latest American railway to adopt disel traction exclusively is the Missouri Pacific, which operates 6,935 route miles of line. This company introduced its first dieselelectric units in 1937, and has completed the conversion from steam traction in 18 years; it now owns 873 diesel units. For emergency use, 43 steam locomotives of the latest types are being retained in working order at the company's shops.