Extract from A.E. Durrant's "The Mallet Locomotive" published 1975

taken from page 101, referring to a paper written by H.F. Brown in 1960

..... . There was no way of running British style short-and-frequent trains; once the track capacity between telegraph points had been allocated to a train it had to be of maximum tonnage, and so that the line might be cleared for the next train to pass that tonnage had to move fast. Thus locomotives of immense power were needed and whereas in 1900 the eight-coupled engine of about 30,000lb tractive effort was more or less a world standard for the heaviest work and took many years to double elsewhere, in the USA the 100,0001b engine was soon commonplace and often exceeded. What enabled such giant strides to be taken was the Mallet, and the Baltimore & Ohio's 0-6-6-0 No 2400, introduced in 1904, was 'the world's largest locomotive' - but not for long. Bigger and bigger engines appeared, each holding the 'world's biggest' title for a short while until replaced by something bigger again. But all the time, from that fateful appearance in 1904 until today -and possibly for ever - the world's biggest locomotive has always been a Mallet. For fifty years the Mallet held sway, until the 1950s saw them all swept away as though decimated by a disease, and that disease was the diesel.

In that brief decade of the fifties, American railroads went from being a predominantly steam-operated institution to almost full dieselisation, and numerous powerful and modern steam locomotives were laid aside and scrapped almost before they had been run in. With them, of course, went the big modern Mallets, and the whole story is a sad one of how the large, powerful oil companies and diesel manufacturers either persuaded the railroads to buy diesels, using dubious comparisons between the best results of new diesels and average results from over-age steam, or by virtual blackmail in threatening to divert traffic from railroads not investing in their diesels. Thus administrations which had rejected three-cylinder, or poppet-valved steam as 'too complicated' found themselves saddled with highly complex diesel power, plus expensive equipment to service and repair it. What is more, they did not last. By the time a good steam engine would have been decently run in the diesel needed a new engine, or even completely renewing, and the initial few cents saving on fuel became a constant drain on capital for costly new components, assemblies, or complete diesel locomotives. The result was as planned-railroads made less profit on their main lines, and losses on the secondary services which they had to close. Eventually, even the main lines may disappear and this is just what the oil and diesel interests want. A hundred-car freight hauled by a Mallet offers no profit to the diesel builder, nor to the oil purveyor. A three- or four-unit diesel to do the same work reverses the situation, but what the manufacturers *really* want is to see the train replaced by a hundred road leviathans-a hundred road diesels each of 250hp represent more profit to the manufacturer than the 8,000hp set of diesel locomotives needed to perform the same transportation job. And, of course, for the oil supplier 25,000 horsepower's worth of oil to cart the load is better than 8,000 horsepower's worth by diesel locomotive, and infinitely superior (to them) than 8,000hp of steam locomotive, burning either coal or low grade (and low profit t) residual oil. To speed the change-over, railroad mergers were opposed (as large, strong railroads might prove less tractable than smaller concerns frightened by cut-throat competition), and pressures maintained at Federal and State Government levels to subsidise the roads and tax the railroads. One man in the USA, just too late, saw what was happening and wrote a learned paper on the subject. He was not allowed to read it in America, nor to the Institute of Locomotive Engineers in Britain, although Britain's Institute of Mechanical Engineers did permit him to read his paper in 1958. Unfortunately, the lessons were not learnt and the same commercial pressures which killed the American Mallets were allowed to swarm across the Atlantic and decimate half of Britain's railway system, together with its rolling-stock and coal industries, thus reducing exports, increasing imports and throwing people out of work-all to enable more diesel lorries to wreck the roads and pollute the atmosphere.

That, then, was the sorry background to the incredible extinction of the amazing locomotives now about to be described.