

stances, such as the Ohio & Mississippi and the Grand Trunk, the track has been narrowed to four feet eight and a half inches at great expense—experience having proven that the original gauge was too wide for the traffic, and that, to use the words of a celebrated engineer, the machinery and rolling stock had been built to haul and transport a gallon when they did not have more than a quart to carry. That a six-foot gauge is too wide, is demonstrated by the report of Captain Tyler on the Erie Railway, in which he recommends it to be narrowed, even though the estimated cost of effecting it amounts to \$8,500,000. Further, a practical financier has stated that, "you could not raise a dollar in the United States to-day, to build a road of wider gauge than four feet eight and a half inches."

Stephenson's gauge was the result of accident or unexplained cause, as when the parts of the first locomotive were put together, it was found to fit a gauge of four feet eight and a half inches, instead of four feet nine inches, as was intended, and which was then the distance between the wheels of ordinary vehicles in England. With few exceptions, this gauge has been adhered to ever since. No one asked the question until a few years ago—Why was the present standard gauge chosen, and why will not a narrower one answer all purposes? Man is an imitative creature; and England, the birthplace of the railway, inhabited principally by a race of conservative men, has now in consequence a railway system of 16,449 miles based on the four feet eight and a half inch gauge. Although only 367 miles, according to the English Board of Trade returns, were constructed during 1874, yet Capt. Tyler, in his report, considers that the railway system is far from complete, and that many hundred miles will have to be built to give the benefit of railway communication to outlying districts. The aggregate length of railways authorized by Parliament during the years 1870, 1871, 1872, 1873 and 1874, and not yet constructed, alone amounts to more than 2,200 miles. The question that naturally suggests itself is, Why were not these railways built? The answer is, because the lines of route are not able to support a gauge costing on the average \$185,000 per mile, and because capitalists are aware of the fact that more