## ENGINEERING AND ENGINEERS.

I shall not occupy your time with any description of those superb roads constructed by the Romans, not only in Italy, but wherever their conquests extended, and which have won the admiration of all succeeding ages. Of these, the great roads alone extended over 53,000 Roman miles. They were constructed with vast labour and expense, and maintained with the utmost care. But with the decline of the Empire, they fell into decay, and the succeeding period of barbarism was as fatal to the *preservation even* of internal communications, as it was to science and art generally.

Some efforts towards improvement were, indeed, made in the seventh century, under King Dagobert, and these probably involved the partial restoration of some of the Roman roads.

In the same era we find existing the abominable system of "corvée" or forced labor on the roads, which cropped up from time to time, until it finally disappeared in the revolution of 1790.

Charlemagne, towards the close of the 8th century, revived "the ancient laws and customs" under which each district was bound to construct bridges and roads; and this was more or less enforced to the middle of the 9th century. But the bridges were mere causeways or approaches to ferries over rivers, and the roads for the next three centuries were little better than winding horse-paths. But the crowds of pilgrims flocking yearly to the shrines of favorite saints, and the crusades imparting new activity to travel, and slowly-growing civilization, forced, in the twelfth century, attention to the state of the reads. Then, to build a bridge was a work of charity, and large properties were dedicated for ever for their construction and maintenance. And about this date arose the cclebrated monastic order of Bridge-builders, known by the name of "Brothers of the Bridge," or Pontifex (Bridge-builder). Their reputed founder was the whilom skepherd, St. Benezet,

W