

GENERAL SIR ALEX TAYLOR
G.C.B., R.E.: HIS TIMES, HIS
FRIENDS, AND HIS WORK

BY HIS DAUGHTER

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CHAPTER XXIV

COOPERS HILL

ON arrival in England Sir Alex settled temporarily with his family in London, where he found many an old friend known under very different conditions—Lord Napier, Sir Robert Montgomery, Sir Henry Yule, Sir Richard Temple, and others—in whose friendship he found needed consolation; for though he put a brave face on it, he was, undeniably, very miserable. His life-work had been suddenly arrested while in full activity, and the shock had been great. His training had been Indian exclusively; it would be difficult, he knew, to find occupation in England which would be complementary to his work in the past. Had he worked through his time of office as Secretary to Government in the Public Works Department he would probably have become on retirement a Member of the Council of India in England; but this was now out of the question. He was not in sympathy with English public life; its democratic setting was exceedingly distasteful to him, and it is doubtful whether he could ever have submitted to its conditions. His heart was heavy, therefore; and, in proportion to its heaviness was the relief with which he entered on the last phase of his public service, the Presidency of the Royal Indian Engineering College, Coopers Hill, which was offered to him in 1880; a position for which he was peculiarly fitted both by his

personality, which was exceedingly attractive to young men, and by his long connection with Indian Public Works.

The early history of the College is interesting ; it had its roots in conditions obtaining in India at the time of its foundation and previously.

As the Western man—whose ideal of civilisation is based on the exploitation of the material resources of the country he inhabits—got a closer and closer grip of India, the demands on the Department dealing with Public Works naturally increased. Roads and canals on an imposing scale had been made and were still in process of construction ; but the mid-Victorian era had seen the inauguration and rapid expansion of swifter means of transport. Railways in India date from 1853. Their construction was at first largely entrusted to subsidised Companies. This arrangement proved costly and otherwise unsatisfactory, and in 1870 the Government of India adopted the policy of constructing and working all railways through the direct agency of the State—an immense accession to its duties.

It was evident, also, that the Irrigation works of the future would be on a constantly increasing scale. India contains large desert-areas, arid because waterless ; and also mighty rivers, which pour millions of cubic feet of water per second into the sea, water which, if applied to purposes of irrigation, would make the desert bloom like a garden. It was felt that this waste was a slur on the domestic economy of the country, and that the future of canal-making was endless. With the commercial development of the country and the growth of great trading centres came the necessity for rapid exchange of information. The burden of work laid on the Telegraph Department became very great. Famines had been scourges before which administrators trembled ; it was clear that

the construction of the above public utilities would be a profitable mode of both famine-relief and famine-prevention. Evidently, the general trend of progress necessitated the development of a larger and more comprehensive system of Public Works.

Speaking generally, India had been conquered—little by little—by the British army; it was in the nature of things, therefore, that the first steps in its material development should have been taken by the Engineers on the spot, *i.e.* the Company's Military Engineers; and splendid was the work they had done.

As time went on, however, and public demands increased, it was found necessary to supplement the services of the Royal (Bengal) Engineers by those of Civil Engineers proper. In 1858 Lord Stanley¹—who had carried the Bill for the transference of the Government of India from the hands of the E. I. Company to those of the Crown, and was then the first Secretary of State for India—founded a service of Indian Engineers called Stanley Engineers after their founder. It was composed of men who had passed the test of examinations, and had worked for four years in the offices and workshops of great civil engineers at home. It soon appeared that the equipment of these recruits was very unequal—some were men of trained ability, who have since risen to the highest posts in the Department, but others were not on the same professional level, and it became only too clear that a man might have passed a qualifying examination—especially if judiciously crammed—without becoming either a good engineer or a desirable member of a great Public Department.

There was, moreover, a difficulty in getting sufficient recruits, for it was no easy matter for a young English Engineer to get an adequate training in those days. Before

¹ Afterwards 15th Earl of Derby (1826-1893).

1872 there was no Engineering College in England, though Engineering Departments had been attached to a few Colleges. There were Chairs of Engineering at Glasgow and Edinburgh; a good school, for that date, at Dublin; Engineering classes at Cork and Galway; and a very recently founded Engineering Department at Owens College, Manchester;¹ these were all in their infancy, and none had what would now be regarded as a reasonable Staff or suitable equipment. In short, there was a deficiency of trained recruits, this deficit being largely due to the absence of an Institution in which they might be educated.

These circumstances gave rise to a growing wish for the foundation of an Engineering College in England, which would stand to the members of the Public Works Department in the relation formerly held by Haileybury to the members of the Civil Service, and by Woolwich and Chatham to the Royal Engineers and Artillerymen, and the certificated output of which would be men who had received a uniform training on lines determined by experts, and had been welded into corporate unity by common education and common associations before their arrival in India.

The establishment of such a College was favourably discussed at the India Office under the ægis of the Duke of Argyll (Secretary of State for India 1868-74); and, in 1869, a proposal was drafted and submitted to the Viceroy and Members of Council in India. It was, however, most unfavourably received at a meeting convened for its consideration at Simla. Evidently, the existence of the proposed College—valuable as it might prove to the Public Works Department—was prejudicial to various established interests. Many were the points of view of its

¹ Engineering Departments were opened at University College and King's College (London) in 1872. The first Engineering Laboratory in England was established at University College in 1878.

