

My old friend, the late Colonel Ryder, was my immediate predecessor as Surveyor General of India, and I regard him as having been the greatest surveyor of his time. He well earned the Gold Medals of the Royal Geographical Society and the French and Scottish Geographical Societies, which, together with the D.S.O., were awarded to him in 1905, as described in the *R.G.S. Journal* for July 1905. The October number of the same year gives his own lecture on his work in Tibet, and also Colonel Gore's comment on it as "a very modest account of what is, I think, the most wonderful bit of surveying that I can call to mind". Colonel Gore was at that time Surveyor General of India and himself a very able surveyor of wide experience.

Ryder was born in 1868 as the seventh son of Lieut.-Col. S. C. D. Ryder. His successes began with scholarships at Cheltenham College and taking a high place in Army exams at the earliest possible age, so that he got his commission when only just eighteen. In 1891 he joined the Survey of India, which was then a carefully picked service. Here his qualities soon led to his selection for the difficult surveys with the Mekong Boundary Commission of 1894-5.

This apprenticeship to the art of surveying under great difficulties was a good preparation for his adventures in Western China in 1898-1900, which are described in his lecture published in the *R.G.S. Journal* for February 1903. During these two field seasons Ryder, with a few Indian surveyors, was attached to an expedition in Yunnan under Major Davies, which was exploring the possibilities of railway connexions between Burma and China. Ryder's section was concerned with triangulation, astronomical fixings and general surveys, which first put the maps of Yunnan on a scientific basis over a very large area where previous information was scanty and inaccurate. The inhabitants were often difficult and occasionally hostile, Captain Watts-Jones, R.E., being killed while on a railway survey.

The entry each season was through the difficult country north-east of Burma. Exit after the first season was *via* Tonking, but in 1900 Ryder decided to cross China *via* the Yang-tse-Chiang, where he embarked on a raft at Yachao. When there was no going back he heard of the Boxer Rebellion from a missionary, who told him that "the Legation in Peking was besieged and that there was a general massacre of Europeans throughout China". As he adds in his lecture: "This was cheerful news; we were nine armed men [the Gurkha escort] and had 1800 miles of river journey before we could reach Shanghai". He got through, however, and joined in the operations at Peking, for which he was mentioned in dispatches.



His next adventure was in 1903-5 when he was chief Survey officer of the Tibet Expedition to Lhasa, assisted by those hardy triangulators Captains H. McC. Cowie and H. Wood, both R.E., and a few picked Indian surveyors. Again he maintained a triangulation under most difficult conditions and made a good survey of all this new country, with large-scale maps of Lhasa and Gyangtse. This was followed by the perilous trek of 1000 miles behind the Himalayas, when he and Captain Wood triangulated and surveyed right up the Tsang-po (or Brahmaputra) valley to the Mansarowar lake, and thence over high passes down the Sutlej to Simla. No one could foresee whether the Tibetans would prove hostile, and it was all "a race against winter" as they could not start before the middle of October, and they only just managed to cross the Aya La pass (18,700 feet) in December on the last possible day, arriving in Simla on 28th December. Triangulation at these great heights so late in the season entailed severe hardship. They were accompanied by the political officers Captain Rawling and Lieut. Bailey, with five Gurkhas and one Indian surveyor, Rai Sahib Ram Singh. I have indicated in my first paragraph how widely these achievements were appreciated by the world in general.

All these additions to our trans-frontier maps were made between 1894 and 1905, under conditions varying from the most fever-stricken tropical jungles to icy wastes at very high altitudes, with fantastic varieties of transport amongst races who might easily become hostile. We had other hardy officers who would have welcomed such opportunities; but I doubt if any one of them had all the necessary qualities in the same full measure. For, in addition to brains and physique, Ryder's mere presence inspired confidence. His kindly tolerance of other men's foibles and his patience with exasperating muddles were never ruffled, while his real goodness called out the best in all who met him. Though full of quiet humour he was a man of few words and very reticent about his own exploits, only showing his outstanding ability by the ease with which he got things done in the simplest possible way.

A great reorganization of the Survey of India was put through in 1906, and Ryder spent the next seven years in its most important post, as administrator of the six survey parties launched on the re-survey of the North-West Frontier from Baluchistan to Chitral. I was in charge of the largest of these parties and know how he won the confidence and respect of all ranks by the way he gradually perfected the new procedure. The work gave him an unrivalled knowledge of frontier and service problems, as well as the qualities of many of our best officers and surveyors.

In 1913 he and Cowie with some Muhammadan surveyors were attached to the Turco-Persian Boundary Commission to survey unmapped country along the 1180-mile boundary from the Persian Gulf to Mt. Ararat. Much of the work lay in marshes or hot and waterless deserts, and the surveys of our party were soon accepted without question as far better than anything the Russians, Turks or Persians could produce. The outbreak of war in 1914 endangered the completion of the work, which was only broken up in October, 24 hours before Turkey entered the war. Ryder and Captain (afterwards Sir Arnold) Wilson had to rejoin by crossing Russia to Archangel, and thence round the North Cape to England and so back to India. Ryder was given the C.I.E. for this work, which is described in his lecture published in the *Geographical Journal* for September 1925.

From 1915 to 1918 he held a key post in control of the Map Publication



and other technical offices in Calcutta, which had to meet the strain of heavy abnormal demands due to the war. He was then Director of Survey Operations in Iraq for a year, where he effected notable improvements for which he was mentioned in dispatches.

After this we were lucky to have him as Surveyor General of India from 1919 to 1924, to face the thankless task of getting things into shape after the war, in face of drastic economies which he loyally accepted. He employed me in working up his most critical cases and so taught me a great deal about the service problems of all ranks, while his tact in handling personal difficulties was a great example for all his successors. He also had all our textbooks completely revised, and by perfecting these and other professional details he left the Department far better equipped for the future than it had ever been before. All this was so quietly done that few people realize how much all subsequent development has owed to the sound foundations which he laid down.

Throughout the Department there was a real sense of loss when the time came for his retirement, and this was strengthened by the feeling that his outstanding services had not been adequately recognized. That knight-hoods should have been given to three of his contemporaries (his predecessor, his successor and one other officer), *but not to Ryder*, was just "one of those things". His pension was also cut down (as for some other seniors) by a military ruling of 1905, which made it impossible for any officer in the Survey to attain the rank of Major-General, whereas there were two Major-Generals in the Department when I joined it in 1898.

These were, however, small things when set against the happy background of his personal life. At the age of twenty-four he married Ida Josephine, the beautiful daughter of Lieut.-Col. E. E. Grigg, and they had six children and several grandchildren to carry on their fine tradition. His three daughters married into the Army, like their forbears. His youngest son, Commander R. E. D. Ryder, V.C., R.N., was a polar explorer, and won the V.C. while leading the attack on St. Nazaire in 1942. His two elder sons, in the army, may have equally deserved it, since one was last seen holding an impossible rearguard position in France in 1940, while the other disappeared with his unit in the loss of Singapore. They were both married.

I have not met any of the family since 1939, but through many years of contact all my memories of them are very happy ones. Their many friends must feel deep sympathy at the great loss they have suffered by his death, last July, at the age of seventy-seven.

OXFORD, October 1945.

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