

all weak steel bridges on 3000 miles of track. This continued until in 1916 he was appointed Port Engineer, Chittagong (Bengal), engaged on river surveys and schemes for improvement of the Port approaches. In 1919 he became Executive Engineer to the Calcutta Port Commissioners and a year later Senior Executive Engineer on the construction of King George's Dock—a project comprising a wet dock for 34 berths, a dry dock 1190 ft × 80 ft, and import jetties on the banks of the River Karmaphuli (comprising four berths aggregating 2550 ft in length: total cost, about £6M). Of this vast undertaking, Bennett was for a year in complete charge.

He next became Deputy Chief Engineer to the Bombay Port Trust (1927), rising to Chief Engineer in 1930—a position he held for ten years, acting from time to time as Chairman of the Board of Trustees.

During World War II he was for two strenuous years Controller of Supplies in the Government of India's War Supplies Department (Bombay Circle), with territory covering the Bombay Presidency, Baroda State, Central Provinces, Hyderabad State and Kathiawar State (1940–42). Starting with a small office for himself, a deputy and two clerks, his organization expanded to a full five-floor building, with 70 officers and 500 clerks. But by this time he had already spent 32 years in India and found the pace 'too killing'. On medical advice he was forced to give up.

The rest of his career was devoted to consultancy work. From 1942–46 he was engaged as consulting engineer to the Maharaja of Nowanagar, with the object of finding a site for a deep water port and working out a scheme for its construction. Next, he reported to Sir William Halcrow and Partners, Westminster, on the possibilities of expansion of the Port of Kandla, India, then to Messrs Coode, Vaughan-Lee, Frank and Gwyther on two river-dredging schemes and two canal schemes for the Colonial Office (1949). A year later he became a freelance consulting engineer to the Frederick Snare Corporation, New York, in connexion with an expansion scheme for the port of Zonguldak, Turkey.

Despite his heavy responsibilities, Bennett found time for other commitments. He represented India on the Council of the Institution from 1932–35 and 1938–40, and was chairman of the Advisory Committee for India for some eight years. In 1938 he was President of the Bombay Engineering Congress. He was a Fellow of the Institution of Mechanical Engineers and for seven years their Advisor in India, and a member of the Institution of Engineers (India).

Colleagues spoke of their confidence, esteem and affection for Bennett, the energy with which he tackled heavy problems and his unfailing courtesy and efficiency. After his return from India he became a J.P.

He was for 61 years on the Roll. Elected to corporate membership in 1910, he was transferred to the senior grade in 1926.

He is survived by his widow, a daughter, and a son, O. B. Bennett, CBE.

Sir Thomas Arthur Wyness Foy, CIC, CIE, BSc

who was born on 20 February, 1895, died on 11 January, 1971.

Educated at Truro College, Cornwall, he studied engineering at Birmingham University before and after the first world war, taking his BSc(Eng) degree in 1920. From 1914–18 he was on active service with the Royal Fusiliers, the

Royal Engineers and the Royal Flying Corps (later the RAF), and was awarded the 1914-15 Medal and the G.S. and Victory Medals.

Foy was to make his name in India as an irrigation engineer of the first order. In 1920 he joined the Indian Service of Engineers and served in the Punjab PWD (Irrigation Branch) until 1947, when he became Chief Engineer to the Government of Sind on the Lower Sind Barrage, a position he held until his retirement eight years later.

During his first five years in the Punjab he was partly responsible for the construction and design of the Islam Barrage over the River Sutlej under E. R. Foy and F. Burkitt; on this river he was also engaged on the Ferozepore Barrage. Appointed Executive Engineer in 1925, he embarked on the construction of the Bikaner Canal, under Mr T. B. Tate. This was a concrete-lined channel 85 miles long, 52 ft wide and 10 ft deep, carrying 2720 cusecs, and the work included design and construction of bridges, distributaries, etc. Foy was next engaged on maintenance and administration of the Sirhind Canal and reconstruction of Rasul Weir on the River Helum, which had suffered serious damage in the record flood of 1929.*

For a time he worked as Under-Secretary to the Punjab Government before becoming Chief Engineer to Bikaner State on the State-controlled Bikaner Canal. From 1940-45 he was Superintending Engineer under A. St.C. Lyster on the bitter dispute which developed between the Punjab and Sind over distribution of the waters of the Indus and its tributaries between the two Provinces. This resulted in the setting up of the Rau Commission, on which Foy was primarily responsible for the preparation of the Punjab case in its technical aspects. He represented the State of Bikaner before the Committee presided over by Sir Frederick Anderson, and was also in charge of the Sirhind Canal. He carried out substantial repairs to Suleimanke headworks on the River Sutlej.

After further legal work on the water dispute he was included in the deputation to the Government of India on the subject; later he visited Afghanistan to advise on certain dams and irrigation works. Under A. N. Khosla he was responsible for the preparation of projects for dams in the Himalayas, and under F. Haigh was in charge of the Thal Project (completion of Kalabagh headworks, diversion of river and construction of a concrete-lined canal of considerable proportions).

In 1945 Foy was appointed Chief Engineer and Secretary to the Punjab Public Works Department (Irrigation Branch) and for the next two years was in charge of the completion of the Thal Project on the River Indus, began construction of Bhakra Dam and of the Nangal Project (his own conception). He was also responsible for the design and construction of earth dams for storage near Delhi.

In 1947 he became Chief Engineer and Secretary to the Government of Sind, in charge of the design and construction of the Lower Sind Project (comprising the Kotri Barrage, 3000 ft long, and three earthen channels totalling 37 000 cusecs, designed to divert the waters of the Indus). During the difficult changeover period he was in the Punjab as Chief Engineer on contract in West Pakistan.

* Foy presented a paper to the Punjab Engineering Congress on 'The Repairs to Rasul Weir'.

His career in India ended with his retirement in 1955, but for a further 14 years he continued to work as a consultant. During the period 1955–59 he paid visits to the Tennessee Valley Authority* and to Europe and India. In 1959 he was appointed one of the consulting engineers for British Thomson Houston, in designing the Peace River hydro-electric scheme in British Columbia: this continued until he returned to England four years later. He also made trips to Australia to inspect the Snowy Mountains project, and did some work for Italian and Danish engineering firms.

Foy was made a Companion of the Order of the Star of India in 1947. He received a knighthood in 1956.

He was a member of the Indian Government (Retired) Association, and was elected direct to the senior grade of membership of the Institution in 1955.

He is survived by two daughters of separate marriages.

* An organization set up in the United States during the depression to build a series of dams and so relieve unemployment.



John Kenneth Hunter, BSc(Eng) who was born on 11 August, 1899, died on 24 August, 1971.

Educated at St Bees School, Cumberland, he went from the classroom to the army, serving in World War I in the Royal Engineers from 1917–19, for the last two years with a commission.

The war over, he studied engineering at the City & Guilds College, taking his BSc(Eng) degree in 1922. Later he was to receive the DIC.

After a year's post-graduate course in hydro-electric development—already his chief interest—he embarked on two years' practical training with Sir W. G. Armstrong Whitworth & Company Limited, continuing for a further five years in their hydro-electric department.

At their Elswick Works he supervised the manufacture of a number of 15 000 h.p. water turbines and in 1924 represented the firm at the British Empire Exhibition, Wembley. During the same year he was in complete charge of the installation and testing of two 8000 h.p. Pelton wheels supplied by Armstrong Whitworth to the Aluminium Corporation for the Dolgarrog Power Station, North Wales. He gained some experience in Norway, and went to Ceylon as agent and engineer for the firm, where he was for 3½ years in control of the commercial and technical sides of their Ceylon branch. He was also in charge of all design work and responsible for a number of water turbine installations.

At the end of this period came the tide in his affairs which led him to join the staff of Sir Alexander Gibb and Partners—the firm to which he devoted the