## BOSTON SOCIETY OF CIVIL ENGINEERS SECTION AMERICAN SOCIETY OF CIVIL ENGINEERS

## HERMAN GARLAND DRESSER 1901 - 1977



Herman Garland Dresser began man's greatest adventure on January 10, 1977. He died as he had lived, quietly, at peace with his world, and with all his affairs neatly in order. An able engineer, manager and administrator, with an infinite capacity for taking pains, he had an extraordinary ability to select and develop capable young people for positions of leadership, and a rare concern for the men and women who worked with him. People, not papers, are his monument and his earthly immortality.

He was born on August 27, 1901, in Georgetown, Massachusetts, the second son of Fred and Amy Dresser. He grew up in that semi-rural community, absorbing from it, from the Church his family attended and, most of all, from his parents the moral values and the strong sense of duty that were to guide him throughout his life.

As he progressed through the local school system it became apparent that he had an exceptionally fine mind and his mother was determined that he should go to college. It was a major decision for a family of modest means — Fred Dresser was a shoe worker — and it meant great sacrifices. Herman, just turned eighteen, entered Tufts College in September, 1919. His mother opened a tiny shop in Georgetown where she sold her home baked bread and cakes. The profits from the shop, with his own earnings from summer employment and from odd jobs during the school year paid his college expenses. He worked hard, in school and out, and he graduated magna cum laude with a B.S. in civil engineering in June, 1923.

The following September, he began his professional career with an instructorship in engineering mathematics at Rutgers University, in New Jersey. He remained at Rutgers from 1923 until 1926, teaching, and travelling by streetcar to Princeton for advanced work at the University there. Princeton awarded him an M.S. in Mathematics in 1926. While at Rutgers, he married Helen Hatfield, a Georgetown girl he had known almost all of his life. It was a happy marriage, destined to last until his death.

He left the academic world at the close of the college year in 1926 to join Metcalf & Eddy in Boston as an Assistant Engineer and established a home in Wakefield. The next nine years were spent investigating and designing the hydraulic and structural elements of dams, water purification plants, pumping stations, incinerators, sewers and sewage treatment plants. He used his mathematical background to advantage in many ways, including development of the Dresser formulas for the moments, thrusts and shears in standard shape semi-elliptical sewer sections under various loadings. The Dresser formulas greatly simplified the design of such sections, and they continued to be widely used until availability of large diameter concrete pipe made castin-place sewer construction generally uneconomic.

The depression years of the 30's were hard ones for engineers, as they were for everyone. Metcalf & Eddy was forced to reduce staff and Herman Dresser was released in 1935. For the next three years he moved from office to office, working for brief periods for Samuel Ellsworth, Stone & Webster, Frank Barber, E.B. Badger and Fay Spofford & Thorndike. Difficult as those years were, they provided him much useful experience. They strengthened his conservative philosophy and they gave him a deep and enduring understanding of the problems of men closely dependent on employment for support of their families. He returned to Ellsworth in 1940 as a Principal Engineer and remained with him until Ellsworth's death in 1944.

Ellsworth's practice was acquired in September, 1944, by Thomas R. Camp, who had resigned as Professor of Sanitary Engineering at MIT in June of that year to enter the consulting field. Along with the practice and the office at 6 Beacon Street, Dr. Camp acquired the services of Herman Dresser, beginning an association that was to last until Camp's death in 1971. It led to the Camp Dresser & McKee partnership, formed in 1947, and to the organization of Camp Dresser & McKee Incorporated in 1970. He became Partner Emeritus in 1969, and in 1972 was named Honorary Chairman of the Board by the Corporation. He continued work, but on a reduced schedule, and rarely missed a day in the office until shortly before his death. His interest in the firm, its projects and its people continued unabated until the end. Herman Dresser was an Honorary Member of the American Society of Civil Engineers, a Diplomate of the American Academy of Sanitary Engineers and a Member of the New England Water Works Association and the Water Pollution Control Federation. His greatest society interest, however, was in the Boston Society of Civil Engineers which he joined in 1927, shortly after returning to Boston. He was an active participant in its affairs for nearly four decades, serving the Society as Chairman of the Structural Section (1937-38), Director (1942-44), Treasurer (1948-51) and as a member of the Sanitary Section Award Committee (1946-47 and 1957-58), the Competitive Bidding Committee (1951-52), the Quarters Committee (1951-52) and the Desmond Fitzgerald Award Committee (1964-65).

His outside interests were not confined to technical societies. He contributed to his community as a member of the Wakefield Water and Sewer Board, and for forty years was a faithful and active communicant of the Town's First Parish Congregational Church. He enjoyed the arts, collected original oils and water colors by local artists and was a recognized authority on the fine prints by Timothy Cole (1852-1931) and other wood engravers, whose works he treasured.

Herman Garland Dresser was kind, unpretentious, thoughtful, a good friend and a wise counsellor. His passing leaves an empty place in the hearts of his associates in the Boston engineering community that will be taken by others, in time, but never filled.

> Prepared by Oscar S. Bray and Charles A. Parthum