



Gordon M. Fair

Gordon Maskew Fair

1894-1970

By Abel Wolman

Following a successful engineering career, Gordon Maskew Fair, who was born on July 27, 1894, in Burghersdorp, Union of South Africa, died on February 11, 1970, in Cambridge, Massachusetts.

Philosophers have frequently pointed out that ideas have a greater impact upon society than do material consequences of ideas. To engineers, the beautiful bridge, the soaring office building, or the graceful dam offer visible evidence of the translation of ideas into the service of man.

Professionals choose many routes to attain their major purposes in life. Whether consciously or not, Gordon Fair obviously chose to affect his fellow man through the route of ideas-as teacher, writer, investigator, and mentor. That he chose well, his long and preeminent career gives ample testimony.

Gordon Fair brought to his life's work an unusual intellectual capacity, deeply sharpened by extensive and broad education in the great institutions of learning of his day. He included in his armamentarium a competence in foreign languages, not usually the hallmark of many engineers. The statement that evidence of his accomplishments was not to be found in monumental structures, or that he did not work with steel or concrete, is only half true. Most of what he taught, wrote, and preached did in fact find its way into structures throughout the world, through the more subtle route of the minds of men.

One could quantify, at least, his direct impact on man via a count of his hundreds of students. More difficult is the estimate of his

impact upon thousands of students and practitioners throughout the globe. His textbooks, perhaps the most valuable yet available, mirrored the intellect that he possessed to an extraordinary degree. As a matter of fact, few were as well endowed as he with such lucidity of reasoning, precision of language, and accuracy of recording. He demanded of his students an equally high level of performance-sometimes impatiently, perhaps even harshly. Such is the habit of those more broadly endowed than many of their fellows.

If one were patient, however, one could soon discover that, while his demands were high, a strong thread of humor, good sense, and even gentleness pervaded his life. Those of his friends who had the good fortune to sit and fish with him by the hour attest to these deep-seated softening qualities in an otherwise deceptively austere exterior. While he demanded high quality in the pursuits of his students, he asked no more than he persistently required of himself. The hallmarks of the man were orderliness of conception, honesty of diagnosis, sharpness of investigation, and clarity of exposition. And all his works stand as permanent monuments to these extraordinary virtues.

He was no "ivory tower" academe. He gave much of himself throughout his career to the needs of man throughout the world. He traveled widely to lend his competent aid in alleviating the lot of men, women, and children in almost every part of the disease-ridden and hungry universe.

One of his most fruitful contributions was to the Rockefeller Foundation, which he served as a Member of the Board of Scientific Directors-incidentally, the first engineer to be so honored. One of his colleagues in that activity describes him well in these terms: "Whether it be in the swamps of Sardinia, in the jungles of Brazil, in the lecture rooms of the Ecole Polytechnique in Paris or in the laboratories of the London School of Hygiene, the presence of Gordon Fair inspired all those with whom he came in contact."

He served long and contributed heavily to the peace-time and war-time activities of the United States and international agencies, notably, the League of Nations and the World Health Organization. His years of uninterrupted contributions to myriads of advi

sory committees of the National Research Council, in the National Academy of Engineering, on the Army Epidemiological Board, and in the earliest efforts of the Agency for International Development in Central and South America are legion. The number and variety of these services are astonishing in the lifetime of one man, no matter how genetically well endowed he happened to be. It is compulsory that even his friends review anew the list of his commitments enumerated in this memoir.

Gordon Fair was no mere "sitting member" of these groups. As he participated in these sessions, he was simultaneously busily engaged in the laboratory and library, producing new materials, new interpretations, and new guides and criteria for engineering action for the betterment of that environment—recently discovered by more naive crusaders. Gordon Fair antedated them by a mere half a century.

The outcome of these wartime efforts, among many others, is that *vade mecum* of every global traveler, "globaline," still one of the excellent bactericides and amoebicides. It is well to remember this warborne asset to humanity that bears the hallmark of Gordon Fair's devotion to preventive action.

One of his perceptive admirers, Ed Cleary, properly noted, at the memorial exercises at Harvard University, that "he chose engineering as the fulcrum and teaching as the lever for moving the minds of men to cope with scientific and technologic change." He had an abiding faith in man's capacity to control his environmental fate with wisdom and logic. He needed no formal lesson in his own conception of engineering, that the engineer had a preeminent responsibility to society. He lived that way!

It may well be said of Gordon Fair what Nicholas Murray Butler said years ago of another great engineer, William Barclay Parsons, one-time distinguished member of the Army Corps of Engineers: "Parsons conceived of the engineer as an instrument of civilization." In any such Hall of Fame, Gordon Fair would qualify.

What of the man himself that private self so often concealed behind the public facade? Those friends, long close to him at Cambridge, had years to view him more intimately. They saw him raising his voice in song. They even claim he had a fine tenor voice!

Like all true Izaak Waltons he angled patiently and not too successfully. As Master of Dunster House, he presided for years over "the quick and the slow," fairly, judiciously, with reason and, most of the time, good temper. Good minds deserve *some* explosive moments.

Again, one of his close friends, Edward S. Mason, described him well as "preeminently a man of the age of reason, a classic rather than a romantic, a man with whom one could discuss any subject with the assurance he would come away with a balanced view."

The parading environmental activists of the coming decade will sorely miss the sense of equilibrium that Gordon Fair brought to the discussions of our ever-pressing ills. Although he recognized the ills, he also emphasized repeatedly the possibilities of solutions. These he did not feel would come from "the ravings of scaremongers or even by the practice of confrontation, as favored by the young, but through the careful scientific study that needs to precede action."

In his family life, as in his profession, Gordon Fair was fortunate. His wife, Esther, gentle and understanding, was devoted to him. He was proud of his sons, Gordon and Lansing, and they of him. The generation gap was not visible!

