Fiftieth Anniversary of A.S.M.E.

Organized April 7, 1880

WITH ceremonies worthy of a great institution, The American Society of Mechanical Engineers has this month celebrated, in New York and Washington, April five to eight, the fiftieth anniversary of its founding.

The Taylor Society has already extended its formal congratulations. The text of its engrossed greetings, presented by its delegates at a ceremony at which similar greetings were received from organizations of many countries, is as follows:

TO THE AMERICAN SOCIETY OF MECHANICAL ENGINEERS—GREETINGS:

At these formal exercises to celebrate the Fiftieth Anniversary of the founding of The American Society of Mechanical Engineers, the undersigned have the honor and pleasure to present the filial greetings of Taylor Society Incorporated, an international society to promote the science and the art of administration and of management and to commemorate the creative work of Frederick Winslow Taylor, president in nineteen hundred six of The American Society of Mechanical Engineers. On this happy occasion we felicitate the officers and the membership of The American Society of Mechanical Engineers on the completion of a half century of distinguished work in the development and expansion of the content of mechanical engineering and in the application of this knowledge for the benefit of mankind.

H. P. KENDALL, President — MORRIS L. COOKE, Official Delegate
H. S. PERSON, Managing Director — EDWARD EYRE HUNT, Official Delegate

We are stimulated to say more than could properly be included in a formal greeting. In addition to congratulations we desire to express the indebtedness of all who are interested in the art and in a science of management for the creative work of A.S.M.E. in that field, and of the Taylor Society in particular, for the helping hand it has from time to time received from A.S.M.E.

It was on the forum offered by meetings of A.S.M.E. and by technical journals identified with it that the management movement in American industry had its origin. We are accustomed to cite Henry R. Towne's paper "The Engineer as Economist" (1885) as a convenient milestone to mark the beginning of that movement. For nearly twenty-five years A.S.M.E. remained practically the only influence in the development of a science of management. Then expansion of the content of mechanical engineering—one result of the creative work of A.S.M.E.—compelled that Society about 1907 to begin to give relatively increasing attention to pure engineering and less to management, and the latter field soon became the concern of the specialized Taylor Society organized by a small group, particularly interested in management, within A.S.M.E.

It was discussions at meetings of A.S.M.E. which stimulated Taylor to rationalize the significance of the procedures which he had developed at Midvale and Bethlehem; and "A Piece Rate System," "Notes on Belting," "Shop Management," "On the Art of Cutting Metals" and important papers of Gantt, Emerson and Gilbreth were stimulated by its meetings.

When in 1919 the Taylor Society decided to establish an office, it was A.S.M.E. which gave it its first home. Through the courtesy of its Secretary, Calvin Rice, the personnel (consisting of the managing director and a stenographer) and the equipment (consisting of two desks and a file) of the Taylor Society were given a temporary location in one of the large offices of A.S.M.E. Since then many other courtesies it has been our privilege to receive from Mr. Rice and his associates.

Therefore at the same time that we congratulate we also express gratitude to The American Society of Mechanical Engineers.

We should be remiss if we should fail also to congratulate the Society on the excellence of the program of the anniversary celebration and on the scientific management evident in the planning for it and the precision with which the schedule was carried through. Living in the same building, we have witnessed the months of preparation. Throughout the entire gamut of personnel—from Council to the humblest messenger boy—the planning and execution have been that of a highly co-ordinated, well trained organization. We once believed that the planning and execution of the entertainment by the Vereine Deutsche Ingenieure of several hundred members of A.S.M.E. in 1913 was the high water mark of excellence in the planning and conduct of such an enterprise. A succession of later experiences, of which this anniversary celebration is the latest, leads us to believe that excellence is not to be attributed to nationality but to engineering technique, by whatever national group it is employed.

The Naumkeag Experiment

A Case of Employer-Worker Co-operation in a New England Textile Mill

The Management Point of View[1]

By J. FOSTER SMITH
Agent, Naumkeag Steam Cotton Company, Salem, Mass.

Mill History

THE disastrous embargoes on American shipping during the Napoleonic Wars and the War of 1812 had a direct bearing on the establishment of a cotton mill at Salem, Massachusetts, in 1839. During the embargoes hundreds of ocean-going ships lay rotting alongside the wharves of the historic town, with their seamen scattered wherever employment could be found. Many old and famous concerns went out of business, or transferred their affairs to the rapidly growing city of Boston, or the already outstanding city of New York, when the embargo was lifted. The commerce of Salem received such a setback that it never revived. Ship-owners, shipmasters and merchants began to look about for other investments. Their attention was naturally drawn to the new and successful industry of cotton spinning and weaving, as carried on along the Merrimack and Charles Rivers in Massachusetts and the Blackstone Valley in Rhode Island. The logical result of their investigation was the establishment, in 1839, of the Naumkeag Steam Cotton Company on the harbor front.

At that time, ninety years ago, this was a unique location for a cotton mill, since it had no water power, the universally used motive force in those days. The humid atmospheric condition always found about a water course, and so essential to the successful manipulation of the cotton fibre, was also lacking. The proponents of the scheme figured, however, that with the new fuel, coal, power could be generated cheaply enough to compete with the water wheel, and the proper atmospheric condition would be afforded by the rise and fall of the tide. Whether their calculations were correct or not, it is a fact that the required funds were raised and in 1845 the mill was in active and successful operation. With addition of buildings and machinery from time to time, its prosperous career was continued until June 25, 1914, when the entire plant was totally destroyed in the great fire.

Immediately after the conflagration, rebuilding operations began on the same site, and in a year and a half a new Naumkeag was in full operation, with an equipment of about the same capacity as the old plant. This new Naumkeag was of improved reinforced concrete construction, with special attention paid to the details of light, ventilation, sanitation and everything that might contribute to the well-being of the operatives. The machinery was of the latest design, largely automatic and electrically driven. Although this equipment is less than fourteen years old, the management has already made large replacements, and consistently throws out old machinery as fast as more efficient or more economical machines are tested and proved.

After numberless visits to establishments in this country—North and South—in England and on the continent, I consider Naumkeag an outstanding cotton factory, as far as lay-out, co-ordination of operation, and efficiency are concerned. Were I commissioned to build a mill of the same capacity today, I would find it difficult to improve on a single essential part of the present plant.

Its Product

The Naumkeag has always specialized in plain sheetings. Even in the first year of its operation it was awarded a medal, at the Annual Exhibition of the Massachusetts Charitable Mechanics Association, for the excellence of its product. Previous

[1]Paper presented at a meeting of the Taylor Society, New York, December 6, 1929.