

CARL GEORGE LANGE BARTH

ELECTED HONORARY MEMBER OF THE
TAYLOR SOCIETY, MAY 8, 1920

At the session of Saturday evening, May 8, Henry S. Dennison, President of the Taylor Society, arose and made an announcement wholly unexpected by the recipient of the honor which it conferred:

"A provision of the constitution of the Taylor Society gives the Board of Directors authority to elect to honorary membership by unanimous vote. The Society guards this class of membership jealously. In the ten years of its history there have been but two Honorary Members—Frederick W. Taylor, and M. Henri Le Chatelier, inspired director of the development of scientific management in France.

"Tonight the Board of Directors announces another election to honorary membership.

"Not because of his skill as a consulting engineer, for he is not alone in that competence; not because of his unexcelled mastery of the technique of scientific management, for others share with him such distinction; not because of his unique and lovable personality, for others are lovable and some even uniquely so; not because of the rugged integrity of his character, conspicuous though that be; but because of all of these in combination, and especially because of his application of pure science to the uses of management, do we thus honor ourselves and him.

"As assistant to Mr. Taylor some twenty years ago, he brought to Mr. Taylor's genius as a scientist in management the aid of his own genius in pure mathematics; to the data of which Mr. Taylor's vision inspired the acquisition, he applied the laws of mathematical logic and compelled a chaos of figures to yield its secret; then with that absolute and therefore practical command of his science, he devised the mechanism of a slide rule which put into its simplest form the answer which chaos had been compelled to give, making it available to the clerk in the planning room and to the foreman in the shop.

"The Board of Directors announces that Carl George Lange Barth is an Honorary Member of the Taylor Society."

Those readers who are not acquainted with the origin and development of scientific management, and are interested in more specific information concerning the scientific contributions of Mr. Barth, are referred to Taylor's "On the Art of Cutting Metals" and to Mr. Barth's articles "Supplement to Frederick

W. Taylor's "On the Art of Cutting Metals," now appearing in current issues of *Industrial Management*.

A DENNISONIAN PROPOSITION

I WANT to propose to the members of the Taylor Society an application of the principles of scientific management to the whole field of corporate structure. I do not pretend that the management profession has reached such a point of perfection that it can afford a serious distraction of attention, but I do believe that steady progress in the handling of his problems brings the manager before long face to face with some fundamental difficulties inherent in the structure of the corporation he is working for. I venture to say there are few of our senior members who have not at one time or another found valuable assistance in the backing of owners who knew something of their business and whose purposes were somewhat broader than merely to obtain this year's profits; or who have not met with discouraging obstacles in the attitude of absentee owners whose eyes were focused on the stock market.

Certainly in the broad field of industrial relations the testimony of Mr. F. C. Hood, President of Associated Industries of Massachusetts, in his report of October 24, 1919, is fairly conclusive. In that report Mr. Hood said that he estimated that eighty per cent of the cases which came before the National War Labor Board, of which he was a member, came from those concerns where the general management was not at the place of operation; that is, absentee management.

For better or worse, then, I should like to make the roughest sort of preliminary analysis of the major interests at stake in the modern corporation. I shall then take the liberty of reporting upon what steps we have so far taken in our own corporation with the idea of meeting these interests and harnessing them all more or less effectively into the service of production.

It seems to me that no industrial system can hope to persist whose primary purpose is not production and efficient distribution and which does not use to this end all the necessary factors. I take as the four chief factors Capital, Management, Labor and the Customer. Their purposes in the industrial structure are too well known to dwell upon; their necessary rewards will however bear close analysis.

CAPITAL

1. In the first place it is necessary to make a payment to capital for its use, a payment sufficient at any given state of the market to induce the investment of savings rather than their expenditure. This rate is approximately the savings bank or government security rate.

2. There must be for industrial purposes a payment made in addition to the above to cover the normal risks of industry. The rate required to cover use and normal risk is fairly well illustrated at any time by the rate at which good industrial preferred stocks are selling.

3. Capital at normal risk is likely to require some provisions in the nature of insurance, such as a sinking fund for its gradual retirement or a liberal depreciation policy. A common provision for the insurance of capital at normal risk is to grant to such capital powers of control in case the agreed payments of interest and dividend cannot be kept up.

4. In addition to these conditions there is in practically every business—certainly in its early years—a special risk. The necessary payment for this special risk must of course be determined in each case separately and must be determined by the bargaining process. Special risks may warrant an agreement to pay, if earned, large rates of dividend on common or preferred stocks, but there are few special risks for which some definite maximum agreement cannot be made.

5. To obtain capital in the first two categories it is seldom necessary to grant it voting privileges; for bonds and preferred stocks voting powers usually develop only upon breach of contract. For capital at special risk, voting privileges are more appropriate, but it is not by any means always necessary to make such a bargain for capital that voting privileges continue after the special risk stage is passed. It is after this stage is passed that the voting powers become inappropriate and liable to cause difficulties.

6. Capital is in one respect vitally different from the other three factors. When once purchased its service to the corporation cannot be materially affected by variation in reward. Bonuses to capital may have a part in inviting new capital into the business but cannot obtain added service from the old. In this respect capital once obtained resembles more closely the facilities of a business—raw materials, buildings, machineries, etc.—than the live human factors of management, labor and the trade.

MANAGEMENT

1. The corporation must pay for the use of management with salaries.

2. It is probable that normal risk enters as a very real consideration in obtaining management; that is to say, it could probably be shown that the average salary for ultra safe positions,—government jobs, saving bank jobs, and the like,—is lower than salaries for similar positions in business houses where the chances of loss of job are greater.

3. The only consideration which might be taken to resemble insurance lies in the expectation of those taking managerial positions that they will be paid through good times and bad and given a reasonable allowance of time for sickness.

4. Payment for more than normal risk is only rarely made by higher salaries. The dynamic force of a reward varying with the success or non-success of the venture is a more common and effective means of payment. Besides the provision of reward for success there can very effectively be provided a penalty for failure. This is very simply arranged where the management and the owner of capital are one and the same; or can be provided by giving the members of the management shares of common stock at the time of incorporation, or from year to year afterwards as a share in profits.

5. Control is by definition the natural function of management. Its daily specific control obviously must be in close concord with other general or partial controls whether exercised by stockholders' representatives, labor unions, or government.

6. With management the dynamic force of the bonus is of primary importance. Management stands at the center of all the forces of the corporation performing the functions of inspiring and coordinating their activities. Any reward to management which might link its destiny intimately with that of the corporation should therefore lend strength to the whole structure.

LABOR

1. The payment for the use of labor is the basic wage.

2. Normal risk may enter as a consideration, but labor at anything less than normal risk is so scarce that its consideration is of academic interest only.

3. Labor has not until recently been in a position strong enough to raise the question of insurance. We have started with accident compensation and obviously must soon set about the working out of the prob-