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VIII. DISCUSSION

H. K. HATHAWAY¹: To the older members of the Society it is unnecessary to say that I am heartily in

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accord with Mr. Lichtner in all that he advocates in his carefully prepared paper. As I recollect it, in the early days of the Society whenever the president was unable to get anyone to present a *real paper* it was my duty to "just talk about something." On such an occasion about eight years ago I talked about something which then appeared to me to be of vital importance and I feel that it is of even greater importance today. My remarks were printed three and a half years later in the BULLETIN of January, 1919, under the title of "Field of Activity of the Society," and I want to enter them as my discussion of Mr. Lichtner's paper. Nothing has happened in the past six years, and I greatly fear that six years from now some other member will present another paper advocating what Lichtner and I have already advocated.

In 1916 I presented a paper in the A. S. M. E. entitled "A Proposed Plan for the Activities of the Machine Shop Practice Sub-Committee," advocating the collection and codification of data and the promulgation of standards relating to machine shop practice. Still not satisfied I read a paper more or less along the same lines before the American Foundrymen's Association in the fall of 1916.

No action so far as I know has resulted from any of these efforts, and I am inclined to feel as a result of these experiences and what I have seen of the committee method of doing work, that little is to be hoped for unless some means is found for financing the undertaking on such a basis as will permit the placing of a competent man at the head of it with sufficient funds for meeting the expenses incident to the work.

I also recall that at an earlier meeting during the Society's "informal" days—I think in 1910 or 1911 at the Philadelphia Engineers' Club—Mr. James M. Dodge offered to contribute to the Society's archives copies of all the Taylor System data of the Link Belt Company. This was in response to a plan similar to that advocated by Mr. Lichtner, proposed by Mr. Wm. Kent. At that time nothing could be done as the Society's headquarters were in Bob Kent's hat—or his brief case.

Taylor used to get a single company to put up the money for experiments leading up to the promulgation of standards such as he and Barth established for cutting metals. Can the Society do as much as Taylor did? Where he got one company to bear the expense alone can we get a group?

To me it seems terribly wasteful to have a man like Mr. Barth devoting his time to making isolated developments of the Taylor System. He ought to be working for the Society along lines such as those suggested in Mr. Lichtner's and my earlier paper, or better still (and what would be more probable) along lines which he himself might lay out.

I am glad that Mr. Lichtner has revived this important question and hope that others may continue to do so, keeping it alive until the ways and means can be found for its accomplishment.

CARL G. BARTH¹: I believe that this is a timely paper. Some standardization of the terms used is decidedly desirable; but I see a great many difficulties in the way of such standardization to the length proposed. Before we standardize our terms, we must first standardize the methods and appliances to which the terms apply, so far as possible; and it appears from this paper that Mr. Lichtner, who never had the opportunity to learn directly from Mr. Taylor, on the one hand uses methods and appliances originally used and recommended by Mr. Taylor but since discarded by some of us who were nearest to him; while he, on the other hand, uses certain methods and appliances that show lack of knowledge of certain of Mr. Taylor's practices still rigidly adhered to by some of us.

Now, my idea is that nobody has any right to take a very strong stand on principles, methods, appliances, terms, etc. to be used in connection with scientific management, who does not know any more about their origin and history than what he has gathered from what Mr. Taylor found time to write before his untimely death, or from casual surface observations of what has been done by one or the other of his direct disciples, or by numerous pretenders of the second and third crop.

It seems to me, therefore, that we should first get together, and discuss some of our diversified practices; and in doing this, we should always go back to Mr. Taylor's own practices, and readapt them whenever definite improvements cannot be shown in deviations practiced. This is only what our sense of loyalty to our master should prompt us to do, and also loyalty to his principle that, once a practice has been established, it should be adopted as a standard and strictly adhered to as such, until somebody who has actually used this standard can suggest improve-

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ment that by a competent judge are recognized as sufficient to warrant their adoption in a new standard. For example: Among the terms Mr. Lichtner suggests to confine to a single use as against two or more uses, he contends are now in vogue, is "Bulletin Board;" but as Mr. Taylor never tolerated what is ordinarily understood in an establishment by this term, and insisted that no notices be posted, but that everybody concerned be notified directly by his foreman,—he never had any misunderstanding about the use of this term. Hence, before we discuss the use of the term "Bulletin Board," it behooves us first to agree upon an approval or disapproval of Mr. Taylor's opposition to broadcast notices on bulletin boards.

Mr. Taylor's bulletin board was the glass covered and locked-up cabinet in which he posted his flexible order of work for the information of both foreman and workers. While I have retained the general plan involved in this, I have long since done away with the glass doors and lock, for I have never had the difficulty of men wantonly tearing down what has been posted on an open bulletin board, which Mr. Taylor had in his earlier days, and which I happen to know from his own lips was the only reason for the glass cover. Still, those who do not know this fact often adopt the glass covered bulletin board as a distinctive and necessary feature of the Taylor System, when there rarely, if ever, is need of it any more:

MR. LICHTNER: Why don't you write these things down so that we may all know them?

MR. BARTH: That is just what I still hope to do before I die.

WM. D. HEMMERLY²: Mr. Lichtner has so completely covered his topic and the subject has been so admirably discussed that there is not much more that I can attempt to add. There are, however, several salient phases that are outstanding.

There can be no doubt as to this being an opportune time for the Taylor Society to take some specific and concrete action along the lines suggested by the paper.

During my twenty years experience in assisting in the introduction of Taylor methods—and this period embraces my connection at the Bethlehem Steel Company during the Taylor regime, as well as subsequent associations with Gantt, Hathaway, Coburn and The Thompson and Lichtner Company—I have often realized the need for some definite standard of terms,

²The Thompson & Lichtner Co., Boston and New York.