

of various ones, who possibly, as they selected her, presumably an expert, may not be quite so well posted in regard to the qualities which are essential to success in the different departments. Would that be considered an efficient arrangement in an industrial organization?

MR. BARTH: That is merely the old story of touchiness in, and false ideas of the dignity of, a superior position. Such selection should be made jointly in a perfectly amicable manner. A candidate should be examined by both the immediate and the higher superior of the position to be filled, or by an employment agent to whom the higher superior assigns his part of this joint duty, if the institution is large enough to warrant the office of such an agent. To fill the position in a fully satisfactory manner, the person employed must be acceptable to everybody concerned; and while the immediate superior may know better how to select the person with the best technical qualifications for the position, the higher superior, who presumably possesses a greater, broader, all-round experience in dealing with people, should certainly be better qualified to pass upon a candidate's more general fitness. The whole matter resolves itself ultimately into a question of whether or not the two superiors have caught the real spirit of co-operation; for when they have, the question of who is the higher superior rarely comes up in their internal relations with each other. They unconsciously defer to and supplement each other in matters that require more than the experience and judgment of either. But, alas! the spirit of co-operation does not as yet pervade our institutions generally; and much trouble and heartache does accordingly exist in our institutions, which are but little ameliorated by the more or less military rules and regulations that by many are considered absolutely necessary substitutes for more desirable conditions that they consider too ideal to even hope for.

MISS BELL: That answers the question.

MR. BARTH: It has indeed been interesting and gratifying to learn that such a good beginning has been made toward the development of scientific management in hospitals. I have recently had quite an experience in one of the large hospitals of this country which indicates considerable laxity in the enforcement of whatever system is supposed to be in vogue there, if indeed there is anything there worthy of being called a system in an up-to-date sense. What I observed indicates an entirely too military relation between the physicians, head nurses, and nurses, whose feminine, kindly dispositions toward their wards—of whom I had the pleasure of being one for two days—apparently often miscarries in the effort to obey certain orders to the letter. In every

industry and institution emergencies will arise under which a strictly military execution of orders is necessary; but the routine work of an industry or institution cannot be carried on in a satisfactory manner unless orders are executed with the understanding and co-operative accord of the subordinates. Seven years of work as management expert in some of the *Arsenals of the United States* has convinced me of the wrong policy of carrying on the strictly industrial activities of these under the charge of men of military training; and in such cases, and to the extent to which the officers learn to forget the military part of their otherwise excellent training, do they succeed in being good executives of the Arsenal. In time some of them do succeed very well, and I have some exceedingly gratifying recollections of some of the officers whom I have the pleasure of numbering among my personal friends.

MR. WILLIAM KENT: I had an interesting experience several years ago as a trustee of a hospital. I was appointed because the trustees wanted an engineer on the board. I served for a year attending the monthly meetings and voting with the majority of all routine questions, but taking no active part in the management except in connection with engineering matters, such as the power plant, the laundry, and the heating and ventilating system. Then I was elected president, much against my will.

I told the trustees that if they elected me they would have a different kind of a president from the former one. His life had been made a burden by the working staff always coming to him with complaints and keeping him busy investigating and making decisions. I said I would preside over the board of trustees at the monthly meetings, but would not be a general factotum around the hospital. At the next meeting there was trouble. The Ladies' Auxiliary complained of the head nurse and wanted her disciplined. The Auxiliary had entire charge of the housekeeping. They appointed the housekeeper and her work was done under their direction. The doctors and nurses had nothing to do with that end of the hospital. The result was that the Ladies' Auxiliary resigned in a body. That cleared the atmosphere. We appointed a committee to revise the constitution, making the Ladies' Auxiliary an advisory body instead of an independent managing body. I said, "Here is an opportunity for a big change in the organizing of the Board of Trustees. Let us turn the whole hospital over to an executive committee of four, two doctors nominated by the medical staff and two members of the board of trustees." So the constitution was changed and the committee of four appointed. I saw the head nurse, who was a most efficient lady, with tremendous organizing abil-

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ity, just the one for the position. I told her what had been done. She said, "Where does that leave me? I have got four bosses. How can I serve four bosses?" I said, "Don't you know that when that committee of four men get together one man is going to be the leader and the other three will say yes to everything he says? You are not much of a manager if you cannot manage that one man." She said, "All right, I am satisfied." In a few weeks the housekeeper was discharged. The head nurse found there was no need of a housekeeper; she was able to run the hospital and she ran the executive committee. We had the trustees meet four times a year instead of once a month, and peace reigned thereafter. That is what an engineer can do, knowing nothing what-

ever about a hospital, but only having a few common sense ideas about management.

DR. DICKINSON: I desire to thank you all for your kind interest. I feel that we would be poor scientists if we could not stand being dissected and having our views criticized. Mr. Gilbreth has served us greatly in coming in with the severity of his criticisms. I left that question of motion study entirely with him, knowing that he would talk about it in an interesting way. When you speak of the elimination of waste motion, there is a very general need of just such work as Mr. Gilbreth is doing, even in the best and greatest of operators. I wish all success to your body in helping us to do our work.