

MRS. CARLETON PARKER<sup>1</sup>: This is really a rather unfair advantage to take of a person who is supposed to be as weary on Saturday afternoon as the average factory worker; but I shall have to admit that other duties made me lay off this last week. If this had been a week ago today, I should have been in somewhat of a collapsed state, because I do find factory work, conscientiously carried on, rather a strain. I have been doing more sedentary labors during this past week because I wanted so badly to attend these meetings and I felt I couldn't get in all of them and work a foot press at the same time.

On the side of labor, which is my main interest, there is a big point to be made in the idea of standardization which I don't feel has been brought out. To achieve any state of industrial peace and greater efficiency there has to be a much greater cooperation of the human element, a much greater cooperation between management and men. That cooperation cannot be achieved without a great deal more understanding on the part of labor of the actual industrial processes. The more complicated those processes the more difficult it is going to be for labor to understand them in any detail.

Given the most simplified of factory procedure there would always be enough variety to make it interesting from the point of view of the factory worker sharing to some degree in management. Take the most extreme form of variety production, the average worker today sees but an infinitesimal part of it. That has been one of the disappointments to me working as a factory hand. One of the reasons why I wanted to go into the work was the mere curiosity of understanding better all miracles that lay behind any finished article as you view it today. You see a door knob and you have a feeling that it was born that way in the door, and I really wanted to know something of what got that door knob where it was. I find I get put on a little job where hour after hour and day after day I do the same infinitesimal piece of work. As far as labor is concerned, it has come to be such an unskilled process at best that from that point of view I see no valid objection on the part of labor that standardization of process will detract from the laborer's skill.

At best—and I think it is at best—we are tending from trade organization to industrial organization. The great point in favor of industrial organization is that there is far more education in actual plant man-

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agement to be brought about through industrial organization than through the separate craft organization. The less variety in the industry the more capable labor is going to be to cooperate intelligently with management. There is not going to be so much to learn about the business and what is learned can be better learned.

From the point of view of the female consumer—and we are told that the female is the purchaser of the nation—there is this also to be said: surely there is no need for the variety that is foisted upon consumers. Big business is responsible for that, because business, in spite of the remarks somebody made here previously, has grown away entirely from the idea of community service. It is no conscious fault of business. The very size of large scaled production has meant that large scaled producers must be kept busy making money, and if there is not enough demand for an article already produced then something else must be invented and advertised and a buyer found for it.

If a large variety does not exist in an article worth while having, the consumer is not going to stand off and say, "If that is manufactured in only four colors instead of seven I am not going to buy it." If it is something that is worth while it is going to be bought. And the point of view that industrial stagnation would follow, I think is beside the point. A certain type of industrial hecticness might be eliminated which would be entirely "to the good."

I do believe that there is a distinction to be made between objective standardization and subjective standardization. That may be again where my feminine prejudices enter. I can't see but what the nation as a whole could find no great psychological repression if everyone had to use all twenty-one inch pipes instead of some twenty-two inch pipes, but I don't want all ladies wearing the same hats.

And I have enough faith in the perversity of the female sex to think that no matter how much standardization could be put over even in the matter of hats, there would be something developed which would allow a perverse woman to look as if her hat were a little different from the hat next to her.

But, especially as pipes mostly are under-ground or between walls, I should imagine perhaps there might not develop the need of the scientist in pipes that Mr. Gilbreth spoke about as necessary in the matter of shoes. I told Mr. Gilbreth a story and he is going to use it sometime and act as if it were his, so I might as well get what credit I can for it today. In the matter of shoes, I told him the last time I went to get a

pair of shoes when they were making an extremely narrow last I said to the shoe clerk, "I can't possibly wear that last; haven't you something broader than that?" He looked at my foot and then looked at me with serious disgust. He said, "The trouble with you, madam, is that you have ruined your foot; that is its natural shape."

T. W. MITCHELL<sup>1</sup>: There seems to be some apprehension that a standardization of product is going to unduly limit the variety which is at the command of the customer. None of us wants the ladies to be restricted to one particular design of hat. We want as much variety as we can afford. But it seems to me that a large part of the variety which the producers offer the public is entirely lost.

For instance, several years ago I worked for a little while in a handkerchief factory. There I found that there were 2,500 different designs of handkerchiefs being offered to the public. No ultimate purchaser of handkerchiefs ever looks at 2,500 different designs of handkerchiefs, or 500 designs, or 100 designs; and if we tried to put 2,500 designs of handkerchiefs before one customer the customer would be appalled and not know what to do with them.

I want to give another illustration to show the effect of the great variety of product that is offered by the manufacturers. A certain clothing manufacturer offers to its customers twenty-four models of sack suit. The piece goods buyers bought over one thousand different suitings and this concern offered each of those fabrics in each of those models. Right there the customer who buys one suit was offered 24,000 choices. But each of those models is offered in several different lining constructions, three at least—full lined, half-lined or three-eighths lined, quarter-lined and sometimes what is called sport trim. Thus every customer has 72,000 choices. But of the lining, it may be alpaca; it may be all silk; it may be alpaca body and silk sleeves. That makes 216,000 choices. I shall say nothing about the variety of shapes,—regular, stouts, longs, sorts—or the variety in sizes; but stopping with the 216,000 choices already shown, I will say that on the basis of the total sales for a season, if each customer exercised all possible variety of choice that is offered to him, every suit that is manufactured by that company would have to be cut and processed separately.

That the customers are not nearly so insane as the manufacturer believes is shown by the fact that in that

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company's factory the suits go through in lots averaging twelve to the lot. This company in addition to offering twenty-four regular models, offers to make special models for customers and actually makes fifteen customers' specials. Of those fifteen special models there is no model the sales of which amount to as much as one-half of one per cent. Of the total sales the sale of one of them amounts to fourteen thousandths of one per cent. In the case of the regular models there is one model the sale of which amounts to two thousandths of one per cent of the total sales, and a great number of other of the models sell in correspondingly small quantities, less than one per cent.

As a matter of fact the great bulk, practically ninety per cent, of the sales of this company concentrate on six or seven models.

One point that I want to make is that the great variety of models that are offered are lost to the ultimate consumer. He does not exercise that choice and does not want to exercise that choice and couldn't do it. The other point is that this great variety which is manufactured within a given plant means expensive, unnecessary production.

W. H. LEFFINGWELL<sup>1</sup>: It has always been a mystery to me why, though we all seem to agree on principles, when we each commence to define our principles we are apparently as far apart as the poles.

I am very glad to have the previous speaker bring out these startling figures. The difficulties of standardization are so frequently argued from the standpoint of styles. We are told over and over again that we must all wear the same hats and the same clothes.

Yet, as a matter of fact, the difference between the clothing of the men in this audience is so slight that only a keen observer—perhaps a clothing manufacturer only—could tell the difference. Look at the hats of a crowd of men—they are practically all alike. Those are the things in standardization that our bright critics pick on. They say we wish to rob mankind of individuality. Yet they are the very things that are more standardized than anything else.

Another point that we ought to take home, I believe, is why is it that although there has been improved machine after improved machine, although we have increased the productivity of the worker, the productivity of the plant, the productivity of the nation, the cost of living is constantly increasing? That is a point we ought to be considering very carefully. We do things so much better than they have ever been

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