methods and media? and a rounded personnel for complete service. He attacks a problem just as the production engineer does—on the basis of facts first, then action. He first makes an analysis of the market and the possibility for the article offered. He isolates resistance that must be met so that his activities may be directed against the real problem. For example, an agency started out to analyze the problem of a manufacturer of canned beans. They found that 60 per cent of the potential market did not eat baked beans, 20 per cent preferred to bake their own, and 20 per cent bought canned baked beans, the client having half of this percentage. This client had been exerting his effort against the competition that held the other 10 per cent of the potential market, whereas eight times as much opportunity lay before him in promoting the idea of eating canned baked beans among the other 80 per cent of the market.

Following this market analysis and isolation of resistance, the agency prepares a plan just as the engineer does. It then carries on a test campaign just as the engineer tries out his plans on a small scale before putting them into the whole plant. Satisfied with this, it proceeds on the plan.

The big question is, Does it work? The answer can be found in your own observations. Of the nationally-distributed, nationally-known trademarked goods, practically all are advertised and advertised in the national magazines. Recently a question was put to the editors of "Printer's Ink" as to whether there was any known case where a manufacturer of a nationally-distributed product of general consumption had been able to change from private brands to his own brand without the use of consumer advertising. Their answer was that no such case is known.

It is, however, easy to point out well-known cases where the change from the manufacture of a complex to a simplified line and from jobbers' brands to the mill's own brand have been accomplished by the use of consumer advertising. For instance; the Hammer mill Paper Company brought this change about several years ago and now makes little except their well-known line of Hammermill papers. Fayette R. Plumb, Inc., the well-known tool manufacturer, since the close of the war has been able to change his business from

practically all private brands to 80 per cent his own brand. At the same time, he has reduced from 2752 items under 200 different brands to 761 items. He has increased his business and gives befter value for the money. The Certainteed Products Corporation, by explaining their goods to the consumer through magazine advertising, by labelling them so they could be identified, has made it more advantageous for the jobber to handle the mill's branded goods than his own, so that their business has been swung to their own brands. Even in women's dresses we have the case of the Goldman Costume Company, Inc. By creating the Betty Wales models and advertising them in the magazines, they have been able to shift from 1500 different styles under any kind of label to their own brand with 4 series of about 50 styles in each. Incidentally, it might be pointed out that their advertising costs are approximately 3 per cent of sales. A similar story might be told of the Martex Towels, the Florsheim shoes, the Brenlin window shades, the Scott Paper Company's Thirsty Tissue, and the General Cigar Company. This last, for example, by advertising was able to reduce from 152 brands to but 5 brands. Simultaneously, their sales increased onethird despite the growing popularity of the cigarette. Time only limits multiplication of such cases.

In conclusion, the following points seem clear:— First: Just as the sales department must have efficient manufacture back of it to enable it to meet competition, so must the manufacturing department have competent marketing to allow it to operate effectively.

Second: Wherever, the distribution of goods is broad the manufacturer must employ mass selling methods just as he does mass manufacturing.

Third: The avertising agency of today operates to bring the same effectiveness and scientific methods into marketing problems that the engineer brings into manufacturing

Fourth: Experience has shown that it is only through the application of these scientific principles to mass marketing that it is possible for the manufacturer of a widely distributed product to gain control of his own market, and, therefore, of his own manufacturing.

Scientific Management in Germany

How Taylor Methods Have Taken Hold Since the War

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NTIL recently only a few industrial leaders or factory managers in Germany have known of the existence and the progress of scientific management. My book of a few months ago, "The Planning of Work" was planned to present a comprehensive outline of the subject and show what could be known, and should be known generally about scientific management.

The customary conception of the term scientific management is that it denotes certain fundamental principles of quite general application, these to be adapted individually to different types of businesses. Some people, however, are spreading the idea that in the management of industry, so far as questions of organization are concerned, there are many ways to Rome; and each seems to believe that his particular method is for him the only proper one.

The idea that one's special ability and experience enable one to establish an undeniably exceptional case is a characteristic widely observable in daily life. When we consider the fact that with few exceptions the managers of our factories are too busy to make themselves familiar with the scientific side of their profession, it becomes clear that the average manager lacks the critical, objective attitude of mind, even though he may have a detail knowledge of his special branch of work. The fact that the management problems of a mine are only superficially different from those of a chocolate factory or a laundry seems so grotesque a notion that it gets little recognition. The possibility that such extremely different branches of industry may be provided with a form of organization essentially identical and with the same types of managerial direction and methods of production undermines the foundations of all ordinary understanding.

One who has the opportunity to gauge the mental attitudes of the technical managers in the various

industries finds a similarity of opinion concerning questions of wages, working hours, policy towards trade unions or government agencies, taxation, health insurance and other matters of social legislation. But if one inquires by what means the hand workers or the machine workers, for example, have their daily tasks planned and apportioned, what provisions must be made in order always to have the tools handy and what guarantee is given the worker that his performance will be justly remunerated—all requirements which are fundamental management conditions necessary anywhere—then a Babylonian confusion is produced by the wide variety of answers.

The reason for these differing answers is that a standard method of operating and directing a business concern is neither recognized nor desired by any large number of industrial leaders. The unconscious antipathy towards everything new with which the individual comes in contact, the contentment with things as they are, often also the unquestioned financial success achieved with the accustomed means-in a word, inertia-forms the primary defense, the protective wall against new ideas. If the head of a factory of several thousand workmen, as for instance the manager of a weaving mill, is told that his concern could by scientific management be organized in exactly the same way and provided with exactly the same method of procedure as a foundry or a machine shop; or if he is told that scientific management today is ready and able-and can prove this by practical examplesto use a standard system of organization, of scheduling and dividing the work and of making time studies. whether a factory employs 25 men or 5000, and whether it is engaged in single, serial or mass production; then the demand upon his understanding is so great that he is glad to escape to the struggles with daily petty details of the business,

And science? Our technical institutions? One must say with shame that in the art of production, in the development in an orderly and scientific way

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²V. D. I. Publishing Company, Berlin, S. W. 19, 1924.