## MONTHLY NEWS BULLETIN

Division of Simplified Practice National Committee on Metals Utilization National Committee on Wood Utilization

No. 23

10

2,9

19

15,18

February 15, 1927. Table of Contents Paragraphs Paragraphs Government Contract Form Benefits of Simplification 11, 13, 15, 21 Business and Employment 7,26 Mass Production ..... Conditions ..... Business Management ..... 3;6,17 Ē Cooperation ..... 20 Source of Profits ..... Elimination of Waste ..... Foreign Simplification ... 5,12 Turnover .....

1.

# MAINTAINING ADHERENCE

R. M. Hudson, Chief, Division of Simplified Practice

Now and then the question arises - "How are Simplified Practice Recommendations enforced?"

Since a recommendation is the product of the joint and cooperative action of the manufacturers, distributers and consumers of the commodity simplified, the responsibility for adherence to the recommendation obviously rests with the group that created it, and not with the Government. The latter's services might be regarded as "catalytic," -- and a "catalyst" in chemistry, you remember, is sort of a "chemical parson officiating at a marriage of certain elements."

If the manufacturers adhere to the recommendation by concentrating their menufacturing efforts on the simplified line, - if the distributers stock it, - if the wurchasors specify it when buying, there is set up a chain or circle of support that is broken only by intentional departure from the terms of the recommendation.

Arpreciating that it takes time to accusint all members of the industry and the trade with the aims and purposes of the Simplified Fractice Recommendation, there is the continuing necessity on the part of those developing the recommendation to promote its application, use and observance. In practically every instance, this promotional work is done by the Standing Committee appointed by the groups concerned to sponsor the recommendation. The Standing Committee observes the adherence to the similified line of its industry through its re-surveys of varieties ordered, made and sold; also of the relative demand for each. These periodic audits of support in 19 simplifications recently showed an acherence of 79%.

Granting that simplification was undertaken in these fields in the faith that it would reduce waste in the production and distribution of the goods affected, this support is a strong demonstration that industry can be celf-governing. When all parties support a common plan or course of action in simplification there is no occasion for "policing" or "enforcement."

2. "THE MAGIC IN OUR PUYING POWER": In discussing this subject, George E. Putnam, in the December issue of American Bankers Association Journal, states: "Some of the increase in consumer buying power is the firect result of our increased production per man. Through the adoption of mass production methods and improved processes we have made phenomenal croaress in lowering unit costs and in increasing labor efficiency. The wage earner, no loss than society at large, has been the beneficiary of these economics. In helping to make available a larger quantity of goods, he has been able to buy more goods with his weekly pay check. This is only another way of saying that increased production per man makes for higher real wages and greater purchasing power."

Simplified Fractice has helped to bring about the adoption of these improved methods and processes.

- 3. BIG BRAINS AND BIG BUSINESS: An excerpt from an article on "Big Brains and Big Business", which appeared in Industrial Management for October, disclosed the fact that one of the world's largest shop plants, Endicott-Johnson, near Binghamton, N.Y., is giving considerable attention to treating workers well, providing regular employment, simplification of numbers and styles, and building of ultra-modern plants. Also, this firm has its own tanneries. In addition, large-scale buying and handling helps overcome leather market uncertainties. Financing of workers' homes, and provention of high retail prices and rentals help to increase the real buying power of their wages.
- 4. <u>OBSOLETE VERSUS MODERN EQUIPIENT</u>: William Feather, in a bit of business philosophy says - "The industrial success of America rests on our willingness to throw out the old and inefficient and install the new and efficient. High wages have compelled us to adopt this policy, because the only chance the American manufacturer has for survival in the world market is by employing machines to do his work. "In this situation the business man who would like to play safe finds kinself "left on base." Alert competitors, awake to the possibilities for improvements, surge forward, and the mossback dies.

"The most priceless asset of any industry is an open-minded management, keenly alive to the necessity for everlasting pelf-scrutiny. That can we do No improve our product? To reduce its cost of manufacture? To better our service? To facilitate distribution? Unless an executive is willing to face this daily cross-examination he might as well retire from business. He certainly cannot keep his place if he resists progress. Again, he says, "Limited output is the most vicious fallacy - 3 -

that has ever found its way into the minds of working people. Limited output means low wages, high writes, long hours and periods of unemployment. Large output means high wages, short hours, low prices and abundant employment. "

One of the major causes for waste in industry has been the interrupted production caused by idle men, idle materials, idle plants and idle equipment.

5. <u>STANDARD SCREW THREADS IN CANADA</u>: At a recent conference in Toronto at which a number of manufacturers of machine screws and machine tools were represented, it was agreed that the machine screw situation in Canada could be greatly improved by a reduction in the number of varieties of threads. The meeting, which was held under the auspices of the Canadian Engineering Standards Association, also decided that the carrying on of a campaign of education among customers would tend to reduce the variety of orders received. A sub-committee was appointed to investigate the matter further and to prepare tentative data sheets to show the standard screw threads which should be stocked.

This matter is also engaging the attention of engineers in the United States.

6. FOREMEN STUDYING BUSINESS MANAGETENT: The delegates to the Convention of the National Association of Foremen, held in May 1925, approved a fouryear program of topics for use in the verious foremen's clubs and groups in the Association. To each month is assigned a general topic and under this general heading the verious aspects of interest to foremen, have been listed. The topics for the next five months are as follows: January, "Leadership"; February, "Factory Organization and System"; March, "Civic Responsibilities"; April, "Management"; May, "Economics". The Foremen's Magazine will cover these topics each month and taken along with the speeches on the Club programs, the subjects will be covered very fully.

Some of the wastes the foreman can control are: <u>Low Production</u>, due to more men on the job than necessary, the wrong men on the job, excessive use of material - swelled work; <u>Interrunted Production</u>, due to not having enough material up to the machine, poor machine condition, power shortage or breakdown; <u>Restricted Production</u>, due to stelling, loafing, gossiping, terdiness, unnecessary absence, quitting early; <u>Lost Production</u>, due to disregard for safety, unsanitary conditions, indifference to health.

Waste means high cost and low profits, therefore low pay.

7. <u>BUSINESS AND EMPLOYMENT CONDITIONS</u>: In Bulletin No. 14, on "Business and Employment Conditions," published by the Peirce School of Business Administration, the statement is made that "If you are in business and did not earn at least 10% more this year than last, you did not get your share and this is the time you should study your methods to determine why your profits were below the average. Some of the larger organizations increased their profits 20%.

"It is estimated that the labor turnover in the United States this year (1926) has been 125% of the number employed. In some industries it has been very much larger. This means that to maintain an average employment roll of 1000, 1250 additional persons must be engaged. Suppose that the average weekly wage is \$20.00 and that it requires about one week for the new employee to become proficient so that the first week's wages is an expense. 1250 new employees during the year represents an actual loss of \$25,000. But some turnover is necessary to maintain the efficiency and morale of the force. If this necessary turnover is 25%, we still have a preventable loss of \$10,000. If the net profit is 10%, the net return from the first \$100,000 of sales is wiped out. A waste of \$10,000 which might have been prevented by more care in the selection of employees, better working conditions, more reasonable supervision, greater promotional opportunities, more equitable wages. Think it over and apply this method of calculating to your own business."

Many manufacturers have found in simplification the means for greater individual production and more permanent employment.

- 8. ARCHITECTS FALL IN LIME: Simplified Practice Recommendation on lumber is included in a handbook for architects and builders, vol. 28, issued under the auspices of the Ill. Society of Architects. Inclusion of all Simplified Practice Recommendations in such handbooks would expedite the general adoption of the waste elimination program and obviate confusion among users of materials which have been simplified, according to the "Dayton Journal."
- 9. MASS PRODUCTION AND LARGER PROFITS: Among the encouraging factors in evidence at the close of 1925, according to the Peirce School of Business Administration, are "The margin between cost and selling price has become narrower, but owing to mass production, profits have generally been larger. Price competition is becoming keener and creating a necessity for greater efficiency and less waste. All classes have enjoyed the present prosperity. Wages have remained on a ligh level and during the last few months living costs have receded."
- 10. <u>STANDARD CONTRACT FOR!</u> FOR FEDERAL SERVICE: In line with the movement to standardize commercial forms, the Inter-departmental Board of Contracts and Adjustments, of the Bureau of the Budget, has developed a <u>standard contract form</u>. President Coolidge has recently approved the forms, consisting of an invitation for bids, a form of bid, instructions to bidders, a bid bond and performance bond. He has directed that on and after January 1, 1927, these forms be used for every formal contract for the construction and repair of Federal buildings or works. The Contract Board first collected from the U.S. Departments and establish-

ments the contract forms in use and discovered there were several hundred of them varying in size, terms, phraseology, and embodying many unreasonable requirements.

This standard contract form will result in material saving to the Government and will make a large contribution toward more efficient and economical operation of the Federal service.

11. DECLIPE IN PRICES: "Are Lower Prices Coning", is the subject of an editorial which appears in the "American Machinist" for November 11, 1920. The writer says, "There has been a decrease in prices during the last year, without distinution in industrial profits. This condition must indicate a reportionate elimination of waste. Further reduction in prices will have to be achieved by the same means, or by reduction in wages. Resistance against lower wages is stronger than it ever has been, and comes from the employer as well as the employee. It seems therefore, that further declines in prices are not imminent, except as they can be brought about by further elimination of waste and by developments resulting from research."

Leading men in widely divergent fields agree that the application of Simplified Practice will decrease production costs and eliminate many of the causes for waste in industry.

12. STANDARDIZED TRUMA: According to "Schweizerische Technische Zeitschrift" for November, 1925, "A few months ago the Central Association of German trunk manufacturers, Berlin, in common with representatives of the merchants and Consumers Association, decided to proceed with the standardization of trunks. The first step in this direction is to cover all sizes of trunks made of hard card board and vulcanized fibre; subsequently the standardization of Leather trucks shall be taken up. In the place of the infinite number of sizes now appearing in the market, it is decided to manufacture, as of January 1, 1927, only 10 sizes of hand begs; 4 sizes of collapsing bags; 4 sizes of steamer trunks; and 3 sizes each for men's and women's trunks (average and full size). The sizes are so graduated that when shipling them, they may be placed one inside the other and thus expense for packing and transportation may be decreased.

Here is food for thought for donestic manufacturers of trunks and bags.

13. INDUSTRIAL SIGNIFICANCE OF STANDARDIZATION: Those who entertain any doubts about the industrial significance of standardization should read "Mechanical Engineering" for August, 1925. Sixteen splendid arguments are given in fever of standardization. Among them are "(1) standardization stabilizes production and employment, since it makes it safe for the manufacturer to accumulate stock during periods of slack orders, which he cannot safely 40 with an unstandardized product; (2) it reduces celling cost; (5) it lewors unit costs to the

(over)

public by taking mass reduction possible, as has been so strikingly shown in the unification of incendescent lange and automebiles; (4) by simplifying the carrying of stocks, it makes deliveries quicker and prices lower (5) it eliminates indecision both in production and utilization, a prolific cause of inefficiency and waste; (5) by concentrating on fewer lines it enables more thought and energy to be put into designs, so that they will be more efficient and economical; (7) it helps to eliminate practices which are merely the result of accident or tradition, and which impede development; (5) joint effort in bringing about standardization within and between industries almost invariably loads to better understanding and to beneficial cooperation along other lines--a step toward the integration of our industries."

14. EREAKING THROUGH COMPETITION: In his new book bearing the foregoing title, Ray Giles cites (on pages 138-140) the following experiences of three companies that applied simulification to their sales problems: (1) One company which was hit hard during the postwar deflation began to graft new products on to its old line in a desperate effort to keep up profits But the profits stayed down. In spite of the fact that many of the new additions appeared promising, this same monufacturer started in at the beginning of the year to cut them off. The salesmon had so many items to suggest to the dealer that there was no time for aggressive salesmanchip. Since the amputations took place business is on the up, and the selling cost per dollar's worth of product is decidedly lower than it has been for years. (2) Another case is that of a department head for one of the large New England jobbing houses, who recently said to a group, "I'm through with side lines." By this he meant that he was through solling competitive products. He had found that cleancut enthusiastic selling could come only when the salesman was never put in the position of having to rob Peter to pay Paul. Icday that jobber has only one product in certain price classes. (3) The third company simplified its line and then threw all the salcamen into one force. This large company had several separate celling forces for different departments before they simplified. The men row sell the complete lines. These changes resulted in 65 par cent reduction in traveling expenses, ability to make more frequent calls on dealers where necessary, the added attraction to the trade of being able to get prompt, adequate shipments from a near-by point - which is se frequently a determining factor in closing a sale."

These are the experiences of a large number of manufacturers and distributers who have investigated and applied the principles of Simplified Fractice.

15. <u>SILPLIFICATION AND THE FOUNTAIN PEN BUSITESS</u>: "The Policy That Makes Every Year Our Best Year", is the title of a very interesting article by the President of the Parker Pen Company which appeared in a recent issue of "System" magazine. To get a better indication of the demand for new pens, investigators were sent out in several states, equipped with 10 or 12 fountain pens, verying in size and style but all black except the three Duofolds. The investigation showed an extensive demand for Duofolds. By concentrating on an advertising and selling campaign, the year 1922 closed with a 77% gain in sales over 1921. The success of the Duofolds, made it practical for the company to <u>simplify</u> their line, and according to the President this was one of the best things it did. Like many manufacturers, they had added style after style, until they had more than 400 styles of pens four years ago. They have reduced their line until they now have less than 30 styles.

- 16. ELIMINATING THE SLOW SELLING ITEMS: Contending that the first loss is the cheapest loss in the disposal of slow moving merchandise, even at a price, R. W. Standart, Jr., vice-president and treasurer, Standart Bros. Hardware Co., Detroit, Mich., told the recent convention of the National Hardware Association how his firm had eliminated unnecessary sizes, styles, varieties and lines. In part Mr. Standart said:
  - "We made up a chart which gave us a picture of our stock showing the amount of sales for the year, our stock on hand, price and manufacturer's name. With this chart as a base, we worked out a plan of disposing of slow selling lines. Our policy is to confine our buying to the best known lines, or what we consider the best known lines. Whenever we put in a new line, we will wash out the old line first. This we failed to do in the past and this was just another reason for having too many unnecessary sizes and styles. We found we had duplicated items for about the same price, so we eliminated the slow selling item, but retained the line as complete as possible."
- 17. MANAGEMENT'S SHARE IN WASTE ELIMITATION: Mr. R. W. Sparks, Deputy Manager, Folicyholders' Service Bureau, Metropolitan Life Insurance Company, in discussing"Management's Share in Waste Elimination," in The Management deview for December, makes the observation that "management's changing status lately has been a point of profound discussion." The American Management Association's recent discussion of Trends in Management Organization indicates the importance of organization and coordination. Management must see to it that its organization is a unit, then production control, maintenance, costs, <u>simplification</u> and the myriad of other problems that are constantly herassing management can more easily be ironed out."
- 18. MAKE EVERY POLLAR WORK: In the first of an unusually timely and practical series by leaders of American business the "Factory" magazine for November carries an article by C. E. Mitchell, Pres., The National City Bank of New York. "Gone are the salad days of American business, when wide margins made possible substantial profits for the manufacturer who was a good trader but not so good an executive," says Mr. Mitchell, in pointing to the road we must follow if we are to survive in today's strenuous competition. Among other things he says: "It is of the essence of modern manufacturing that a fast rate

of turnover goes hand-in-hand with a large volume of production and a small margin of profit. And a variation of casts 3% or 5% above the standard may impair the net profit by 50% or even wipe it out altogether. Unquestionably the whele tendency of manufacturing today is in this direction. Low costs, low prices, low margins, high r rates of turnover.- In making a business profitable today, these are the things that count. They are the means that keep every dollar of operating money in the channel where it will flow fastest. They make every dollar do more work."

19. THE SOURCE OF PROFITS: "The profits of a business are not carned by the sales department on sales. Sales are merely opportunities to realize finally on all the planning and work that have gone before. As a matter of fact, the profits of a business are not carned by any single department, and some of them are not even earned; they are saved. Your purchasing department, for instance, doesn't earn profits but it may save them. So with your credit department and all your other non-productive departments. You see, profits are the sum total of an accumulation of many small advantages, earned or saved at every point in a business. Keep that before you always, for it is the key to profitable management." (Spoken by Eurton Dexter, the banker, in "Captains in Conflict." - the story of the struggle of a business generation, by R. R. Updegraff).

Elimination of waste through simplified practice is now widely recognized throughout American business as a powerful influence for better profits.

20. AN AGE OF HILLIPATION: In an address before the National Hardware Association, R. W. Standart, Jr., vice-president and treasurer, Standart Bros. Hardware Co. of Detroit, made the statement that, "This is an age of elimination. For example, he says: "The General Electric Mfg. Co., are recommending to their trade to handle one type of lamp in six different voltages, as they have found their sales are on these laups. The Hill Bolt Co. of Detroit have confined their line to three sizes and six lengths of carriage bolts and the same sizes and lengths of machine bolts. This is their ontire output: P. & F. Corbin Company have issued a new catalog and greatly reduced their lines. The same applies to the Axe story. After we had reduced our line of tinware to the items which we felt were good sellers, a representative of a tinware company called upon us. We asked his opinion of what we had done and he said: 'Who gave you the idea?' We told him it was out own. He seemed very much surprised and said that just the previous week, all the tinware manufacturers had met and reduced their lines to practically the same plan that we had made. He said we were absolutely right in what we had done."

21. <u>BENEFITS DERIVED THROUGH SIMPLIFICATION:</u> "The concentration of demand on comparatively few varieties of a commodity instead of many promises great economies for the future," J. R. Colville, of the National Lamp Works of the General Electric Company, Cleveland, Ohio, told the National Hardware Association at its convention held recently in Detroit. Mr. Colville said in part:

"You are, if course, familiar with the increasing interest being shown in <u>simplification of lines</u>. Some manufacturers, in analyzing this problem, are finding that 90 or 95 per cent of their present demand is concentrated in a very few items and that the remaining 10 or 5 per cent is scattered over a wide variety of types. Under modern highspeed, high-production methods, the cost of producing low-demand goods is out of all proportion to their actual value. Unless lar e price differentials are established, this extra cost is distributed over the entire line, with the result that the consumer who can use a standard type is penalized for the benefit of the consumer who can not or will not. It is easy to see how the manufacturer benefits from simplification of lines and elimination of unnecessary types. It is also clear that the consumer benefits, for, in general, lower manufacturing costs mean lower prices. It is equally true, although not quite so obvious, that the distributor and the dealer also benefit."

22. <u>SIMPLIFICATION OF SALT CONTAILERS</u>: On January 14th, a Preliminary Conference of salt producers met in Chicago, under the auspices of the Division of Simplified Practice of the Department of Connerce to consider the simplification of salt container sizes. As a result of this neeting a committee was appointed to conduct a survey to determine the varieties used by this industry. From the report of this committee an age.da will be prepared for consideration at a General Conference of all interests, with the view of developing a Simplified Practice Recommendation.

23.

AMERICAN MARINE STANDARDS CON ITTEN

The fourth annual mass meeting of the American Marine Standards Committee was held at the U.S. Department of Conmerce, on January 17, 1927. The meeting was presided over by Colonel E. A. Simmons, Chairman of the Executive Board of the A.M.S.C. In his opening ad ress the Chairman pointed out that 20 standards were approved during the past year and in addition there was produced, the report of the special committee on "Stability and Loading of Ships", representing the best thought of some of the prominent men in the marine field. The Executive Board for 1927, as recently elected by the membership, is made up of 21 prominent and representative men in the marine industry. Secretary Hoover addressed the me ting, stating that he considered the voluntary action of industry in the setting up of committees for the elimination of waste and the adoption of better lethods, was one of the nost forward steps taken by the American business public in many years; that the purpose of the Department of Commerce was to encourage generally such action and to contribute directly to their deliberations wherever it was possible to so assist; that it was not the purpose of the Department to dominate their decisions, for he held the belief that voluntary action was not only effective of far greater results than official pressure, but that it was laying the foundations for a much sounder economic organization for the country.

24.

#### NATIONAL COMMITTEE ON METALS UTILIZATION

The status of the condittee's active projects is as follows:

Electrical Refrigeration Industry: During the past month the Committee has had correspondence with about forty manufacturers of electric refrigerating apparatus, of domestic refrigerators, and of artificial ice. Two of the larger firms indicated a desire to sponsor a movement for simplification of over-all dimensions of ice boxes, ice compartments, and electric refrigerating units made to fit into conestic ice boxes. There seems to be a majority opinion that simplification can be accomplished, particularly in reducing the number of different sizes of ice compartments. The maximum results can be secured by the cooperation of all the above groups, and of the manufacturers of tanks and ice cans used in making artificial ice.

<u>New Billet Steel for Concrete Reinforcement:</u> In the latter part of December, manufacturers of new billet steel for concrete reinforcement met at the Department of Concerce to discuss the results of the recent questionnaire to producers and users of new billet stock for concrete reinforcement. The meeting was presided over by Mr. A. E. Lindau, of the American System of Reinforcing, who is Chairman of the Committee appointed at the general conference in January, 1926, to conduct the survey.

Solid Section Steel Windows: The Committee of Manufacturers of Solid Section Steel Windows, who are at present working on a Simplified Practice Recommendation for this commodity, report favorable progress. It is expected that there will be a general conference in the Spring.

<u>Porcelain Insulators</u>: On January 20, 1927, a group of manufacturers of Porcelain Insulators met at the Department of Commerce and made further progress in the simplification of their product. This was the second meeting of the above group. The first meeting was held on November 10, 1926.

<u>Punch and Die Industry</u>: The Simplified Practice Committee of the Punch and Die Industry reports that it expects to have a tentative program ready for submission to a conference of all interests in the near future.

<u>Automobile License Plates:</u> In an effort to secure standard dimensions for punchings of automobile license plates, a resurvey of present dimensions has been made. This study brings out very clearly the need for the establishment of a uniform standard of punchings.

## NATIONAL COMMITTEE ON WOOD UTILIZATION

The status of the committee's active projects is as follows:

Short Lengths Project: The Director and Assistant Director have addressed meeting of lumber retailers in the middle west, south and southwest, regarding distribution of short lengths lumber. Retail lumber organizations have purchased 6,900 copies of the Committee's bulletin for distribution among their members, and lumber manufacturers have placed them at the disposal of their salesmen and consumers. Nore than 14,000 copies have been sold thus far. The Counittee has circularized about 14,000 newspapers and trade papers, giving the short length project wide publicity.

<u>Genc Sawing of Lumber</u>: As soon as circumstances permit, a special study will be made of the sawing of logs less than 10 or 11 inches top diameter which cannot be satisfactorily and profitably converted into lumber with present equipment. These small logs consist of top logs and small timber produced through thinning of the stand. Gang saws of light construction and of special design for this class of timber have been developed and a few of these saws are in operation in the eastern parts of the United States. The successful operation of these saws would mean the saving of several millions of feet of timber now left in the woods.

Grade Marking of Lumber: About 170,000 copies of the Committee's bulletin on grade marking of lumber have been sold since July, 1925. The grade marking system has undergone new developments since this bulletin was issued and a compaign will be started to popularize the grade marking of lumber. This project involves the revising of the bulletin in question.

<u>Mational Survey of Non-Utilized Raw Material:</u> A Sub-Conmittee will be erganized in the near future to conduct a survey of non-utilized raw material at saw mills, box factories and other wood-working establishments in the State of Virginia. The Virginia Conservation Commission has pledged its aid in this work. Later, the survey will be extended to other States. It is believed that such a survey will be a material aid in a closer coordination of forest industries in each state.

Wood Flour: As a result of the increasing demand for information in regard to the manufacture of wood flour and its uses, it was decided to prepare a bulletin on the subject embedying a study of the uses for sawdust. Some time ago, the Committee issued a mineographed statement in regard to wood flour and this treatise will be revised and amplified.

The Annual meeting of the Committee will be held about May first. The exact date will be announced later.

25.

# GEMERAL BUSIFESS CONDITIONS

26. <u>HIGH WAGES AND PROSPERITY</u>: In a discussion of the general business conditions of the country which appeared in the January bulletin of the National City Bank, the editor has this to say:

"So much is said in current discussion to the effect that high wages are the secret of this country's prosperity that in the interest of clear understanding it is well that some qualifications be made. High wages which accompany high productivity, either as a cause or result, undoubtedly make for prosperity and the general welfare, but high wages which contribute to high industrial costs and are passed on for consumers to pay have no such beneficial results. If they yield benefits to the recipients it is at the expense of the rest of the community, and if no more substantial basis than this existed for the country's prosperity the outlook would be poor.

The real basis of prosperity is that as a rule prices to consumers have advanced less than wages, thus enabling the wage-earners to consume a larger physical quantity of goods. This could not be so unless productivity was increasing.

If wages and prices both advance 50 per cent with production remaining the same, it is evident that the wage-carning class will have no greater command over commodities than before and that its consumption cannot increase. This is a fundamental truth which is ignored in much of current discussion. Wage increases without increased production signify nothing but the competition of industrial groups with each other. If one wins larger buying powers, it does so at the empense of the others.

If, however, by the installation of improved machinery in production or more powerful locomotives in transportation, the costs of production or transportation are lowered and prices are reduced accordingly, the result to every consumer will be precisely the same as though his wages had been increased, for a portion of his buying power will be available for new purposes.

The improvement in social conditions so much desired is not obtained by wage-battles, which usually are costly and wasteful, or by victories for wage-carners which result in higher prices to consumers, but as Mr. Green, President of the American Federation of Laber, describes, by 'expanding productivity so that the cost of the manufactured article will be reduced instead of increased.:"