

MONTHLY NEWS BULLETIN
OF THE
DIVISION OF SIMPLIFIED PRACTICE
DEPARTMENT OF COMMERCE
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STICKING TO IT

In nineteen different lines, the average adherence to the Simplified Practice Recommendations is seventy-nine (79) per cent. In other words, an average of practically four-fifths of last year's output in these lines conformed to the sizes, dimensions, etc., in the simplification programs adopted through joint conference of representative manufacturers, distributors, and consumers concerned. Details are as follows:

<u>Commodity</u>	<u>Adherence</u>	<u>Commodity</u>	<u>Adherence</u>
Beds, Mattresses and Springs	51%	Metals Field	
Sand Lime Brick	62	Sheet Steel (Jobbers)	53%
Hospital Beds	69	Brass Sink Traps	75
Asphalt (Grades)	74	Hot Water Storage Tanks	82
Paving Bricks	74	Steel Barrels and Drums	84
Face Brick	74	Steel Reinforcing Bars	85
Milk Bottles and Caps	75	Woven Wire Fence	97
Lumber	80	Eaves Trough and Conductor Pipe..	97
Shot Gun Shells	81	Metal Lath	99
Follow Building Tile	84	Range Boilers	99
Average	72.4%	Average	85.6%
Grand Average			
79%			

The above figures are taken from the resurveys made by the Standing Committees responsible for the success of the simplification programs in their respective industries. In nearly every case above cited, the re-survey covered eighty (80) per cent or more of the output of the entire industry. Had it been possible to obtain statistics from all the plants producing these commodities, the percentages of adherence might have run even higher.

This degree of support for Simplified Practice demonstrates that the companies cooperating in simplification have found it pays. They certainly would not stick to their simplification programs to this degree if it did not pay them to do so.

In every one of these cases, each industry, prior to simplification, thought it necessary to have a multiplicity of sizes, dimensions, grades, etc. Now they know it is not, for most of them are doing a greater volume of business than ever before. To the industries which have not yet applied simplification, its success in the above fields is a constant challenge.

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On November 17, 1926, a representative group of manufacturers of cylindrical roller bearings convened at the Department of Commerce under the auspices of the National Committee on Metals Utilization for the purpose of considering the

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feasibility of applying the principles of simplified practice. It was the sense of the meeting that the initial step should be confined to an effort to eliminate the excessive variety of bore sizes up to six inches of cylindrical roller bearings, i.e., bearings exclusive of that type which is now interchangeable with ball bearings, and which conform with present ball bearing standards.

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Garden hose is made in several sizes, ranging from 1/2 to 1 inch, inside diameter. In recent years there has been a strong tendency on the part of manufacturers to encourage the use of 5/8-inch hose in place of the 1/2 and 3/4 inch sizes. This standardization of size seems desirable for several reasons. It would tend to reduce the cost of manufacture by eliminating two unnecessary sizes, and at the same time it would reduce amount of stock to be carried by dealers. That the 5/8 inch size is large enough for ordinary purposes has been demonstrated by tests recently made at the Bureau of Standards to determine the discharge capacities of 1/2, 5/8 and 3/4 inch hose under different pressures.

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A general conference of manufacturers, distributors and users of Binder Board was held in New York City, November 30th. A report of the Simplified Practice Recommendation developed at that meeting will be available for distribution within a few days.

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At the request of the industry, a general conference of manufacturers, distributors and users of office desks was held in Chicago, November 30th. A summary report of the conference, including the Simplified Practice Recommendation, as developed at that meeting, will be mailed out to all interests in the near future, for acceptance.

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Probably the least generally and properly understood phase of exporting is that which pertains to the foreign laws and regulations which affect the importation of American products abroad. The apparent complexity of these laws and regulations too often present to the manufacturer imaginary, insurmountable barriers. In the Division of Foreign Tariffs of the Bureau of Foreign and Domestic Commerce these frequently changing foreign customs requirements, which so affect the movement of American products into the outside world markets, are closely studied. Certain of these data are put in most usable and readily understood form by this Division, and are published for the use of the various industries concerned.

The Division of Foreign Tariffs not only compiles and currently revises all information on the rates and basis of assessment of duties on products exported from the United States to the various countries of the world, but also maintains a similar record of foreign consular and customs regulations. A perpetual survey is also being made of the foreign laws affecting the admission of samples and advertising matter, likewise rules governing the possible regulation of or payment of fees by commercial travelers abroad.

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In connection with their program for the year, The National Association of Purchasing Agents, Inc., will concentrate on a "drive" to accelerate the adoption of the National Standard Invoice Form. The Committee on National Standard Invoice Form will consist of one district chairman for each district, the National Secretary acting as chairman of this National Committee; each district chairman to supervise the work of the various local committees in his district, to tie them together into a single working unit so that all may be having the benefits of the good ideas of each association and to avoid duplication and to standardize on method of securing adoption of the National Standard Invoice Form. The Editors of Association Magazines and Bulletins, the Invoice Chairmen of Affiliated Associations, and others have been asked to assist in the drive by running articles and advertisements in their publications.

More than eighty nationally known trade associations have already endorsed the form. Thousands of corporations and a majority of the large railroad systems throughout the country are demanding its use. Following this, the Comptroller-General of the United States has requested all government vendors to bill on the National Standard Invoice Form.

Some of the principal ADVANTAGES of a standard invoice form are - eliminates misunderstandings and inconveniences; expedites shipments and the settlements of accounts; saves money by reducing clerical personnel; saves paper by cutting from standard size stock without waste; saves correspondence by including all necessary information on the forms themselves; saves time in filing, finding and handling while being checked; saves filing space through uniformity of size, etc.

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During the past year the Bureau of Standards made nearly 180,000 tests for the government and private industries, ranging from paper money to photography, brick walls, steel columns, theatre curtains and sheet metal garages. Every merchant will be glad to know, for example, that the bureau has brought about certain changes in the manufacture of paper for currency which, it is believed, will increase the life of bills fully fifty per cent.

In the radio field, according to the Bureau, the piezo oscillator, which employs a quartz plate possessing a definite mechanical frequency of vibration, has been developed as a practical and successful device for holding transmitting stations exactly on their assigned wave lengths.

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The National Committee on Wood Utilization, in their News Letter No. 2, reports as follows on their active projects:

Uses of Short Lengths in Building and Construction: A bulletin entitled "The Marketing of Short Length Lumber", which will contain about 60 pages, will be ready for distribution about the first of the year.

End Matching of Lumber: The bulletin on this subject is now being compiled for the use of the subcommittee working on this project.

Seasoning and Handling of Lumber: Research work along the lines of proper methods of seasoning and handling is being carried on by the Committee and many valuable

suggestions are being received from the various subcommittee members.

Wood Distillation: The report on the Bulletin of the manufacture of charcoal and wood distillation by-products will be completed by the end of November, and as soon as it is approved by the subcommittee on Wood Chemicals, it will be sent to the printer.

Wood Preservation: The Chairman of the Subcommittee on Wood Preservation reports the preparation of a primer on this subject which will be printed following approval by the several members of his subcommittee.

Containers: A meeting of the Subcommittee was held in New York City, October 15th, and it was decided to prepare an exhibit of scientifically designed and constructed boxes and crates which would be shown in the leading industrial centers of the United States. An invitation has been extended by the Fifth National Exposition of Paper and Mechanical Engineering to be held at Grand Central Palace, New York City, December 6th to 11th inclusive.

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The Concrete Reinforcing Steel Institute has ordered, through the Government Printing Office, 2,000 copies of Simplified Practice Recommendation No. 53, for Steel Reinforcing Spirals. These are to be distributed among the members of the Institute. This cooperation is very much appreciated by the Department of Commerce, as the distribution of these pamphlets will bring the simplified line to the attention of a large group of manufacturers and others interested.

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The following resolution was passed by the California Industrial Council, comprising the Industrial Organizations of the State:

WHEREAS The Secretary of Commerce established the Division of Simplified Practice in December, 1921, to serve as a centralizing agency in bringing producers, distributors and users together and to support the recommendations of these interests when they shall mutually agree upon simplification of benefit to all concerned, now therefore be it

RESOLVED That the Advisory Committee of the California Industrial Council pledges its support of the program of the Department of Commerce for the elimination of waste through simplified practice and tenders to Chief Ray M. Hudson every possible assistance in furthering this desirable work. And be it further

RESOLVED That the Advisory Committee of the California Industrial Council will recommend to all its affiliated organizations that they secure the same cooperation and assistance from their individual members to the Department of Commerce.

This is typical of the cooperation being received from a number of the State Manufacturers' Associations and other groups, in connection with the Elimination of Waste program of the Department of Commerce.

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The Department of Manufacture of the Chamber of Commerce of the United States is organized to afford the members of the Chamber, particularly manufacturers, an industrial informational service of a more intimate character than ordinary, where their common language can be spoken and understood. It is contemplated that all questions of importance and of general concern to industry or the producers of specific commodities may be brought to it for attention. The principal function of the Department will be in assisting its members to promote interest in their common problems and to develop the cooperation helpful in finding solutions - typical, are efforts to develop waste elimination -- uniform cost accounting -- employee problems in industry -- statistics of production -- service to trade associations, etc. Correspondence on any of these subjects is invited by the Chamber.

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After completing a rigid analysis of their hosiery stock, a prominent firm in Baltimore has concentrated upon four prices in the classification of plain silk hose. During the period from December 30, 1925, to June 18, 1926, 80 per cent of their sales were made on these four price lines. Greater sales with less effort, greater turnover, and increased profits will naturally result from such an analysis in any line.

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The Economic Committee of the Imperial Conference of Great Britain has completed its consideration of the subject of industrial standardization and simplification. According to the London Times, it was reported to the Committee that the standardization in the number of iron and steel sections produced in Great Britain from some hundreds to 113 was estimated to have resulted in a saving in cost of production of 5s. per ton over all sections rolled which would be equivalent to about half a million pounds sterling per annum. It was further estimated that the value of stocks of ironmongery in the hands of wholesalers and retailers in Great Britain amounted to 25,000,000 pounds sterling, and that if the number of types were reduced to a moderate extent one-fifth of the capital thus locked up could be released. In the same way, the value of stocks of electric lamps outside of factories was said to approach 4,000,000 pounds sterling, and it was stated that the ultimate effect of the unification and standard pressure might cut this amount down by at least one-half.

The subject of simplification has been coming to the front at a great rate in Great Britain, as well as other countries abroad. The Division of Simplified Practice is not only getting reports on the application of the principle in other countries, but also is receiving many inquiries for information about its progress here in the United States.

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Artificial trade barriers and a multiplicity of small competitive factory and distributive units are among the outstanding obstacles to European commercial recovery, says a recent exchange. During the past month, definite steps have been taken to remedy these handicaps. A group of financial men recently signed an international manifesto that virtually recommends free trade among European nations. Another measure was the consolidation of steel mills of Germany, France, Belgium, and Luxemburg, the aggregate production of which con-

stitutes about 30% of the world's supply of steel products. The immediate effect of the formation of this combine was an advance in the prices of finished steel products. From reliable sources we are informed that other industries in Europe are also in the process of forming consolidations. Just what immediate effects international trade agreements and consolidations will have upon trade and industry in America is impossible to determine at this time.

The way for American industries to meet this competition is through the "elimination of waste".

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The National Committee on Metals Utilization is working in close cooperation with the trade associations in the metals-using industries, with the view of having the various associations set up their own committees to study the problem of waste elimination in their respective fields and furnish suggestions and recommendations which will facilitate the elimination of waste in the Metals field.

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Students of psychology realize fully that habits established in childhood are likely to be carried over into later life and thus become part of the warp and woof of the individual's mental and moral machinery. To this end it is essential that thrift habits be established early. If children are taught the dignity of labor; the moral and economic values of earning and of saving; the reasons for the elimination of waste, they will develop into self-supporting and self-respecting men and women. Since 1915, the school systems the country over are giving attention to the teaching of thrift. It has been estimated that during the past year 8,000,000 pupils of all classifications have had presented to them thrift studies in some form or other.

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How one concern eliminated the "seasonal peaks" and another eliminated an "unprofitable line" is very clearly explained in an article on the subject of marketing, which appeared in a recent exchange. By demonstrating that seasons made no appreciable difference in the buying activities of the major industries to which the first company sold, and in securing a more careful supervision of sales activity, the "seasonal peaks" that formerly appeared on the sales curve were almost eliminated. In the second case, the investigation of sales records over a period of years, and the segregation, according to industries, of both sales and profits, demonstrated that business on one particular line, which represented more than one-third of the total sales, was being taken at a loss of about 3-1/2 per cent. The discontinuance of this line of manufacture, the expenditure of its proportionate sales effort upon more profitable lines, increased the profits available for distribution at the end of the first fiscal year.

Simplified Practice means concentration upon those lines which are profitable and in greatest demand.

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Mr. L. W. Wallace, past president of the Society of Industrial Engineers and now Executive Secretary of the American Engineering Council, speaking on "The Menace of Waste" says that competition in local and foreign markets is steadily increasing. Business is becoming more difficult to secure. It is held that the greatest struggle in history for domestic and foreign markets is being initiated. The future of American business and industry is at stake. Will American business and industry maintain their places, is the grave question in many far-seeing minds. These minds answer "Yes", provided business and industrial leaders exercise the initiative and leadership with which they are endowed. Such initiative and leadership must envisage the elimination of waste, because it has an international significance. It is recognized as an important factor in economic advancement.

The field of waste in administration, production and distribution has been explored and the major streams of waste brought to view. The turning of these streams of waste into streams of revenue is the most practicable way to meet increasing costs of doing business and the insurgency of competition.

In the realm of administration prevail some of the largest and most persistent streams of waste. Means of stopping them are known, but the problem is to create a general realization of this fact, so that American industry may profit thereby.

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A well known firm of management engineers has recognized the following as being the six most important steps in a working program for anybody who wants to do improvement work in the office or factory: (1) Analysis; (2) Elimination; (3) Coordination; (4) Standardization; (5) Organization, and (6) Incentives. These are mentioned in the order in which they should be performed.

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The introduction into Germany of mass production has resulted in a division of manufacture calling for specialization on the part of individual machinery plants and the institution of common sales bureaus for the purpose of cost reduction. This end is usually obtained through the creation of a community of interests between two or more plants producing the same class of machinery. Each plant limits itself to the manufacture of that class of products for which it is best suited and renounces production of other lines in favor of its former competitors. The unification of sales bureaus and sales practice has been another method widely used to reduce costs in Germany. A still further method of cost reduction has been the standardization of parts, the joint production of these parts, and the joint purchase of raw materials for production.

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In a splendid article by B. M. Smarr, Director, Standards Section, General Purchasing Committee, General Motors Corporation, which appeared in the "American Machinist", the statement is made that "the keynote of a plant standardization campaign should be the elimination of useless sizes and varieties. The natural result will be that greater quantities of the sizes and varieties that remain will be needed and they can therefore be purchased in larger quantities. The price per piece will automatically reduce itself. Odd sizes and varieties are

almost invariably born of some emergency. Before you know it, they become accepted and the next man who specifies their use does so because he believes that it is essential, that a real reason for so doing exists. Experience shows that it is almost invariably possible to reduce the number of sizes or varieties of a given type of unit 50 per cent.

Standardization within a company or a combination of companies requires a great amount of detail work and patience, and extreme consideration for the men and things affected. But the ends attained are justified in the satisfaction that comes from a job well done and in very substantial financial savings as well."

Here, indeed, is a splendid argument for simplification and what can be accomplished by "sticking to it"!

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This division is in receipt of a report from the Standardization Engineer of one of the large manufacturing concerns located in the middle west. In a summary of progress in material and parts standardization, for the period from February to June, 1926, an average elimination of 14 per cent has been accomplished on screw threads, steels, screwed fastenings, pipe fittings, valves and cocks, rivets, cotter pins, taper pins, Woodruff keys, stationery sizes and name plate sizes.

This company is cooperating with the Division of Simplified Practice by using, wherever possible, the simplified sizes which are found in the series of Simplified Practice Recommendations developed under the auspices of this Division.

By "sticking to it", this company and a large list of other manufacturing concerns and distributors are demonstrating the possibilities for savings and economies through the application of simplification.

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In a recent newspaper article, Mr. Hubert T. Parson, of the Woolworth Company, is quoted as saying - "since 1921, we have cut down the number of individual articles handled in our stores to about 3,000. In this connection we analyzed our stocks of merchandise and eliminated all unnecessary duplicates. We began to specialize in those which have public preferment. This policy enables us to concentrate more. Moreover, it enables the manufacturers to specialize and to apply Ford principles of mass production. Since adopting these more scientific principles of merchandising, we have increased our turnovers from 6 to 8 a year, thus heightening the rate of profit on invested capital."

Inasmuch as the profit margins are necessarily small in five-and-ten-cent store, this company, like others, has been driven to develop scientific management, being perpetually alive to the need of eliminating economic waste.

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As an item of particular interest to Chambers of Commerce throughout the country, we quote a detailed reply from the Assistant Managing Director of the Dayton Chamber of Commerce - - - - "I just returned from Washington, and the first thing I am going to do is to reply to your request for a report of the

savings which have been effected by applying simplified practice in the purchasing of stationery for this Chamber of Commerce.

Shortly after your visit to Dayton last spring, the writer was given authority to purchase supplies for this office. On making a survey of the stationery we had on hand, I found we had a variety as follows: 13 different styles and forms of letter-heads and 11 different kinds of envelopes. The reason for having these varieties is that our former executives thought each department should have individual letter-heads. After you addressed us, telling of the benefits to be derived by applying simplified practice, we ordered 50,000 letter-heads at a cost of a little over \$200.00, and we have eliminated the other 12 sizes and forms and now imprint the departments on the standard letter-head which we have adopted.

Formerly it had been necessary to purchase these varieties in small quantities, such as five and ten thousand lots, costing approximately \$350.00 for the same amount of letter-heads. We effected a savings in a small purchase of 50,000 in the amount of \$138.00 as a six months' supply. We have cut down on our envelope variety from 11 to 2 sizes, known as the No. 5 and No. 8 government envelopes. This will effect a savings of approximately the same amount as above in envelopes alone.

We apply simplified practice on other purchases and I am confident that in a six months' supply of all stationery we will effect through this practice a savings of \$500.00. I really believe if all Chamber of Commerce secretaries would apply the teachings as set forth by your division, they would see a big savings and be in a better position to advocate to the various business interests in their cities the benefits to be derived by applying simplified practice in every possible way. Very truly yours, (signed) Sam C. Davis, Assistant Managing Director."

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The Secretary of the Railway Accounting Officers' Association advises that wherever practicable the forms mentioned in the "Railway Accounting Procedure", 1927 edition, have been made to conform to Simplified Practice Recommendation No. 50, for Bank Checks, Notes, Drafts, and similar instruments.

This is one more example of the splendid cooperation being given by the railroads in connection with the promulgation of the simplified practice recommendations which have been developed in cooperation with more than 60 industries.

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In discussing modern business philosophy, William Feather makes the observation that - "after a man has been in business for a few years he begins to realize that there is a natural law operating by which the benefit of every new idea is passed on to the consumer. The business man gets the profits from his economies and efficiencies for a little while, but not for long. There is an irresistible force, just as potent as the law of gravitation, which takes these extra dollars and passes them around. For instance, the manager of a department store doing a volume of \$12,000,000 annually tells me that he wants to net a profit of 2 per cent on his gross sales -- no more, no less. The big thing he aims for is volume of sales. This year he expects his volume will be 30 per cent higher than

last year. His profit will be larger in the same proportion. But he will actually be giving his customers bigger value for their money than ever before. The way to get big sales is to offer the best merchandise you can at the lowest price you can, consistent with good service and quality".

Mr. A. A. Stevenson, Vice President, Standard Steel Works Company, Philadelphia, makes the further comment that - "This same idea will apply to simplification".

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A saving of upward of \$100,000,000 a year to both retail dealers and manufacturers through the proper packing of merchandise for shipment is estimated as a possibility by the National Retail Dry Goods Association, after a study of methods by A. C. Albee, Manager of its traffic group. A campaign to bring the saving about has just been announced by the association. The association is continuing its investigations into the most economical sizes of containers, packages, packing materials and wrapping paper and what changes in the folding of goods will be necessary.

The National Committee on Wood Utilization and the Division of Simplified Practice are cooperating with industry on a program for the simplification of container sizes.

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The Irving Bank & Trust Company of New York, after discussing current business conditions in its November Mid-Month Review, says "The conclusion borne in upon us irresistibly is that caution is still a useful watchword, and there will be a growing need for managerial ability of a high order in commerce and industry generally, during the era of increasing competition ahead."

Many business managers and executives are finding Simplified Practice an effective ally in their efforts to meet the highly competitive conditions of the day.

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