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PROFITS IN 1928.

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That sharp competition will continue through 1928 with profit margins in most lines very narrow is the tenor of several recent predictions by business leaders. Others cite the steady increase in industrial efficiency, making possible continuance of high wages, as the chief assurance of sustained high purchasing power for the mass of people. That purchases and therefore volume of output will be greater, even though profit per unit of sale must be less, is also predicted.

In seeking for causes of smaller profit margins, we may well question whether or not the new, or inter-industry, competition has resulted in lowering prices before those economies in production which would sustain profit at the lower prices have been realized. We may also question whether high pressure selling either to combat hand-to-mouth buying or to absorb hitherto idle or unused productive capacity has not increased the costs of doing business. And again, whether or not the demand for style and the consequent diversification of product have run up inventories and their costs-to-carry, as well as manufacturing and selling costs.

One major result of the prevalent greater individual prosperity is the growing demand for more style, for more beautiful things, for more art in industry. Recognition of this demand has added more varieties to many a manufacturer's line, and in cases where obsoleted varieties have not been dropped, this diversification has undoubtedly increased inventories and likewise production and sales costs. In such cases, simplification of the line to current numbers only would relieve some of the burden.

Efforts to keep pace with too rapidly changing styles have also cut into otherwise normal profits. Too high a frequency of change is always costly in manufacturing. Too low a frequency of change eventually loses sales. Costs of change are inescapable, but with a compact or simplified line they are smaller to combat. It is conceivable that there is a normal or proper frequency of change for each general class or kind of goods, and that it may be profitable for an industry, by concerted effort of its members, to find and settle upon that frequency which is best for it, - all factors being considered. The sterling silver ware industry found one pattern per manufacturer every two years would meet its needs. The practice of "yearly models" by the automotive industry affords a better known example.

Excessive variety in grades or qualities affords opportunity for economy in manufacturing and selling by reducing their number. Quality may be and often is standardized or held constant at certain levels, regardless of variety in size, dimension, or style. Even where size or dimension is standardized for interchangeability, quality may be improved through scientific research, through the use of higher grade materials, or through the simplification of production processes. In many instances, industries have found it possible, when making fewer varieties, to make them better in quality and to give them more style or attractiveness.

Simplification and standardization as applied by certain manufacturers of men's shoes have enabled them to keep step with style and to improve quality, meanwhile cutting costs, increasing volume and annual net profit on a lower price to the consumer.

Profitless prosperity, as and where it may exist, may not be altogether the fortuitous concurrence of circumstances. It may be, and perhaps is, in more instances than not, the result of not applying these useful tools of modern business, viz., simplification and standardization, to the solution of current problems.

2. STANDARDS AND SPECIFICATIONS IN WOOD-USING INDUSTRIES. Miscellaneous Publication No. 79, entitled "Standards and Specifications in the Wood-using Industries", has just been announced by the U. S. Bureau of Standards. It contains the substance of all standards and specifications in the wood-using industries formulated by the lumber manufacturers associations and other trade associations; the national technical societies, concerned with lumber and manufacturers thereof, paper and paper products, and other organizations which speak for industry as a whole, or with the authority of the Federal Government.

This is the first of a series of publications dealing with the standards and specifications in various industries; others are to be issued by the Bureau of Standards as rapidly as conditions will permit. In its use has been made of the same system for the classification of paper and wood which was employed in the National Directory of Commodity

Specifications. The purposes of the book are:

1. Reference used by architects, engineers, contractors, builders, purchasing agents and others having to do with the specifications, purchase and use of lumber for building and construction only.
2. Through such use, to create wider interest in and support for "American", and other recognized lumber standards and specifications.
3. To serve as a guide book to lumber manufacturers and distributors, wholesale and retail as to what sizes, dimensions, grades, qualities, etc. of lumber are wanted for the above uses and thus enable them to manufacture and stock accordingly.
4. To further the utilization of lumber and lumber products.
5. To depict the opportunities for extension of standardization throughout the entire field of lumber usage and thus stimulate action toward extension of standardization of lumber.

3. **WORK PROGRAM OF PURCHASING AGENTS.** The National Association of Purchasing Agents has developed a 5-year campaign of work of the organization to help business. This program is divided into several groups, each group in charge of a national committee. These groups are as follows:

National Committee on Simplified Invoices, to work for the general adoption of the Simplified Invoice Form by business, thus effecting annual savings of millions; National Committee on Waste Elimination, which will work to eliminate waste in production, distribution and purchasing. To help producers and distributors of every commodity in their efforts to reduce costs. National Committee on Inquiries and orders to develop and promote standardized purchase, inquiries and orders. To give to vendors the same economies which they give up through the simplified invoices. Another committee will promote interest in, and help establish standardized and simplified practices, grades, etc.

In this work the various committees of the National Association of Purchasing Agents will cooperate with the Division of Simplified Practice, as well as other recognized waste-elimination agencies.

4. **PURCHASING AGENTS MEETING TO DISCUSS STANDARDIZATION.** Standardization of nomenclature for material and supplies will be the topic of an address by E. T. Gushee, Purchasing Agent for the Detroit Edison Company, at the two-day meeting of purchasing agents of public utility corporations, to be held January 26-27, 1928 at Buffalo, N. Y. The meeting will be under the auspices of the Public Utility Group of the National Association of Purchasing Agents.

5. **WASTE ELIMINATION WITHIN THE SHOPS.** Recently the Westinghouse Electric and Manufacturing Company conceived the idea of getting the tremendous importance of waste elimination across to the men in the shops, through the use of exhibits. The officials of the company believed that the savings would be greater if the cooperation of the shop men was enlisted, and that the men would become enthusiastic boosters for the idea if once they thoroughly understood its aims and values, and also that it would mean money to them as well as to the company.

On some of the exhibits, samples of wasted materials were mounted with statements as to the quantities used and the corresponding costs. Examples of spoiled work and broken tools were collected, costs on such spoilage calculated and slogans were prepared on cards, urging greater care in machining or processing. Records of repair costs were gathered and striking cases were selected to drive home the principle that money could be saved by more careful use of equipment; in fact, that profits can be as easily made by internal economies as by increased sales prices and with greater benefit.

The plan was a great success, according to information received from officials of the company, who state that housecleaning, reduction of waste, and improvement of methods were general throughout the plant. They further state that two important results stand out from this experiment, namely, the men are commencing to understand what huge sums can be saved by waste prevention, and that the management can not accomplish this work alone, but depends on the cooperation of employees for the biggest savings.

6. **THIS 1927 CONCEPTION OF PRODUCTION.** The 1927 conception of production is that industry must be tooled up fundamentally for service, and not just for the production of a certain product, said L. J. Belnap, President, The Worthington Pump and Machinery Corporation, in Magazine of Business (Oct.). He said that today planning for industry must start with distribution rather than production. When a business finds what the market needs, it may then plan what, where, how, and how much to produce.

Mr. Belnap's company made an extensive survey of the demands for its product. The survey showed that although they had been getting more than their normal share of the business in one territory, much additional business was still available. Their salesmen are now selling in terms of territories' need for their product rather than company's need of orders. His organization has studied its manufacturing plants in relation to probable future needs of industry, and in geographical relation to markets, materials and labor. By concentrating for more economical production, they dispensed with one plant.

7. **THE SPIRIT OF MANAGEMENT.** Interest in management is continually increasing. We do not yet know very much about management compared with what we will know in the future, observes O. H. Cheney, Vice-President, The American Exchange - Irving Trust Company, in discussing the Spirit of Management in Commerce and Finance. But, he writes, "if business men applied what is already known about it, many of our difficult economic problems would be solved", continuing with the statement that "one of the handicaps to progress of management is that its mechanical systems, such as cost accounting, are confused with its spirit".

Modern management methods are increasingly necessary as competition increases. In no other way can production be made more efficient, sales increased, and profits maintained. Financial management should be the integration of all policies including production and selling. It should enable executives to decide wisely when expansion is needed. It should teach them to buy ahead without being caught with too large or too small inventories. It should enable him to keep production costs down to minimum, to reduce selling expense, and to borrow cautiously and economically.

8. **U. S. MASTER SPECIFICATIONS ANNOUNCED.** The Federal Specifications Board has promulgated the following specifications as U. S. Government Master Specifications, effective November 23rd.

FSB No.

- 21B - Paint, lithopone, Interior, White and Light Tints, Flat or Eggshell Finish, Semi-paste and ready-mixed. Revision. Superseded FSB No. 21.
- 23B - Lamps, Electric, Incandescent, Large, Tungsten Filament. Revision. Superseded FSB No. 23.
- 58A - Cells and Batteries, Dry. Revision. Superseded FSB No. 58.
- 531 - Zinc Plates, Sheets and Strips.
- 532 - Wire, Spring, Phosphor-Bronze.
- 533A - Lumber, Softwood, Yard and Factory. Revision. Supersedes that part of FSB Spec. No. 24, which covered Softwood.

- 534 - Nails, Spikes, Tacks and Staples.
- 535 - Pipe Fittings, Malleable Iron (threaded) (150 lb.)
- 536 - Metal, Anti-friction, Ingots and Castings.
- 537 - Pipe, Water, Centrifugally-cast Iron.

Copies of these specifications may be obtained from the Federal Bureau of Standards, Washington, D. C.

9. **CERTIFICATION PLAN.** Lists of "willing-to-certify" manufacturers have been compiled for 75 U. S. Government Master Specifications. Approximately 570 copies of sets of these lists have been distributed in mimeograph form, almost exclusively in response to specific requests from purchasing agencies, a total of more than 43,000 lists having been distributed to date. The average number of "willing-to-certify" manufacturers on each list is about 21, the aggregate number of names of manufacturers on the 75 lists being 1,609. There are 684 separate individual manufacturing firms represented on these lists. Work is now going forward actively on a compilation of 76 additional lists of "willing-to-certify" manufacturers, making a total of 151 U. S. Government Master Specifications to which the Certification Plan has been, or is being, applied.

10. **INTELLIGENT PURCHASING AN AID IN COST REDUCTION.** Anything saved on purchases is cost reduction of the most constructive kind, observes E. S. Gregg, Chief Statistician for the Western Electric Company, in Kardex Institute. He says in general, the soundest policy is to depend upon a few able supplies, rather than upon many of them, and points out the importance of watching market conditions, of specialization and centralization in purchasing, and of keeping adequate records. He further states that if business men demand intelligence and skill in purchasing, costs can certainly be reduced.

Adherence on the part of purchasing agents to Simplified Practice Recommendations in making purchases will assist in this cost reduction. Wholesale savings to individuals have been made by conservative buying, savings have come mainly from reduced inventories.

11. **CONCRETE FORMS SIMPLIFIED.** Proposed standard dimensions for removable concrete forms was a subject discussed at the semi-annual meeting of the Concrete Reinforcing Steel Institute held at Detroit. The conference decided to standardize on the width of forms, the length and total contraction of tapers, special filler widths and depths of forms. These recommendations will be taken up with the Division of Simplified Practice, Department of Commerce, with the idea of nationalizing these standard dimensions.

12. **MACHINERY STANDARDIZATION.** Low production costs in road building, as in many other manufacturing enterprises, result from operating at full capacity, machines of high capacity, observes the Highway Engineer and Contractor in discussing standardized machinery for road building. In this way labor costs are reduced to a minimum and the immense advantage of rapid construction is achieved, are the viewpoints editorially expressed in the publication. They say, further:

"But the high cost of productive machinery, the proof that such machinery is economical in spite of high cost is in the fact of widespread use, can be reduced best through the quantity production of such machines for construction. This, of course, means standardization. Standardization of machines is dependent, in turn, on specifications as to methods of work which are sufficiently flexible to permit the use of machinery. Erratic methods must be avoided if costs are to be reduced. This is a standardization task for engineers. Where methods have been standardized machine standardization has followed as clearly illustrated in the building of concrete roads. The low production costs in concrete road building can be attributed to no other cause than the splendid machines that have been developed to make rapid and economical production possible.

"Similar standardization is certainly highly desirable in asphalt road machinery. The same thing can be said about machines for building brick, stone, gravel and other forms of road surface. The manufacturers and contractors stand ready to make mass production of roads possible through machine standardization. The problem is for the engineers to solve."

13. **LEATHER INDUSTRY SEEK STANDARDIZATION OF PRODUCTS.** Improved methods of removing hides and standardization of leather are sought by members of the Leather Industry working through the Tanners' Council, and assisted by the Hides and Leather Division, and the Division of Simplified Practice, of the Department of Commerce, and the Department of Agriculture. The latter department is interested in promoting greater attention among cattle raisers to the protection of hides on living animals and more careful removal of the hides from the carcass. The two divisions of the Commerce Department are cooperating with the Tanners Council in enlisting the interest of the Leather Industry in the standardization of leather. They will probably consider among other things the matter of color, weight and thickness of leather. Simplification could also establish standard specifications of leather so that light medium and heavy medium, or whatever designations are decided upon, will have a common and general meaning instead of the variety of dimensions they now admit.
14. **WHOLESALE PRICE INDEXES REVISED.** The monthly publication of wholesale price indexes by the Bureau of Labor Statistics, of the Department of Labor, has been revised in several important respects, for the purpose of rendering the statistics more applicable to present conditions. The revision consists of (1) the addition of important articles to the list of commodities included in the index, (2) a shift of the price base to the last completed year (now 1926) and, (3) the substitution of more recent "weights" for those heretofore employed. It is understood that the Bureau of Labor Statistics expects to continue the revision of wholesale price index numbers, always for the purpose of obtaining data which will best measure present conditions.
15. **ADHERENCE MAKES FOR LOWER PRICES.** Close adherence to standard construction weights and widths whenever possible in buying textiles, makes for lower prices, wider sources of supply, quicker deliveries, and a better chance of securing supplies promptly in case of emergency, said W. A. Karl in a recent issue of The Purchasing Agent.
16. **RESEARCH TAKES ON NEW SIGNIFICANCE.** Research was invested with a new significance by Edward J. Mehren, Vice-President, McGraw-Hill Publishing Company, Inc., in an address recently made before the Chicago Association of Commerce. After presenting an exposition of its great value as one of the long-term guarantees of prosperity, he epitomized the situation as follows:

"I hold out to you a promise, future industrial success, if you employ research, and I hold a threat, industrial lameness and decay, if you neglect it.

"Back of the immediate and commercial types of research there must be another type, deeper in character, which is concerned with pushing back the boundaries of the unknown. On the results of this more basic form of research is built all of the great development that has made for the progress of the world since history began. Investigations of this type can not be controlled. It is not possible to know before-hand what the result may be. It must suffice the investigator to know that there should be a result, either positive or negative. This type of research is to industry what the telescope is to the astronomer. The field is limitless.

"It is the responsibility of every American business executive to give generous support to cost reduction efforts and to industrial and scientific research", concluded the remark of Mr. Mehren.

17. COTTON-TEXTILE SIMPLIFICATION. Closely related to the expansion in uses for cotton goods, are the matters of simplification, standardization and specifications, according to the first annual report of Walker D. Hines, President of The Cotton Textile Institute, Inc. In his report Mr. Hines reviews the progress that has been made in this field and what awaits the future attention of the Institute.

There is a wide field for the improvement of specifications for various cotton textiles, particularly those to be bought by the Governments, state and federal, and for nearer approaches to standardization and simplification in types and constructions of cotton fabrics, recently wrote Mr. Hines in Nation's Business, in discussing a New Leadership in Cotton.

From the manufacturer's standpoint, to satisfy the various requirements, it is possible to use any one of 32 standard market grades of cotton, any one of 17 quoted staples, and one or more of several characteristics such as the softness or hardness of the raw material, observes the Purchaser. There is a choice of more than 1,600 possible combinations, but variety does not end here. Cotton is woven into yarns having diameters from less than the thickness of a sheet of writing paper to as coarse as a ninth of an inch.

18. WASTES IN DISTRIBUTION. Wastes in distribution are outstanding problems of every commercial, industrial and business organization that has a sales problem, said E. St. Elmo Lewis, in his article "Wastes in Distribution", which appeared in Management Magazine. He said that the fundamental trouble is the attitude of the average technical man toward sales waste. Society, he believes, is demanding elimination of waste, but five advertising fallacies impede progress. They are; that people know what they want, will automatically demand what is best, know difference between price and value, will remember over any great length of time without being constantly reminded, and that it is more difficult to produce than to sell. Other popular delusions are that low price will insure demand, advertising is an economic waste, and high wages mean high costs. The buyer must be educated in "buymanship", and the seller in advertising and selling if there is to be any diminution in distribution waste.

On the other hand, Bruce Barton in his article "The Creed of an Advertising Man", which appeared in Printers' Ink Weekly (November 3, 1927) said that advertising, by increasing production power, increases wealth and that wealth is the power which enables human beings to produce and consume.

19. NINE STATES WITHOUT STANDARD CONTAINERS. A survey of state standardization of fruit and vegetable containers, made by the Bureau of Agricultural Economics, showed that nine states are without laws on the subject. These are Arizona, Colorado, Delaware, Georgia, Louisiana, North Dakota, Oklahoma, Tennessee, and Wyoming. All other states and the District of Columbia have authority to establish standard containers, and in practically all cases have standardized one or more types of containers, including berry boxes, grape baskets, apple barrels, and boxes, round stave baskets, hampers, splint or market baskets, climax baskets, and till baskets.

Reducing the variety of fruit boxes with a view to simplifying production and bringing about lower costs was discussed by approximately twenty-five members of the Standard Containers Manufacturers at a recent meeting in Jacksonville, Fla. Those in attendance represented three states, Georgia, Florida, and Alabama. The purpose of the meeting was to review business conditions in various sections, and thereby gauge the production of fruit and vegetable containers. There is little change in the fruit boxes this year, but the manufacturers are centering their attention on simplification.

20. SELF REGULATION BY BUSINESS. In his address before the recent meeting of the National Council of the Chamber of Commerce of the United States at West Baden Spring, Indiana, Hon. Edwin B. Parker, Chairman of the Board urged business to cooperate in waste elimination as a means of strengthening self government and of reducing costs to the ultimate consumer.
21. COMBINED INDUSTRIES CUT BUSINESS COSTS, says Julius Kahn, President of the Truscon Steel Co., in Manufacturing Industries. In his article Mr. Kahn points out that combination of several related businesses into one organization has many advantages and economies. It lowers purchasing costs, and through standardization of materials purchased, eliminates odd types and sizes. Equipment cost is lowered because same may be used by two or more departments. Another factor is lowered expense of material handling. With bulk shipments, lower freight rates are secured, loss and damage in transit more easily prevented, and warehousing problems simplified. Economy in labor costs is effected by mass production and utilization of time, man and machine, much of which would otherwise be idle. Sales expense is reduced by eliminating duplication of sales effort over the same territory. The largest savings come from volume output, standardization, and simplification.
22. REDUCES INVENTORY THRU SIMPLIFICATION. In a recently published book by a well known author appears the statement that "Simplification and the steadily increasing dependability of transportation are making it possible for nearly every business man to reduce the number of dollars invested in inventory and keep them working faster. Some concerns come pretty close now to carry their inventories 'in transit', raw materials on the way from their sources, finished products on the way to their customers, with the stop-over at the factory for production reduced to days, even to hours in some cases. No loafing dollars there."
23. NATIONAL SAFETY CODES. The American Engineering Standards Committee, 29 West 39th Street, New York City, has just issued a bulletin on The Status of the National Safety Codes. It contains resumes of the present status of forty-four national safety codes, twenty-two of which have been completed under the rules of procedure of the American Engineering Standards Committee, while the rest are in course of development. These codes are the result of years of painstaking work of joint committees composed of representatives of all interested groups and represent, therefore, a concensus of the experience and knowledge of experts in their individual fields.
24. OVERSEAS COMPETITION. Can we compete abroad? "Indeed we can", said C. C. Martin in Business. In his article Mr. Martin stresses the fact that increased knowledge of mechanism of trade and practical overseas experience of our traders and manufacturers have established conviction that we can and do compete abroad with marked success. "It has been said that a large part of our exports are bought and not sold, that many commodities move overseas because of demand we do not create and do little to stimulate. This is only partly true. World-wide marketing organizations exist for many of these products, and with increase in world development, competition is emerging in many directions. Competitors admit that we have achieved steady advances, have used unique methods, and are rapidly progressing."
25. AUSTRALIANS WORKING FOR SIMPLIFIED PRACTICE. The Australian Commonwealth Association of Simplified Practice, which was formed in July of this year is now doing its pioneer work, trying to educate the manufacturing and distributing organizations as to the aims of their society and the value of simplification and other waste-elimination measures. Much literature on waste elimination as printed by the Division of Simplified Practice has been sent to the Australian Association in helping them during the infancy of the work overseas.

26. **EUROPEAN BALL-BEARING MAKERS MAY STANDARDIZE.** Following recent negotiations the British, German, Czechoslovakian, Swiss, Austrian, Swedish and Russian makers of ball-bearings are reported to have neared an agreement for standardization of the bearings produced in these countries. The many and widely different patterns will be abandoned and uniform ball-bearings introduced.
27. **RUSSIAN PLANTS TO CONTRIBUTE TO FUND.** The council of Labor and Defense has ordered all plants engaged in manufacturing agricultural machinery and implements to appropriate for a standardization fund, one-half of one per cent of the wholesale price of their products, according to the Moscow "Economic Life", an official daily of Russia. The same percentage will be appropriated by trading organizations on all imported products of this kind, based on the prices delivered at Russian frontiers. This fund is to be administered by a special standardization committee, which will submit a draft of standards for agricultural machines and implements, and a plan for the utilization of the fund.
28. **BRITISH STANDARD RAILS.** Revision of the British Standards for tramway rails and fishplates has been made and the British Engineering Standards Association has issued a revised edition of the standard specification covering them. The basic Bessemer process for the manufacture of the steel has been eliminated in accordance with a recent decision of the association. A new dwarf rail section has been introduced, intended for carrying heavy loads.
29. **RAILROAD ADHERES TO SIMPLIFICATION.** From the Weyerhaeuser Sales Company according to information received by the Division of Simplified Practice, the specifications of the Pennsylvania Railroad Company for certain lumber used by them has been changed to comply with the Simplified Practice Recommendation developed for lumber. This recommendation provides for a standard nomenclature grades and sizes for softwood lumber, and is known as Simplified Practice Recommendation N o. 16.
30. **RAILWAY ASSOCIATION INTERESTED IN SIMPLIFICATION PROGRAM.** It is very gratifying to the Division of Simplified Practice to see the internal activity on the part of the American Railway Association in the interests of simplification and standardization. This association has been outstanding in its support of the Simplified Practice Recommendations developed for the invoice form; bank checks and notes; and warehouse forms. In addition to the active interest displayed by the Purchases and Stores Division of the Association, the Railway Purchases and Stores, monthly publication of the association, has shown a warm interest in the work of simplification and has frequently printed articles on the subject.
31. **FAVORS SIMPLIFIED PRACTICE.** In a recent communication to this Division, Mr. George G. Powers, Vice President and Treasurer, Union Bed and Spring Company, said that his observations of the operation of the Simplified Practice Recommendations dealing with simplification of hospital beds, lead him to believe that the situation as to widths of beds and springs is in a more satisfactory condition than it has been since the inception of the program.
32. **SAUCE FOR THE GOOSE.** Under this title Automotive Wholesaling says that moderation is necessary in all things. Those who berate the retailer for failing to carry a wider variety or a fuller assortment, sometimes overlook the fact that the fear of not being able to fill every order that came his way has tempted more than one merchant into the quagmire of overstocks. The retailer wants volume quite as much as the wholesaler does, but not at the cost of useful capital tied up too long in non-productive goods.

33. **TIRE SIMPLIFICATION.** Growing interest in the revision of the S.A.E. Recommended Practice covering balloon tire sizes, and the further simplification of their present great variety is evidenced by the November 21st meeting of the Detroit Section of the Society of Automotive Engineers at the Book-Cadillac Hotel in Detroit. B. J. Lemon, Field Engineer for the U. S. Rubber Company, and Vice-chairman of the S.A.E. Detroit Section, in his comprehensive paper on the manufacture of balloon tires, presented the manufacturers' difficulties resulting from the specification of too many different tire sizes. T. G. Graham, Works Manager for the B. F. Goodrich Company further emphasized the wastefulness caused by the present diversity in balloon tire sizes and presented charts showing the comparatively small differences between many of the current sizes. H. M. Crane of the General Motors Corporation covered the motor car designers' problems due to style trends in the industry, and the importance of the correct tire size in securing the proper style affects. R. M. Hudson of the Bureau of Standards discussed the economic side of the problem and the effects of too many varieties on annual net profits.

In its December "Supercharges" the Detroit Section says: "All speakers, each from a different angle, impressed us first with the seriousness of the problem of tire size standards; second, with the advisability and economic necessity for immediate action; and thirdly, with the entire feasibility of this needed standardization, once the tire men and automobile manufacturers get together through the S.A.E. and the Bureau of Standards."

The Standards Department of the S.A.E., through its manager, R. S. Burnett, is now making a survey of current varieties preparatory to presenting a revised Recommended Practice covering size standards at the Society's Annual Meeting in January. The Bureau of Standards expects to be called upon to assist through its Division of Simplified Practice in securing recognition of, and adherence to, the standard list of sizes as adopted by the S.A.E. at its annual meeting.

34. **FRENCH AND ITALIAN CAR STANDARDIZATION.** Under the title, "Let Us Standardize", says La Vie Automobile, Henri Petit declares that the first work to be undertaken by the newly founded French Society of Automobile Engineers is standardization. As illustrations of how badly needed it is, he mentions the fact that a certain manufacturer of piston rings carries no less than 3,800 models; that there are no less than 250 types of batteries and that there are also 60 dimensions of tires. L'Auto Italiana editorially demands standardization by automobile manufacturers in Italy and Premier Mussolini may enter into this matter.

35. **AGAINST WASTE.** A most interesting story is contained in the Foremen's Magazine of the fight being waged by the White Motor Company against waste. A group of officials of the company, known as the Quality committee, and consisting of the production manager, the chief inspector, the assistant factory engineer, the production engineer, the salvage supervisor, and the manufacturing assistant production manager, make weekly visits to the plant on an inspection tour.

During the week all materials scrapped in a department are collected at the Waste Material Depot for each particular department. The Quality Committee visits each of these depots and examines the material, discusses the cause for the scrapping and decides upon the measures for preventing its recurrence. Someone in the group is made functionally responsible for seeing that the trouble is remedied.

36. **AUTOMOTIVE STANDARDS REPORTS APPROVED.** Twenty reports by divisions of the standards committee of the Society of Automotive Engineers, recommending new standards or changes in existing ones were approved at a meeting of the standards committee and the council of the

society, according to S.A.E. Journal, which in its account of the meeting said that the new specifications relate to roller bearings, automotive wiring, instrument mountings and connections, dome light lamp brackets, passenger car body lighting switches, heat treatment definitions, steel specifications, the numbering of steels, motor vehicles turning radius, bumpers, brushings, rivets, flexible couplings, and taps.

The Division of Simplified Practice has cooperated with the Society of Automotive Engineers in securing acceptance of, and support for standards relative to Brake Lining, Spark Plugs, Roller Bearings and Oversize Piston Rings. Under these developed standards there are 6 varieties of spark plugs, 6 varieties of oversize piston rings, 37 varieties of brake linings, and 172 varieties of taper roller bearings. It is expected that the printed recommendation dealing with brake lining and the one for roller bearing will be released from the Government Printing Office during February. The recommendations on oversize piston rings and spark plugs are now in the process of acceptance. Before these recommendations will become effective, they must be accepted by 80 per cent of the volume of production.

37. HEIGHT OF AUTOMOBILE BUMPERS. The S.A.E. Standard for passenger-car bumpers, small motor-coaches and light delivery trucks is as follows: The horizontal center-line of bumper face exclusive of fittings shall be 18 inches plus or minus 3/8 inch per inch of effective face, above the ground for front bumpers and 19 inches, plus or minus 3/8 inch per inch effective face, above the ground for rear bumpers or fender-guards. The minimum over-all length of front bumpers shall be 60 inches on passenger cars having the standard 56 inch tread. The minimum dimension measured between the extreme ends of rear bumpers, or fender guards, shall be 60 inches on passenger cars having the standard 56 inch tread. The minimum vertical depth of bars for single-bar-type front and rear bumpers shall be 2 inches. The bumper height shall be measured with the car supplied with the normal amount of water, oil and gasoline, but without passengers or other load. The vertical spread of contact face shall be the distance between the upper and lower edges of the outer-bumper elements, exclusive of any additional projecting parts.

The only way to make these standards effective is through adherence on the part of car manufacturers and car owners. It is urged that car owners check up on their bumpers to see if they are attached in accordance with the above standards. Those having bumpers installed after purchasing a car would do well to have them set according to these measurements. In present traffic conditions it is important, where bumpers meet, that they meet face to face and not overlap or interlock as they so often do now.

38. RECENT ACTIVITIES OF THE DIVISION OF SIMPLIFIED PRACTICE.

Preliminary, general and revision conferences have recently been held under the auspices Division of Simplified Practice, U. S. Department of Commerce, looking to the simplification of:

PAINT AND VARNISH BRUSHES. - (REVISION) The Standing Committee of the Brush Industry has revised Simplified Practice Redommendation No. 43, Paint and Varnish Brushes, for another year, beginning December 15, 1927, by adding the following:

Table 3 - Leather-Bound Wall and Stucco Brushes

| <u>Size</u> | <u>Number</u> | <u>Size</u> | <u>Number</u> |
|-------------|---------------|-------------|---------------|
| 3" | 25 | 4½" | 40 |
| 3½" | 30 | 5" | 45 |
| 4" | 35 | 5" | 45 |

It is recommended that the industry modify its present practice of ordering by number and size and work toward a designation by size only, discontinuing the use of reference numbers.

The Committee reported to the officials of the Division that a survey of approximately 60 per cent of the volume of trade showed 80.5 per cent adherence to the recommendation. This original schedule reduced the variety of brushes from 480 to 138.

BOXBOARD THICKNESSES. - (REAFFIRMATION) Simplified Practice Recommendation No. 44, Boxboard Thickness has been reaffirmed by the Standing Committee of the Industry, for another year, effective January 1, 1928, according to the Division of Simplified Practice, U. S. Department of Commerce. The results of a survey conducted by the Industry indicated 65 per cent adherence to the recommendation, which reduced the varieties of boxboard thicknesses from 244 to 60, an elimination of 75 per cent.

STEEL BARRELS AND DRUMS. A revision conference for steel barrels and drums was held in Cleveland, Ohio, with representative of the Division in attendance. The original recommendation for this commodity reduced the varieties from 66 to 24.

FOLDING CHAIRS. A conference for developing a Simplified Practice Recommendation for wood folding and portable chairs was held in Buffalo, N. Y., December 5th.

SURVEYING INSTRUMENTS. The simplification committee of manufacturers of surveying instruments, in cooperation with the National Screw Thread Commission, has prepared a tentative recommendation for tripod threads for surveying instruments. Samples made in accordance with the proposed thread are now being examined by manufacturers in preparation for discussion at a meeting which is expected this month in New York.

COMPOSITION BOOKS. At a meeting of the Tablet Association in Chicago last month, the tentative recommendation for composition books was approved, and it is expected that this association will request the organization of a general conference this month to consider the proposal and develop a recommendation.

ADHESIVE PLASTER. A report is being prepared from questionnaires on Adhesive Plaster, and it is believed that a meeting of manufacturers will be held in the near future to draft a tentative recommendation for this commodity.

POCKET KNIVES. The simplified practice committee of manufacturers of the pocket knife industry met in New York on November 11th, with a view to expediting the return of all questionnaires with regard to production of the various styles of these knives. It is expected that all returns will be in this month and the committee will then take up the matter of drafting a tentative recommendation.

MARINE HARDWARE. A meeting of the simplified practice committee of the marine and industrial hardware industry was held in Portland, Maine, last month. Initial steps were taken looking toward a simplification of the entire line manufactured by this group.

HOLLOW METAL AND KALAMEIN DOORS. The hollow metal and kalamein door industry has about completed its survey of current practice in production. It is planned to hold a joint conference this month. Later, a general conference of all interests will be called to consider a definite simplified practice recommendation.

BEEKEEPERS SUPPLIES. The members of the newly organized Bee Industries Association, are interested in reducing the number of items heretofore carried in their catalogues. The Division of Simplified Practice is cooperating with the President and the Board of Directors with the view of developing a simplified practice program.

HOUSEHOLD AND INDUSTRIAL BRUSHES. It is the belief of some of the manufacturers of household and industrial brushes that the industry is now producing a great many more styles and sizes than are required to meet the needs of the trade. A questionnaire has been sent out to ascertain the views of manufacturers relative to the adoption of a simplified line of styles, sizes, etc.

CHEESE AND CHEESE CONTAINERS. A member of the staff of the Division will meet with a group of cheese producers and distributors in Milwaukee today to discuss the appointment of a simplified practice committee to conduct a survey of current practice as to cheese and cheese container sizes, etc.

GLASS CONTAINERS. Several trade associations, including the American Pharmaceutical Manufacturers' Association, the Glass Containers Association, the American Pharmaceutical Association, The National Wholesale Druggists Association, and the National Preserves Association, have indicated considerable interest in a simplification program for their respective groups.

HOSPITAL PLUMBING FIXTURES. A preliminary conference of manufacturers of hospital plumbing fixtures will be held in Washington, D. C., to go over the results of a survey and to discuss an appropriate simplified list of sizes, etc., to be recommended to hospital authorities for adoption as standards.

POLISHING AND BUFFING WHEELS. In reply to a questionnaire sent out to manufacturers and users of these items, a number of producers and consumers indicated they were in favor of the promulgation of a simplified line of sizes, shapes and types.

PANELBOARDS AND SWITCHBOARDS. At the suggestion and with the approval and cooperation of the Panelboard Distribution Board Section of the National Electrical Manufacturers Association, this Division presented the matter of simplification to the manufacturers of panelboards and switchboards with particular reference to the reduction in number of styles, varieties and sizes of slate used in constructing switchboards. It is the belief of several leaders in the industry that the varieties and sizes of slate panels could be reduced. The Panelboard Distribution Board Section have standardized on certain sizes, which if adopted by everyone concerned would prove of material benefit.

39.

AMERICAN MARINE STANDARDS COMMITTEE

The meeting of the Executive Board of the committee was held in New York on November 12th, and approved 4 applications for membership. Nominations for the Executive Board for the year 1928 made by the Nominating Committee were read. These are to appear on ballot to be distributed to the membership by the Secretary for vote, this month. The next meeting of the Board is to be the annual meeting and will be held on January 23rd, 1928, in the Department of Commerce Building, Washington, D. C., and will be followed by the annual meeting of the members on January 24th.

The meeting last month approved supplemental instructions for simplified procedure in development of standards in cases where such will be appropriate; considered suggestion for standardization of marine railways but decided that the subject is not within the scope of the work of the committee; referred to committees of origin for further consideration the following proposed standards: Specification for marine glue for ship decks, Specification for metallic packing for condenser tubes, and Specification for five kinds of hose for ship equipment; considered request of the Bureau of the Public Health Service for

promulgation of general specifications for rat proofing methods on ships and authorized the Secretary to prepare a proposed standard in consultation with the Bureau; considered suggestion to standardize watertight receptacles to obtain interchangeability of these fittings in electrical installations on ships, and directed the Secretary to take the necessary steps to prepare proposed standards.

Proposed American Marine Standard Rules for Design and Construction of Marine Boilers have been submitted to the Subject Committee on "Rules for Boilers and Pressure Tanks", also to the Boiler Code Committee of the ASME, to the Steamboat Inspection Service, and to the Council of the Society of Naval Architects and Marine Engineers. After a reasonable time has been allowed for constructive criticisms of the proposed rules by these various interests, a meeting of the subject committee is to be called.

It is expected that a large number of publications of marine standards will become available for distribution during December.