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COMMERCIAL STANDARDS GROUP, BUREAU OF STANDARDS

(This Includes: Division of Simplified Practice; Division of Specifications; Commercial Standards Unit; American Marine Standards Committee.)

Address Inquiries to Commercial Standards,

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TABLE OF CONTENTS

	<u>Paragraphs</u>		<u>Paragraphs</u>
Activities of Commercial Standards Group-----	11	More Acceptors for Simplified Invoice-----	20
Auto Bumpers Standardization-----	25	Need for Standard Contracts-----	21
Belgium Adopts Simplified Practice	17	New Booklet on Use of Seasoned Lumber-----	12
British Launch Standardization Program-----	14	1927 New Manufacturing Plants---	31
Building Managers Visit Bureau---	35	Present Business Condition-----	3
Bureau of Mines has Movie Service	5	Press Metal Institute to Promote Simplification-----	33
Can Profits be made with Falling Prices?-----	1	Reduces Inventory-----	6
Corrective Suggestions-----	23	Sewing Machine Parts Standardized	18
Credit Methods to be Studied-----	19	Simplified Bank Checks in Use---	2
Department to Aid Domestic Commerce-----	10	Simplified Invoice Saver-----	13
Drafts Standards for Medicines---	15	Something New in Cooperation-----	32
Elimination of Waste Number-----	9	Specifications Index-----	8
Federal Specifications-----	29	Standardization to be Important Topic-----	24
Fire Apparatus Simplifications---	26	Standard Machine Parts-----	27
Government Simplifies its Forms---	22	Survey of Recent Economic Changes	23
Library Simplification Saves Millions-----	30	Three Recommendations Reaffirmed-	4
Lumber Grade Marking-----	34	Uses for Old Wooden Containers---	16
		Will Study Durability of Paper---	7

1. CAN PROFITS BE MADE WITH FALLING PRICES?

Ray M. Hudson, Assistant Director, Commercial Standards.

Rising costs of doing business are said to be hurting profits, and intensive selling methods are said to be responsible for the current upward trend in distribution costs. The defense of these methods is that keen competition, hand-to-mouth buying, and idle production capacity make them necessary.

However justified this defense may be, the fact is the larger the mass to be moved, the greater the effort to move it; the greater the inertia, the greater the force to overcome it. This natural law is evidently as applicable to the disposal of our factory output as it is to the displacement of a granite boulder. As the total output of our factories increases, greater selling effort becomes a necessary part of the process of getting that output into the hands of the ultimate consumer. The greater the variety offered the public, the greater must be the effort to sell it. We may, therefore, expect an increase in the cost of distribution, but recognition of mass-distribution as the concomitant of mass production does not compel the blind acceptance of present distribution costs, nor of present "over-diversification" in product.

If excessive variety and increased costs of distribution absorb the economies of mass-production, either profit must be sacrificed to selling price, or price must be raised to protect profit. Investors will resist the one course, consumers the other. Furthermore, it has been generally recognized that it is more advantageous to increase total profits by reducing prices to the consumer, - at the same time maintaining or improving quality, - and thus secure increased sales volume, than it is to try to increase profits by raising prices.

Current discussion may be summed up thus; - consumers want lower prices, invested capital wants a fair return, costs of distribution are rising, - production costs are about as low as present variety of product, equipment for making it and current wage rates will permit. What is the way out?

There are many avenues open. To catalog them all calls for a treatise on Management, but we suggest Simplification as the starting point. Simplification ordinarily means elimination of unnecessary variety in sizes, dimensions, or line numbers. It can be applied to models, patterns, colors, styles, and also price ranges. It means concentration of production and selling effort on those varieties in proven greatest demand. Simplification throws the burden of the odd or seldom-wanted variety on the individual who demands it and thus frees those who produce, sell or buy the simplified line from the waste of needless variety.

Simplification is a means by which producer or distributor can be assured of sufficient variety to meet the majority demands of his trade. It is the means by which the consumer can be assured of reasonable variety without excessive cost. Studies of many fields show 80 per cent of the business in almost any line of goods is done on 20 per cent of the varieties in which that line is offered. Then why carry the "idle" 80 per cent of variety?

Simplification has been applied by individual manufacturers, merchants and purchasers; it has also been applied by them in groups, with marked success. Data on hand show reduced inventory, quicker turnover, increased sales volume, lower costs of doing business, lower production costs, better profits, and lower prices, as results of simplification.

If all, who could, would "throw overboard" that 80 per cent of the variety they now carry and which brings them but 20 per cent or less of their annual business, and then concentrate all their production, sales and advertising efforts on the 20 per cent of variety that yields them 80 per cent or more of their annual business, making a profit in this era of falling prices would be more of a pleasure than a struggle.

To those who want the evidence, we will send on request, our mimeographed summary, "Results and Benefits of Simplified Practice". Address Division of Simplified practice, Department of Commerce, Washington, D. C.

2. SIMPLIFIED BANK CHECKS IN USE. Eighty-five per cent of bank checks now issued comply with the simplified form promulgated under the auspices of the Division of Simplified Practice, E. R. Preston, President of the American Bankers Association, said recently in discussing the simplification program and the savings resulting from adherence to it. The simplified check replaces the heterogeneous shapes and sizes in use prior to its development. Mr. Preston stated that the universal adoption of simplified checks will mean a saving of at least \$20,000,000 a year in the conduct of the nation's business.

3. PRESENT BUSINESS CONDITION. In discussing "Why Falling Prices no Longer Terrorize", The Merry Thinker says that "the present situation in business is without parallel in any stage of American development. Many of our foremost financial men have been astounded at the fact that during the larger part of the past three years retail

prices have been falling, while money is almost a drug in the market. Falling prices in the past have been regarded as indicating business recession. And yet the total volume of business, except for a slight recession in the last few months due largely to the open winter which has retarded retail buying, has averaged far higher during these three years than ever before in a like period.

"It is being generally recognized by our thinking business men that the explanation can be traced directly to the fact that unit costs of production through the adoption of scientific methods of manufacture and research have been going steadily forward while wages have not dropped. The concerns which adhere to the old basis of past experience and personal ability are rapidly falling by the wayside."

According to "The Merry Thinker", the job of the industrial engineer is to use his knowledge for the purpose of simplification so that greater profits may be produced at less cost.

4. **THREE RECOMMENDATIONS REAFFIRMED.** Three simplifications, namely, S.P.R. 8 Range Boilers; S.P.R. 18, Builders Hardware, and S.P.R. 52, Staple Vitreous China Plumbing Fixtures, were reaffirmed during the past month. While reports on the degree of adherence have not yet been received on recommendations 18 and 52, it is very gratifying to note that the average degree of adherence to range boilers is 96.37 per cent, and to expansion tanks 99.37 per cent for the past year.
5. **BUREAU OF MINES HAS MOVIE SERVICE.** As a part of its educational service, the U. S. Bureau of Mines, of the Department of Commerce, has instituted a motion picture service. Films on mining, safety, national parks, tools, and commodities, etc., are loaned out upon request, without charge. The borrower pays only the express charges, postage, etc. in connection with the shipment of films.
6. **REDUCES INVENTORY.** With a total sales of \$270,000,000 for 1927, one of the leading chain stores organization of the country imported only 5 per cent of the goods sold over the counter, according to "Nation's Business". In discussing the sales organization of this concern, "Nation's Business" said that through standardization and simplification more than 600 of the articles carried three years ago have been eliminated from the current inventory.
7. **WILL STUDY DURABILITY OF PAPER.** An extensive research relative to the durability and other properties of paper has been started by the Bureau of Standards. The investigation, among other purposes, is designed to ascertain the effect of accelerated aging tests upon different kinds of paper. The degree of permanence of paper is a matter of vital importance. Little is known definitely of the permanence of modern papers and the numerous requests received by the Bureau of Standards from the Federal Government Departments, and from State governments, from the Library of Congress, and public libraries, and from many business concerns, for advice respecting durability of papers, indicate that the importance of this property of paper is generally realized.
8. **SPECIFICATIONS INDEX.** The Bureau of Standards has announced the publication of an "Alphabetical Index and Numerical List of the U. S. Government Master Specifications", promulgated by the Federal Specifications Board, and complete to January 1, 1928. Copies may be secured from the Superintendent of Documents, Government Printing Office, Washington, D. C. In ordering, specify Bureau of Standards Circular No. 319.

9. ELIMINATION OF WASTE NUMBER. The April issue of "Shipyard Bulletin," a publication of the Newport News Shipbuilding and Dry Dock Company, is known as a "souvenir edition". The editorial contents are devoted to the recently conducted "elimination of waste" campaign of the company. The "head-mast" of the publication states that the issue is dedicated to the Committee on the Elimination of Waste in Industry. Copies of this particular issue may be had by writing W. B. Ferguson, Production Manager, Newport News Shipbuilding and Dry Dock Company, Newport News, Va., mentioning this Bulletin.
  
10. DEPARTMENT TO AID DOMESTIC COMMERCE. "Practical Aids for Domestic Commerce", a 15-page booklet, describes the services of the Department of Commerce to the industry and domestic trades of the United States. Among the points discussed are the regional market surveys; the studies of market areas, distribution costs, retail store problems, trade association activities, and regional commodity movements; analysis of market research agencies and of industrial, commercial and technical agencies - all services rendered by the Domestic Commerce Division. The commodity and technical studies undertaken by other divisions of the Bureau of Foreign and Domestic Commerce, as well as by other bureaus in the Department of Commerce, are also listed. This booklet is a convenient and valuable guide to industry and trade in suggesting the nature of problems in which the Department is prepared to cooperate. Copies may be procured, free of charge, from the Domestic Commerce Division, Department of Commerce, Washington, D. C., or from any district office of the department.
  
11. ACTIVITIES OF COMMERCIAL STANDARDS GROUP.

#### DIVISION OF SIMPLIFIED PRACTICE.

TIRES - The project to establish a simplified line for balloon tire sizes has been given greater impetus. As a result of cooperative action between the manufacturers of automobile tires, the Society of Automotive Engineers, the Rubber Association of America, and the Tire and Rim Association, a tentative simplified practice recommendation has been drafted, which would reduce the variety of balloon tire sizes from 40 to 17. A meeting held in Detroit of representatives of tire, rim and car manufacturers, the National Automobile Chamber of Commerce, the Rubber Association of America, the Society of Automotive Engineers, and the Tire and Rim Association, approved the simplified list, which will apply only to 1929 and future equipment, and will not concern itself with present rolling equipment.

FIRE ENGINES - Tentative recommendations for reduction of variety of pumping capacities are expected to be presented at the Convention of the Fire Equipment Institute during May, for approval by manufacturers, engineers and others interested. General conference of all interests will be held as soon as possible after these recommendations have been approved by the manufacturers group.

LOADING PLATFORMS AND LIFT TRUCKS - This project was discussed at the meeting of the Materials Handling Division of the American Society of Mechanical Engineers in Philadelphia last month. A representative of the Division of Simplified Practice addressed the meeting on this subject, and afterward met with various groups, including shippers, railroad officials and manufacturers of equipment, all of whom heartily indorsed the proposal of establishing national dimensions of platforms, hand lift trucks, electric lift trucks and accessory equipment.

At a meeting of the Electric Lift Truck Manufacturers' Association, held last month, the project was formally indorsed by the Association and a committee of three appointed to cooperate with the Division of Simplified Practice in developing

the matter. The manufacturers of hand lift trucks are proposing similar action to be taken by their Association at its next meeting.

The Division of Simplified Practice expects to arrange two preliminary conferences in the near future, the first to include large shippers who are already using the truck and platform system of handling materials, or who expect to use it if the establishment of national standards for equipment assures interchangeability. Railway traffic and stores officials are also expected to attend this conference. A second preliminary conference, to include the manufacturers of electric and hand lift trucks and of platforms, together with railway officials, will be held as soon as possible after the first conference, for the purpose of formulating tentative standards of dimensions for this equipment. Data will be available by that time on all existing sizes now in regular production.

**HACK-SAW BLADES** - A general conference of manufacturers, distributors, and organized users, held at the Department of Commerce, April 12th, approved a simplified practice recommendation for standard Tungsten and Carbon hack-saw blades. The conference set July 1, 1928 as the date on which the recommendation shall become effective for new production, and January 1, 1929 as the effective date for clearing current stocks. The recommendation as adopted, represents a reduction of approximately 75 per cent in variety. It does not apply to what is known as high speed blades, and is limited to standard Tungsten and Carbon blades.

**POCKET KNIVES** - A simplified practice committee of the pocket knife industry met in New York on April 18th and 19th to consider the data obtained in their recent survey of the industry. A tentative recommendation was developed at this meeting and will be submitted to manufacturers for approval. When this approval has been obtained, the recommendation will be submitted to a general conference of all interests.

**MARINE HARDWARE** - A representative of the Division of Simplified Practice met with officials of the recently formed Marine Hardware Institute, Inc., which is representative of manufacturers and distributors of marine hardware. One of the chief activities of the Association is to be simplification on a broad program covering practically all the products of the industry.

**SEPTIC TANKS** - The manufacturers of septic tanks have indicated that there is a need in their industry for adoption of a simplified list of sizes and capacities of these tanks. It is expected that a conference will be held early in May to consider this matter.

**STEEL WINDOWS** - The manufacturers of heavy steel casement windows have completed a survey of current practice and expect to meet at the Department of Commerce during the month of May to draft a tentative simplified practice recommendation.

**FLOOR SWEEPS** - At the general conference of representatives of manufacturers, distributors and floor sweeps users, held at Atlantic City on March 22, a simplified list of sizes was established for regular stock items. The recommendation is now before the industry for acceptance.

**VEGETABLE SHORTENING CONTAINERS** - The Refiners' Division of the Interstate Cotton Seed Crushers Association has submitted a proposal for eliminating the superfluous and seldom-called for sizes and varieties of containers used in packing

vegetable shortening, with the request that the Division of Simplified Practice call a general conference of all interests to consider the details and develop a simplified practice recommendation.

PRESERVE JARS AND JELLY GLASSES - A consolidated report, prepared by the Division of Simplified Practice, summarizing the returned questionnaires in connection with survey of container sizes, has been submitted to the National Preservers Association for the consideration of the simplified practice committee. This committee will meet in the near future to discuss and prepare a tentative recommendation to be submitted to a general conference for the development and adoption of a recommendation covering glass containers for use in packing preserves and jellies.

HOSPITAL PLUMBING FIXTURES - At a recent preliminary conference of manufacturers, a recommended list of over-all dimensions was worked out for solid porcelain and vitreous china plumbing fixtures for hospital use. It was the sense of the meeting that enameled iron fixtures be included in the recommendation to the hospital authorities. A tentative recommendation is to be worked out in the near future at a joint meeting of the plumbing fixture manufacturers and the standardization and simplification committee of the American Hospital Association.

BUFFING WHEELS - At the preliminary conference of the simplified practice committee, it was unanimously voted that a variety survey should be made to ascertain the facts upon which to base a tentative simplified practice recommendation for presentation to the industry. As soon as a satisfactory questionnaire has been prepared, it is the intention of the committee to have the Division of Simplified Practice mail out a copy to each manufacturer, asking for specific data from which to prepare a composite report showing the present practice in the industry.

CHEESE - A questionnaire was recently sent out by the Secretary of the National Cheese Institute asking the members to indicate the sizes of cheese they thought unnecessary. A consolidated report of the replies is being compiled for use in working out a tentative recommendation.

#### AMERICAN MARINE STANDARDS COMMITTEE.

During the past month proposed standard for scupper valves was submitted to the membership. Final drafts of standard specifications for insulation of piping and machinery and for metallic packing for condenser tubes were submitted to the Technical Committee on "Engineering Details" for approval. Final drafts of standard designs for propeller hubs of the flush-face type, and fairwater caps for same, were submitted to the Technical Committee on "Engineering Details" for approval. Preliminary drafts of standard specifications for built-up and solid propellers and for templates for machining propeller blades were submitted to the Technical Committee on "Engineering Details" for approval. Final drafts of five standard hose specifications were submitted to the Technical Committee on "Ship Operation Details and Supplies" for approval. Proposed alternative standard for boom head gear was submitted to the Technical Committee on "Hull Details" for consideration.

The organization of a subject committee on "Watertight Receptacles for Use on Shipboard" was completed and approved during the month. The committee held its first meeting on April 25th.

Progress has been made on proposed standards for pipe flanges and fittings. A meeting was held during the month on glassware specifications and a draft was practically agreed upon. The Technical Committees on "Hull Details" and on "Machinery Details" were reorganized. The next meeting of the Executive Board is scheduled to take place May 23rd.

12. NEW BOOKLET ON USE OF SEASONED LUMBER. Wood, being organic matter, has the natural advantages and disadvantages of other products of the soil. Unless it is properly cured or seasoned its services will be impaired. This was well understood by past generations and the thousands of substantially built frame houses of great age bear witness to the wisdom of using seasoned lumber. The National Committee on Wood Utilization of the Department of Commerce, considers this question one of paramount importance. For more than a year, its experts have thoroughly studied problems of seasoned lumber and its use, and have compiled a series of booklets on the subject, the first of which entitled "Seasoning and Handling of Lumber, Consumers' Edition" will shortly be released. It is written for consumers, and explains the use of seasoned lumber, shows how to eliminate sagging floors, cracked plaster, sticking doors and other troubles due to use of green wood.

13. SIMPLIFIED INVOICE SAVER. Prior to the time that General Electric adopted the simplified invoice, there were at least five hundred customers of the company requesting that they be billed on their own invoice forms. This number had been reduced to twelve at the beginning of 1928, and after the new year, the company announced that it would no longer write special invoices.

Those familiar with the evil of customer invoices know that they disrupt routine operations of the office and increase billing costs. The simplified invoice affords the opportunity for other companies to free themselves from the customer invoice "evil", as it has the General Electric Company. Acceptors of the simplified invoice form are helping to reduce lost time and other wastes, and to increase office efficiency.

14. BRITISH LAUNCH STANDARDIZATION PROGRAM. The British government is following the lead of the United States and Germany in devising means for the further development of a standardization and simplification program, according to the London Times which says: "with regard to standardization proper, it was, of course, most desirable that the valuable work conducted by the British Engineering Standards Association should be continued and developed by that body. Attention had, however, been drawn, largely by the work done in the United States and Germany, to the great economies which might be effected in many trades by what is known as simplification, or the elimination of unnecessary types of articles, to the consequent advantage of producers, distributors and users."

A meeting of the Board of Trade in London requested the formation of a central organization to handle the program, with a member of the Board of Trade acting as chairman. This central organization will consist of members of various trade associations, the Board of Trade, and government departments concerned.

15. DRAFTS STANDARDS FOR MEDICINES. The contact committees of the American Drug Manufacturers Association, and the American Pharmaceutical Manufacturers Association, have submitted to the Food, Drug, and Insecticide Administration of the Department of Agriculture, their fourth report containing recommendations for tolerances on certain medicinal tablets. They have indicated the degree of accuracy within which properly manufactured medicinal tablets can be made under present-day manufacturing methods. This report covers recommendations on 11 compressed tablets and includes recommended methods of analysis.

16. **USES FOR OLD WOODEN CONTAINERS.** The National Committee on Wood Utilization is investigating uses for wooden containers, such as boxes, crates or cases, after they have served their purposes in transportation of commodities. The fabrication of wood containers consumes annually 4,000,000,000 feet of lumber, frequently of good quality although of lengths too short for construction purposes. This amount of lumber represents nearly 10 per cent of the nation's entire annual lumber cut. The possibilities for economy through the profitable re-use of these containers, therefore, appear to be very great. Among these are the making of toys, certain types of furniture, and other practical articles that can be fashioned either from whole boxes or from the sound boards salvaged from them. Manufacturers of containers, shippers, warehousemen, department stores, and others have evinced much interest in the investigation.
17. **BELGIUM ADOPTS SIMPLIFIED PRACTICE.** Standardization of industry through simplification of manufacturing processes and its resultant elimination of waste in money, time and material, is attracting increased attention among Belgian industries, according to a report received by the Department from George W. Berkalow, assistant trade commissioner at Brussels. The Belgian Association of Standardization has inaugurated a campaign to impress the industrialists, merchants, and economists with their responsibility in the matter, and has published pamphlets on various subjects regarding standardization. Among these treated are construction of bridges, simplification of steel rivets, copper rivets, chains, metallic cables and water pipes.
18. **SEWING MACHINE PARTS STANDARDIZED.** German housewives are hailing as a great boon the step taken recently by leading German sewing machine manufacturers who have agreed to standardize parts of their machines so as to make them interchangeable. Different makes of sewing machines hitherto had parts slightly varying in size, and of needles alone, there were scores of different types on the market, which burdened dealers in accessories with multifarious stocks. As a consequence of the agreement, the whole sewing machine trade in Germany will be much simplified.
19. **CREDIT METHODS TO BE STUDIED.** A nation-wide survey of credit methods employed by retail stores will be undertaken this summer by the Department of Commerce, through the Domestic Commerce Division. The purpose of the survey is to obtain a basis for estimating the total amount of credit outstanding, with the possibility of eliminating credit waste through stabilization of credit methods. It is expected that this survey will give information regarding credit sales on deferred payments and those on open accounts. Both have reached large volumes in recent years, but no accurate information concerning them is available. It is also expected that the survey will bring out facts regarding the costs of different classes of credit.
20. **MORE ACCEPTORS FOR SIMPLIFIED INVOICE.** According to information received by the Division of Simplified Practice from C. M. Finney, Comptroller of the Westinghouse Electric and Manufacturing Company, ten of the fifteen members of The Compressed Air Society, are using or intend to use the simplified invoice. Mr. Finney intimated that within the near future 100 per cent of the membership will be using the invoice. Twenty-five of the thirty-six members of the Hydraulic Society have also adopted the simplified invoice, according to Mr. Finney's report.
21. **NEED FOR STANDARD CONTRACTS.** There is a vital need for standard plans, specifications and contracts within the industry, according to a report made by a committee of the American Road Builders Association. In its report, the committee proposed that each county adopt standard plans, specifications and contract forms, if they have not already done so.



Several copies of specifications now in use by various counties, received by the committee indicated the desirability of a standard size. It was stated that most of the printed forms received were printed in various bookbinder's sizes, according to the taste of the printer, or of the departmental head. The committee urged that in cooperation with the efforts of the Division of Simplified Practice, all such specifications and other printed forms, should be printed in standard letterhead size for economy in filing, - that odd sizes are great wasters of space unless filed in special cabinets. Obviously, the latter practice is more expensive than using standard letter size cabinets.

22. GOVERNMENT SIMPLIFIES ITS FORMS. In discussing the simplification of contract forms, the Southwestern Purchasing Agent commends the strict adherence by the Federal Government to the standard contract form for construction and supplies, as promulgated November 19, 1926. It says these forms are used without deviation by all government activities, in connection with every kind of contract for the construction or repair of public buildings or works.
23. CORRECTIVE SUGGESTIONS. In speaking before the fourth annual convention of the Iron, Steel and Allied Industries, Del Monte, California, on "Steel Points the Way", Frank C. Mortimer, Vice President of the Citizens National Bank and Citizens Trust and Savings Bank, Los Angeles, offered eight corrective suggestions to the conference as a prescription for their business. They were:
- 1 - Continue your research and educational work. Find new uses for steel and inform the public how to apply them.
  - 2 - Watch costs more carefully. Reduce overhead and distribution expense where possible.
  - 3 - Manufacture or contract in quantities sufficient to supply the requirements of regular customers and such additional quantities as can be sold at a good profit. Tighten up on execution and enforcement of contracts.
  - 4 - Consolidate some plants, if economical to do so. Disregard excess plant capacity, and discontinue unprofitable volume.
  - 5 - Maintain sales volume in proper relation to demand.
  - 6 - Put a price on products that will permit a continuance of good wages to employees and good returns to stockholders.
  - 7 - Take or follow the lead in further and more effective moves for closer cooperation and better understandings in the industry.
  - 8 - Earnestly and sincerely adhere to your present code of ethics, or to such revised practices as may be decided upon for the betterment of conditions.
24. STANDARDIZATION TO BE IMPORTANT TOPIC. Members of the National Association of Purchasing Agents will hold their annual convention this year in Kansas City, from May 27th to 31st, inclusive. The subjects of standardization and simplification, as well as coordination of purchasing, will be important topics of discussion during the convention. On May 30th the convention will have a general discussion on standardization of equipment and supplies, and Arthur Baker, Editor of the Southwestern Purchasing Agent, will speak on "Standardization".
25. AUTO BUMPERS STANDARDIZATION. What causes the most traffic tie-ups? While many motorists might suggest starter trouble, lack of gas or overheating, a recent experience in Washington, in a typical instance of heavy traffic shows that locked bumpers cause the most difficulty. This brings out the fact that there is a pressing need for standardization of heights of automobile bumpers as attached to cars. Seldom will two different sets meet, face-to-face. They invariably "lock". A movement is under way looking to this end. In drafting a proposed uniform motorcoach code, prepared by a special committee representing the National Automobile Chamber of Commerce, the Connecticut Public Utilities Commission, the Society of Automotive

Engineers, the Motor Vehicle Conference Committee, and the publication, "Bus Transportation", provision is made for standardization of bumpers heights. This is a step in the right direction.

26. FIRE APPARATUS SIMPLIFICATIONS. A recent conference of manufacturers and distributors of fire hose couplings held in Pittsburgh, discussed the progress being made by cities and towns throughout the United States in adopting the National American Standard Fire Hose Thread. This conference also considered the revision of the National American Standard so as to include additional sizes, composition, and weight of couplings. The possibilities of standardization of small hose couplings was also discussed.

This conference on standardization of fire hose couplings also calls to mind an interesting scheme employed by the Pittsburgh Fire Department in connection with standardization. Blueprints of every device used in the department hang on the walls of every fire station. Training school practice teaches every man the use of every standard device. Each and every piece of motor apparatus is equipped with a standard set of tools and devices.

27. STANDARD MACHINE PARTS. Standardization has long been a dream of forward looking machine designers and builders, according to the American Machinist in commenting on standardization of machine parts. The American Machinist says that while progress in this line has been slow, a good beginning has been made by American builders. Most noticeable is the adoption of a standard spindle nose by the builders of milling machines in the spring of 1927. The change was made without difficulty, and was welcomed by users. Standard T-slots have been worked out by joint committees of the American Society of Mechanical Engineers and National Machine Tool Builders Association. Toolholder sizes are also nearing the point of adoption, while standard tapers are being carefully studied. According to this article, standardization and simplification are being demanded by users, particularly of such parts of machines as affect interchangeability of work and toolholding devices. With chucks and tools that can be used on different machines, the investment in these auxiliaries would be greatly reduced, because both tools and chucks would be in use much more constantly.

28. SURVEY OF RECENT ECONOMIC CHANGES. The National Bureau of Economic Research, 474 West 24th Street, New York City, has announced that the survey of "Recent Economic Changes in the United States", which has been undertaken by that Bureau, may be considered as a continuation under the same auspices and on a somewhat larger scale of the survey entitled "Business Cycles and Unemployment", made by the Bureau in 1922 for the standing committee of President Harding's Unemployment Conference.

The survey will include an appraisal of the influence of simplification and standardization, and other waste elimination measures during the period under review.

29. FEDERAL SPECIFICATIONS. The following U. S. Government Master Specifications have been promulgated by the Federal Specifications Board:

<u>FSB</u>	<u>Commodity</u>	
126a	Iron, Pig, Foundry	(Revision)
378a	Iron, Malleable, Castings	(Revision)
444a	Integral Waterproofing Material	(Revision)
548	Bolts, Nuts and Machine Screws	
549	Steel Plates, Marine Boiler	
550	Steel, Staybolt, Boiler	
551	Laundry Appliances	

Copies of these specifications may be obtained upon request, by addressing the Federal Specifications Board, Bureau of Standards, Washington, D. C.

30. **LIBRARY SIMPLIFICATION SAVES MILLIONS.** Simplification and standardization of the printed card published by the Library of Congress has resulted in a savings of more than a million dollars annually, according to Ernest C. Richardson of the Library of Congress. He stated, in his communication to the Division of Simplified Practice, that more than 4,000 libraries were now using the standardized printed card.

31. **1927 NEW MANUFACTURING PLANTS.** Announcement has been made by the Chamber of Commerce of the United States that the report "1927 New Manufacturing Plants" has been prepared and is now available upon request. This report is an attempt to analyze the distribution, kinds and relative sizes of manufacturing industries which were started new, from the viewpoint of the community, during the year 1927, whether entirely new or primary plants, or branch plants, or removed plants.

The Chamber defines, for the purpose of this report, a manufacturing plant as an organization which changes the character of material by a manufacturing process. A primary plant is one started de novo. A branch plant is a branch established in a city other than where the parent or main plant is located, and does not include new departments, expansions, or branches established in the same city where the main plant is located. A removed plant is one removed from one city to another and does not include removed branch plants. Additions to existing plants, warehouses, sales offices, wholesale and retail concerns are not included in this report.

32. **SOMETHING NEW IN COOPERATION.** Here is an entirely new idea in the way of cooperation between concerns in the same industry. After some months spent in organization work, perfecting plans for manufacturing, and naming it, the cooperative candy bar venture of the Western Confectioners' Association, has launched a new bar on the Pacific Coast Market. Under the name of the "Candy Associates"; twenty of the leading candy manufacturers in the seven western states agreed to manufacture, market, and advertise simultaneously the same bar, each serving its own territory through its own sales force, all expecting to enjoy the prestige which the combined advertising and merchandising strength the new organization will provide.

The experiment is one which will be watched with interest by the entire confectionery industry, and may be the forerunner of further cooperative movements having to do with package goods and other forms of candy. It may also interest cooperative associations in other parts of the country.

In discussing the idea editorially, The Peanut Journal says: "We confess that we are deeply impressed with the procedure of the Western Confectioners Association in the seven western states in which it operates. It certainly looks logical. It is not only a sample of cooperation in practical form, but is the essence of concentration upon the production of what amounts to a standardized article that will sell on merit."

33. **PRESS METAL INSTITUTE TO PROMOTE SIMPLIFICATION.** The recently organized Press Metal Institute, 232 Delaware Avenue, Buffalo, N. Y., provided in its Constitution that

Monthly News Bulletin No. 38--12.

cooperation with government agencies and other organizations in standardization and simplification and other trade association activities, would be one of its main objectives.

34. LUMBER GRADE MARKING. "Grade Marking of Lumber, for the Consumers' Protection", is the name of a new pamphlet soon to be issued by the National Committee on Wood Utilization. Written expressly for the benefit of consumers, it explains the many advantages of using properly grade-marked lumber. Grade marking, it is explained in the booklet, means placing on every piece of lumber a stamp or mark indicating its quality or grade, for the purpose of assuring consumers that they receive what they specify and pay for. Grade-marking is not a new idea, - some lumbermen having practiced it for several years, but it has not been universally practiced in all lumber districts in America.
35. BUILDING MANAGERS VISIT BUREAU. A group of New York building owners and managers, all members of the Building Managers and Owners Association of New York City, were guests of the Bureau of Standards on April 22nd. Following a conference with officials of the Bureau, the visitors were given the opportunity to inspect the work being carried on in the several laboratories.

The inspection trip included a review of the Portland Cement investigations; the physical testing of cement, concrete, also brick walls; a new equalizer for elevator cables; the elevator interlock and safety appliance tests; the safe testing laboratory where furnace and drop tests are made on office safes; the fire-test house for testing roofing materials; the huge testing machines, one of which for high precision work has a capacity of 1,150,000 pounds in tension, and 2,300,000 in compression, and another, the largest in the world with a capacity of 10,000,000 pounds in compression. The visitors also saw the large wind tunnel in which can be developed a maximum velocity of 75 miles per hour for use in studies of wind pressure on structures.

Engineers, technicians, and scientists, when visiting Washington are always welcome at the Bureau. Business men often find in the work going on there information helpful to them in researches connected with improvement in their products and the processes by which they are made.