

U. S. DEPARTMENT OF COMMERCE

DANIEL C. ROPER, Secretary

NATIONAL BUREAU OF STANDARDS

LYMAN J. BRIGGS, Director

Bureau of Standards

MAR 3 1938

WOOL
AND PART-WOOL FABRICS

COMMERCIAL STANDARD CS65-38

Effective as a basis for describing and labeling new production from January 1, 1938.

Effective for clearance of existing retailer stocks from January 1, 1939.



A RECORDED STANDARD OF THE INDUSTRY

UNITED STATES
GOVERNMENT PRINTING OFFICE
WASHINGTON : 1938

PROMULGATION
of
COMMERCIAL STANDARD CS65-38
for
WOOL AND PART-WOOL FABRICS

On December 16, 1935, at the instance of the National Association of Wool Manufacturers, a general conference of representative manufacturers, distributors, and users of wool and part-wool fabrics adopted a recommended commercial standard for this commodity. The industry later accepted and approved for promulgation by the United States Department of Commerce, through the National Bureau of Standards, the standard as shown herein.

The standard is effective as a basis for describing and labeling new production from January 1, 1938, and for clearance of existing retailer stocks from January 1, 1939.

Promulgation recommended.

I. J. Fairchild,
Chief, Division of Trade Standards.

Promulgated.

Lyman J. Briggs,
Director, National Bureau of Standards.

Promulgation approved.

Daniel C. Roper,
Secretary of Commerce.

WOOL AND PART WOOL FABRICS

(Not including Blankets¹ and Knit Underwear²)

COMMERCIAL STANDARD CS65-38

PURPOSE

1. The purpose of this standard is to provide standard methods of describing and labeling fabrics represented in any way to be made wholly or in part of wool and an open understanding on the significance of the terms employed, permissible tolerances, and standard methods of test in order to protect the interests of the manufacturer, distributor, and user. *It is not intended that the terms defined herein should carry any significance as to the relative quality of the wool fibers present.*

SCOPE

2. This standard defines terms used to describe the fiber content of fabrics, excluding blankets and knit underwear, if represented in any way to be made wholly or in part of wool spun on any system of spinning; provides methods of test for determining the percentage by weight of the total fiber content represented by wool fibers therein; and illustrates the manner by which manufacturers and distributors may guarantee compliance with the commercial standard.

GENERAL REQUIREMENTS

3. The term "wool" for the purpose of this standard shall be defined as the fiber from the fleece of the sheep or lamb, angora goat, camel, alpaca, llama, cashmere goat, or vicuna. (These requirements do not prohibit proper terminology specifically applicable to specialty fleeces.)

4. In labeling or otherwise representing fabrics to be of wool or part-wool, if the terms "wool," "woolen," or "worsted" are used, either alone or qualified by "100%," "all," "pure," or similar words or phrases, or accompanied by a notation as to the use of other fibers for decoration or color effects, the following definitions and limitations shall apply, subject to the tolerances set forth under Methods of Test. The use of a label is not obligatory, but no labels may be used thereon in a manner not consistent with the provisions of this standard.

5. Should any fabric in manufacturing or processing have its weight augmented by nonfibrous materials (sizing or metallic compounds,

¹ Requirements for blankets are covered by Wool and Part-Wool Blankets, Commercial Standard CS39-37.

² Requirements for knit underwear are covered by Trade-Practice Conference Rules of the Federal Trade Commission for Knit Underwear, published March 9, 1929 and July 7, 1930.

etc.) in excess of 5 percent of the dry weight of the finished fabric, such fabric shall be clearly designated in addition as "weighted."

DETAIL REQUIREMENTS

6. *100% Wool (2% tolerance)*.—The terms "100%," "all," "pure," and the like, when used to modify or in connection with "wool," "woolen," or "worsted," are synonymous and may be used only in labeling, or otherwise referring to fabrics, the fiber content of which shall be 100 percent of wool. (For tolerances—not exceeding 2 percent—see paragraphs 12e, 13e, 14d, 15e, and 16d.)

7. *95 to 100% Wool (2% tolerance)*.—The terms "wool," "woolen," or "worsted" with the expressions "decorated with silk," "with mercerized cotton decorations," and the like may be utilized only in labeling or otherwise referring to fabrics of which the wool-fiber content is not less than 95 percent by weight of the total fiber content. The qualifying expression shall be as visible, legible, clear, and distinct as the label word "wool," "woolen," or "worsted." (For tolerances—not exceeding 2 percent—see paragraphs 12e, 13e, 14d, 15e, and 16d.)

8. *Less than 95% Wool*.—The terms "wool," "woolen," or "worsted" when utilized in labeling or otherwise referring to fabrics of which the wool-fiber content is less than 95 percent by weight of the total fiber content shall be preceded by a figure indicating the guaranteed minimum percentage of wool fiber, e. g., "80% wool." The figure stating the guaranteed percentage of wool shall be as visible, legible, clear, and distinct as the label word "wool," "woolen," or "worsted."

METHODS OF TEST

NOTE.—The methods of test herein outlined are predicated on the identification or knowledge of the kind of fibers present prior to quantitative tests. In order to select the method of test applicable, the fabric may be examined microscopically to determine the kinds of fibers present. Any fibers, which by the methods of test outlined herein would be reported as wool, and which are not listed in paragraph 3, should be detected by microscopic examination and corrections therefor made in reporting "wool" content.

9. *Mechanical analysis*.—Where practicable, the different kinds of fibers in a fabric may be separated mechanically from each other, and the sizing, finishing, and nonfibrous materials removed by the method in paragraph 10. The fibers are then weighed and the percentages calculated.

10. *Test for determining the total sizing, finishing, and other nonfibrous materials*.—The purpose of this procedure is to remove all nonfibrous natural constituents of the fiber and substances added by the manufacturer. Starch, china clay, soaps, some waxes, some non-drying oils, and the usual natural constituents are in this category and are removed by the procedure given. However, general directions for the removal of all possible substances which may be present cannot be given. The delustered rayons and some of the newer finishes present special problems. The analyst will have to meet special cases as they arise. When it is necessary to modify the procedure in order to remove completely nonfibrous constituents, the analyst shall make sure that purified samples of the fibers under consideration do not lose weight when subjected to the same treatment.

Ordinarily, samples shall be analyzed in accordance with the following paragraphs:

10a. A sample of approximately 5 g shall be taken for test. Particular care shall be taken to prevent the loss of fibers in the treatments. The sample shall be dried at 221 to 230° F (105 to 110° C) to constant weight.

10b. The sample shall then be extracted for 2 hours with carbon tetrachloride in a Soxhlet or similar extractor and shall be allowed to dry in the air. It shall then be washed by repeated immersion in hot distilled water, squeezing between each immersion.

10c. The sample shall then be immersed in a 3- to 5-percent aqueous solution of a starch and protein-solubilizing enzyme preparation at 122° F (50° C). It shall be squeezed while immersed, removed and squeezed again, and this procedure repeated at least three times. The purpose is to insure thorough wetting of the fibers by the enzyme solution. The enzyme solution shall then be maintained at 122 to 140° F (50 to 60° C), or the optimum temperature range for the particular enzyme used, and the sample kept immersed in it for 1 hour. A shorter time is permissible if sizing is removed in the shorter time. Fifteen minutes is sufficient for some textiles. The sample shall then be rinsed 12 times in fresh portions of hot distilled water, squeezing after each rinse. Thorough rinsing is necessary in order to remove china clay from heavily filled fabrics. The enzyme treatment and rinsing may be carried out in a Launder-Ometer or similar device, if desired. The rinsed sample shall then be dried at 221 to 230° F (105 to 110° C) to constant weight.

10d. The dry weight of the sample (paragraph 10a) minus the dry weight of the fibers (paragraph 10c) divided by the dry weight of the sample and the quotient multiplied by 100, equals the percentage of sizing, finishing, and other nonfibrous materials.

11. *Tests for determining wool content in mixtures of wool and cotton and/or rayon.*—Proceeding, then, on the determination of wool content, obtain the weight of the sample free from sizing compounds, etc., dried to a constant weight at 221 to 230° F (105 to 110° C). The wool content may be determined by any one of the methods of test outlined in paragraphs 12, 13, and 14. In cases of dispute, the sulphuric-acid method (paragraph 14) shall be used.

12. *Caustic-soda method for determining wool content in mixtures of wool and cotton and/or rayon.*

12a. The sample as prepared in paragraph 11 shall be treated with boiling 5-percent caustic-soda solution for 10 minutes, using sufficient solution to obtain a ratio of 1 g of material to 100 ml of solution.

12b. Filter off the caustic solution by passing through a 100-mesh sieve.

12c. The residue is washed, first with water, then with a 5-percent solution of acetic acid, and finally with water, until the rinse is neutral to litmus.

12d. Multiply the dry weight of the residue by 1.03.³ Divide this product by the dry weight of the sample (paragraph 11) and multiply the quotient by 100. The product equals the percentage of cotton and/or rayon (dry basis).

³ This factor allows for the average loss of 3 percent in weight of cotton in a fabric during the alkali boil off. This factor may vary slightly with different fabrics, but for the majority of cases it is approximately correct. When viscose rayon is present, there is a much wider variation in the loss of the weight of rayon and no definite factor can be determined. The loss for rayon is usually higher than that for cotton.

12e. 100 minus the percentage of cotton and/or rayon (dry basis) equals the percentage of wool (dry basis). A 2-percent tolerance based on the total fiber content required by paragraphs 6 and 7 is allowed for uncontrollable variations in manufacture.

13. *Aluminum-chloride method for determining wool content in mixtures of wool and cotton and/or rayon.*

13a. The sample as prepared in paragraph 11 shall be immersed for 10 minutes in a boiling solution of aluminum chloride containing 5 g of aluminum chloride (or 9 g of the hydrated salt $\text{AlCl}_3 \cdot 6\text{H}_2\text{O}$) per 100 ml of water.

13b. The sample shall be removed from the solution and after allowing the excess liquid to drain off (the sample shall not be squeezed) it shall be heated in an oven at 221 to 230° F (105 to 110° C) until the cotton has become brown in color and brittle (usually 2 hours is sufficient).

13c. Then place the sample on a 100-mesh screen and rub it against the screen with sufficient pressure to powder the carbonized cellulose and pass it through. Place the residual fibers (wool) in a suitable container, preferably a 250-ml beaker. The material which passed through the screen shall be screened again to recover any wool fibers.

13d. The wool shall be agitated with about 100 ml of dilute hydrochloric-acid solution (1 part by volume of the concentrated laboratory reagent diluted with 9 parts of distilled water), collected as a pad, washed with distilled water until free from chlorides, and dried at 221 to 230° F (105 to 110° C) to constant weight.

13e. The quotient obtained by dividing the dry weight of the fibers (paragraph 13d) by the weight of the dry sample (paragraph 11) multiplied by 100 equals the percentage of wool (dry basis). A 2-percent tolerance based on the total fiber content required by paragraphs 6 and 7 is allowed for uncontrollable variations in manufacture.

14. *Sulphuric-acid method for determining wool content in mixtures of wool and cotton and/or rayon.*

14a. Approximately 2 g of the sample as prepared in paragraph 11, accurately weighed, shall be immersed in 200 ml of a boiling 1-percent solution⁴ of sulphuric acid for 7 to 10 minutes.

14b. If the sample is cloth or yarn, it is transferred to a Gooch crucible (no asbestos) and the excess acid is removed by suction. If it is in the form of loose fiber, it is collected in a crucible with a medium fritted-glass bottom and the excess acid is removed by suction.

14c. The sample is then placed in 200 ml of a 70-percent solution⁵ of sulphuric acid at 100° F and worked 15 minutes. The residue is then collected on a 100-mesh screen or in a crucible with a fritted-glass bottom, washed well with cold water, then placed in a beaker, and neutralized with a 2-percent solution of sodium bicarbonate at room temperature for 5 minutes. It is washed again on the screen or in the crucible and dried at 221 to 230° F (105 to 110° C) to constant weight.

14d. The quotient obtained by dividing the dry weight of the fibers (paragraph 14c) by the weight of the dry sample (paragraph 14a) multiplied by 100 equals the percentage of wool (dry basis). A 2-percent tolerance based on the total fiber content required by paragraphs 6 and 7 is allowed for uncontrollable variations in manufacture.

⁴ The solutions of sulphuric acid used shall be carefully made up to contain 1 percent and 70 percent, respectively, of actual sulphuric acid, by weight.

⁵ See footnote 4.

15. *Test for determining wool content in mixtures of wool and silk.*—Obtain weight of the sample free from sizing compounds, oils, etc. dried to a constant weight at 221 to 230° F (105 to 110° C). The silk may be removed and percentage of wool calculated as follows:

15a. The sample, of approximately 2 g, shall be treated for 5 minutes in 200 ml of concentrated hydrochloric acid (cp HCl) at 70 to 75° F.

15b. The solution is diluted with warm water ($100 \pm 2^\circ$ F) and filtered through a 100-mesh sieve, rinsing well on the sieve.

15c. The sample is then treated for 3 minutes in a 2-percent solution of sodium bicarbonate, again washed, and rinsed well on the sieve.

15d. Dry the residue to a constant weight at 221 to 230° F (105 to 110° C).

15e. Multiply the dry weight of the residue by 1.003.⁶ The quotient obtained by dividing this product by the dry weight of the sample (paragraph 15) multiplied by 100 is the percentage of wool (dry basis). A 2-percent tolerance based on the total fiber content required by paragraphs 6 and 7 is allowed for uncontrollable variations in manufacture.

16. *Test for determining wool content in mixtures of wool, cotton, rayon, and silk.*—A sample of approximately 5 g shall be taken for this test. Particular care shall be taken to prevent the loss of fibers in the treatments. After removing the sizing, finishing, and other nonfibrous materials by the method outlined in paragraph 10, the residue accurately weighed shall be treated as follows:

16a. Agitate vigorously for 15 minutes in about 50 times its weight of acetone at room temperature.⁷ The residue shall be rinsed while squeezing by alternate immersion in acetone, two fresh portions of acetone being used. The residue shall be allowed to dry and then immersed in water at a temperature of about 158° F (70° C). The excess water shall be removed by squeezing and the residue dried at 221 to 230° F (105 to 110° C).

16b. The residue from 16a shall be cut to lengths of about 2 to 4 mm and agitated vigorously for 1 hour in 200 ml of a clear aqueous solution of calcium thiocyanate of specific gravity 1.35 to 1.36 at a temperature of 158° F (70° C) made just acid to litmus with acetic acid, and maintained at a temperature of $158 \pm 4^\circ$ F ($70 \pm 2.2^\circ$ C). Precautions shall be taken to prevent evaporation from the solution with consequent concentration of the thiocyanate. The fibers which are not dissolved shall be collected in a small Büchner funnel, Gooch crucible, or bitumen filter, preferably with the aid of suction. When a good pad of fibers has formed on the filter, the hot mother liquor shall be poured through a second time to recover all fibers on the pad. The fibers shall then be agitated for 5 minutes in a fresh 200-ml portion of the thiocyanate solution. The filtration shall be repeated and the fibers washed with hot distilled water until free from thiocyanate.

16c. The residue from 16b shall be treated in accordance with either the method outlined in paragraphs 13a to 13d, inclusive, or that outlined in paragraphs 14a to 14d, inclusive. In cases of dispute, the latter method shall be used.

⁶ This factor allows for the 0.3 percent (three-tenths of one percent) which should be added to the dry weight of the residue of wool to correct for the loss of weight of wool occasioned by the hydrochloric-acid treatment, and applies only to wool.

⁷ A Launder-Ometer or similar type machine can be used to obtain satisfactory results.

16d. The quotient obtained by dividing the dry weight of the fibers (paragraph 16c) by the weight of the dry sample (paragraph 16) multiplied by 100 equals the percentage of wool (dry basis). (When the sulphuric-acid method is used, a factor shall be applied to correct for the reduction in amount of sample. This factor is the quotient obtained by dividing the residue from paragraph 16b by the dry weight of the sample used under paragraph 16c.) A 2-percent tolerance based on the total fiber content required by paragraphs 6 and 7 is allowed for uncontrollable variations in manufacture.

LABELING

17. In order that the consumer may become familiar with the significance of the terms herein defined, fabrics correctly labeled in conformity with this standard may be accompanied by a certificate, tag, card, or other label incorporating the following wording:

The ----- Company guarantees that this fabric is marked for fiber content in strict accordance with Commercial Standard CS65-38, as sponsored by the National Association of Wool Manufacturers and issued by the National Bureau of Standards of the United States Department of Commerce.

NOTES

18. The methods of test included under paragraphs 10, 13, 16a, and 16b conform in all essential requirements with the respective methods of the American Society for Testing Materials Tentative Methods for the Identification of Fibres in Textiles and for the Quantitative Analysis of Textiles, ASTM Designation D276-37T. The method included under paragraph 14 conforms in all essential requirements with the Tentative Method for the Determination of Wool in Wool-Cotton Textile Materials as given in the 1935-1936 Year Book of the American Association of Textile Chemists and Colorists.

APPENDIX

It will be noted that this commercial standard provides a definite basis for describing the *kind* of fiber contained in wool and part-wool fabrics, but makes no specific provisions for indicating the *relative quality* of the wool fibers, or for differentiating between new and used wool fibers. However, it contains no provisions which in any way restrain further disclosures as to the quality of the wool fibers used or the quality of the finished fabric.

EFFECTIVE DATE

The standard is effective as a basis for describing and labeling new production from January 1, 1938, and for clearance of existing retailer stocks from January 1, 1939.

STANDING COMMITTEE

The following comprises the membership of the standing committee, which is to review, prior to circulation for acceptance, revisions proposed to keep the standard abreast of progress. Each association

nominated its own representatives. Comment concerning the standard and suggestions for revision may be addressed to any member of the committee or to the Division of Trade Standards, National Bureau of Standards which acts as secretary for the committee.

- HUGH CHRISTISON (chairman), Arlington Mills, Lawrence, Mass.
 C. M. BLACKHALL, Pacific Mills, 261 Fifth Ave., New York, N. Y.
 E. FREEDMAN, R. H. Macy & Co., Inc., 34th and Broadway, New York, N. Y.
 MRS. THOS. J. GILLOOLY, General Federation of Women's Clubs, 613 East Main St., Clarksburg, W. Va.
 WM. GOLDMAN, Cohen, Goldman & Co., Inc., 45 West 18th St., New York, N. Y.
 V. W. GOTTSCHLING, Hayward-Schuster Co., Inc., 51 Madison Ave., New York, N. Y.
 MORTIMER LANZIT, National Dress Manufacturers' Association, 1450 Broadway, New York, N. Y.
 DR. PAULINE BEERY MACK, Pennsylvania State College, State College, Pa.
 F. R. MARSHALL, National Wool Growers Association, 509 McCornick Building, Salt Lake City, Utah.
 JOSEPH MEIERHANS, Farr Alpaca Co., 469 Seventh Ave., New York, N. Y.
 MISS LAURA E. PRATT, Sears, Roebuck & Co., Chicago, Ill.
 MRS. CARL L. SCHRADER, National Council of Women, 58 Payson Road, Belmont, Mass.
 WERNER VON BERGEN, Forstmann Woolen Co., Passaic, N. J.
 K. B. WILLSON, National Better Business Bureau, Inc., Chrysler Building, New York, N. Y.
 AMERICAN ASSOCIATION OF TEXTILE CHEMISTS AND COLORISTS.
 (Invited to appoint representative.)
 NATIONAL ASSOCIATION OF RETAIL CLOTHIERS AND FURNISHERS.
 (Invited to appoint representative.)
 WHOLESALE DRY GOODS INSTITUTE.
 (Representative to be named.)

HISTORY OF PROJECT

The Board of Directors of the National Association of Wool Manufacturers adopted on February 5, 1935, "Regulations for the Labeling of Wool and Part-Wool Knitted or Woven Fabrics." Desirous of having these regulations effective on a national basis, that Association under date of October 3, 1935, requested the cooperation of the National Bureau of Standards in the establishment of a commercial standard based on these regulations to cover the labeling or otherwise describing the wool-fiber content of wool and part-wool fabrics.

At a general conference in New York on December 16, 1935, the proposed standard was adopted with some changes to meet the composite recommendation of the wool growers, the manufacturers, distributors, and users of wool and part-wool fabrics. The draft was circulated to those concerned on January 15, 1936, for written acceptance.

Subsequent study revealed a ruling of the U. S. Supreme Court that the word "wool" when used as an adjective means "made of wool" (Winsted Hosiery Case, 258 U. S. 483). Accordingly, some modifications in the text were drafted for compatibility with the ruling and to strengthen the enforceability of the standard through the Federal Trade Commission and the courts.

The modified recommended standard was submitted to acceptors of record on September 14, 1936, and to all others interested on September 25, 1936. Announcement of the success of the project was issued on November 20, 1937.

ACCEPTANCE OF COMMERCIAL STANDARD

This sheet properly filled in, signed, and returned will provide for the recording of your organization as an acceptor of this commercial standard.

Date.....

Division of Trade Standards,
National Bureau of Standards,
Washington, D. C.

Gentlemen:

Having considered the statements on the reverse side of this sheet, we accept the Commercial Standard CS65-38 as our standard of practice in the

Production ¹Distribution ¹Use ¹

of wool and part-wool fabrics.

We will assist in securing its general recognition and use, and will cooperate with the standing committee to effect revisions of the standard when necessary.

Signature.....

(Kindly typewrite or print the following lines)

Name and title.....

Company.....

(Fill in exactly as it should be listed in pamphlet)

Street address.....

City and State.....

¹ Please designate which group you represent by drawing lines through the other two. Please file separate acceptances for all subsidiary companies and affiliates which should be listed separately as acceptors. In the case of related interests, trade papers, colleges, etc., desiring to record their general approval, the words "in principle" should be added after the signature.

TO THE ACCEPTOR

The following statements answer the usual questions arising in connection with the acceptance and its significance:

1. *Enforcement.*—Commercial standards are commodity specifications voluntarily established by mutual consent of the industry. They present a common basis of understanding between the producer, distributor, and consumer and should not be confused with any plan of governmental regulation or control. The United States Department of Commerce has no regulatory power in the enforcement of their provisions; but, since they represent the will of the industry as a whole, their provisions through usage soon become established as trade customs, and are made effective through incorporation into sales contracts by means of labels, invoices, and the like.

2. *The acceptor's responsibility.*—The purpose of commercial standards is to establish for specific commodities, nationally recognized grades or consumer criteria, and the benefits therefrom will be measurable in direct proportion to their general recognition and actual use. Instances will occur when it may be necessary to deviate from the standard and the signing of an acceptance does not preclude such departures; however, such signature indicates an intention to follow the commercial standard where practicable, in the production, distribution, or consumption of the article in question.

3. *The Department's responsibility.*—The major function performed by the Department of Commerce in the voluntary establishment of commercial standards on a Nation-wide basis is fourfold: First, to act as an unbiased coordinator to bring all branches of the industry together for the mutually satisfactory adjustment of trade standards; second, to supply such assistance and advice as past experience with similar programs may suggest; third, to canvass and record the extent of acceptance and adherence to the standard on the part of producers, distributors, and users; and fourth, after acceptance, to publish and promulgate the standard for the information and guidance of buyers and sellers of the commodity.

4. *Announcement and promulgation.*—When the standard has been endorsed by companies representing a satisfactory majority of production, the success of the project is announced. If, however, in the opinion of the standing committee of the industry or the Department of Commerce, the support of any standard is inadequate, the right is reserved to withhold promulgation and publication.

ACCEPTORS

The individuals and organizations listed below have indicated in writing acceptance of this specification as their standard of practice in production, distribution, or use. This being an industry standard, observance is expected without regard to whether a firm has or has not officially indicated its acceptance thereof. The fact that a firm does not appear as an acceptor does not indicate lack of observance, nor does the inclusion of a firm as a formal acceptor necessarily guarantee to the public that all products of that firm conform with the requirements of this standard, although it is expected that they will so conform. *Distributors' acceptances are based on the understanding that authentic information on wool content will be furnished voluntarily and automatically by the manufacturer on each lot at the time of delivery.*

ASSOCIATIONS

American Home Economics Association, Washington, D. C.
 American Institute of Laundering, Joliet, Ill.
 Associated Wool Industries, New York, N. Y.
 Knitted Outerwear Manufacturers Association, Philadelphia, Pa. (In principle.)
 Laundryowners National Association of the United States and Canada, Joliet, Ill. (In principle.)
 National Association of Wool Manufacturers, New York, N. Y. (In principle.)
 National Council of Women, Committee on Consumer Interests, Belmont, Mass.
 National Knitted Outerwear Association, New York, N. Y. (In principle.)
 National Wool Trade Association, Boston, Mass. (In principle.)
 Specialty Stores Association, New York, N. Y.
 Wholesale Dry Goods Institute, New York, N. Y.

FIRMS

Abbot Worsted Co., Graniteville, Mass.
 Abbott Co., Amos, Dexter, Maine.
 Abraham & Straus, Brooklyn, N. Y.
 Acoma Textile Mills, Inc., Brooklyn, N. Y.
 Agawam Co., Agawam, Mass.
 Allmann Woolen Co., F. R., Brooklyn, N. Y.

Altman & Co., B., New York, N. Y.
 Amana Society, Amana, Iowa.
 American Woolen Co., New York, N. Y.
 Ames Worsted Co., Lowell, Mass.
 Angora Journal, Portland, Oreg.
 Anniel Woolen Mills, Inc., Mount Airy, N. C.
 Appleton Woolen Mills, Appleton, Wis.
 Ardross Worsted Co., The, Philadelphia, Pa.
 Ardsley Textiles Sales Co., New York, N. Y.
 Arlington Mills, Boston, Mass.
 Artloom Corporation, Philadelphia, Pa.
 Atlantic Mills, Providence, R. I.
 Atlas Waste Manufacturing Co., Inc., Glendale, Long Island, N. Y.
 Atwood Co., J. J., Upland, Calif.
 Avec Knitting Mills, Inc., Woonsocket, R. I.
 Ayres & Co., L. S., Indianapolis, Ind.
 B & B Stores, Inc., Logansport, Ind.
 Badger Worsted Mills, Grafton, Wis.
 Bamberger & Co., L., Newark, N. J.
 Barnett Woolen Mills Co., I., Milwaukee, Wis.
 Baron Woolen Mills, Inc., Brigham City, Utah.
 Barron Co., The E. R., La Crosse, Wis.
 Battey Trull & Co., New York, N. Y.
 Bear & Co., Charles H., York, Pa.
 Belgian Spinning Co., Waltham, Mass.
 Benn Corporation, Joseph, Greystone, R. I.
 Berg, Inc., Charles F., Portland, Oreg.
 Bergner & Co., P. A., Peoria, Ill.
 Berkshire Woolen Co., Pittsfield, Mass.
 Birdsall Bros. Co., Seelyville, Pa.

- Bjorklund Bros. & Co., Cambridge, Minn.
 Blackinton Co., North Adams, Mass.
 Blum Store, The, Philadelphia, Pa.
 Boessneck & Co., Inc., New York, N. Y.
 Boggs & Buhl, Inc., Pittsburgh, Pa.
 Bolger Bros., Philadelphia, Pa.
 Bon Marche Dry Goods Co., The, Lowell, Mass.
 Bonwit Teller, Inc., New York, N. Y.
 Boston Better Business Bureau, Boston, Mass. (In principle.)
 Botany Worsted Mills, Passaic, N. J.
 Brackett, M. R., New York, N. Y.
 Bradshaw-Diehl Co., Huntington, W. Va.
 Branch River Wool Combing Co., Inc., Woonsocket, R. I. (In principle.)
 Bressmer Co., The John, Springfield, Ill.
 Bridgewater Woolen Co., Bridgewater, Vt.
 Broad Brook Co., Broad Brook, Conn.
 Broadalbin Knitting Co., Ltd., The, Broadalbin, N. Y.
 Broadway Department Store, Inc., Los Angeles, Calif.
 Brown Dunkin Co., Tulsa, Okla.
 Brown's Sons, Inc., George, Mount Joy, Pa.
 Burke & Co., Inc., J. Franklin, New York, N. Y.
 Burrows & Sanborn, Lynn, Mass.
 Bush & Bull Corporation, Bethlehem, Pa., and Easton, Pa.
 Bush Woolen Mills Co., Dresden, Ohio.
 Caledonia Woolen Mills, Clifton Heights, Pa.
 California, University of, College of Agriculture, Berkeley, Calif. (In principle.)
 Caron Spinning Co., Rochelle, Ill.
 Carr's, Minneapolis, Minn.
 Cascade Woolen Mill, Oakland, Maine.
 Charlottesville Woolen Mills, Charlottesville, Va.
 Charlton Woolen Co., Charlton City, Mass.
 Chase & Co., L. C.—Troy Blanket Mills Division, New York, N. Y.
 Chatham Manufacturing Co., Winston-Salem, N. C.
 Cherry Brook Worsted Co., Woonsocket, R. I.
 Cheshire Mills, Harrisville, N. H.
 Chicago Better Business Bureau, Chicago, Ill. (In principle.)
 Chicago Mail Order Co., Chicago, Ill.
 City of Paris Dry Goods Co., San Francisco, Calif.
 Clasgens Co., The J. & H., New Richmond, Ohio.
 Clear Spring Worsted Mills, Inc., Doylestown, Pa.
 Cleland Simpson Co., Scranton, Pa.
 Cleveland Worsted Mills Co., The, New York, N. Y.
 Clinton Woolen Manufacturing Co., Clinton, Mich.
 Cocheo Woolen Manufacturing Co., East Rochester, N. H.
 Cole Co., The D. J., Billings, Mont.
 Colonial Woolen Mills Co., The, Cleveland, Ohio.
 Comins & Co., Inc., Rochdale, Mass.
 Continental Mills, Inc., Germantown, Philadelphia, Pa.
 Cornell University, College of Home Economics, Ithaca, N. Y.
 Cowan & Hunt, Inc., Sault Ste. Marie, Mich.
 Coyle & Richardson, Inc., Charleston, W. Va.
 Crabtree & Sons, Wm., Montgomery N. Y.
 Crescent Woolen Mills Co., Two Rivers, Wis.
 Croft Sons & Co., Howland, Camden, N. J. (In principle.)
 Crown Mills, Marcellus, N. Y.
 Crown Worsted Mills, Inc., Providence, R. I. (In principle.)
 Cumberland Gap Woolen Mills, Harri-man, Tenn.
 Cummings Co., Daniel E., Newport, Maine.
 D. & M. Woolen Mills, Putnam, Conn.
 Dauntless Worsted Mills, Philadelphia, Pa.
 Davison Paxon Co., Atlanta, Ga.
 Dayton Co., The, Minneapolis, Minn.
 Dearnley Bros. Worsted Spinning Co., Inc., Germantown, Philadelphia, Pa.
 Dempsey, Inc., Joseph A., New York, N. Y.
 Denver Dry Goods Co., The, Denver, Colo.
 Diamond Co., M., New York, N. Y.
 Dickey & Sons, Inc., W. J., Oella, Md.
 District of Columbia, Government of the, Washington, D. C.
 Dodge-Davis Manufacturing Co., Bristol, N. H.
 Dorr Woolen Co., Guild, N. H.
 Draper, Inc., W. E., Yakima, Wash.
 Draper Bros. Co., Canton, Mass.
 Dunderry Woolen Mills, Rockford, Ill.
 Dunn Worsted Co., J. F., Providence, R. I.
 Dunn Worsted Mills, New York, N. Y.
 Eavenson & Levering Co., Camden, N. J. (In principle.)
 Ehrenberg Co., B., New York, N. Y.
 Empire Worsted Mills, Inc., Jamestown, N. Y.
 Emporium, The, San Francisco, Calif.
 Erben-Harding Co., The, Philadelphia, Pa. (In principle.)
 Esterly Woolen Co., Esterly, Pa.
 Eugene Woolen Mills Co., Eugene, Oreg.
 Eureka Woolen Mills, Eureka, Calif.
 Fair, The, Chicago, Ill.

- Falls City Knit-Wear Co., Louisville, Ky.
 Fandel Co., St. Cloud, Minn.
 Faribault Woolen Mill Co., Faribault, Minn.
 Farnsworth, Daniel W., New York, N. Y.
 Fashion, The, Columbus, Ohio.
 Faulkner & Colony Manufacturing Co., Keene, N. H.
 Field Co., The L. H., Jackson, Mich.
 Field & Co., Marshall, Spray, N. C.
 Field Co., Walter, Chicago, Ill.
 Filson Co., C. C., Seattle, Wash.
 Fisher Sons & Co., Inc., M., New York, N. Y.
 Fort Schuyler Knitting Co., Utica, N. Y.
 Franklinshire Worsted Mills, New York, N. Y., and Philadelphia, Pa.
 Frederick & Nelson, Seattle, Wash.
 French Co., George B., Portsmouth, N. H.
 French Worsted Co., The, Woonsocket, R. I.
 Gable Co., The Wm. F., Altoona, Pa.
 Gardner Yarn Co., Gardner, Mass.
 Garvin & Co., M. T., Lancaster, Pa.
 General Athletic Products Co., The, Greenville, Ohio.
 Gera Mills, Passaic, N. J.
 Gertz, Inc., B., Jamaica, Long Island, N. Y.
 Gilchrist Co., Boston, Mass.
 Gilet Carbonizing Co., Inc., Lowell, Mass. (In principle.)
 Globe Department Store, Waukegan, Ill.
 Gold & Co., Lincoln, Nebr.
 Gold Mark Knitting Co., Woonsocket, R. I.
 Goldstein-Migel Co., The, Waco, Tex.
 Gonic Manufacturing Co., Gonic, N. H.
 Gordon Woolen Mills, Inc., Newport, N. H.
 Greenwich Mills, The, East Greenwich, R. I.
 Guerin Mills, Inc., Woonsocket, R. I.
 Hager & Bro., Inc., Lancaster, Pa.
 Hampton Looms of Virginia, Inc., Bedford, Va.
 Hart & Son Co., L., San Jose, Calif.
 Hartford Better Business Bureau, Inc., Hartford, Conn. (In principle.)
 Hartford Woolen Co., Hartford, Vt.
 Hatch Textile Research, Inc., New York, N. Y. (In principle.)
 Hayward-Schuster Co., Inc., New York, N. Y.
 Hayward Woolen Co., East Douglas, Mass.
 Hecht Co., The, Washington, D. C.
 Hens & Kelly Co., Buffalo, N. Y.
 Hird & Sons, Inc., Samuel, Garfield, N. J.
 Holden Leonard Co., Inc., New York, N. Y.
 Holliday, Wm. S., Manayunk, Philadelphia, Pa.
 Holmes Co., Ltd., D. H., New Orleans, La.
 Hopeville Manufacturing Co., Inc., Worcester, Mass.
 Household Finance Corporation, Chicago, Ill. (In principle.)
 Houston, Better Business Bureau of, Houston, Tex. (In principle.)
 Howse Sons, Chas. W., Unionville, Conn.
 Hudson Worsted Co., Hudson, Mass.
 Huntington Textile Co., Inc., Huntington, Mass.
 Huyck & Sons, F. C. (Kenwood Mills), Rensselaer, N. Y.
 Indera Mills Co., Winston-Salem, N. C.
 Intervale Mills, Inc., Webster, Mass.
 Iselin-Jefferson Co., New York, N. Y.
 Israel Putnam Mills, Wilsonville, Conn.
 Ivey & Co., J. B., Charlotte, N. C.
 Jacob Co., J. G., New York, N. Y.
 Jacobsen Co., H., New York, N. Y. (In principle.)
 Jefferson Manufacturing Co., The, Jefferson, Mass.
 Jewell Brook Woolen Co., Ludlow, Vt.
 Johnson Woolen Co., Cyril, Stafford Springs, Conn.
 Jones Knitting Mills, Los Angeles, Calif.
 Jordon Mills, Inc., Waterford, Conn.
 Kansas, University of, Lawrence, Kans. (In principle.)
 Kaufman, Inc., B. M., New York, N. Y.
 Kay Woolen Mill Co., Thos., Salem, Oreg.
 Keene Silk Fibre Mills, Inc., Keene, N. H.
 Kent Manufacturing Co., The, Clifton Heights, Pa.
 Kezar Falls Woolen Co., Kezar Falls, Maine.
 Kilpatrick & Co., Thomas, Omaha, Nebr.
 Klous Co., Henry, Lawrence, Mass.
 Koehn, Inc., Edward W., New York, N. Y.
 Kuenzel Mills Co., The, New Bremen Ohio.
 Lansburgh & Bro., Washington, D. C.
 La Porte-Daniels Woolen Mills, Inc., La Porte, Ind.
 Lawrence & Co., Frederick T., New York, N. Y.
 Lawrence Manufacturing Co., Lowell, Mass.
 Lawton & Co., Herbert, New York, N. Y.
 Lazarus & Co., The F. & R., Columbus, Ohio.
 Lebanon Woolen Mills, Lebanon, Tenn.
 Lebanon Woolen Mills Corporation, Lebanon, N. H.
 Lees & Sons Co., Jas., Bridgeport, Pa.

- Leominster Mills, Inc., Leominster, Mass.
- Leonard & Co., W. C., Saranac Lake, N. Y.
- Levinson's Department Store, Eldorado, Kans. (In principle.)
- Lewis Co., E. Frank, Lawrence, Mass.
- Lewis & Co., W., Champaign, Ill.
- Libbey Co., W. S., Lewiston, Maine.
- Liberty House, The, Honolulu, Hawaii.
- Lincoln Worsted Co., Philadelphia, Pa.
- Lincolnsfield Mills Corporation, Lincoln, Maine.
- Lintz Dry Goods Co., Guthrie, Okla.
- Livingston Worsted Mills, Inc., The, Holyoke, Mass.
- Lonsdale Fabrics, Philadelphia, Pa.
- Lord & Taylor, New York, N. Y.
- Lorge Lenk & Co., Inc., New York, N. Y.
- Lorraine Manufacturing Co., Pawtucket, R. I.
- Lucas Woolen Mills, Jefferson, Wis.
- Luckey, Platt & Co., Poughkeepsie, N. Y.
- Lungstras Dyeing & Cleaning Co., St. Louis, Mo.
- Lymansville Co., North Providence, R. I.
- Lynx Corporation, New York, N. Y.
- Mabbett & Sons Co., George, Plymouth, Mass.
- MacInnes Co., John C., Worcester, Mass.
- Mack Corporation, M. J., New York, N. Y.
- Mackie Worsted Mills, Inc., Centredale, R. I.
- Macy & Co., Inc., R. H., New York, N. Y.
- Maine Spinning Co., Inc., Skowhegan, Maine.
- Majestic Woolen Mills, Philadelphia, Pa.
- Mali & Co., Henry W. T., New York, N. Y.
- Marsh & Bachman Co., Hudson, N. Y.
- Marston Co., The, San Diego, Calif.
- Masurel Worsted Mills, Inc., Woonsocket, R. I.
- May Co., Los Angeles, Calif.
- Mayfair Worsted Mills, Inc., Woonsocket, R. I.
- Mayflower Worsted Co., Kingston, Mass.
- Mayo Woolen Mills Corporation, Millbury, Mass.
- McCurdy & Co., Inc., Rochester, N. Y.
- McEvoy, Inc., John F., New York, N. Y.
- McEwen Halliburton Co., Oklahoma City, Okla.
- McGary & Coleman, New York, N. Y.
- McGraw Wool Co., The P., Pittsburgh, Pa. (In principle.)
- McWhirr Co., R. A., Fall River, Mass.
- Mellon Institute of Industrial Research, Commodity Standards Fellowship, Pittsburgh, Pa. (In principle.)
- Melville Woolen Co., Sykesville, Md.
- Merkel Co., The, Mason City, Iowa.
- Merrimac Mills, Methuen, Mass.
- Metcalf Bros. & Co., New York, N. Y.
- Meyer Woolens Inc., New York, N. Y.
- Millbury Woolen Co., Millbury, Mass.
- Miller & Paine, Lincoln, Nebr.
- Mitchell Knitting Mills, Inc., Winona, Minn.
- Mitchell & Son, Allen R. (Sackamaxon Mills), Philadelphia, Pa.
- Moller, C. J., New York, N. Y.
- Monnig Dry Goods Co., Ft. Worth, Tex.
- Moore & Co., H. L. G., New York, N. Y.
- Moore Co., Harry C., Nevada, Mo.
- Moore Wool Scouring Mills, Geo. C., North Chelmsford, Mass.
- Muir, Inc., R. H., East Orange, N. J.
- Murphy Co., G. C., McKeesport, Pa.
- Neponset Woolen Mills, Canton, Mass.
- New Bedford Textile School, New Bedford, Mass. (In principle.)
- New England Woolen Fabric Co., Worcester, Mass.
- New Jersey Worsted Mills, Garfield, N. J.
- New Orleans, Better Business Bureau of, New Orleans, La. (In principle.)
- New Utica, The, Des Moines, Iowa.
- New York Dry Goods Co., Helena, Mont.
- Nichols & Co., Inc., Boston, Mass.
- North American Knitting Co., Mansfield, Ohio.
- North Berwick Co., North Berwick, Maine.
- North Billerica Co., North Billerica, Mass.
- Novelty Knitting Mills, Inc., Philadelphia, Pa.
- Oak Worsted Mills, Philadelphia, Pa.
- Oakes & Co., Inc., Thomas, Bloomfield, N. J.
- Oakland Worsted Co., The, Providence, R. I.
- Old Town Woolen Co., Inc., Guilford, Maine.
- Oregon Worsted Co., Portland, Oreg.
- O'Shea, Dennis, Laconia, N. H.
- Oughton's Sons, John, Philadelphia, Pa.
- Pacific Mills, Worsted Division, Lawrence, Mass.
- Packard Mills, Inc., Webster, Mass.
- Paige & Co., Frank E., Boston, Mass. (In principle.)
- Paris Co., The, Salt Lake City, Utah.
- Park & Sons, Inc., William, Stafford, Conn.
- Parker, Wilder & Co., New York, N. Y.
- Parsons, Sonders Co., Clarksburg, W. Va.

- Pearce Manufacturing Co., Latrobe, Pa.
 Pearsall & Goldsmith, New York, N. Y. (In principle.)
 Peck & Peck, New York, N. Y.
 Peerless Fibre Co., Cohoes, N. Y.
 Penn Traffic Co., Johnstown, Pa.
 Penn Worsted Co., Philadelphia, Pa.
 Peoria, Better Business Bureau of, Peoria, Ill. (In principle.)
 Philadelphia Worsted Mills, Philadelphia, Pa.
 Powers Mercantile Co., Minneapolis, Minn.
 Prairie du Chien Woolen Mill Co., Prairie du Chien, Wis.
 Premier Worsted Mills, Woonsocket, R. I., and Boston, Mass.
 Progressive Laundryman Publishing Co., Chicago, Ill. (In principle.)
 Prouvost Lefebvre & Co., Inc., Boston, Mass. (In principle.)
 Pullar, Robert Taft, New York, N. Y.
 Purdue University, Home Demonstration Department, Extension Division, West Lafayette, Ind. (In principle.)
 Rankin Dry Goods Co., Inc., Santa Ana, Calif.
 Rathbun Knitting Co., The, Woonsocket, R. I.
 Reliance Garnetting Mills, Waltham, Mass.
 Rike-Kumler Co., The, Dayton, Ohio.
 Ring & Co., Jonathan, Philadelphia, Pa.
 Riverside Woolen Mills, Stafford, Conn.
 Riverside Worsted Co., Inc., Woonsocket, R. I.
 Robertson Bros. Department Store, Inc., South Bend, Ind.
 Robinson Co., J. W., Los Angeles, Calif.
 Robinson Manufacturing Co., Oxford, Maine.
 Robson, Leonard, New York, N. Y.
 Rochambeau Worsted Co., Providence, R. I.
 Rockfall Woolen Co., The, Middletown, Conn.
 Rockford Mitten & Hosiery Co., Cloth Division, Rockford, Ill.
 Roos Bros., Inc., San Francisco, Calif.
 Root Manufacturing Co., Cohoes, N. Y.
 Rorabaugh Dry Goods Co., The, Wichita, Kans.
 Rosenbaum Co. of Pittsburgh, Pittsburgh, Pa.
 Rosenberg Co., Gus L., New York, N. Y.
 Royal Worsted Mill, Lowell, Mass.
 Rubenoff & Son, Robert, New York, N. Y.
 Ruth & Co., George M., New York, N. Y.
 St. Cloud Woolen Mills Co., St. Cloud, Minn.
 St. Marys Woolen Manufacturing Co., St. Marys, Ohio.
 Sattler's, Inc., Buffalo, N. Y.
 Sawyer, Regan Co., Dalton, Mass.
 Scarbrough & Sons, E. M., Austin, Tex.
 Scatchard's Sons, Inc., Joseph, Philadelphia, Pa.
 Schenker, Herbert S., Philadelphia, Pa. (In principle.)
 Schmidt & Co., C. H., New York, N. Y.
 Schneider & Armitage, New York, N. Y.
 Schuster Woolen Co., East Douglas, Mass.
 Scranton Better Business Bureau, Scranton, Pa. (In principle.)
 Scruggs-Vandervoort-Barney, St. Louis, Mo.
 Sears, Roebuck & Co., Chicago, Ill.
 Seattle Woolen Co., Seattle, Wash.
 Selden Worsted Mills, Methuen, Mass.
 Seymour Woolen Mills, Seymour, Ind.
 Shepperd Manufacturing Co., Manayunk, Philadelphia, Pa.
 Shirreffs Worsted Co., New York, N. Y.
 Sibley, Lindsay & Curr Co., Rochester, N. Y.
 Silver Lake Worsted Mills, Inc., Providence, R. I.
 Silverstein, B., New York, N. Y.
 Slack Corporation, John T., Springfield, Vt. (In principle.)
 Somerset Worsted Mills, Skowhegan, Maine.
 Somersworth Textile Co., Inc., Somersworth, N. H.
 South Acton Woolen Co., South Acton, Mass. (In principle.)
 Southern Worsted Corporation, Boston, Mass.
 Springfield Blanket Co., Inc., Holyoke, Mass.
 Springfield Woolen Mills Co., The, Springfield, Tenn.
 Stafford Worsted Co., The, Stafford Springs, Conn.
 Standard Yarn Co., Worcester, Mass. (In principle.)
 Standware Products, Inc., New York, N. Y.
 Star Carbonizing Co., Woonsocket, R. I.
 Star Worsted Co., Fitchburg, Mass.
 Steacie Garnetting Co., Framingham, Mass. (In principle.)
 Stearns Co., R. H., Boston, Mass.
 Steel, Inc., Warner J., Bristol, Pa.
 Steiger, Inc., Albert, Hartford, Conn.
 Stern Bros., New York, N. Y.
 Stevens & Co., Inc., J. P., New York, N. Y.
 Stevens & Sons Co., M. T., North Andover, Mass.
 Stokes Bros. Worsted Co., Inc., Providence, R. I.
 Stoughton Mills, Inc., Stoughton, Mass.
 Strawbridge & Clothier, Philadelphia, Pa.
 Strong Hewat & Co., Inc., North Adams, Mass.
 Super Dux Co., Detroit, Mich.

- Susquehanna Woolen Co., New Cumberland, Pa.
 Sutton's Mills, North Andover, Mass.
 Tacoma Better Business Bureau, Tacoma, Wash. (In principle.)
 Taft Manufacturing Co., David N., Oxford, Mass.
 Talbot Mills, North Billerica, Mass.
 Talbot Wool Combing Co., Norton, Mass.
 Taunton Wool Stock Co., Taunton, Mass.
 Taylor Son & Co., The Wm., Cleveland, Ohio. (In principle.)
 Tex Knit Mills, Inc., Union City, N. J.
 Thayer Woolen Co., North Oxford, Mass.
 Thermo Mills, Inc., Hudson, N. Y.
 Tipper, F. W., New York, N. Y.
 Toshach Co., Inc., Wm. D., New York, N. Y.
 Troutman Co., A. E., Greensburg, Pa.
 Troy Blanket Mills, Troy, N. H.
 U. S. Bunting Co., Lowell, Mass.
 United States Testing Co., Inc., Hoboken, N. J. (In principle.)
 Verd Mont Mills Co., Ludlow, Vt.
 Verdun Manufacturing Co., Inc., Woonsocket, R. I.
 Vreeland, D. R., New York, N. Y.
 Wahl Store, The J. B., Bellingham, Wash.
 Walther Manufacturing Co., Philadelphia, Pa.
 Wanskuck Co., Providence, R. I.
 Ware Woolen Co., Ware, Mass.
 Warren Woolen Co., The, Stafford Springs, Conn.
 Warrenton Woolen Co., The, Torrington, Conn.
 Wasson & Co., H. P., Indianapolis, Ind.
 Waterville Textile Mills, Inc., Waterville, N. Y.
 Waucantuck Mills, Uxbridge, Mass.
 Weaver, A. C., New York, N. Y.
 Weill & Co., Raphael (The White House), San Francisco, Calif.
 Wellesley Woolen Co., Wellesley Hills, Mass. (In principle.)
- Wemstock Lubin & Co., Inc., Sacramento, Calif.
 White Co., R. H., Boston, Mass.
 White, Inc., George C., New York, N. Y.
 Whitman Co., Inc., William, New York, N. Y.
 Whitney Worsted Co., Franklin, Mass.
 Wiese & Co., Inc., Wm., New York, N. Y.
 Wilton Woolen Co., Wilton, Maine.
 Windsor Manufacturing Co., Philadelphia, Pa.
 Winterbottom & Brown, Inc., Boston, Mass.
 Wolf Wile Co., Inc., Lexington, Ky.
 Wolfe & Co., Lipman, Portland, Oreg.
 Wolstenholme Sons & Co., Inc., Thos., Philadelphia, Pa.
 Woolrich Woolen Mills, Woolrich, Pa.
 Woonsocket Worsted Mills, Woonsocket, R. I.
 Worcester Textile Co., Inc., Valley Falls, R. I.
 Worth Bros., Inc., Los Angeles, Calif.
 Worumbo Co., New York, N. Y.
 Wright Textile Co., Philadelphia, Pa.
 Wright's Underwear Co., Inc., New York, N. Y.
 Wuskanut Mills, Inc., The, Farnumsville, Mass., and New York, N. Y.
 Wyandotte Worsted Co., New York, N. Y. (In principle.)
 Wyman & Co., Geo., South Bend, Ind.
 Younker Bros., Des Moines, Iowa.
 Yund, Kennedy & Yund, Inc., Amsterdam, N. Y.
 Ziock Industries, Inc., Rockford, Ill.
 Zion's Co-operative Mercantile Institution, Salt Lake City, Utah.

U. S. GOVERNMENT

- Agriculture, U. S. Department of, Washington, D. C.
 Treasury Department, Washington, D. C.
 Veterans' Administration, Procurement Division, Washington, D. C.

COMMERCIAL STANDARDS

CS No.	Item	CS No.	Item
0-30.	The commercial standards service and its value to business.	37-31.	Steel bone plates and screws.
1-32.	Clinical thermometers (second edition).	38-32.	Hospital rubber sheeting.
2-30.	Mopsticks.	39-37.	Wool and part wool blankets (second edition).
3-38.	Stoddard solvent (second edition).	40-32.	Surgeons' rubber gloves.
4-29.	Staple porcelain (all-clay) plumbing fixtures.	41-32.	Surgeons' latex gloves.
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6-31.	Wrought-iron pipe nipples (second edition).	43-32.	Grading of sulphonated oils.
7-29.	Standard weight malleable iron or steel screwed unions.	44-32.	Apple wraps.
8-33.	Gage blanks (second edition).	45-36.	Douglas fir plywood (domestic grades) (second edition).
9-33.	Builders' template hardware (second edition).	46-36.	Hosiery lengths and sizes (second edition).
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15-29.	Men's pajamas.	52-35.	Mohair pile fabrics (100-percent mohair plain velvet, 100-percent mohair plain frieze, and 50-percent mohair plain frieze).
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17-32.	Diamond core drill fittings (second edition).	54-35.	Mattresses for hospitals.
18-29.	Hickory golf shafts.	55-35.	Mattresses for institutions.
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20-36.	Staple vitreous china plumbing fixtures (second edition).	57-36.	Book cloths, buckrams, and impregnated fabrics for bookbinding purposes except library bindings.
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22-30.	Builders' hardware (nontemplate).	59-36.	Woven dress fabrics—testing and reporting.
23-30.	Feldspar.	60-36.	Hardwood dimension lumber.
24-30.	Standard screw threads.	61-37.	Wood-slat venetian blinds.
25-30.	Special screw threads.	62-38.	Colors for kitchen accessories.
26-30.	Aromatic red cedar closet lining.	63-38.	Colors for bathroom accessories.
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28-32.	Cotton fabric tents, tarpaulins, and covers.	65-38.	Wool and part-wool fabrics.
29-31.	Staple seats for water-closet bowls.		
30-31.	Colors for sanitary ware.		
31-35.	Wood shingles (third edition).		
32-31.	Cotton cloth for rubber and pyroxylin coating.		
33-32.	Knit underwear (exclusive of rayon).		
34-31.	Bag, case, and strap leather.		
35-31.	Plywood (hardwood and eastern red cedar).		
36-33.	Fourdrinier wire cloth (second edition).		

NOTICE.—Those interested in commercial standards with a view toward accepting them as a basis of everyday practice in their industry may secure copies of the above standards, while the supply lasts, by addressing the Division of Trade Standards, National Bureau of Standards, Washington, D. C.



