U. S. DEPARTMENT OF COMMERCE JESSE H. JONES, Secretary

NATIONAL BUREAU OF STANDARDS LYMAN J. BRIGGS, Director

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INNER-CONTROLLED SPOTLAMPS FOR VEHICLES (AFTER MARKET)

COMMERCIAL STANDARD CS82-41

Effective Date for New Production from January 1, 1941



A RECORDED VOLUNTARY STANDARD OF THE TRADE

UNITED STATES
GOVERNMENT PRINTING OFFICE
WASHINGTON: 1940

PROMULGATION

of

COMMERCIAL STANDARD CS82-41

for

INNER-CONTROLLED SPOTLAMPS FOR VEHICLES (AFTER MARKET)

On January 11 and 12, 1940, at the instance of the Safety Equipment Manufacturers Association, a general conference of representative manufacturers, distributors, regulatory officials, testing laboratories, and users of inner-controlled spotlamps for vehicles (after market) adopted a recommended commercial standard for this commodity. Those concerned have since 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 for new production from January 1, 1941.

Promulgation recommended.

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

Promulgated.

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

Promulgation approved.

Jesse H. Jones, Secretary of Commerce.

INNER-CONTROLLED SPOTLAMPS FOR VEHICLES (AFTER MARKET) ¹

COMMERCIAL STANDARD CS82-41

EXPLANATORY

As the art of motor-vehicle lighting is a continually developing one, these specifications are necessarily of a current character and are subject to revision from time to time. They are intended to apply primarily to sample equipments submitted by the manufacturer to the testing laboratory for original approval but may be applied to equipments purchased on the open market or to equipments taken at random from regular production. Should the first sample fail to pass one or more of the test requirements, two more samples may be tested, and, if two out of the three samples comply with each of the requirements, the equipment shall be considered to be satisfactory.

PURPOSE

1. The purpose is to establish standard specifications and methods of test for inner-controlled spotlamps (after market) for the guidance of manufacturers, distributors, and users.

SCOPE

2. This standard covers the requirements and methods for construction, vibration and shock, moisture, dust, corrosion, and photometric tests of inner-controlled spotlamps.

DEFINITION

3. An inner-controlled spotlamp is a light-projecting device with a plain lens with means inside the car for turning it on or off and for aiming it in any desired direction. The lamp housing is located outside the car and controllable both mechanically and electrically, from within the car. Such lamps are intended, not as a substitute for head or auxiliary lamps, but for use in emergencies and under conditions where a concentrated, controllable light beam is advantageous.

GENERAL REQUIREMENTS

4a. All mounting brackets and externally used bolts, nuts, screws, and fittings shall be of stainless steel or nonferrous metal.

¹ The term "after market" shall be construed to mean any equipment or device manufactured for accessory installation on a vehicle; provided, however, it shall not be construed to mean any equipment or device regularly installed on or furnished for new vehicles by the vehicle manufacturer, and provided further, that it shall not be construed to include genuine replacements of original equipment.

4b. All wiring shall conform to SAE standard specifications, known as type No. 2 or better, of electrical conductivity not less than the equivalent of No. 16 AWG (B & S) gage solid copper wire.

INSTALLATION INSTRUCTIONS

5. Complete instructions for installing the inner-controlled spotlamps, including a comprehensive wiring diagram, type and designation of bulb, shall accompany each lamp.

MANUFACTURERS' RECOMMENDATIONS

6. The device shall be aimed and used in accordance with the Uniform Vehicle Code—Act V—Uniform Act Regulating Traffic on Highways, as recommended for State enactment, which reads as follows:

Article XVI, Sec. 136. Spotlamps and auxiliary driving lamps.—(a) Any motor vehicle may be equipped with not to exceed one spotlamp and every lighted spotlamp shall be so aimed and used upon approaching another vehicle that no part of the high-intensity portion of the beam will be directed to the left of the prolongation of the extreme left side of the vehicle nor more than 100 feet ahead of the vehicle.

LAMP BULBS

7. Lamp bulbs used in inner-controlled spotlamps shall be of American manufacture. Their physical and electrical specifications shall be in accordance with current standard SAE or SEMA specifications covering lamp bulbs.

SAMPLES FOR TEST

8a. Sample inner-controlled spotlamps submitted for laboratory test shall be representative of the devices as regularly manufactured and marketed. Each sample shall include all accessory equipment peculiar to the device and necessary to operate it in normal manner. The vibration and shock, moisture, and dust tests shall be made on the

same sample in that order.

8b. All bulbs used in photometric tests shall be selected for accuracy in accordance with the Standard SAE Specifications covering lamp bulbs and be operated at their rated mean spherical candlepower during the tests. Unless otherwise specified, the lamp bulbs used in the tests shall be supplied by the laboratory and shall be representative of standard bulbs in regular production. Where special bulbs are specified, they shall be submitted with the devices and the same or similar bulbs used in the tests and operated at their rated mean spherical candlepower.

LABORATORY FACILITIES

9. All laboratory tests shall be made by a recognized impartial engineering laboratory having all facilities and equipment necessary to make accurate physical and optical tests herein specified in accordance with established laboratory practices.

VIBRATION AND SHOCK TEST

10a. A sample unit, attached to a support simulating that part of the car to which the device is normally attached, shall be mounted, in normal manner and operating position obtaining in service, on the

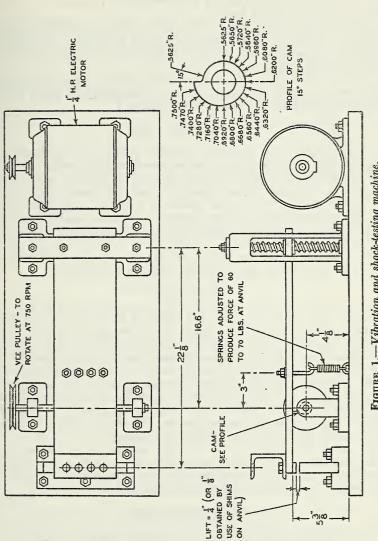


FIGURE 1.—Vibration and shock-testing machine.

anvil end of the table of the vibration rack and vibrated approximately 750 times per minute through a distance of ¼ inch. The table shall be spring-mounted at one end and fitted with steel calks on the under side of the other end. These calks are to make contact with the steel anvil once during each cycle at the completion of the fall. shall be operated under a spring tension of 60 to 70 pounds. shall be continued for 1 hour.

10b. The unit shall then be examined. Any unit showing evidence of material physical weakness, loosening or rupture of parts shall be considered to have failed. Failure of the bulb shall not be considered

as failure of the unit.

10c. It is recommended that for the purpose of standardizing the vibration and shock test, the testing machine shall be made substantially in accordance with the drawing, figure 1.

MOISTURE TEST

11a. That part of a sample unit which in service is located outside the car shall be mounted in its normal operating position with any drain holes open and subjected to a precipitation of 0.1 inch of water per minute, delivered at an angle of 45 degrees from a nozzle with a solid-cone spray. During the moisture test the lamp shall revolve about its vertical axis at a rate of 4 rpm. This test shall be continued for 12 hours. The water shall then be turned off and the unit permitted to drain for 1 hour.

11b. The unit shall then be examined. Any accumulation of more than ½ ml of water in the unit shall constitute a failure.

DUST TEST

12a. That part of a sample unit which in service is located outside the car shall, with any drain holes closed, be mounted in its normal operating position, at least 6 inches from the wall, in a box measuring 3 feet in all directions, containing 10 pounds of fine powdered cement in accordance with ASTM Specification C9-38. At intervals of 15 minutes, this dust shall be agitated by compressed air or fan blower by projecting blasts of air for a 2-second period in a downward direction into the dust in such a way that the dust is completely and uniformly diffused throughout the entire cube. The dust is then allowed to settle. This test shall be continued for 5 hours.

12b. After the dust test, the exterior surface shall be cleaned, and if the maximum candlepower is within 10 percent of the maximum as compared with the condition after the unit is cleaned inside and

out, it shall be considered adequately dust tight.

CORROSION TEST

13a. A sample unit, including mounting brackets, shall be subjected to a 20-percent salt-spray solution for a period of fifty (50) hours consisting of two (2) periods of 24 hours' exposure and 1 hour's drying each, at a temperature of 95° F (35° C).

13b. There shall be no evidence of undue or excessive corrosion

immediately after the above test has been completed.

PHOTOMETRIC TEST

14. The beam from a spotlamp shall be substantially round, well defined, fairly uniform in cross section, and free from dark streaks.

MARKING AND LABELING

15. Each inner-controlled spotlamp manufactured and sold as conforming to this standard shall bear a distinctive designation prominently and permanently indicating the trade-mark of the manufacturer duly applied for or registered under the laws of the United States, or the trade name or other distinctive model, designation, or

other means of identification.

16. In order to provide the purchaser with a ready means for distinguishing between inner-controlled spotlamps which meet the requirements of this standard and those which do not, the Safety Equipment Manufacturers Association has adopted the wording quoted below for labels or statements on cartons. The mark "SEMA-AP-PROVED" on the lamps, is based upon tests on samples and reexaminations by a recognized impartial engineering laboratory. It illustrates a method of certifying that these items comply with the commercial standard.

This Inner-Controlled Spotlamp, marked SEMA-APPROVED, is certified by the Safety Equipment Manufacturers Association and by the manufacturer as conforming to Commercial Standard CS82-41.

EFFECTIVE DATE

The standard is effective for new production from January 1, 1941.

STANDING COMMITTEE

The following individuals comprise 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.

Manufacturers:

H. B. Donley (chairman), Columbus Metal Products, Inc., 767 North 4th St., Columbus, Ohio. Representing Safety Equipment Manufacturers Association.

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A. B. Dettmer, K-D Lamp Co., 610 West Court St., Cincinnati, Ohio. Representing Safety Equipment Manufacturers Association.

R. R. Whipple, The Trippe Manufacturing Co., 564 W. Adams St., Chicago, Ill. Representing Safety Equipment Manufacturers Association.

Charles W. Anklam, C. M. Hall Lamp Co., 1035 E. Hancock Ave., Detroit, Mich. Representing Society of Automotive Engineers.

R. N. Falge, Guide Lamp Division, General Motors Corp., Anderson, Ind. Representing Society of Automotive Engineers.

WILLIAM F. LITTLE, Electrical Testing Laboratories, East End Ave. at 79th St., New York, N. Y. Representing Society of Automotive Engineers.

Distributors:

W. E. Blanchard, National Automobile Dealers Association, 154 Bagley Avenue, Detroit, Mich.

G. B. Cornwell, Sears, Roebuck & Co., Homan Ave. & Arthington St., Chi-

cago, Ill. Representing Mail Order Association of America.
L. S. Jullien, L. S. Jullien, Inc., 1439 P St. NW., Washington, D. C. Representing Motor & Equipment Wholesalers Association.

CHARLES G. MORGAN, Jr., American Trucking Associations, Inc., 1013 16th St., N. W., Washington, D. C.
Leon F. Banigan, National Council of Private Motor Truck Owners, Inc.,

National Press Bldg., Washington, D. C.

BURTON W. MARSH, American Automobile Association, Mills Bldg., 17th and

Pennsylvania Ave., Washington, D. C.
Alternate: Earl Allgaier.

Martin Schreiber, Public Service Coordinated Transport, 80 Park Place, Newark, N. J. Representing National Association of Motor Bus Operators.

General Interest:

H. H. Allen, Interstate Commerce Commission, Washington, D. C.

H. H. Kelly, Interstate Commerce Commission, Washington, D. C. senting Federal Interdepartmental Safety Council. Alternate: H. H. ALLEN.

FRANK W. MATSON, Minnesota Railroad and Warehouse Commission, St. Paul. Minn. Representing National Association of Railroad and Utilities Commissioners.

J. J. Shanley, Department of Motor Vehicles, Trenton, N. J. Representing American Association of Motor Vehicle Administrators.

Laboratories:

Sydney V. James, Underwriters' Laboratories, Inc., 207 E. Ohio St., Chicago,

MONROE L. PATZIG, American Council of Commercial Laboratories, 2215 Ingersoll Ave., Des Moines, Iowa. WM. F. LITTLE, Electrical Testing Laboratories, East End Ave. at 79th St., New York, N. Y.

Alternate: HERMAN KOENIG.

HISTORY OF PROJECT

Pursuant to a request on July 18, 1938, from the Safety Equipment Manufacturers Association (then known as the MEMA Light and Signal Group) for the cooperation of the National Bureau of Standards in the establishment of commercial standards for nine items of lamps and signal equipment for vehicles (after market), preliminary conferences of all interested manufacturers were held in Detroit on September 22 and 23, 1938, and again on March 1 and 2, 1939, in

order to adjust the drafts to suit the consensus of producers.

The proposed standards, as adjusted by the preliminary manufacturers' conferences, were then submitted to the American Association of Motor Vehicle Administrators and other key organizations for advance consideration and recommendations. Following receipt of these recommendations, a general conference was held in Washington, D. C., on January 11 and 12, 1940, to which all interested producers, distributors, users, regulatory bodies, and testing laboratories were The report of the general conference was circulated on invited. February 20, 1940.

On April 8, 1940, copies of the Recommended Commercial Standards as adopted by the general conference, including recommendations of two subcommittees appointed by the conference, were circulated to all concerned for written acceptance. Upon receipt of written acceptances from a preponderant majority, announcement was issued on July 10, 1940, that the standards would become effective for

new production from January 1, 1941.

Date

ACCEPTANCE OF COMMERCIAL STANDARD

If acceptance has not previously been filed, this sheet properly filled in, signed, and returned will provide for the recording of your organization as an acceptor of this commercial standard.

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 CS82-41 as our standard of practice in the
Production ¹ Distribution ¹ Use ¹
of inner-controlled spotlamps. 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 of individual officer(In ink)
(Kindly typewrite or print the following lines)
Name and title of above officer
Organization(Fill in exactly as it should be listed)
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 those concerned. 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 interested groups 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, distri-

bution, 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 interested parties 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 a satisfactory majority of production or consumption in the absence of active, valid opposition, the success of the project is announced. If, however, in the opinion of the standing committee or the Department of Commerce, the support of any standard is inadequate, the right is reserved to withhold promulgation and

publication.

ACCEPTORS

The organizations and individuals listed below have accepted this standard as their standard of practice in the production, distribution, and use of inner-controlled spotlamps. Such endorsement does not signify that they may not find it necessary to deviate from the standard, nor that producers so listed guarantee all of their products in this field to conform with the requirements of this standard. Therefore, specific evidence of conformity should be obtained where required.

ASSOCIATIONS

Transit Association, New American York, N. Y. Michigan Trucking Association, De-

troit, Mich.

National Council of Women of the U. S., Inc., New York, N. Y. National Standard Parts Association,

Detroit, Mich. (In principle.) Safety Equipment Manufacturers' Association, Inc., New York, N. Y.

FIRMS

A. G. Sales Co., Inc., New York, N. Y. (In principle.)

Aetna Motor Products Co., Boston (Dorchester), Mass. Anthes Force Oiler Co., Fort Madison,

Iowa.

Appleton Electric Co., Chicago, Ill. Approved Patents Corporation, New York, N. Y. Arrow Safety Device Co., Medford, N. J.

Atlantic Greyhound Corporation, Charleston, W. Va.

Atlantic Refining Co., The, Philadelphia, Pa.

Autocar Co., The, Ardmore, Pa. Automotive Lighting Equipment, Inc., Franklinton, La.

Bendix Aviation Corporation, Bendix Products Division, New York, N. Y. Bolser Corporation, The, Cedar Falls, Iowa.

Carlton Lamp Corporation, Union City,

N. J. (In principle.) Casco Products Corporation, Bridgeport, Conn.

Central Co-operative Wholesale, Superior, Wis.

Coleman Motors Corporation, Littleton, Colo.

Colorado, State Highway Department of, Traffic Division, Denver, Colo. (In principle.)

Columbus Metal Products, Inc., Columbus, Ohio.

Connecticut, State Motor Vehicle Department of, Hartford, Conn. Connecticut Telephone & Electric Cor-

poration, Meriden, Conn.

Crescent Co., The, Pawtucket, R. I. Culver-Stearns Manufacturing Co., ·Worcester, Mass.

Dallas, Better Business Bureau of,

Dallas, Tex. (In principle.)
Detroit Testing Laboratory, The, Detroit, Mich. (In principle.)
Dietz Co., R. E., New York, N. Y.

(In principle.) Divco-Twin Truck Co., Detroit, Mich. Dixie Motor Coach Corporation, Dallas,

Economy Electric Lantern Co., Inc., Milwaukee, Wis.

Electric Service Supplies Co., Phila-

Electric Service Supplies Co., Finiadelphia, Pa.
Electrical Testing Laboratories, New York, N. Y. (In principle.)
Firestone Tire & Rubber Co., The, Akron, Ohio.
Hunt & Co., J. R., Baltimore, Md.
Idaho, State of, Boise, Idaho.
K-D Lamp Co., The, Cincinnati, Ohio.
Kilborn-Sauer Co., The, Fairfield, Conn.
Lancaster Lens Co., The, Lancaster,

Long Beach, Calif., Ltd., Better Business Bureau of, Long Beach, Calif. Maryland Casualty Co., Baltimore, Md. (In principle.)

McKee Glass Co., Jeannette, Pa. Miller Co., The A. J., Bellefontaine, Ohio.

Minnesota Department of Highways, St. Paul, Minn.

Moreland Motor Truck Co., Los Angeles, Calif.

Nebraska State Railway Commission,

Lincoln, Nebr.

New Orleans, Inc., Better Business
Bureau of, New Orleans, La. (In principle.)

Oklahoma Department of Public Safety, Oklahoma Čity, Okla.

Packard Properties, Inc., General Accessories Division of, New York, N. Y. Patzig Testing Laboratories, Des Moines, Iowa.

Peltier Glass Co., The, Ottawa, Ill. Perfection Motor Products Co., The,

Bridgeport, Conn. Pittsburgh & Weirton Bus Co., Weirton,

W. Va. Pollak Corporation, Joseph, Boston

(Dorchester), Mass. Premier Signal Co., Bellevue, Ohio. Protectall Motor Signal, Inc., Syracuse, N. Y.

Purdue University, Engineering Experiment Station, Lafayette, Ind. (In

principle.)

Reo Motors, Inc., Lansing, Mich. Sears, Roebuck & Co. Chicago, Ill. Sunshine Bus Lines, Inc., Dallas, Tex. Tennessee Department of Safety, Nashville, Tenn. Trippe Manufacturing Co., Chicago, Ill.

U. S. Metal Products Co., New York, N. Y.

Unity Manufacturing Co., Chicago., Ill. Virginia, Division of Motor Vehicles of, Richmond, Va. (In principle.)
Walter Motor Truck Co., Ridgewood,
L. I., N. Y.
Ward Motor Vehicle Co., Mt. Vernon,

N. Y. Washington, State of, Olympia, Wash. Western Auto Supply Co., Kansas City, Mo.

Wisconsin, Motor Vehicle Department

of, Madison, Wis.

U. S. GOVERNMENT

Agriculture, U. S. Department of, Office of Plant & Operations, Washington, D. C.

Foreign & Domestic Commerce, Bureau of, Electrical Division, Washington, D. C. (In principle.)

D. C. (In principle.)
Panama Canal, The, Transportation Division, Supply Department, Balboa Heights, Canal Zone. Veterans' Administration, Washington,

D. C.

War Department, Washington, D. C.

COMMERCIAL STANDARDS

CS No. Item 0-40. Commercial standards and their value to business (third edition). Clinical thermometers (second edition).

2-30. Monsticks.

3-40. Stoddard solvent (third edition)

4-29. Staple porcelain (all-clay) plumbing fixtures. 5-40. Pipe nipples; brass, copper, steel, and wrought

6-31. Wrought-iron pipe nipples (second edition). Superseded by CS5-40.

7-29. Standard weight malleable iron or steel screwed unions.

8-33. Gage blanks (second edition)

8-33. Gage blanks (second edition).
9-33. Builders' template hardware (second edition).
10-29. Brass pipe nipples. Superseded by CS5-40.
11-29. Regain of mercerized cotton yarns.
12-40. Fuel oils (fifth edition).
13-39. Dress patterns (second edition).
14-39. Boys' button-on waists, shirts, junior and poloshirts (made from woven fabrics) (second

edition).

15-29. Men's pajamas. Wall paper.

16-29. 17-32. Diamond core drill fittings (second edition). 18-29. Hickory golf shafts.

19-32. Foundry patterns of wood (second edition).
20-36. Staple vitreous china plumbing fixtures
(second edition).

21-39. Interchangeable ground-glass cocks, and stoppers (fourth edition).
22-40. Builders' hardware (nontemplate) (second

edition).

edition).
23-30. Feldspar.
24-30. Standard screw threads.
25-30. Special screw threads.
26-30. Aromatic red cedar closet lining.
27-36. Mirrors (second edition).

28-32. Cotton fabric tents, tarpaulins, and covers. 29-31. Staple seats for water-closet bowls.

30-31. Colors for sanitary ware. 31-38. Wood shingles (fourth edition).

32-31. Cotton cloth for rubber and pyroxylin coating. 33-32. Knit underwear (exclusive of rayon).

33-32. Kint underwear exensive or rayon.
34-31. Bag, case, and strap leather.
35-31. Plywood (hardwood and eastern red cedar).
36-33. Fourdrinier wire cioth (second edition).
37-31. Steel bone plates and screws.

38-32. Hospital rubber sheeting

Wool and part wool blankets (second edition). Surgeons' rubber gloves. Surgeons' latex gloves. 39-37. 40-32.

41-32. 42-35.

Fiber insulating board (second edition). Grading of sulphonated oils. 43-32.

44-32. Apple wraps. 45-40. Douglas fir plywood (domestic grades) (fourth

edition). 46-40. Hosiery lengths and sizes (third edition)

Marking of gold-filled and rolled-gold-plate articles other than watch cases. 47-34.

48-34. Domestic burners for Pennsylvania anthracite (underfeed type).

CS No. Item

49-34. Chip board, laminated chip board, and miscellaneous boards for bookbinding purposes.

50-34. Binders board for bookbinding and other purposes. 51-35. Marking articles made of silver in combination

with gold. 52-35. Mohair pile fabrics (100-percent mohair plain velvet, 100-percent mohair plain frieze, and 50-percent mohair plain frieze). 53-35. Colors and finishes for cast stone.

54-35. Mattresses for hospitals. 55-35. Mattresses for institutions. 56-36. Oak flooring.

57-40. Book cloths, buckrams, and impre fabrics for bookbinding purposes library bindings (second edition). buckrams, and impregnated

58-36. Woven elastic fabrics for use in overalls (overall elastic webbing).

59-39. Woven dress fabrics--testing and reporting (second edition).

60-36. Hardwood dimension lumber. Wood-slat venetian blinds. 61-37.

62-38. Colors for kitchen accessories. 63-38. Colors for bathroom accessories.

64-37. 65-38. Walnut veneers.

66-38. Wool and part-wool fabrics. 66-38. Marking of articles made wholly or in part of platinum.

67-38. Marking aritcles made of karat gold. 68-38. Liquid hypochlorite disinfectant, deodorant, and germicide. 69-38.

70-38.

Pine oil disinfectant. Coal tar disinfectant (emulsifying type). Cresylic disinfectants. Household insecticide (liquid spray type). 71-38.

72-38

73-38. Old growth Douglas fir standard stock doors. 74-39. Solid hardwood wall paneling. 75-39. Automatic mechnical draft oil burners. Hardwood interior trim and molding.

76-39. 77-40. 78-39. Sanitary cast-iron enameled ware. 78-39. Ground-and-polished lenses for sun glasses. 79-39. Blown, drawn, and dropped lenses for sun

glasses. 80-41. Electric direction signal systems other than semaphore type for commercial and other vehicles subject to special motor vehicle laws (after market).

81-41. Adverse-weather lamps for vehicles (after market).

82-41. Inner-controlled spotlamps for vehicles (after market).

83-41. Clearance, marker, and identification lamps for vehicles (after market).

84-41. Electric tail lamps for vehicles (after market). 85-41. Electric license-plate lamps for vehicles (after

market). 86-41. Electric stop lamps for vehicles (after market).

87-41. Red electric warning lanterns. 88-41. Liquid-burning flares. 89-40. Hardwood stair treads and risers.

Notice.—Those interested in commercial standards with a view toward accepting them as a basis of everyday practice 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.

