

CS5-40
Nipples, Pipe; Brass, Copper,
Steel, and Wrought-Iron

U. S. DEPARTMENT OF COMMERCE

HARRY L. HOPKINS, Secretary

NATIONAL BUREAU OF STANDARDS

LYMAN J. BRIGGS, Director

Bureau of Standards

AUG 16 1940

PIPE NIPPLES; BRASS, COPPER, STEEL
AND WROUGHT-IRON

COMMERCIAL STANDARD CS5-40

(Revision and Consolidation of CS5-29, CS6-31, and CS10-29)

Effective date for new production from May 10, 1940



A RECORDED VOLUNTARY
STANDARD OF THE TRADE

UNITED STATES
GOVERNMENT PRINTING OFFICE
WASHINGTON : 1940

PROMULGATION

of

COMMERCIAL STANDARD CS5-40

for

PIPE NIPPLES; BRASS, COPPER, STEEL, AND
WROUGHT-IRON

(Revision and Consolidation of CS5-29, CS6-31, and CS10-29)

On January 29, 1928, a joint conference of representative manufacturers, users, and general interests adopted recommended commercial standards for steel and wrought-iron pipe nipples, which were accepted in writing by those concerned and published as Commercial Standards CS5-29 and CS6-29, respectively. In 1931, upon recommendation of the standing committee, a revision of the latter was accepted and issued as CS6-31.

Similarly, as a result of a joint conference on December 14, 1928, followed by written acceptances, there was published Brass Pipe Nipples, Commercial Standard CS10-29.

On January 10, 1940, at the recommendation of the combined standing committees, a recommended revision and consolidation of the three commercial standards proposed by the National Association of Pipe Nipple Manufacturers, was circulated for acceptance. Those concerned have since accepted and approved for promulgation by the Department of Commerce, through the National Bureau of Standards, the revised standard as shown herein.

The standard is effective for new production from May 10, 1940.

Promulgation recommended.

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

Promulgated.

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

Promulgation approved.

Harry L. Hopkins,
Secretary of Commerce.

PIPE NIPPLES; BRASS, COPPER, STEEL, AND WROUGHT-IRON

COMMERCIAL STANDARD CS5-40

(Revision and Consolidation of CS5-29, CS6-31, and CS10-29)

PURPOSE

1. This standard is a basis for common understanding between manufacturers, distributors, and users of pipe nipples. Through the certification of quality according to the requirements of this standard a means is provided to safeguard the user and place competition on a fair basis to the mutual advantage of all concerned.

SCOPE

2. This standard covers steel, ferrous-alloy, and wrought-iron pipe nipples, black- and zinc-coated (hot-dip galvanized), in iron-pipe sizes from 1/8 to 12 inches, inclusive, of standard lengths; and brass and copper nipples in standard sizes from 1/8 to 6 inches, inclusive, of standard lengths.

3. Ferrous-iron pipe nipples are furnished in the following weights: standard weight, extra strong, and double extra strong.

4. Brass and copper pipe nipples are furnished in the following weights: standard weight and extra strong.

MATERIAL

5. *Steel and ferrous-alloy* pipe nipples shall be made only from tested new black- or zinc-coated (hot-dip galvanized), welded, and seamless steel and ferrous-alloy pipe conforming in all respects to the requirements of Federal Specification WW-P-403a or to ASTM¹ Specification A120-36 (for ordinary uses).

6. *Wrought-iron* pipe nipples shall be made only from tested new black- or zinc-coated (hot-dip galvanized) welded wrought-iron pipe conforming in all respects to the requirements of Federal Specification WW-P-441a or ASTM Specification A72-39.

7. *Brass* pipe nipples shall be made only from tested new seamless brass pipe conforming in all respects to the requirements of Federal Specification WW-P-351 or to ASTM Specification B43-39T. The chemical compositions of the three grades covered by Federal Specification WW-P-351 are given for convenience in table 1.

TABLE 1.—Chemical composition of brass pipe (WW-P-351)

Grade	Trade name	Copper	Zinc	Lead	Iron
		Percent		Percent (max.)	Percent (max.)
A-----	Red brass-----	83 to 86 ...	Remainder-----	0.06	0.05
B-----	High brass-----	65 to 68do.....	.80	.07
C-----	Muntz metal-----	59 to 68do.....	.80	.07

NOTE.—ASTM Spec. B43-39T covers standard sizes in 4 compositions, including admiralty metal—70 to 73 percent of copper.

¹ American Society for Testing Materials, 260 S. Broad St., Philadelphia, Pa.

8. *Copper* pipe nipples shall be made only from tested new seamless copper pipe conforming in all respects to the requirements of Federal Specification WW-P-377, or to ASTM Specification B42-39T.

GENERAL

9. Pipe nipples shall be threaded on both ends with standard taper pipe threads conforming to Federal Specification GGG-P-351 Pipe-Threads; Standard, or to American Standard for Pipe Threads, published by the American Society of Mechanical Engineers and the American Standards Association, B2-1919.

10. Pipe nipples shall be chamfered on the outside at an angle of 25° to 45° to the central axis. Ends shall be cut square to the central axis. All burrs on the inside shall be removed.

11. A tolerance of plus or minus $\frac{1}{16}$ inch in length is permitted.

DETAIL REQUIREMENTS

12. Ferrous pipe nipples shall be of the respective dimensions given in tables 2, 3, 4, and 5. Special sizes and lengths may be specified when required. Special lengths shall not vary more than $\frac{1}{16}$ inch over or under the lengths required by the purchase order.

TABLE 2.—*Ferrous pipe nipples, standard weight, black, iron-pipe sizes and lengths*

Iron-pipe size	Lengths				
	Close	Special short	Short	Long	Extra long
	<i>Inches</i>	<i>Inches</i>	<i>Inches</i>	<i>Inches</i>	<i>Inches</i>
$\frac{1}{8}$	$\frac{3}{4}$	1	$1\frac{1}{2}$	2, $2\frac{1}{2}$, 3, $3\frac{1}{2}$	4, $4\frac{1}{2}$, 5, $5\frac{1}{2}$, 6, 7, 8, 9, 10, 11, 12
$\frac{1}{4}$	$\frac{1}{2}$	$1\frac{1}{4}$	$1\frac{1}{2}$	2, $2\frac{1}{2}$, 3, $3\frac{1}{2}$	4, $4\frac{1}{2}$, 5, $5\frac{1}{2}$, 6, 7, 8, 9, 10, 11, 12
$\frac{3}{8}$	1	----	$1\frac{1}{2}$	2, $2\frac{1}{2}$, 3, $3\frac{1}{2}$	4, $4\frac{1}{2}$, 5, $5\frac{1}{2}$, 6, 7, 8, 9, 10, 11, 12
$\frac{1}{2}$	$1\frac{1}{8}$	----	$1\frac{1}{2}$	2, $2\frac{1}{2}$, 3, $3\frac{1}{2}$	4, $4\frac{1}{2}$, 5, $5\frac{1}{2}$, 6, 7, 8, 9, 10, 11, 12
$\frac{3}{4}$	$1\frac{3}{8}$	$1\frac{1}{2}$	2	$2\frac{1}{2}$, 3, $3\frac{1}{2}$, 4	$4\frac{1}{2}$, 5, $5\frac{1}{2}$, 6, 7, 8, 9, 10, 11, 12
1	$1\frac{1}{2}$	----	2	$2\frac{1}{2}$, 3, $3\frac{1}{2}$, 4	$4\frac{1}{2}$, 5, $5\frac{1}{2}$, 6, 7, 8, 9, 10, 11, 12
$1\frac{1}{4}$	$1\frac{5}{8}$	2	$2\frac{1}{2}$	3, $3\frac{1}{2}$, 4, $4\frac{1}{2}$	5, $5\frac{1}{2}$, 6, 7, 8, 9, 10, 11, 12
$1\frac{1}{2}$	$1\frac{3}{4}$	2	$2\frac{1}{2}$	3, $3\frac{1}{2}$, 4, $4\frac{1}{2}$	5, $5\frac{1}{2}$, 6, 7, 8, 9, 10, 11, 12
2	2	----	$2\frac{1}{2}$	3, $3\frac{1}{2}$, 4, $4\frac{1}{2}$	5, $5\frac{1}{2}$, 6, 7, 8, 9, 10, 11, 12
$2\frac{1}{2}$	$2\frac{1}{2}$	----	3	$3\frac{1}{2}$, 4, $4\frac{1}{2}$, 5	$5\frac{1}{2}$, 6, 7, 8, 9, 10, 11, 12
3	$2\frac{5}{8}$	----	3	$3\frac{1}{2}$, 4, $4\frac{1}{2}$, 5	$5\frac{1}{2}$, 6, 7, 8, 9, 10, 11, 12
$3\frac{1}{2}$	$2\frac{3}{4}$	----	4	$4\frac{1}{2}$, 5, $5\frac{1}{2}$, 6	7, 8, 9, 10, 11, 12
4	$2\frac{7}{8}$	----	4	$4\frac{1}{2}$, 5, $5\frac{1}{2}$, 6	7, 8, 9, 10, 11, 12
5	3	4	$4\frac{1}{2}$	5, $5\frac{1}{2}$, 6	7, 8, 9, 10, 11, 12
6	$3\frac{1}{8}$	4	$4\frac{1}{2}$	5, $5\frac{1}{2}$, 6	7, 8, 9, 10, 11, 12
8	$3\frac{1}{2}$	----	5	6, 7, 8	10, 12
10	$3\frac{3}{8}$	----	5	6, 7, 8	10, 12
12	$4\frac{1}{2}$	----	6	8	10, 12

TABLE 3.—*Ferrous pipe nipples, extra strong, black, iron-pipe sizes and lengths*

Iron-pipe size	Lengths				
	Close	Special short	Short	Long	Extra long
$\frac{1}{8}$	<i>Inches</i> $\frac{3}{4}$	<i>Inches</i> ----	<i>Inches</i> $1\frac{1}{2}$	<i>Inches</i> $2, 2\frac{1}{2}, 3, 3\frac{1}{2}$	<i>Inches</i> 4, 5, 6
$\frac{1}{4}$	$\frac{7}{8}$	----	$1\frac{1}{2}$	$2, 2\frac{1}{2}, 3, 3\frac{1}{2}$	4, 5, 6
$\frac{3}{8}$	1	----	$1\frac{1}{2}$	$2, 2\frac{1}{2}, 3, 3\frac{1}{2}$	4, $4\frac{1}{2}, 5, 6$
$\frac{1}{2}$	$1\frac{1}{8}$	----	$1\frac{1}{2}$	$2, 2\frac{1}{2}, 3, 3\frac{1}{2}$	4, $4\frac{1}{2}, 5, 6$
$\frac{3}{4}$	$1\frac{3}{8}$	$1\frac{1}{2}$	2	$2\frac{1}{2}, 3, 3\frac{1}{2}, 4$	$4\frac{1}{2}, 5, 6$
1	$1\frac{1}{2}$	----	2	$2\frac{1}{2}, 3, 3\frac{1}{2}, 4$	$4\frac{1}{2}, 5, 6$
$1\frac{1}{4}$	$1\frac{5}{8}$	2	$2\frac{1}{2}$	$3, 3\frac{1}{2}, 4, 4\frac{1}{2}$	5, 6
$1\frac{1}{2}$	$1\frac{3}{4}$	2	$2\frac{1}{2}$	$3, 3\frac{1}{2}, 4, 4\frac{1}{2}$	5, 6
2	2	----	$2\frac{1}{2}$	$3, 3\frac{1}{2}, 4, 4\frac{1}{2}$	5, 6
$2\frac{1}{2}$	$2\frac{1}{2}$	----	3	$3\frac{1}{2}, 4, 4\frac{1}{2}, 5$	6
3	$2\frac{5}{8}$	----	3	$3\frac{1}{2}, 4, 4\frac{1}{2}, 5$	6
$3\frac{1}{2}$	$2\frac{3}{4}$	----	4	5, 6	-----
4	$2\frac{7}{8}$	----	4	5, 6	-----

TABLE 4.—*Ferrous pipe nipples, standard weight, zinc-coated, iron-pipe sizes and lengths*

Iron-pipe size	Lengths				
	Close	Special short	Short	Long	Extra long
$\frac{1}{8}$	<i>Inches</i> $\frac{3}{4}$	<i>Inches</i> 1	<i>Inches</i> $1\frac{1}{2}$	<i>Inches</i> $2, 2\frac{1}{2}, 3, 3\frac{1}{2}$	<i>Inches</i> 4, 5, 6
$\frac{1}{4}$	$\frac{7}{8}$	----	$1\frac{1}{2}$	$2, 2\frac{1}{2}, 3, 3\frac{1}{2}$	4, 5, 6
$\frac{3}{8}$	1	----	$1\frac{1}{2}$	$2, 2\frac{1}{2}, 3, 3\frac{1}{2}$	4, $4\frac{1}{2}, 5, 5\frac{1}{2}, 6, 8, 10, 12$
$\frac{1}{2}$	$1\frac{1}{8}$	----	$1\frac{1}{2}$	$2, 2\frac{1}{2}, 3, 3\frac{1}{2}$	4, $4\frac{1}{2}, 5, 5\frac{1}{2}, 6, 8, 10, 12$
$\frac{3}{4}$	$1\frac{3}{8}$	$1\frac{1}{2}$	2	$2\frac{1}{2}, 3, 3\frac{1}{2}, 4$	$4\frac{1}{2}, 5, 5\frac{1}{2}, 6, 8, 10, 12$
1	$1\frac{1}{2}$	----	2	$2\frac{1}{2}, 3, 3\frac{1}{2}, 4$	$4\frac{1}{2}, 5, 5\frac{1}{2}, 6, 8, 10, 12$
$1\frac{1}{4}$	$1\frac{5}{8}$	2	$2\frac{1}{2}$	$3, 3\frac{1}{2}, 4, 4\frac{1}{2}$	$5, 5\frac{1}{2}, 6, 8, 10, 12$
$1\frac{1}{2}$	$1\frac{3}{4}$	2	$2\frac{1}{2}$	$3, 3\frac{1}{2}, 4, 4\frac{1}{2}$	$5, 5\frac{1}{2}, 6, 8, 10, 12$
2	2	----	$2\frac{1}{2}$	$3, 3\frac{1}{2}, 4, 4\frac{1}{2}$	$5, 5\frac{1}{2}, 6, 8, 10, 12$
$2\frac{1}{2}$	$2\frac{1}{2}$	----	3	$3\frac{1}{2}, 4, 5$	6, 8, 10, 12
3	$2\frac{5}{8}$	----	3	$3\frac{1}{2}, 4, 4\frac{1}{2}, 5$	6
$3\frac{1}{2}$	$2\frac{3}{4}$	----	4	5, 6	-----
4	$2\frac{7}{8}$	----	4	$4\frac{1}{2}, 5, 5\frac{1}{2}, 6$	-----

TABLE 5.—*Ferrous pipe nipples, right and left standard weight and extra strong, black, iron-pipe sizes and lengths*

Iron-pipe size	Lengths		
	Short	Long	Extra long
$\frac{1}{8}$	<i>Inches</i> ----	<i>Inches</i> -----	<i>Inches</i> -----
$\frac{1}{4}$	----	-----	-----
$\frac{3}{8}$	----	2, 3	4, 5, 6
$\frac{1}{2}$	----	$2, 2\frac{1}{2}, 3, 3\frac{1}{2}$	4, 5, 6
$\frac{3}{4}$	2	$2\frac{1}{2}, 3, 3\frac{1}{2}, 4$	5, 6
1	2	$2\frac{1}{2}, 3, 3\frac{1}{2}, 4$	5, 6
$1\frac{1}{4}$	$2\frac{1}{2}$	$3, 3\frac{1}{2}, 4, 4\frac{1}{2}$	5, 6
$1\frac{1}{2}$	$2\frac{1}{2}$	$3, 3\frac{1}{2}, 4, 4\frac{1}{2}$	5, 6
2	$2\frac{1}{2}$	$3, 3\frac{1}{2}, 4, 4\frac{1}{2}$	5, 6

13. Brass and copper pipe nipples shall be of the respective dimensions given in tables 6, 7, and 8. Special sizes and lengths may be specified when required. Special lengths shall not vary more than $\frac{1}{16}$ inch over or under the lengths required by the purchase order.

TABLE 6.—Brass and copper pipe nipples, standard weight, standard pipe sizes and lengths

Stand- ard pipe size	Lengths			
	Close	Special short	Short	Long
	<i>Inches</i>	<i>Inches</i>	<i>Inches</i>	<i>Inches</i>
$\frac{1}{8}$	$\frac{3}{4}$	1	$1\frac{1}{2}$	2, $2\frac{1}{2}$, 3, $3\frac{1}{2}$, 4, $4\frac{1}{2}$, 5, $5\frac{1}{2}$, 6
$\frac{1}{4}$	$\frac{7}{8}$	$1\frac{1}{4}$	$1\frac{1}{2}$	2, $2\frac{1}{2}$, 3, $3\frac{1}{2}$, 4, $4\frac{1}{2}$, 5, $5\frac{1}{2}$, 6
$\frac{3}{8}$	1	----	$1\frac{1}{2}$	2, $2\frac{1}{2}$, 3, $3\frac{1}{2}$, 4, $4\frac{1}{2}$, 5, $5\frac{1}{2}$, 6
$\frac{1}{2}$	$1\frac{1}{8}$	----	$1\frac{1}{2}$	2, $2\frac{1}{2}$, 3, $3\frac{1}{2}$, 4, $4\frac{1}{2}$, 5, $5\frac{1}{2}$, 6
$\frac{3}{4}$	$1\frac{3}{8}$	$1\frac{1}{2}$	2	$2\frac{1}{2}$, 3, $3\frac{1}{2}$, 4, $4\frac{1}{2}$, 5, $5\frac{1}{2}$, 6
1	$1\frac{1}{2}$	----	2	$2\frac{1}{2}$, 3, $3\frac{1}{2}$, 4, $4\frac{1}{2}$, 5, $5\frac{1}{2}$, 6
$1\frac{1}{4}$	$1\frac{5}{8}$	2	$2\frac{1}{2}$	3, $3\frac{1}{2}$, 4, $4\frac{1}{2}$, 5, $5\frac{1}{2}$, 6
$1\frac{1}{2}$	$1\frac{3}{4}$	2	$2\frac{1}{2}$	3, $3\frac{1}{2}$, 4, $4\frac{1}{2}$, 5, $5\frac{1}{2}$, 6
2	2	----	$2\frac{1}{2}$	3, $3\frac{1}{2}$, 4, $4\frac{1}{2}$, 5, $5\frac{1}{2}$, 6
$2\frac{1}{2}$	$2\frac{1}{2}$	----	3	$3\frac{1}{2}$, 4, $4\frac{1}{2}$, 5, $5\frac{1}{2}$, 6
3	$2\frac{5}{8}$	----	3	$3\frac{1}{2}$, 4, $4\frac{1}{2}$, 5, $5\frac{1}{2}$, 6
4	$2\frac{7}{8}$	----	4	$4\frac{1}{2}$, 5, $5\frac{1}{2}$, 6
5	3	4	$4\frac{1}{2}$	5, $5\frac{1}{2}$, 6
6	$3\frac{1}{8}$	4	$4\frac{1}{2}$	5, $5\frac{1}{2}$, 6

TABLE 7.—Brass and copper pipe nipples, extra strong, standard pipe sizes and lengths

Stand- ard pipe size	Lengths		
	Close	Short	Long
	<i>Inches</i>	<i>Inches</i>	<i>Inches</i>
$\frac{1}{8}$	$\frac{3}{4}$	----	2, 3, 4, 5, 6
$\frac{1}{4}$	$\frac{7}{8}$	----	2, 3, 4, 5, 6
$\frac{3}{8}$	1	----	2, 3, 4, 5, 6
$\frac{1}{2}$	$1\frac{1}{8}$	----	2, 3, 4, 5
$\frac{3}{4}$	$1\frac{3}{8}$	2	3, 4, 5, 6
1	$1\frac{1}{2}$	2	3, 4, 5, 6
$1\frac{1}{4}$	$1\frac{5}{8}$	----	3, 4, 5, 6
$1\frac{1}{2}$	$1\frac{3}{4}$	----	3, 4, 5, 6
2	2	----	3, 4, 5, 6

TABLE 8.—Brass and copper pipe nipples, right and left, standard weight, standard pipe sizes and lengths

Stand- ard pipe size	Lengths	
	Short	Long
	<i>Inches</i>	<i>Inches</i>
$\frac{3}{8}$	----	2, 3, 4, 5, 6
$\frac{1}{2}$	----	2, 3, 4, 5, 6
$\frac{3}{4}$	2	3, 4, 5, 6
1	2	3, 4, 5, 6
$1\frac{1}{4}$	----	3, 4, 5, 6
$1\frac{1}{2}$	----	3, 4, 5, 6
2	----	3, 4, 5, 6

PACKAGING

14. The standard assortments of ferrous pipe nipples, black- and zinc-coated (hot-dip galvanized), including the total number contained in a carton, are given in table 9.

TABLE 9.—Standard assortments of standard weight black or galvanized ferrous nipples

[Number contained in carton]

Iron- pipe size	Close	Length in inches										Total	
		Short	Long					Extra long					
			1½	2	2½	3	3½	4	4½	5	5½		6
¼	20	10	15	10	10	5	10	5	5	5	5	100	
⅝	20	10	15	10	10	5	10	5	5	5	5	100	
½	20	10	15	10	10	5	10	5	5	5	5	100	
⅜	20	10	15	10	10	5	10	5	5	5	5	100	
1	15	--	12	5	12	3	12	3	5	3	5	75	

15. The standard assortments of brass and copper pipe nipples including the total number contained in a carton are given in table 10:

TABLE 10.—Standard assortments of standard weight brass and copper pipe nipples

[Number contained in carton]

Standard pipe size	Close	Length in inches										Total
		1½	2	2½	3	3½	4	4½	5	5½	6	
¾	20	10	15	10	10	5	10	5	5	5	5	100
½	20	10	15	10	10	5	10	5	5	5	5	100
¾	20	10	15	10	10	5	10	5	5	5	5	100
1	15	--	12	5	12	3	12	3	5	3	5	75
¾	12	5	5	5	5	5	5	2	2	2	2	50
½	12	5	5	5	5	5	5	2	2	2	2	50
¾	12	5	5	5	5	5	5	2	2	2	2	50
1	10	--	10	5	5	3	5	2	4	2	4	50

LABELING

16. Cartons containing standard assortments of lengths, as shown in tables 9 and 10, shall be labeled to show (1) the total number in the carton, (2) the size, (3) the kind of metal, and (4) the words "Standard Assortment", for example "100 — ¾-inch Galvanized Steel Pipe Nipples—Standard Assortment." Cartons containing other than standard assortments of lengths shall be labeled to give the same information, except that the words "Standard Assortment" shall be replaced by the number and length of the contents, for example, "100 — ¾- × 2-inch Galvanized Steel Pipe Nipples" or "100 — ¾-inch Black Wrought-Iron Pipe Nipples—Lengths 25—1½", 50—2", 25—2½".

17. In order that the consumer may become more familiar with standard pipe nipples and may have confidence in them, it is recommended that pipe nipples conforming to the requirements of this standard be accompanied by a certificate, tag, sticker, card, or other label incorporating the following wording:

Guaranteed pipe nipples conforming to CS5-40. Made from new, full-weight, mill-tested pipe.

(Company or organization)

EFFECTIVE DATE

The standard is effective for new production from May 10, 1940.

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.

GEORGE P. CARTWRIGHT (chairman), Thomas Devlin Manufacturing Co., Burlington, N. J.
 A. M. HOUSER, Crane Co., 836 S. Michigan Ave., Chicago, Ill.
 A. G. GETTY, Standard Sanitary Manufacturing Co., 312 Galveston Ave., N. S., Pittsburgh, Pa.
 J. LESTER WILLIAMS, Chicago Nipple Manufacturing Co., 1966 Southport Ave., Chicago, Ill.
 D. W. HOWE, Ware Coupling & Nipple Co., Ware, Mass.
 R. B. SHOE, Shoe-Letcher Co., 214 Provost St., Jersey City, N. J.
 JAMES A. MESSER, James A. Messer Co., Inc., 1206 K St., N. W., Washington, D. C.
 W. J. SPILLANE, James B. Clow and Sons, Inc., 201 N. Talman Ave., Chicago, Ill.
 W. E. MCCOLLUM, Central Supply Association, 228 N. LaSalle St., Chicago, Ill.
 JERE L. MURPHY, National Association of Master Plumbers, 340 E. 44th St., New York, N. Y.
 A. V. HUTCHINSON, American Society of Heating and Ventilating Engineers, 51 Madison Avenue, New York, N. Y.
 THOMAS G. ENGLISH, City of Pittsburgh, Pittsburgh, Pa.
 THOMAS J. LEE, American Society of Sanitary Engineering, 1421 Boyle St., N. W., Pittsburgh, Pa.

HISTORY OF PROJECT

General Conference.—On June 29, 1928, a general conference of representative manufacturers, users, and general interests adopted commercial standards for steel and wrought-iron pipe nipples, which were later accepted by those directly concerned and published as Commercial Standards CS5-29 and CS6-29, respectively. These two standards were effective for new production from January 1, 1929.

Similarly, on December 14, 1928, a general conference adopted a commercial standard for brass pipe nipples, which subsequently was accepted by those directly concerned and published as Commercial Standard CS10-29, effective for new production from July 1, 1929.

The chief purpose of these standards was to draw a clear line of demarcation between pipe nipples made from new, tested pipe and those made from used or second-hand pipe or from crop ends.

First revision.—On October 27, 1930, in accordance with the recommendations of the standing committee, a Proposed Revision of Wrought Iron Pipe Nipples, CS6-29, was circulated to the industry for written acceptance. This revision included the definition for wrought iron adopted by the ASTM, as well as changes in actual thickness and inside diameters of pipe on the basis of the density of wrought iron instead of steel, as formerly. The revised commercial standard was accepted by those concerned and published as Commercial Standard CS6-31, effective for new production and clearance of existing stocks from May 1, 1931.

Second revision and consolidation.—In order to bring these standards up to date and simplify reference thereto, the National Association of Pipe Nipple Manufacturers recommended the revision and consolidation of the three commercial standards. Following endorsement of this proposal by the standing committee, the recommended revision and consolidation was circulated on January 10, 1940, to the trade for written acceptances. The establishment of the revised standard was announced on April 10, 1940, effective for new production 30 days from the announcement.

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.

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 CS5-40 as our standard of practice in the

Production ¹

Distribution ¹

Use ¹

of pipe nipples.

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

Company

(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, 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 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 these grading rules as their standard of practice in the production, distribution, and use of pipe nipples. 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

American College of Surgeons, Chicago, Ill.	Manufacturers Standardization Society of the Valve & Fittings Industry, New York, N. Y.
American Institute of Wholesale Plumbing & Heating Supply Associations, Battle Creek, Mich.	National Association of Pipe Nipple Manufacturers, Pottstown, Pa.
American Specification Institute, Chicago, Ill.	Steel Heating Boiler Institute, Middletown, Pa.
Denver Master Plumbers Association, Denver, Colo.	Tennessee, Associated Master Plumbers of, Memphis, Tenn.
Heating, Piping & Air Conditioning Contractors National Association, New York, N. Y.	Virginia Associated Plumbing & Heating Contractors, Inc., Richmond, Va.

FIRMS

Acheson Manufacturing Co., Rankin, Pa.	Brass Products Co., Chicago, Ill.
Aitchison-Richmond Supply Co., St. Joseph, Mo.	Brazer, Clarence W., New York, N. Y.
Allen Co., Inc., Walter H., Dallas, Tex.	Bridgeport Plumbing Supply Co., Inc., Bridgeport, Conn.
Allen Manufacturing Co., W. D., Chicago, Ill.	Brust & Brust, Milwaukee, Wis.
American Brass Co., The, Waterbury, Conn. (In principle.)	Buffalo Nipple & Machine Co., Buffalo, N. Y.
American Pipe & Steel Corporation, Alhambra, Calif.	Burnham Plumbing Co., Inc., San Francisco, Calif.
Appley Brothers & Whittaker Co., Harrisburg, Pa.	Byers Co., A. M., Pittsburgh, Pa.
Atlantic Pipe & Supply Co., Inc., Boston, Mass.	Byrd Plumbers' Supply Co., The, Cleveland, Ohio.
Attwood Brass Works, Grand Rapids, Mich.	Canfield Supply Co., Kingston, N. Y.
Auchinachie & Sons, Binghamton, N. Y.	Capital City Supply Co., Charleston, W. Va.
Auler, Jensen & Brown, Oshkosh, Wis.	Capitol Manufacturing & Supply Co., The, Columbus, Ohio.
Bailey & Son, H. P., Plymouth, Mass.	Capitol Supply Co., Lincoln, Nebr.
Baker Plumbing Co., Inc., Beaumont, Tex.	Central Supply Co., Little Rock, Ark.
Baker Speciality & Supply Co., Logansport, Ind.	Central Tube Co., Pittsburgh, Pa.
Barrett Supply Co., Augusta, Ga.	Chase Brass & Copper Co., Inc., Waterbury, Conn.
Bayonne Nipple Co., Bayonne, N. J.	Chenoweth, James, Philippi, W. Va.
Bellingham Plumbing Supply Co., Bellingham, Wash.	Chicago Nipple Manufacturing Co., Chicago, Ill.
Biggs-Kurtz Hardware Co., Grand Junction, Colo.	Child, Harry Charles, Sayre, Pa.
Vilz & Son, William A., Spring Lake, Mich.	Children's Country Home, Westfield, N. J.
Blue Ridge Pipe & Nipple Co., Greenstone, (Adams Co.) Pa.	Clow & Sons, James B., Chicago, Ill.
Bond Supply Co., Kalamazoo, Mich.	Cohoes Rolling Mill Co., Cohoes, N. Y.
Boston Woven Hose & Rubber Co., Boston, Mass., and Cambridge, Mass.	Columbia Pipe & Supply Co., Chicago, Ill.
	Connery Construction Co., Philadelphia, Pa.
	Continental Nipple Manufacturing Co., Chicago, Ill.
	Cotter Co., J. J., Springfield, Mass.

- County Seat Plumbing Supply Co., Inc., White Plains, N. Y.
 Crane Co., Chicago, Ill.
 Cressman Co., N. C., Philadelphia, Pa.
 Dalziel Plumbing Supplies, San Francisco, Calif.
 Danser Manufacturing & Supply Co., The, Weston, W. Va., and Clarksburg, W. Va.
 Detroit Nipple Works, Detroit, Mich.
 Delvin Manufacturing Co., Thomas, Burlington, N. J.
 Dickinson Plumbing & Heating Co., Willisca, Iowa.
 Dietel, George T., Buffalo, N. Y.
 District of Columbia, Government of the, Washington, D. C.
 Dodge & Morrison, New York, N. Y.
 Dover Boiler Works, Dover, N. J.
 Drake, Inc., George H., Buffalo, N. Y.
 Dravo Corporation, Pittsburgh, Pa.
 Dubuque Supply Co., R. A., St. Louis, Mo.
 Duffy & Co., Edward W., Detroit, Mich.
 Duluth Plumbing Supplies Co., Duluth, Minn.
 Eastern Plumbing Supply Co., Inc., The, Hartford, Conn.
 Eastman Kodak Co., Kodak Park Works, Rochester, N. Y.
 Egyptian Supply Co., Christopher, Ill.
 Ellis & Sons, Inc., Sol, Chicago, Ill.
 Ellsworth Pipe & Supply Co., Milwaukee, Wis.
 Emch Machine & Plumbing Supply Co., Nick, Toledo, Ohio.
 English, Thos. G., Pittsburgh, Pa.
 Enterprise Galvanizing Co., Philadelphia, Pa. (In principle.)
 Fall River Steam & Gas Pipe Co., Fall River, Mass.
 Farnan Brass Works Co., The, Cleveland, Ohio.
 Federal Pipe & Supply Co., The, Toledo, Ohio.
 Ferguson Supply Co., Grand Rapids, Mich.
 Fitz-Gibbon, T. David, Norfolk, Va. (In principle.)
 Flagg & Co., Inc., Stanley G., Philadelphia, Pa.
 Flannagan, Eric G., Henderson, N. C.
 Florence Pipe Foundry & Machine Co., Philadelphia, Pa.
 Ford Brothers & Co., Philadelphia, Pa.
 Freeport Plumbing & Heating Engineers, Freeport, N. Y.
 Frick & Lindsay Co., Pittsburgh, Pa.
 Goodrich Co., The B. F., Akron, Ohio.
 Grabler Manufacturing Co., The, Cleveland, Ohio.
 Grady Plumbing Co., Carbondale, Ill.
 Gray Co., Edmund A., Los Angeles, Calif.
 Grinnell Co., Inc., Providence, R. I.
 Groeniger, William C., Columbus, Ohio.
 Harper & West, Boston, Mass.
 Hellenthal Plumbing & Heating Co., Seattle, Wash.
 Hendy Iron Works, Joshua, Sunnyvale, Calif. (In principle.)
 Hess Co., Charles, New York, N. Y.
 Holsman & Holsman, Chicago, Ill.
 Home-Plumbing & Heating Co., Twin Falls, Idaho.
 Hood River Plumbing Co., Hood River, Oreg.
 Hoppe, M. F., Washington, D. C.
 Hospital Bureau of Standards & Supplies, Inc., New York, N. Y.
 Hubbard Co., The S. B., Jacksonville, Fla.
 Hughes Heating & Plumbing Co., Minneapolis, Minn.
 Hughes Supply Co., The, Mansfield, Ohio.
 Hunting Co., The, Rochester, N. Y. (In principle.)
 Ideal Supply Co., Somerville, Mass.
 Illinois Malleable Iron Co., Chicago, Ill.
 Inland States Testing Laboratory, Dubuque, Iowa. (In principle.)
 Iroquois Pipe Products Supply Co., Inc., Buffalo, N. Y.
 Jacobs Plumbing Supply Corporation, C. & S., Brooklyn, N. Y.
 Jahns Supply Co., Fort Worth, Tex.
 Jarecki Manufacturing Co., Erie, Pa.
 Johns Hopkins Hospital, The, Baltimore, Md.
 Johnson Plumbing Co., Texarkana, Ark.
 Johnson Hardware Co. (Johnson Supply Co.), Clarksburg, W. Va.
 Jones—Plumbing & Heating, W. H., Conshohocken, Pa.
 Jones Kay Co., Inc., Pendleton, Oreg.
 Kalispell Mercantile Co., Kalispell, Mont.
 Kansas City Plumbing & Heating Co., Kansas City, Mo.
 Keich & O'Brien, Warren, Ohio.
 Kiefaber Co., W. H., Dayton, Ohio.
 Kintz Plumbing Shop, S. F., Tacoma, Wash.
 Kleinman, Russell F., Philadelphia, Pa.
 Knapp Supply Co., The, Muncie, Ind.
 Koller Brothers Co., The, Cleveland, Ohio.
 LaCrosse Plumbing Supply Co., LaCrosse, Wis.
 Lansdale Nipple Co., Lansdale, Pa.
 Larkin Packer Co., Inc., St. Louis, Mo.
 Lebanon Plumbing Supply Co., Lebanon, Pa.
 Leighton Supply Co., Fort Dodge, Iowa.
 Lenox Hill Hospital, New York, N. Y.
 Levine, Samuel, New York, N. Y.
 Lloyd's Register of Shipping, New York, N. Y. (In principle.)
 Lobsitz Hardware Co., The, Perry, Okla.
 Love Brothers, Inc., Aurora, Ill.

- Malleable Iron Fittings Co., Branford, Conn.
 Malone Plumbing Supply Co., Pittsburgh, Pa.
 Mann & Co., Hutchinson, Kans. (In principle.)
 Martin & Son, A. Oscar, Doylestown, Pa. (In principle.)
 May Supply Co., Anderson, Ind.
 McArdle & Cooney, Inc., Philadelphia, Pa.
 McGowan Plumbing Co., Memphis, Tenn.
 McKenna Brothers, Westbury, N. Y.
 Mechanical Construction Corporation, Hibbing, Minn.
 Medina Stamping & Machine Co., Inc., Medina, N. Y.
 Merkel Brothers Co., The, Cincinnati, Ohio.
 Messer Co., Inc., James A., Washington, D. C.
 Meyer, F. & J., New York, N. Y.
 Michigan Steel Tube Products Co., Detroit, Mich.
 Miller Supply Co., Chicago, Ill.
 Mineola Plumbing Supply Co., Inc., Mineola, N. Y.
 Mission Pipe & Supply Co., San Diego, Calif.
 Missouri Pipe Fittings Co., St. Louis, Mo.
 Mono & Co., Inc., P. G., New London, Conn.
 Monroe Plumbing & Heating Supply Co., Rochester, N. Y.
 Montague Pipe & Steel Co., San Francisco, Calif.
 Montgomery Ward & Co., Inc., Chicago, Ill.
 Moore Dry Dock Co., Oakland, Calif.
 Morrison Supply Co., Ft. Worth, Tex.
 Mott Co. of Pennsylvania, Philadelphia, Pa.
 Murphy, Inc., J. L., New York, N. Y.
 Murpy Supply Co., Green Bay, Wis.
 Muskegon Boiler Works, Muskegon, Mich.
 National Lead Co., New York, N. Y.
 National Supply Co., The Pittsburgh, Pa.
 Nelson, Albert L., St. Louis, Mo.
 Nelson Co., Detroit, Mich.
 Nelson Co., N. O., St. Louis, Mo.
 New Jersey Engineering & Supply Co., Passaic, N. J.
 New York Brass Foundry Co., New York, N. Y.
 Neyland Plumbing Supply Corporation, Passaic, N. J.
 Norvelt-Wilden Supply Co., Beaumont, Tex.
 Nye Tool & Machine Works, The, Chicago, Ill.
 Ohio Fuel Gas Co., The, Columbus, Ohio.
 Ohio Pipe & Supply Co., Cleveland, Ohio.
 Orange County Plumbing Supply Co., Middletown, N. Y.
 Orange Memorial Hospital, Orange, N. J.
 O'Rourke Plumbing & Heating Co., W. R., Walla Walla, Wash.
 Pacific Nipple Co., San Francisco, Calif.
 Palo Alto Plumbing Co., Palo Alto, Calif.
 Peerless Colorado Co., Denver, Colo.
 Peerless Missouri Co., St. Louis, Mo.
 Pehrson, G. A., Spokane, Wash.
 Peninsular Supply Co., Fort Lauderdale, Fla.
 Pennsylvania Engineering Works, New Castle, Pa.
 Pennsylvania Hospital, Philadelphia, Pa.
 Philadelphia Steel & Iron Co., Conshohocken, Pa.
 Pittsburgh-Des Moines Steel Co., Pittsburgh, Pa.
 Pittsburgh Piping & Equipment Co., Pittsburgh, Pa.
 Pittsburgh Valve & Fittings Corporation, Barberton, Ohio.
 Plumbers & Factory Supplies, Inc., Columbus, Ohio.
 Plumbers' Supply Co., New Bedford, Mass.
 Plumbing-Heating-Metal Works, Palmetto, Fla.
 Pollock Co., The William B., Youngstown, Ohio.
 Pottstown Pipe Products Co., Pottstown, Pa.
 Praetorius Sanitary Plumbing Co., Wm. P., Grand Rapids, Mich.
 Queen City Nipple Co., Cincinnati, Ohio.
 Rayl Co., The, Detroit, Mich.
 Republic Pipe & Supply Corporation, Roxbury, Mass.
 Richardson Brass Co., Edro, Baltimore, Md.
 Rockford Plumbing Supply Co., Rockford, Ill.
 Roe, Inc., William S., Newark, N. J.
 Rom Co., The Robert, Milwaukee, Wis.
 Ross-Willoughby Co., The, Columbus, Ohio.
 Sacramento Pipe Works, Sacramento, Calif.
 St. John's Hospital, Brooklyn, N. Y.
 Salina Supply Co., The, Salina, Kans.
 Santa Monica Plumbing Supply Co., Santa Monica, Calif.
 Sarco Co., Inc., New York, N. Y.
 Sawhill Manufacturing Co., The, Bridgeville, Pa. (In principle.)
 Schaffer Co., E. G., Washington, D. C.
 Schnitzer Alloy Products Co., Elizabeth, N. J.
 Schoeppe, Edward, Philadelphia, Pa.
 Scranton Pump Manufacturing Co., Scranton, Pa.
 Seamless Steel Equipment Corporation, New York, N. Y. (In principle.)

- Sears, Roebuck & Co., Chicago, Ill.
 Seashore Supply Co., Atlantic City, N. J.
 Shapiro Plumbing Supply Co., Inc., A., New York, N. Y.
 Shaw Kendall Engineering Co., The, Toledo, Ohio.
 Sherman Manufacturing Co., H. B., Battle Creek, Mich.
 Shivers Plumbing Supply Co., W. M., Houston, Tex.
 Shoe-Letcher Co., Jersey City, N. J.
 Smith Courtney Co., Inc., Seattle, Wash.
 Smolka Co., Inc., New York, N. Y.
 Spangler Plumbing Co., Birmingham, Ala.
 Speakman Co., Wilmington, Del.
 Specification Record, Chicago, Ill.
 Standard Boiler & Plate Iron Co., The, Niles, Ohio.
 Standard Pipe & Plumbing Supply Co., Kansas City, Mo.
 Standard Plumbing & Heating Co., Dumont, N. J.
 Standard Plumbing Supply Co., New York, N. Y.
 Standard Supply Co., The, Portsmouth, Ohio.
 Standard Valve Manufacturing Co., Boston, Mass.
 Star Nipple Co., Chicago, Ill.
 State Plumbing Supply Co., Philadelphia, Pa.
 Staten Island Supply Co., Inc., West Brighton, S. I., N. Y.
 Steel Tank & Pipe Co. of California, The, Berkeley, Calif.
 Stratton Supply Co., Inc., Petersburg, Va.
 Sullivan County Plumbing & Heating Supply Co., Inc., Liberty, N. Y.
 Summers Hardware & Supply Co., Johnson City, Tenn.
 Swank Hardware Co., The, Johnstown, Pa.
 Tallman Co., St. Louis, Mo.
 Texas Nipple Manufacturing Co., Houston, Tex.
 Thornley Supply Co., The, Pawtucket, R. I.
 Toye Supply Co., E. W., Winona, Minn.
 Trimble & Lutz Supply Co., Wheeling, W. Va.
 Trumbull Plumbing Supply Co., Warren, Ohio.
 Tubular Service Corporation, Brooklyn, N. Y.
 Twin City Steel Manufacturing Co., Minneapolis, Minn.
 Tyne Co., Chicago, Ill.
 Union Malleable Manufacturing Co., The, Ashland, Ohio.
 United Pipe & Supply Co., Inc., Norristown, Pa.
 Universal Engineer Publishing Co., New York, N. Y.
 Van Camp Hardware & Iron Co., Indianapolis, Ind.
 Van Denberg Supply Co., Rockford, Ill.
 Virginia Polytechnic Institute, Blacksburg, Va.
 Vogel & Sons Co., P. A., Louisville, Ky.
 Wachter, Harry W., & Horace W., Toledo, Ohio.
 Walsh, William H., Chicago, Ill.
 Ware Coupling & Nipple Co., Ware, Mass.
 Warren Balderston Co., Trenton, N. J.
 Warren Plumbers' Supply Co., Inc., Jersey City, N. J.
 Waynesboro Nipple Works, Waynesboro, Pa.
 Weakley-Watson-Miller Hardware Co., Brownwood, Tex.
 Weatherhead Co., Inc., The, Cleveland, Ohio.
 Webb Manufacturing Co., F. W., Boston, Mass.
 Weber & Co., Inc., C. L., Philadelphia, Pa.
 Weekes & Son Co., John, Watertown, N. Y.
 Weil-McLain Co., Chicago, Ill.
 West Hoboken P. S. Co., Union City, N. J.
 Westchester Square Plumbing Supply Co., Inc., New York, N. Y.
 Western Pipe & Steel Co. of California, San Francisco, Calif.
 Wheeling Machine Products Co., Wheeling, W. Va.
 Willatsen, Andrew, Seattle, Wash.
 Wilson, Fred F., Bozeman, Mont.
 Wolverine Brass Works, Grand Rapids, Mich.
 Woodrow Corporation, Chicago, Ill.
 Woolcock Plumbing & Heating Co., Niagara Falls, N. Y.
 Yelton-Weaver Supply Co., Springfield, Ill.
 Young Supply Co., W. B., Kansas City, Mo.
 Zimmer Plumbing Co., H. E., Canton, Ohio.
 Zimmerman, Inc., Joseph, Staten Island, N. Y.

U. S. GOVERNMENT

- Federal Loan Agency, Federal Housing Administration, Washington, D. C.
 United States Housing Authority (Federal Works Agency), Washington, D. C. (In principle.)
 U. S. Department of the Interior, National Park Service, Omaha, Nebr.
 U. S. Treasury Department, Washington, D. C.
 United States Coast Guard, Treasury Department, Washington, D. C.
 Veterans' Administration, Washington, D. C.
 War Department, Washington, D. C.

COMMERCIAL STANDARDS

CS No.	ITEM	CS No.	ITEM
0-40.	Commercial standards and their value to business (third edition).	49-34.	Chip board, laminated chip board, and miscellaneous boards for bookbinding purposes.
1-32.	Clinical thermometers (second edition).	50-34.	Binders board for bookbinding and other purposes.
2-30.	Mopsticks.	51-35.	Marking articles made of silver in combination with gold.
3-40.	Stoddard solvent (third edition).	52-35.	Mohair pile fabrics (100-percent mohair plain velvet, 100-percent mohair plain frieze, and 50-percent mohair plain frieze).
4-29.	Staple porcelain (all-clay) plumbing fixtures.	53-35.	Colors and finishes for cast stone.
5-40.	Pipe nipples; brass, copper, steel, and wrought iron.	54-35.	Mattresses for hospitals.
6-31.	Wrought-iron pipe nipples (second edition). Superseded by CS5-40.	55-35.	Mattresses for institutions.
7-29.	Standard weight malleable iron or steel screwed unions.	56-36.	Oak flooring.
8-33.	Gage blanks (second edition).	57-40.	Book cloths, buckrams, and impregnated fabrics for bookbinding purposes except library bindings (second edition).
9-33.	Builders' template hardware (second edition).	58-36.	Woven elastic fabrics for use in overalls (overall elastic webbing).
10-29.	Brass pipe nipples. Superseded by CS5-40.	59-39.	Woven dress fabrics—testing and reporting (second edition).
11-29.	Regain of mercerized cotton yarns.	60-36.	Hardwood dimension lumber.
12-40.	Fuel oils (fifth edition).	61-37.	Wood-slat venetian blinds.
13-39.	Dress patterns (second edition).	62-38.	Colors for kitchen accessories.
14-39.	Boys' button-on waists, shirts, junior and polo shirts (made from woven fabrics) (second edition).	63-38.	Colors for bathroom accessories.
15-29.	Men's pajamas.	64-37.	Walnut veneers.
16-29.	Wall paper.	65-38.	Wool and part-wool fabrics.
17-32.	Diamond core drill fittings (second edition).	66-38.	Marking of articles made wholly or in part of platinum.
18-29.	Hickory golf shafts.	67-38.	Marking articles made of karat gold.
19-32.	Foundry patterns of wood (second edition).	68-38.	Liquid hypochlorite disinfectant, deodorant and germicide.
20-36.	Staple vitreous china plumbing fixtures (second edition).	69-38.	Pine oil disinfectant.
21-39.	Interchangeable ground-glass joints, stopcocks, and stoppers (fourth edition).	70-38.	Coal tar disinfectant (emulsifying type).
22-40.	Builders' hardware (nontemplate) (second edition).	71-38.	Cresylic disinfectants.
23-30.	Feldspar.	72-38.	Household insecticide (liquid spray type).
24-30.	Standard screw threads.	73-38.	Old growth Douglas fir standard stock doors.
25-30.	Special screw threads.	74-39.	Solid hardwood wall paneling.
26-30.	Aromatic red cedar closet lining.	75-39.	Automatic mechanical draft oil burners.
27-36.	Mirrors (second edition).	76-39.	Hardwood interior trim and molding.
28-32.	Cotton fabric tents, tarpaulins, and covers.	77-40.	Sanitary cast-iron enameled ware.
29-31.	Staple seats for water-closet bowls.	78-39.	Ground-and-polished lenses for sun glasses.
30-31.	Colors for sanitary ware.	79-39.	Blown, drawn, and dropped lenses for sun glasses.
31-38.	Wood shingles (fourth edition).	80-41.	Electric direction signal systems other than semaphore type for commercial and other vehicles subject to special motor vehicle laws (after market).
32-31.	Cotton cloth for rubber and pyroxylin coating.	81-41.	Adverse-weather lamps for vehicles (after market).
33-32.	Knit underwear (exclusive of rayon).	82-41.	Inner-controlled spotlamps for vehicles (after market).
34-31.	Bag, case, and strap leather.	83-41.	Clearance, marker, and identification lamps for vehicles (after market).
35-31.	Plywood (hardwood and eastern red cedar).	84-41.	Electric tail lamps for vehicles (after market).
36-33.	Fourdrinier wire cloth (second edition).	85-41.	Electric license-plate lamps for vehicles (after market).
37-31.	Steel bone plates and screws.	86-41.	Electric stop lamps for vehicles (after market).
38-32.	Hospital rubber sheeting.	87-41.	Red electric warning lanterns.
39-37.	Wool and part wool blankets (second edition).	88-41.	Liquid-burning flares.
40-32.	Surgeons' rubber gloves.		
41-32.	Surgeons' latex gloves.		
42-35.	Fiber insulating board (second edition).		
43-32.	Grading of sulphonated oils.		
44-32.	Apple wraps.		
45-38.	Douglas fir plywood (domestic grades) (third edition).		
46-36.	Hosiery lengths and sizes (second edition).		
47-34.	Marking of gold-filled and rolled-gold-plate articles other than watch cases.		
48-34.	Domestic burners for Pennsylvania anthracite (underfeed type).		

NOTICE.—Those interested in commercial standards with a view toward accepting them as a basis of every-day 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.

