

**UNITED STATES TARIFF COMMISSION**

**CLINICAL THERMOMETERS, FINISHED OR UNFINISHED**

**Report to the President (1961)  
Under Executive Order 10401**



**TC Publication 20**

**Washington  
May 1961**

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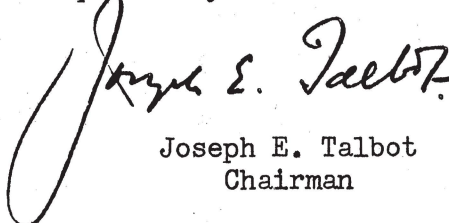
May 22, 1961

Dear Mr. President:

I have the honor to transmit the United States Tariff Commission's second report under paragraph 1 of Executive Order 10401 with regard to developments in the trade in clinical thermometers, finished or unfinished, classifiable under paragraph 218(a) of the Tariff Act of 1930, since the withdrawal of the tariff concession granted in the General Agreement on Tariffs and Trade on such clinical thermometers by Proclamation No. 3235, effective after the close of business on May 21, 1958.

The Commission is of the view that developments in the trade in clinical thermometers, finished or unfinished, classifiable under paragraph 218(a), do not indicate such a change in the competitive situation as to warrant institution at this time of a formal investigation under the provisions of paragraph 2 of Executive Order 10401.

Respectfully



Joseph E. Talbot  
Chairman

Enclosure

The President

The White House

UNITED STATES TARIFF COMMISSION  
Washington 25, D.C.

Clinical Thermometers, Finished or Unfinished

Report to the President, Under Paragraph 1 of Executive Order 10401, on Developments with Regard to Clinical Thermometers, Finished or Unfinished, Since Withdrawal of the Trade-Agreement Concession on May 21, 1958

Executive Order 10401 of October 14, 1952 (3 CFR, 1949-1953 Comp., p. 901), prescribes procedures for the review of "escape clause" actions with a view to determining whether a trade-agreement concession that has been modified or withdrawn may be restored in whole or in part without causing or threatening serious injury to the domestic industry concerned. Paragraph 1 of Executive Order 10401 requires the Tariff Commission to keep under review developments with regard to products on which a trade-agreement concession has been modified or withdrawn under the escape-clause procedure and to make periodic reports to the President concerning such developments. The first such report must in each case be made not later than 2 years after the modification or withdrawal of the concession, and subsequent reports must be made at intervals of 1 year. The Commission's first report on clinical thermometers, under paragraph 1 of the Executive Order, was transmitted to the President on May 23, 1960; this is the second report.

Customs treatment

The clinical thermometers, finished or unfinished, covered by this report are dutiable under the provision in paragraph 218(a) of the Tariff Act of 1930 for "Biological, chemical, metallurgical, pharmaceutical, and surgical articles and utensils of all kinds . . ., finished or unfinished, wholly or in chief value of glass . . .". The rate of duty originally provided in that act for such articles (including clinical thermometers, finished or unfinished) was 85 percent ad valorem. Effective October 1, 1951, the 85-percent rate was reduced to 42-1/2 percent ad valorem, pursuant to a concession initially negotiated with West Germany under the General Agreement on Tariffs and Trade. The concession with respect to clinical thermometers, finished or unfinished, was withdrawn by Presidential Proclamation No. 3235, dated April 21, 1958, effective after the close of business on May 21, 1958 (3 CFR, 1958 Supp., p. 25), with a resultant increase in the import duty on such thermometers from 42-1/2 percent ad valorem to 85 percent ad valorem. The proclamation was issued after an investigation by the U.S. Tariff Commission under section 7 of the Trade Agreements Extension Act of 1951, as amended, and a report of its findings and recommendations was submitted to the President on February 21, 1958. <sup>1/</sup>

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<sup>1/</sup> U.S. Tariff Commission, Clinical Thermometers, Finished or Unfinished: Report to the President on Escape-Clause Investigation No. 63 . . ., 1958 (processed).

During the period 1955-59, most of the imports of clinical thermometers entered the United States in an unfinished condition, usually in the form of "blanks." <sup>1/</sup> In 1960, however, nearly two-thirds of the U.S. imports of clinical thermometers entered in a finished condition. Contributing to this change in the composition of U.S. imports was the following ruling issued on March 10, 1959, by the U.S. Bureau of Customs (Bureau of Customs Circular Letter No. 3067, later abstracted for publication as T.D. 54822) relating to unfinished thermometers:

Effective June 1, 1959, subject to the exceptions from marking provided for under section 304(a)(3), Tariff Act of 1930, as amended, clinical thermometer blanks otherwise substantially completed except for calibrating, application of pigment, and testing shall be legibly and conspicuously marked to indicate the English name of the country of origin by etching or any other reasonable method which will survive such processing.

Subsequently, on March 7, 1960, the U.S. Bureau of Customs made a clarifying statement, indicating that a clinical thermometer not processed through step 91 <sup>2/</sup> (the step involving the last physical change in the course of the manufacture of a clinical thermometer prior to calibrating, engraving, pigmentation, and testing) need not be marked individually "BLANK MADE IN [country of origin]." Thermometers imported in a finished

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<sup>1/</sup> A clinical thermometer blank is a clinical thermometer that has been completed except for calibration, engraving, pigmentation, and testing.

<sup>2/</sup> See Peter J. Pecorella, The Basic 130 Steps Required for Making the Clinical Thermometer, Pecorella Manufacturing Co., Brooklyn, N.Y.

condition are also required, under section 304(a) of the Tariff Act of 1930, as amended, to be legibly and conspicuously marked to indicate the English name of the country of origin.

After the 1958 increase in the rate of duty by escape-clause action, one of the thermometer-importing concerns established a plant in the U.S. Virgin Islands, where imported blanks are being converted into finished thermometers. The import duty on blanks entering the Virgin Islands is 6 percent of their value, compared with a duty of 85 percent ad valorem on blanks imported into the customs territory of the United States. Thermometers produced in the Virgin Islands from imported blanks are considered products of the Virgin Islands and are generally not subject to import duties when brought into the customs territory of the United States (sec. 301, Tariff Act of 1930, as amended). Such thermometers, however, must be marked "BLANK MADE IN [country of origin]" as provided in T.D. 54860(1), dated May 28, 1959.

#### Description and use

A clinical thermometer, or "fever" thermometer, as it is more frequently called, is a self-registering instrument for measuring body temperatures, principally of human beings. Such a thermometer consists of a specially constructed glass tube nearly 4 inches long, sealed at one end and having at the other a small glass bulb whose opening connects with the bore of the tube. The bulb and part of the tube are filled with mercury, and a temperature scale is engraved on the tube's surface.

There are two distinct phases in the manufacture of clinical thermometers. The first comprises more than 100 operations--almost all by hand and requiring considerable skill--that are necessary for making a clinical thermometer blank. The second phase comprises the 25 or so operations involved in marking the temperature scale (determined separately for each thermometer because of variations in the bore of the tubing), engraving, pigmenting, and testing. These finishing operations require more elaborate equipment than that used for making blanks, but considerably less skilled labor.

Domestic producers of clinical thermometers  
in the United States

In 1957 when the Tariff Commission was conducting the original escape-clause investigation of clinical thermometers, about 25 concerns produced finished clinical thermometers from domestically produced blanks, and probably more than 30 concerns made blanks for sale to the producers of finished thermometers. Most of these fifty-odd concerns were small and were located largely in the vicinity of New York City. By the end of 1959 several of the concerns in the New York and Pennsylvania areas had moved all or part of their thermometer operations to other parts of the country (including Puerto Rico) where the labor costs were generally lower than in their original locations, and the number of concerns producing finished thermometers from domestically produced blanks <sup>1/</sup> had

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<sup>1/</sup> In the period 1957-59, a few of these concerns used small but increasing quantities of imported blanks in addition to domestically produced blanks; in 1960 their consumption of imported blanks was negligible.



declined to about 20, and the number of blankmakers to about 25. At the close of 1960, the concerns producing finished thermometers from domestically produced blanks still numbered about 20, but the number of blankmaking concerns had declined further to about 20.

Various producers of finished thermometers also make some of the blanks that they use; frequently they contract to have some of the operations performed by other concerns or by independent contract workers. Producers of finished thermometers met a substantially larger part of their requirements of blanks in 1960 than in 1957. This development (which occurred primarily in the concerns that moved their thermometer operations away from the New York and Pennsylvania areas), as well as the substantial imports of unfinished and finished thermometers, contributed to the steady decline in the number of blankmaking establishments in recent years.

U.S. shipments (sales) by domestic producers <sup>1/</sup>

Domestic producers that in 1960 probably accounted for about 95 percent of the total output of clinical thermometers made from domestically produced blanks reported total shipments of 73,000 gross of finished thermometers in 1956, 84,000 gross in 1957, 93,000 in 1958, and 77,000 in 1959 <sup>2/</sup> (table 1, in the appendix). The Asiatic

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<sup>1/</sup> In this report the term "domestic producers" refers to (1) the U.S. concerns that produce finished thermometers principally from domestically produced blanks, and (2) the U.S. concerns that make thermometer blanks.

<sup>2/</sup> In 1956-59, shipments by domestic producers included small but increasing quantities of thermometers made from imported blanks; in 1960 their shipments of such thermometers were negligible.

influenza epidemic in the winter of 1957-58 was largely responsible for the 28 percent increase in the annual shipments by domestic producers from 1956 to 1958. In 1960 the shipments of finished thermometers were 74,000 gross, or approximately 4 percent less than the shipments in 1959. The average unit value of the shipments of finished thermometers declined from \$82.76 per gross in 1957 to \$78.06 per gross in 1959, but increased to \$79.62 in 1960.

The shipments (sales) of blanks by blankmaking concerns that reported sales data to the Commission for each of the years 1956-60 are shown in table 2. Shipments of blanks by the 15 identical concerns that reported for each year were 8 percent larger in 1958 than in 1957. Their shipments of blanks in 1959, however, were about 15,000 gross, or 19 percent smaller than their shipments in 1957. During 1960 four of these 15 concerns went out of business; the remaining 11 concerns reported sales of about 8,000 gross in that year.

The substantial decline in annual shipments of blanks from 1958 to 1960 resulted from several developments: A significant reduction in yearend stocks of blanks in the hands of the domestic producers of finished thermometers; an increase in production of blanks by the domestic producers of finished thermometers; and the decline in shipments of finished thermometers by domestic producers. As indicated elsewhere in this report, aggregate U.S. imports in 1960 of thermometers and blanks--which were larger than those in 1957 or any preceding year--were significantly smaller than those in 1958.

The average unit value of the shipments of thermometer blanks by the 15 blankmakers decreased from \$36.94 per gross in 1956 to \$33.87 per gross in 1959. The average unit value of the 1960 shipments of blanks by the 11 concerns that continued operations that year was only \$28.60 per gross.

#### Inventories

The aggregate value of the yearend inventories of unfinished and finished thermometers reported by 15 domestic producers of finished thermometers rose from \$2,032,000 in 1956 to \$2,357,000 in 1959 and declined to \$1,559,000 in 1960 (table 3). The increase of \$325,000 from 1956 to 1959 reflected a rise of \$402,000 in the value of their stocks of unfinished thermometers and a decline of \$77,000 in the value of their stocks of finished thermometers. The decline of \$798,000 from 1959 to 1960 in the value of yearend inventories was accounted for by a decline of \$803,000 in the value of their stocks of unfinished thermometers, and an increase of \$5,000 in the value of their stocks of finished thermometers.

#### U.S. imports and importers' shipments (sales)

On the basis of data reported to the Commission by virtually all the known importers of finished thermometers and thermometer blanks, U.S. annual imports of such articles, which rose sharply from 1956 to 1958, continued upward in 1959 (table 4). Total U.S. imports of finished and unfinished thermometers reported to the Commission were

18,628 gross (valued at \$270,000) in 1956, 32,300 gross (valued at \$481,000) in 1958, and 34,282 gross (valued at \$497,000) in 1959. In 1960, imports of these articles were 25,770 gross (valued at \$398,000), or about 25 percent smaller in terms of quantity (20 percent smaller in terms of value) than the imports in 1959. <sup>1/</sup> Except for small quantities from Mexico and West Germany, imports in 1957-60 came from Japan.

Until June 1959, almost all U.S. imports of clinical thermometers consisted of blanks that had been processed up to the calibrating operation. Since June 1959, however, imports have included substantial and increasing quantities of finished thermometers (completely engraved) and significant quantities of blanks in various stages of completion but not sufficiently processed for calibrating. This change in the composition of U.S. imports of thermometers followed the ruling on marking made by the U.S. Bureau of Customs. <sup>2/</sup> U.S. imports of finished thermometers amounted to 5,600 gross (valued at \$96,000) in 1959 and 16,498 gross (valued at \$287,000) in 1960. Included in the 1960 imports of finished thermometers were 666 gross entered duty free as "emergency purchases of war material abroad" for use by the Armed Forces (under the provisions of 10 U.S.C. 2383).

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<sup>1/</sup> For 1960 the figures reported in table 4 are 12 percent larger than the figures reported in the official import statistics under the classification established for clinical thermometers, finished or unfinished, when the duty was increased. This discrepancy is accounted for principally by the fact that the figures reported to the Commission include imports from Japan into the U.S. Virgin Islands, whereas the official statistics do not.

<sup>2/</sup> See p. 3 of this report.

In 1956-58 thermometers made by the importers from imported blanks accounted for nearly all their shipments of finished thermometers. Since 1958, importers' shipments of such thermometers have declined; they comprised about three-fourths of the 1959 shipments and less than half of the 1960 shipments; for 1959 and 1960 combined, the remainder consisted principally of thermometers imported in a finished condition but also included a significant amount of thermometers made by an importing concern from domestic blanks.

Importers' total shipments (sales) of finished thermometers, which rose from 15,000 gross in 1956 to about 20,000 gross in 1958, declined to 19,000 gross in 1959 and then rose sharply to 29,000 gross in 1960 (table 1). The increase in importers' shipments from 1959 to 1960 was accompanied by a substantial reduction in yearend stocks. The preceding figures relating to importers' shipments include imported finished thermometers and thermometers made by the importers from imported and domestic blanks.

The average unit value of importers' shipments of finished thermometers rose from \$47.47 per gross in 1957 to \$51.20 per gross in 1959, and declined to \$46.81 in 1960. The decline from 1959 to 1960 in the average unit value of importers' shipments is attributable in substantial measure to the change in the composition of their shipments as previously noted. Thermometers imported in a finished condition--which comprised more than

half of the shipments in 1960--sell at lower prices in the U.S. market than do thermometers made in the United States from imported blanks.

As indicated in the Commission's 1960 report on clinical thermometers, the share of U.S. consumption supplied by importers rose steadily from 7 percent in 1955 to 20 percent in 1959. Information available for 1960 indicates that shipments by importers--exclusive of thermometers made from domestically produced blanks--supplied about 25 percent of the total U.S. consumption of clinical thermometers.

#### Prices

Clinical thermometers are offered for sale by the domestic producers and by the importers in a wide variety of brands and types of packaging, depending upon the sales outlet. The Commission obtained from individual concerns their net selling prices, f.o.b. point of shipment in the United States, on June 1 of 1957-60 for their leading brands of finished thermometers, by principal outlets. These prices, shown in table 5, indicate the trend of prices but, because of differences in quality and packaging, cannot be used to compare prices of thermometers sold by the domestic producers with prices of thermometers sold by the importers. With respect to thermometers sold by the domestic producers, the top prices of the leading brands remained fairly stable during 1957-60, while the bottom prices moved downward for the thermometers going directly to the Federal Government and to retailers and moved upward for the thermometers going to other outlets.

With respect to thermometers sold by the importers to hospital supply houses and druggist supply houses--the only two outlets for which data are available for all the years 1957-60--the top prices moved slightly upward and the bottom prices moved downward.

Employment and wages

Because of the substantial amount of contract work done for the domestic producers, the Commission was unable to obtain complete data on employment and wages of production and related workers. The data available to the Commission relating to the production and related workers engaged in the manufacture of clinical thermometer blanks and finished thermometers in nine U.S. plants indicate that the average number of such workers in the United States, the total man-hours worked by them, and their average hourly earnings moved downward from 1958 to 1960. A similar downward trend is indicated for the average number of production and related workers employed in U.S. blankmaking plants by the data available for 13 such plants.

APPENDIX



Table 1.--Clinical thermometers, finished: U.S. shipments by domestic producers and importers, 1956-60

Item	Unit	1956	1957	1958	1959	1960
Shipments by domestic producers: <u>1/</u>						
Concerns reporting <u>2/</u> -----	Number-----	18	18	18	18	18
Quantity-----	Gross-----	73,262	84,174	93,418	76,610	73,693
Value-----	1,000 dollars---	5,773	6,966	7,597	5,980	5,867
Unit value <u>3/</u> -----	Per gross-----	\$78.79	\$82.76	\$81.32	\$78.06	\$79.62
Shipments by importers: <u>4/</u>						
Concerns reporting-----	Number-----	4	5	6	7	11
Quantity-----	Gross-----	14,722	16,851	20,175	19,240	<u>5/</u> 28,951
Value-----	1,000 dollars---	707	800	1,022	985	1,355
Unit value <u>3/</u> -----	Per gross-----	\$48.05	\$47.47	\$50.65	\$51.20	\$46.81
Ratio of shipments by importers to shipments by domestic producers (based on quantity)-----	Percent-----	19.6	19.8	21.5	25.0	39.3

1/ The term "domestic producers" refers to concerns that produce finished thermometers principally from domestically produced blanks.

2/ The concerns reporting in 1960 accounted in that year for about 95 percent of the total U.S. production of thermometers made from domestically produced blanks.

3/ Calculated from the unrounded figures.

4/ The term "importers" refers to concerns that import finished thermometers, or thermometer blanks that they finish.

5/ Includes a significant amount of thermometers made from domestically produced blanks.

Source: Compiled from information submitted to the U.S. Tariff Commission by the domestic producers and importers.

Table 2.--Clinical thermometer blanks: U.S. shipments by blankmakers, 1956-60

Item	Unit	1956	1957	1958	1959	1960
All concerns making returns: <u>1/</u>						
Concerns included-----	Number-----	24	20	19	20	17
Shipments:						
Quantity-----	Gross-----	27,497	21,425	22,648	17,637	10,551
Value-----	1,000 dollars---	976	735	760	575	320
Unit value <u>2/</u> -----	Per gross-----	\$35.53	\$34.33	\$33.54	\$33.13	\$30.37
Concerns reporting each year: <u>1/</u>						
Concerns included-----	Number-----	15	15	15	15	<u>3/</u> 11
Shipments:						
Quantity-----	Gross-----	17,378	17,835	19,305	14,525	8,252
Value-----	1,000 dollars---	642	616	655	492	236
Unit value <u>2/</u> -----	Per gross-----	\$36.94	\$34.54	\$33.93	\$33.87	\$28.60

1/ Includes several concerns which finish thermometers, but does not include any concerns which make blanks solely for their own use.

2/ Calculated from the unrounded figures.

3/ 4 other concerns that reported in each of the years 1956-59 were out of business in 1960.

Source: Compiled from data submitted to the U.S. Tariff Commission by the blankmakers.

Table 3.--Clinical thermometers, unfinished and finished: Value of yearend inventories reported by 15 domestic (U.S.) producers 1/ of finished thermometers, fiscal years 1956-60

(In thousands of dollars)

Item	Unfinished thermometers	Finished thermometers	Total
Yearend inventory, fiscal year--			
1956-----	1,381	651	2,032
1957-----	1,661	613	2,274
1958-----	1,393	709	2,102
1959-----	1,783	574	2,357
1960-----	980	579	1,559
Net change in yearend inventory, 1956 to 1960-----	-401	-72	-473

1/ The term "domestic producers" refers to producers of finished thermometers made principally from domestically produced blanks.

Source: Compiled from data submitted to the U.S. Tariff Commission by the domestic producers.

Table 4.--Clinical thermometers, unfinished and finished: U.S. imports for consumption, 1956-60

Item	Quantity	Foreign value	Unit value
	Gross		Per gross
Unfinished thermometer blanks: <u>1/</u>			
1959-----	3,672	\$26,067	\$7.10
1960 <u>2/</u> -----	9,272	111,352	12.01
Finished thermometer blanks: <u>2/</u>			
1956-----	18,503	268,123	14.49
1957-----	20,981	299,893	14.29
1958-----	32,014	474,344	14.82
1959-----	25,010	375,136	15.00
Finished thermometers: <u>1/</u>			
1959-----	5,600	96,052	17.15
1960-----	16,498	287,061	17.40
Total:			
1956-----	18,628	270,283	14.51
1957-----	21,300	307,848	14.45
1958-----	32,300	481,291	14.90
1959-----	34,282	497,255	14.50
1960-----	25,770	398,413	15.46

1/ Data for 1956-58 not shown in order to avoid disclosing operations of individual concerns.

2/ Includes both unfinished and finished thermometer blanks in order to avoid disclosing operations of individual concerns.

3/ Data for 1960 included above with those for unfinished thermometer blanks.

Source: Compiled from data submitted to the U.S. Tariff Commission by the domestic producers and importers.

Note.--Practically all of the imports have come from Japan, except in 1956 and 1957, when imports from Mexico accounted for 5 to 10 percent of total imports.

Table 5.--Clinical thermometers, finished: Range of net selling prices, f.o.b. point of shipment in the United States, for the leading brands offered by domestic producers and importers, by principal outlets, June 1 of 1957-60

Item	(Per dozen)			
	June 1--			
	1957	1958	1959	1960
Domestic producers, <u>1/</u> net selling prices to--				
Federal Government (direct)-----	\$4.56-\$10.56	\$4.58-\$10.56	\$4.32-\$10.56	\$3.99-\$10.56
State, municipal, and other institu- tions-----	3.00- 5.98	3.00- 4.92	3.00- 5.00	4.41- 4.92
Hospital supply houses-----	3.50- 5.75	3.58- 5.75	3.58- 5.75	3.75- 5.75
Druggist supply houses-----	3.83- 9.45	3.83- 9.45	3.83- 9.45	3.90- 9.45
Retailers (direct)-----	6.50- 10.80	6.50- 12.17	6.50- 12.17	4.50- 12.17
Importers' <u>2/</u> net selling prices to--				
Federal Government (direct)-----	-	<u>3/</u>	<u>3/</u>	3.53- 4.44
State, municipal, and other institu- tions-----	-	<u>3/</u>	3.71- 5.50	3.46- 5.50
Hospital supply houses-----	3.50- 4.00	3.80- 4.00	3.33- 3.50	3.00- 4.17
Druggist supply houses-----	4.46- 4.67	4.30- 4.95	4.00- 4.95	4.00- 4.95
Retailers (direct)-----	<u>3/</u>	5.00- 5.33	4.67- 7.20	5.25- 7.20

1/ The term "domestic producers" refers to concerns that produce finished thermometers principally from domestically produced blanks.

2/ The term "importers" refers to concerns that import finished thermometers, or thermometer blanks that they finish.

3/ Not available.

Source: Compiled from data supplied to the U.S. Tariff Commission by individual concerns.