

UNITED STATES TARIFF COMMISSION

CLINICAL THERMOMETERS

**Report to the President (No. TEA-IR-3-64)
Under Section 351(d)(1) of the
Trade Expansion Act of 1962**



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Note.--The whole of the Commission's report to the President may not be made public since it contains certain information that would result in the disclosure of the operations of individual concerns. This published report is the same as the report to the President, except that the above-mentioned information has been omitted. Such omissions are indicated by asterisks.

REPORT TO THE PRESIDENT

U.S. Tariff Commission,
May 1, 1964.

To the President:

This report is made pursuant to section 351(d)(1) of the Trade Expansion Act of 1962 (76 Stat. 900) which provides that--

So long as any increase in, or imposition of, any duty or other import restriction pursuant to this section or pursuant to section 7 of the Trade Agreements Extension Act of 1951 remains in effect, the Tariff Commission shall keep under review developments with respect to the industry concerned, and shall make annual reports to the President concerning such developments.

Introduction

Following a report by the Tariff Commission in 1958 ^{1/} pursuant to an investigation conducted under section 7 of the Trade Agreements Extension Act of 1951, the President, by proclamation dated April 21, 1958, withdrew the concession in the General Agreement on Tariffs and Trade on clinical thermometers, finished or unfinished, wholly or in chief value of glass, provided for in paragraph 218(a) of the Tariff Act of 1930, effective after the close of business on May 21, 1958. ^{2/} This action resulted in an increase in the duty on such thermometers from 42-1/2 percent ad valorem to 85 percent ad valorem, the rate originally fixed in the Tariff Act of 1930.

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

^{2/} Proclamation No. 3235; 3 CFR, 1954-1958 Comp., 151.

Thereafter the Commission maintained a continuing review of developments with regard to clinical thermometers and made two reports respecting them pursuant to paragraph 1 of Executive Order 10401. 1/

In May 1962 the Commission, on its own motion, instituted an investigation for the purposes of paragraph 2 of Executive Order 10401. Inasmuch as section 351(d) of the Trade Expansion Act of 1962 superseded Executive Order 10401, 2/ the Commission continued its investigation under the provisions of section 351(d)(2) of that act. In its report of the results of that investigation 3/ the Commission advised the President of its judgment concerning the probable economic effect of a reduction or termination of the increase in duty on clinical thermometers. On September 23, 1963, the President announced that he had determined not to modify the duty then in force. The present report is confined chiefly to a discussion of developments within the industry that have occurred since 1961, the last year covered in the Commission's report under section 351(d)(2).

1/ U.S. Tariff Commission, Clinical Thermometers, Finished or Unfinished: Report to the President . . . Under Executive Order 10401, 1960 and 1961 (processed).

2/ Executive Order 10401 (3 CFR, 1949-1953 Comp., 901) was formally terminated by sec. 12(b)(3) of Executive Order 11075 (28 F.R. 473).

3/ U.S. Tariff Commission, Clinical Thermometers: Report to the President on Investigation No. TEA-IA-1 Under Section 351(d)(2)(5) of the Trade Expansion Act of 1962, TC Publication 90, 1963 (processed). This report was also submitted as the Commission's first report on clinical thermometers for the purposes of sec. 351(d)(1) of the Trade Expansion Act of 1962.

U.S. Tariff Treatment

Clinical thermometers are provided for in item 711.35 of the Tariff Schedules of the United States (TSUS) at the rate of 42.5 percent ad valorem (the rate shown in col. 1 of the TSUS) which reflects the concession thereon granted under the General Agreement on Tariffs and Trade. This concession became effective October 1, 1951. At present, by reason of temporary action taken under the escape-clause procedure, a special provision (item 930.00) for clinical thermometers has been established in the appendix to the TSUS; such thermometers are currently dutiable thereunder at the rate of 85 percent ad valorem, which is the rate originally provided therefor under paragraph 218(a) of the Tariff Act of 1930.

Consumption 1/

The U.S. annual consumption of clinical thermometers, as measured by the volume of sales, increased from 112,000 gross in 1961 to 117,000 gross in 1962 and 129,000 gross in 1963 (table 1). In 1963, consumption was greater than in any year in the past decade and about 15 percent higher than in 1961.

Whereas the share of total consumption supplied by domestically produced thermometers had declined without interruption from 1957 to

1/ Inasmuch as the total U.S. supply of finished thermometers is obtained from several sources, the origins of such thermometers are separately identified throughout this report as follows: (1) The domestic production of finished thermometers from imported blanks; (2) the imports of finished thermometers for consumption; (3) production within the United States and Puerto Rico, primarily from domestically produced blanks; and (4) "shipments" from the Virgin Islands.

1961, it increased sharply thereafter. In 1961 domestic thermometers supplied 64 percent of consumption, compared with about 71 percent in 1962 and 73 percent in 1963. To a significant extent, this change reflects efforts by several large domestic producers to increase their efficiency as well as their capacity for producing thermometer blanks. Concurrently, the production of thermometers from blanks imported for finishing in the United States and Puerto Rico declined after 1961, while the output from domestically produced blanks increased sharply; shipments from the Virgin Islands increased moderately after 1961. 1/

* * * * *

The U.S. Government is one of the larger buyers of clinical thermometers. In 1961, contracts were awarded by the Defense Supply Agency and the Veterans Administration for the delivery of 10,371 gross of finished thermometers, 81 percent of which consisted of imported units (table 2). 2/ The share of the total purchases contracted for by those agencies that was supplied by imports in 1962 and 1963 was considerably smaller than in 1961. In 1962, such purchase

1/ The U.S. Virgin Islands are not part of the customs territory of the United States; hence, articles received from the Virgin Islands are U.S. imports. However, articles containing foreign materials having a value of 50 percent or less of their total value when entering the United States are exempt from duty (general headnote 3(a) of TSUS). For the purposes of this report such duty-free articles are referred to as shipments from the Virgin Islands.

2/ No data are available respecting the time of delivery of the thermometers covered by these contracts. The quantities specified in the contracts awarded in 1961 were equivalent to about 9 percent of consumption in that year; the corresponding ratios for 1962 and 1963 were about 11 percent and 3 percent, respectively.

contracts were awarded for 12,669 gross, of which 59 percent were for imported thermometers. In 1963, such contracts were awarded for 3,753 gross, of which 36 percent were for imported units.

U.S. Producers

In 1961 20 domestic concerns were producing clinical thermometers, virtually all of which were made from domestically produced blanks. After 1961 two firms discontinued such production with the result that the Commission obtained data on the operations of eighteen firms during 1962-63. Fifteen of these companies were single-plant concerns engaged exclusively in the production of thermometers; four of them accounted for nearly a third of the total value of sales of thermometers made from domestic blanks in 1962 and 1963. Three of the producing companies were multiproduct concerns ^{1/} that in the years 1962-63 supplied about 50 percent of the value of sales of thermometers made from domestic blanks. Clinical thermometers account for a small part of the total sales of each of these three concerns; one of them produced clinical thermometers in three separate establishments, and the other two produced clinical thermometers in one plant each.

In 1961, two companies were engaged in the production of finished thermometers from imported blanks. One of them has since discontinued such operations. The remaining concern, which

^{1/} Other products manufactured by these three concerns are chiefly hospital supplies and scientific instruments.

accounts for virtually all of the U.S. production of finished thermometers from imported blanks, is also an importer of finished thermometers.

In each of the years 1961-63, about 30 concerns were engaged on a contract basis in performing one or more of the operations necessary for the production of clinical thermometers. Eleven concerns were engaged in the production of blanks for sale to others. Three of the fourteen concerns that were engaged exclusively in the production of blanks in 1961 have since discontinued such operations.

During the period covered herein (the years 1962-63), several U.S. manufacturers of clinical thermometers continued their attempts to lower production costs by mechanizing various operations formerly performed by manual labor, and their investment in new machinery increased substantially. Such investment totaled about \$615,000 in the years 1962-63, compared with about \$431,000 during the entire period 1958-61. During the years 1964-65 these concerns anticipate investing slightly more than \$1 million to further mechanize their operations. Thus far, the great bulk of such investment has been made by the seven largest producers of clinical thermometers. It is unlikely that much of the new machinery being developed by these concerns will be available to the rest of the industry for some time. However, as new machines presently being developed by independent manufacturers of

machinery are perfected, they will become available to the other producers of clinical thermometers.

Most of the aforementioned investment has been used for the mechanization of operations involved in the production of thermometer blanks. Finishing operations had already been substantially mechanized in the larger plants. Nevertheless future investment in finishing operations employing a new technique known in the trade as flush marking appears imminent; this process involves annealing the scale markings in the glass rather than using etched and pigmented markings.

U.S. Production and Sales

No statistics are available on the production of clinical thermometers made primarily from domestically produced blanks. Inasmuch as producers' yearend inventories of finished thermometers have not varied greatly from year to year, however, the data on their annual sales of finished thermometers are indicative of the volume and trend of their annual output. Data supplied to the Commission by concerns that account for virtually all of the U.S. output of thermometers finished primarily from domestic blanks indicate that the sales of such thermometers amounted to 71,000 gross in 1961 and increased annually thereafter to about 93,000 gross in 1963. Over the same years the value of annual sales rose from about \$5.2 million to about \$6.7 million.

Data on the annual sales of blanks were received from domestic "blankmakers" accounting for the preponderant share of such sales; their sales of blanks amounted to 11,500 gross in 1961, 10,700 gross in 1962, and 11,600 gross in 1963 (table 4). By value, such sales amounted to \$356,000 in 1961, \$317,000 in 1962, and \$350,000 in 1963. The dollar value of the work performed by contractors declined from \$767,000 in 1962 to \$632,000 in 1963.

U.S. Imports

The aggregate U.S. imports of finished and unfinished clinical thermometers increased from 23,246 gross in 1961 to 23,828 gross in 1962 and 27,469 gross in 1963 (table 5). The bulk of the imports in 1962 and 1963 continued to be comprised of finished thermometers, chiefly of types that compete primarily with low-priced units produced in the United States.

* * * * *

Japan is virtually the only supplier of U.S. imports of finished thermometers and thermometer blanks. It is also the only significant foreign supplier of blanks used by a concern producing finished thermometers in the Virgin Islands for sale in the United States.

For several years Japanese producers have maintained a voluntary export quota on shipments of finished clinical thermometers and complete thermometer blanks to the United States and the U.S. Virgin Islands. For the fiscal year April 1, 1961, to March 31, 1962, the

quota for such shipments was set at 26,922 gross; for the fiscal year ending March 31, 1963, it was 31,944 gross. The Japan Machinery Exporters' Association, which imposes the quota, has estimated that the limitation for fiscal 1964 will be 33,300 gross.

The aggregate imports into the United States and the Virgin Islands of complete blanks and finished thermometers approximated the Japanese voluntary quota for fiscal 1962. Data are not available for 1963. Imports of incomplete blanks are not covered by the quota. The imports of such blanks not subject to quota amounted to about 15,000 gross in each of the years 1962 and 1963.

Developments in the Virgin Islands

The Commission's earlier reports indicated that since 1958 the United States has received increasing annual shipments from the U.S. Virgin Islands of finished thermometers produced from blanks made in Japan. Although the shipments from the Virgin Islands were somewhat higher in both 1962 and 1963 than in 1961, the increase in such shipments was very much smaller than the increase in the sales of domestic thermometers during the same intervals.

* * * * *

Employment

During the period 1962-63, the annual number of man-hours worked by U.S. production workers making clinical thermometers increased in approximately the same proportion as the production and sales of such

articles. As indicated in the tabulation shown below, man-hours worked by production and related workers in the domestic production of finished clinical thermometers and blanks increased from 1,244,000 hours in 1961 to 1,581,000 hours in 1963:

<u>Year</u>	<u>Man-hours worked by production and related workers</u> ^{1/} (1,000 man-hours)
1959-----	1,303
1960-----	1,295
1961-----	1,244
1962-----	1,370
1963-----	1,581

^{1/} Data, obtained from questionnaires, cover man-hours worked in the domestic production of unfinished and finished clinical thermometers made predominantly from domestically produced blanks.

Labor devoted to the production of clinical thermometers accounted for about 7 percent of the man-hours worked on all products at the three multiproduct concerns in 1962, and 8 percent in 1963. From 1962 to 1963 total man-hours by all production and related workers employed in the establishments of these three firms where clinical thermometers were produced increased by about 4 percent. Man-hours worked on clinical thermometers at such establishments increased by more than 20 percent from 1962 to 1963.

Prices of Domestically Produced Thermometers

Clinical thermometers are offered for sale by the domestic producers in a wide variety of brands and types of packaging, depending frequently on the type of sales outlet. The widest variety is

offered for sale through retail outlets, where there exists the most opportunity for competition on bases other than price. Thermometers sold to institutions must conform to rigid specifications; sales in this outlet are made primarily on the basis of price.

In its earlier investigations the Commission obtained data from individual domestic producers on their net selling prices, f.o.b. point of shipment; prices were obtained for leading brands of finished thermometers, by principal outlets, on or about June 1 for the years 1958-62. Price indexes were computed from these data for thermometers marketed through each of the principal sales outlets, as was a composite index for prices received by domestic producers of all clinical thermometers (table 6). The series presented in the Commission's last report has now been completed for 1963. Annual variations in the prices received by domestic producers in 1958-63, as indicated by the Commission's composite index (1958-62=100), were as follows:

1958-----	103
1959-----	101
1960-----	100
1961-----	98
1962-----	99
1963-----	99

Statistical Appendix

Table 1.--Clinical thermometers, finished: Apparent U.S. consumption, 1958-63

Year	Sales of finished thermometers		Sales of imported finished thermometers;		Apparent consumption
	virtually all of which were produced from domestically produced blanks	of which were produced from domestically produced blanks	finished in the United States from imported blanks; and shipments to continental United States from the Virgin Islands	finished in the United States from imported blanks; and shipments to continental United States from the Virgin Islands	
	Quantity (gross)				
1958-----	97,652	:	21,027	:	118,679
1959-----	70,968	:	26,363	:	97,331
1960-----	79,114	:	30,844	:	109,958
1961-----	71,405	:	40,150	:	111,555
1962-----	82,852	:	34,362	:	117,214
1963-----	93,425	:	35,276	:	128,701
	Percent of U.S. consumption				
1958-----	82.3	:	17.7	:	100.0
1959-----	72.9	:	27.1	:	100.0
1960-----	72.0	:	28.0	:	100.0
1961-----	64.0	:	36.0	:	100.0
1962-----	70.7	:	29.3	:	100.0
1963-----	72.6	:	27.4	:	100.0

Source: Data on shipments from the Virgin Islands compiled from statistics of the U.S. Bureau of the Census. Data on sales of thermometers imported finished and those finished in the United States and Puerto Rico from domestically produced and imported blanks were submitted to the U.S. Tariff Commission by domestic producers and importers.

Table 2.--Clinical thermometers, finished: Contracts awarded by the U.S. Veterans Administration and the Defense Supply Agency to domestic producers and to importers, 1957-63

Item	1957	1958	1959	1960	1961	1962	1963
Contracts awarded to--							
Domestic producers ^{1/} -----gross--	8,122	7,032	3,040	3,346	1,934	5,231	2,414
Importers ^{2/} -----do-----	-	1,066	1,564	3,982	8,437	7,438	1,339
Total-----do-----	8,122	8,098	4,604	7,328	10,371	12,669	3,753
Share of total quantity awarded to--							
Domestic producers-----percent--	100.0	86.8	66.0	45.7	18.6	41.3	64.3
Importers-----do-----	-	13.2	34.0	54.3	81.4	58.7	35.7
Total-----do-----	100.0	100.0	100.0	100.0	100.0	100.0	100.0

^{1/} Firms that produce finished clinical thermometers primarily from domestic blanks.

^{2/} Firms that either import finished thermometers or produce them from imported blanks.

Source: Compiled from data submitted to the U.S. Tariff Commission by the Defense Supply Agency and the Veterans Administration.

Table 3.--Clinical thermometers finished predominantly from domestically produced blanks: Sales in the United States by domestic producers, 1958-63

Year	Number of firms	Quantity	Value	Unit value
		Gross	<u>1,000</u> dollars	<u>Per</u> gross
1958-----	19	97,652	7,944	\$81.35
1959-----	19	70,968	5,930	83.56
1960-----	20	79,114	6,066	76.67
1961-----	20	71,405	5,239	73.37
1962-----	<u>1/</u> 18	82,852	6,345	76.84
1963-----	18	93,425	6,747	72.22

1/ 2 firms discontinued operations after 1961.

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

Table 4.--Clinical thermometer blanks: Sales in the United States
by domestic blankmakers, 1958-63

Year	Quantity	Value	Unit
		<u>1,000</u>	value 1/
	<u>Gross</u>	<u>dollars</u>	<u>Per gross</u>
1958-----	16,809	543	\$32.33
1959-----	16,170	534	32.99
1960-----	12,839	381	29.69
1961-----	11,501	356	30.92
1962-----	10,686	317	29.63
1963-----	11,622	350	30.07

1/ Calculated from the unrounded figures.

Source: Compiled from data submitted to the U.S. Tariff Commission by blankmakers accounting for virtually all of the annual domestic output.

Table 5.--Clinical thermometers, finished and unfinished:
U.S. imports for consumption, 1956-63

	Quantity	Foreign value
	<u>Gross</u>	
1956-----	18,628	\$270,283
1957-----	21,300	307,848
1958-----	32,300	481,291
1959-----	34,282	497,255
1960-----	21,025	325,863
1961-----	23,246	373,909
1962-----	23,828	416,551
1963-----	27,469	464,188

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

Note.--Except in 1956 and 1957, when Mexico supplied from 5 to 10 percent of the total, virtually all of the imports came from Japan.

Table 6.--Clinical thermometers, finished: Indexes of net selling prices, f.o.b. point of shipment in the United States, for the leading brands offered by domestic producers, ^{1/} by principal outlets, as of June 1 of 1958-63

(Average prices on June 1 of 1958-62=100)

Item	June 1--					
	1958	1959	1960	1961	1962	1963
Domestic producers' net selling prices to--						
State, municipal, and other institutions-----	100	101	100	99	100	101
Hospital supply houses----	103	102	100	97	99	101
Druggist supply houses----	103	101	100	99	98	98
Retailers (direct)-----	103	101	101	98	98	97
Composite index-----	103	101	100	98	99	99

^{1/} Based on data for finished thermometers, virtually all of which were made from domestically produced blanks.

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

