

UNITED STATES TARIFF COMMISSION

DOCKET

WATCH MOVEMENTS

**Report to the President on
Investigation No. TEA-1A-2 Under
Section 351(d)(2) of the
Trade Expansion Act of 1962**



TC Publication 150

**Washington, D.C.
March 1965**

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Note.--Certain portions of this report to the President may not be made public since they contain information that would reveal the operations of individual firms. This published report is the same as the report to the President except that those portions have been omitted. The omissions are indicated by asterisks.

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REPORT TO THE PRESIDENT

U.S. Tariff Commission,
March 5, 1965

To the President:

This report is made pursuant to section 351(d)(2) of the Trade Expansion Act of 1962 (76 Stat. 900), 1/ which provides that--

Upon request of the President or upon its own motion, the Tariff Commission shall advise the President of its judgment as to the probable economic effect on the industry concerned of the reduction or termination of the increase in, or imposition of, any duty or other import restriction pursuant to this section or section 7 of the Trade Agreements Extension Act of 1951.

Introduction

On December 5, 1963, the Tariff Commission, on its own motion, instituted an investigation with respect to watch movements, pursuant to section 351(d)(2). 2/ A public hearing was held in connection therewith ^{on May 12-14} from May 12 to 14, 1964.

Following an escape-clause investigation by the Tariff Commission under section 7 of the Trade Agreements Extension Act of 1951, the President increased the duties on watch movements by Proclamation No. 3062, dated July 27, 1954. 3/ The increased duties became effective at the close of business on that date. Since then the Commission has maintained a continuing review of developments with respect to

1/ This report is also submitted as the Commission's annual report on watch movements for the purpose of sec. 351(d)(1) of the act.

2/ 28 F.R. 13480. For the purpose of this report, "watch movements" are timepiece movements that (1) have pillar plates that are less than 1.77 inches in width and (2) are less than 0.50 inch in thickness.

3/ 3 CFR, 1954-1958 Comp., 15.

watch movements. In connection therewith the Commission made seven consecutive annual reports to the President on watch movements pursuant to paragraph 1 of Executive Order 10401 and subsequently another pursuant to section 351(d)(1) of the Trade Expansion Act of 1962. 1/

As used in this report, the terms "U.S." and "domestic" refer to the customs territory of the United States. This territory embraces the 50 States, the District of Columbia, and Puerto Rico, but does not include the Virgin Islands of the United States. However, production

1/ Executive Order 10401 was revoked on Jan. 15, 1963, by sec.12(b)(3) of Executive Order 11075; the Trade Expansion Act of 1962 was enacted on Oct. 11, 1962. The Tariff Commission's first annual report under sec. 351(d)(1) of the act is Watch Movements: Report to the President (No. TEA-IR-4-63) Under Section 351(d)(1) of the Trade Expansion Act of 1962, TC Publication 102, 1963 (processed).

During the investigation under sec. 351(d)(2) the Commission had two other proceedings under consideration with respect to watch movements. The Commission instituted on Apr. 22, 1964, a preliminary inquiry in regard to watches and watch movements under sec. 337 of the Tariff Act of 1930, as amended (Investigation No. 337-L-29; 29 F.R. 5653), and, on May 19, 1964, an investigation on watches, watch movements, and parts of watch movements under sec. 301(b) of the Trade Expansion Act of 1962 (Investigation No. TEA-I-7; 29 F.R. 6969).

The inquiry under sec. 337 was instituted in response to a complaint submitted by the Elgin National Watch Co. and the Hamilton Watch Co. alleging unfair methods of competition and unfair acts in the importation of watches and watch movements and their sale in the United States. The complaint was amended on Dec. 28, 1964, to state the allegations with more particularity. The Commission is continuing the preliminary inquiry to determine whether the amended complaint contains good and sufficient reason for a full investigation.

The investigation under sec. 301(b) was instituted in response to a petition submitted by the Bulova Watch Co., the Elgin National Watch Co., and the Hamilton Watch Co. The report containing the Commission's finding thereon, which was submitted to the President on Oct. 30, 1964, was entitled Watches, Watch Movements, and Parts of Watch Movements: Report to the President on Investigation No. TEA-I-7 Under Section 301(b) of the Trade Expansion Act of 1962, (TC Publication 142, 1964 (processed)).

of watch movements in the Virgin Islands and shipments from those islands to the customs territory of the United States have been taken into account in the calculation of total U.S. consumption of watch movements. Although articles received from the U.S. Virgin Islands are technically U.S. imports, in this report, unless otherwise indicated, such articles are referred to as "shipments" from the U.S. Virgin Islands, and the data on U.S. imports do not include such shipments.

The forecasts set forth in the following section were made on the basis that the current political and economic trends now in evidence will continue, that is, that there will be no major war, no great depression, etc. The discussion in that section sets forth the effects that would be likely to follow complete restoration of the concessions, i.e., a termination of the increases in the rates of duty on watch movements. For individual concerns a partial restoration might have little or no effect for one concern, and for another, about as much effect as a full restoration. The variation from concern to concern would depend not only on the magnitude of the partial restoration but also on whether the partial restoration was interpreted as a first step toward full restoration on October 11, 1967, the date on which the increase in the rates of duty will be terminated unless further extended by the President, as provided in the Trade Expansion Act of 1962.

Probable Economic Effect of Termination of the
Increases in the Rates of Duty

In summary, full restoration of the trade-agreement rates of duty on imports of watch movements would probably have the following effects: (1) The landed, duty-paid cost for most watch movements imported from foreign countries would become significantly lower; (2) a large share of the duty reductions on the bulk of the imported movements, particularly those that meet intense price competition, would be passed on to retail outlets and consumers in the form of lower watch prices; (3) the assembly of watch movements in the Virgin Islands would be less attractive; (4) imports from Europe and Japan would increase; (5) the share of the U.S. market supplied by watches incorporating imported movements would rise; and (6) the concerns currently producing watch movements in the United States would, in the aggregate, account for most of the increase in imports.

Restoration of the concessions would have widely different effects on individual domestic producers, since the resultant reductions in duty would bear differently on the various categories of imports. These variations are discussed later in more detail, but in summary, restoration of the concession would have no significant effect on the domestic production of pocket watches, most of which incorporate pin-lever movements; it would intensify the competition between the lower priced imported jeweled-lever watches and the higher priced domestic pin-lever watches; it would diminish the incentive for domestic watch producers to import watch parts and would correspondingly increase their incentive to substitute imported movements for

movements assembled domestically from an admixture of imported and domestic parts; and it would encourage domestic producers of jeweled-lever watch movements to substitute imported jeweled-lever watch movements for those they produce domestically. In the aggregate, there would be idling of productive facilities and a decrease in employment in the manufacture of U.S. watch movements beyond that which has already occurred because of the domestic producers' increasing use of movements obtained from abroad and from the Virgin Islands. Although producers in the aggregate would incur capital losses as a result of the idling of plant and equipment, these losses would no doubt be partly or fully offset by increased profits arising out of expanded import operations.

The bulk of the pocket watches sold in the United States, including nearly all of the imported pocket watches, are of the pin-lever type. 1/ Inasmuch as such imports are dutiable at a rate that was not increased under the escape action in 1954, the duty on such articles would not be reduced by restoration of the trade-agreement concessions. No significant competition exists between domestically produced pin-lever pocket watches and the small quantity of jeweled-lever pocket watches sold in the United States--whether domestic or imported. 2/ Neither is there any significant competition between pocket watches and wrist watches. For these reasons the domestic production of pin-lever

1/ Virtually all pin-lever movements for pocket watches are dutiable under TSUS item 932.16.

2/ Jeweled-lever movements for pocket watches are dutiable under TSUS items 932.26 and 932.36.

pocket watches would not be affected significantly by restoration of the concessions.

Most domestically produced jeweled-lever movements are incorporated in wrist watches that compete principally with the more expensive wrist watches containing imported jeweled-lever movements. A significant share of such domestic movements incorporated in ladies' watches, however, compete principally with lower priced ladies' watches incorporating imported jeweled-lever movements. Little effect on the competition between the more expensive watches made abroad and those made in the United States would be likely to result from restoration of the concession, since such competition is based less on price than on other factors, such as prestige of brand names, styling, and quality. A substantial increase in price competition between lower priced ladies' watches would be likely to result from restoration of the concessions on jeweled-lever movements; the reductions in duty on the movements incorporated in such watches would generally be reflected in lower watch prices to consumers.

The concerns that produce jeweled-lever movements in the United States, all of which have foreign affiliates or subsidiaries, have in recent years increasingly substituted imported for domestic movements. The duty reductions that would be brought about by restoration of the concessions would provide an incentive for continuing such substitution. The extent to which further substitution might be expected to take place, however, would vary from concern to concern. Without a certain minimum domestic output, no producer can maintain a viable

domestic operation. For this reason, as well as others, restoration of the concessions might, at one extreme, result in little change in the volume of domestic output of one producer and, at the other extreme, result in abandonment of another's domestic production altogether. To the extent that restoration of the concessions would result in further substitution of imported for domestic movements, it would contribute to a further idling of domestic production facilities and a decline in employment in them, as well as to certain capital losses.

The great bulk of the watches consumed domestically consist of the lower priced wrist watches. Virtually all of the recent increase in domestic consumption has been comprised of such watches; they incorporate both pin-lever and jeweled-lever movements. Imports of jeweled-lever movements for such watches have increased substantially during the last few years, principally from Switzerland; the duty-free shipments from the Virgin Islands have increased even more sharply, principally because of the escape-action rates that apply to movements imported from foreign countries. Without any change in existing rates of duty, there is likely to be a continuing increase in imports from abroad, as well as in shipments from the Virgin Islands, of jeweled-lever movements for incorporation in the lower priced watches. Such watches are likely (1) to replace ultimately the lower priced watches that presently incorporate domestic jeweled-lever movements, and (2) to encroach on the market now served by the higher priced pin-lever watches. A restoration of the trade-agreement concessions

would accelerate these developments; it would also alter somewhat the source of imports by encouraging direct importation of watch movements from foreign sources and thereby discouraging further expansion of assembly operations in the U.S. Virgin Islands--operations that are based principally on the assembly of parts imported from Japan and some European countries.

Restoration of the concessions would result in substantial reductions in the duties on most sizes of pin-lever movements used in wrist watches. 1/ The reduction in duties on the movements used in such watches, together with the reductions in duty on the lower priced jeweled-lever movements, would intensify competition in the price range in which both imported and domestic pin-lever watches are marketed.

Increasingly, pin-lever movements have been assembled in the United States from parts produced in foreign countries. Restoration of the trade-agreement rates would operate both to discourage the importation of watch parts for use in domestic assembly operations and to stimulate the transfer of those operations from the United States to plants abroad.


As indicated elsewhere in the report, six concerns currently produce watch movements in the United States. The Commission's foregoing conclusions with respect to the industry as a whole are based on an analysis of the probable economic effect that restoration of

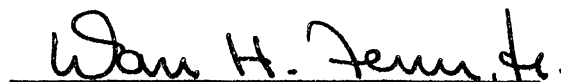
1/ Imported principally under TSUS items 932.10-.15.

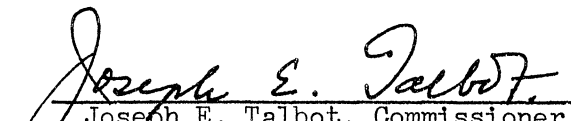
the concessions would have on each of the individual concerns. Much of the analysis with respect to each of them, however, contains material the publication of which would reveal confidential information concerning their individual operations. For this reason the separate analysis with respect to the individual concerns is included only in the report submitted in confidence to the President. That confidential analysis, however, merely provides detailed information in support of the conclusions published with respect to the industry as a whole.

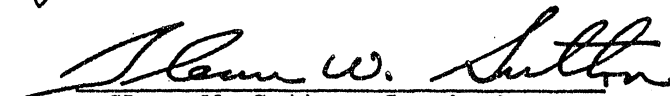
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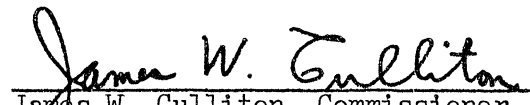
Respectfully submitted.


 Ben Dorfman, Chairman


 Dan H. Fern, Jr., Vice Chairman


 Joseph E. Talbot, Commissioner


 Glenn W. Sutton, Commissioner


 James W. Culliton, Commissioner

Information Obtained in the Investigation

Summary of major developments

Since 1954, when the escape action on watch movements was taken, marked changes have occurred in the organization of the domestic industry, in the volume and composition of domestic production and imports of watch movements, and in the consumption of watches in the United States. The 1954 increase in duties is but one of numerous factors contributing to such changes. Other factors include technological advances both in production techniques and design, changes in fashion, marketing innovations, the rising cost of watch repairs, Treasury Department rulings on "up-jeweling," and changes in regulations regarding shipments from the Virgin Islands.

During the past decade the number of watches sold in the United States has increased significantly. The increase was accounted for entirely by greater sales of watches incorporating domestic and imported pin-lever movements and lower priced jeweled-lever movements. Although the consumption of watches has increased, there has been no upward or downward trend in the aggregate share supplied by those incorporating movements imported from abroad and obtained from the Virgin Islands. The aggregate of the watches incorporating these movements imported from abroad and obtained from the Virgin Islands supplied about 55 percent of domestic consumption in 1961-64 as well as in 1951-53; the imports have not yet significantly reflected the great expansion of the watchmaking industries in foreign countries other than Switzerland, such as in Japan and the Soviet Union.

Nearly all of the concerns currently producing watch movements in the United States have either expanded their foreign facilities or acquired plants in foreign countries and in the Virgin Islands in recent years. U.S. producers now account for a substantial share (about 27 percent in 1964) of the aggregate of the movements imported from abroad and obtained from the Virgin Islands. * * *

Imports of jeweled-lever watch movements declined irregularly from 1954 through 1958 and increased somewhat thereafter; imports from abroad, together with shipments from the Virgin Islands, were at approximately the same aggregate level in 1964 as in the period immediately preceding the increase in duties. The trend of U.S. production of jeweled-lever movements, on the other hand, continued slightly downward throughout the period 1954-64. The segment of the domestic industry engaged in the manufacture of conventional jeweled-lever movements is now comprised of three concerns--Elgin, Bulova, and Hamilton. In times past there were other such producers; the last two to discontinue production were The Waltham Watch Co. and the Precision Time Corp. Waltham discontinued the manufacture of watch movements in 1957, and Precision Time, which began the domestic production of jeweled-lever watch movements in 1959, entered bankruptcy in 1963.

The three domestic concerns that have continued production of jeweled-lever watch movements have progressively reduced the number of their domestic models, and Elgin discontinued the domestic production of all men's watches in 1964. In adjusting to competition from imports and the

changing pattern of U.S. consumption, Elgin, Bulova, and Hamilton have obtained or expanded facilities abroad for producing movements; these three concerns, in the aggregate, have accounted for most of the increase in imports of jeweled-lever watch movements in recent years.

Following the 1954 tariff increase, both U.S. production and imports of pin-lever watch movements rose sharply though irregularly. Annual imports of pin-lever movements in recent years have been more than double the annual average in the early 1950's; annual U.S. production of pin-lever movements was about 75 percent greater in the years 1962-64 than in the years 1952-53.

The segment of the watch industry producing pin-lever movements now consists of three firms--General Time, Ingraham, and United States Time. The New Haven Clock & Watch Co. went out of business in 1959. Ingraham discontinued the production of wrist watches in 1959, and General Time did so in 1964; both firms continue to manufacture pin-lever pocket watches. On the other hand, U.S. Time has more than tripled its domestic output during the past decade and now accounts for virtually the entire domestic production of pin-lever wrist watches; in addition, that concern is producing domestically, in large volume, an unconventional 21-jewel movement and has been importing a jeweled movement powered by an electric cell.

Since 1959, an increasing share of U.S. consumption of jeweled-lever movements has been supplied by shipments from the Virgin Islands. Such movements are assembled there almost wholly from foreign parts and sub-assemblies that are imported into the islands at a very low rate of

duty; ^{1/} the watch movements are then shipped duty-free into the United States. The watch-assembling facilities in the Virgin Islands are owned principally by U.S. interests, including both watch producers and importers. The number of watch movements shipped from the Virgin Islands to the United States in 1964 (2.4 million units) was about twice the number of jeweled-lever movements produced in the United States in that year. Virtually all of the movements received from the Virgin Islands are of jeweled-lever construction but cost much less than either domestically produced conventional jeweled-lever movements or the better quality imported jeweled-lever movements laid down, duty-paid in the United States.

As a whole, the manufacture of watch movements in the United States was profitable during the years 1959-63. * * *

U.S. tariff treatment

Presidential Proclamation No. 3062, of July 27, 1954, provided for the increase of almost all of the rates of duty on the watch movements on which tariff concessions had been granted to Switzerland in 1936. Rates were not increased, however, on movements having more than 17 jewels or on movements measuring over 1.5 inches in width and having no jewels or only 1 jewel. Similarly, no increase was made in the additional rate for

^{1/} Although the rate of duty assessed on each part is 6 percent ad valorem, subsidies provided by the Virgin Island Government to 4 of the 11 firms currently assembling movements almost wholly offset the duty; see the section of this report concerning shipments from the U.S. Virgin Islands.

each adjustment (table 1 in the appendix). 1/ The Tariff Schedules of the United States (TSUS), which came into effect August 31, 1963, made no change in the trade-agreement and escape-action rates of duty on watch movements. 2/ Those rates and the statutory rates of duty 3/ on watch movements are shown in tables 1 and 2.

Shipments from the U.S. Virgin Islands enter the United States free of duty when meeting the requirements of general headnote 3(a) of the TSUS. For a description of this provision see the section of this report on shipments from the Virgin Islands.

1/ The duty applicable to imported movements have more than 17 jewels (\$10.75) and the duty applicable to movements having 1 or no jewels and measuring over 1.5 inches in width (75¢) are the rates imposed under par. 367(a) of the Tariff Act of 1930; the rate on adjustments (50¢ per adjustment), applicable only to movements having 17 or fewer jewels, is a trade-agreement rate.

2/ At the time the concessions were granted Switzerland, as well as at the time the President took the escape action, tariff treatment for watch movements was provided under par. 367(a) of the Tariff Act of 1930. Par. 367(a) made no distinction between movements with pillar plates that are less than 1.77 inches in width, whether used in watches or in clocks. The application of the escape action to all movements under that tariff provision resulted in the imposition of the increased duties on imports of certain movements generally used in small clocks. The TSUS (effective Aug. 31, 1963) established separate tariff provisions for clock movements (see headnotes 2(b) and (c) and 3(d) of subpart 2E of schedule 7) that are less than 1.77 inches in width and 0.50 inch or more in thickness (TSUS items 720.02-.08) and established as the trade-agreement rates of duty for such movements the same rates that had applied to them under the escape action. Inasmuch as such movements are no longer subject to the escape action, data on the trade in such movements are not included in the data shown in this report, except where indicated. Watch movements entering commercial channels in clocks, however, remain dutiable under the TSUS provision for watch movements and are included in the data in this report. Annual imports of such watch movements have probably been insignificant.

3/ The rates of duty imposed under par. 367(a) of the Tariff Act of 1930 and presently set forth in col. 2, pt. 2E, schedule 7, of the TSUS.

U.S. consumption

The apparent U.S. consumption of watch movements was greater in 1964 (27.2 million units) than in any earlier year. ^{1/} Since 1954, when the escape action was taken, the apparent consumption has varied irregularly from year to year, but the trend has been sharply upward. Consumption increased by 63 percent from 16.2 million units in 1954 ^{2/} to an annual average of about 26.4 in 1962-64 (table 3). ^{3/} Annual consumption of watch movements since 1954 has been very sensitive to changes in annual aggregate disposable personal income. The changes in annual consumption, however, have usually been much more pronounced than the changes in annual income. The disparity is attributable primarily to the postponable nature of consumer purchases of watches and the substitutability of other articles as gifts.

The increased quantity of watch movements consumed annually in the United States since the escape action was taken has consisted almost entirely of pin-lever wrist watches. * * * The rise in consumption of

^{1/} Consumption of watch movements has been computed by totaling (1) the watch movements produced in the U.S. customs territory, (2) the U.S. imports of watch movements, and (3) the shipments of watch movements from the U.S. Virgin Islands into the U.S. customs territory, and subtracting from the total the U.S. exports of watch movements. (A more complete explanation of the method used is given in the note appended to table 3 of this report.) The apparent consumption reported herein understates actual consumption, however, because it does not take into account the considerable number of watches and watch movements entered by tourists or smuggled into the U.S. customs territory.

^{2/} The low level of consumption in 1954 marked the bottom of the decline in consumption that had begun after the earlier 1951 peak. The 1954 low appears to have been only coincidental with the escape action and probably resulted primarily from a low level of disposable personal income.

^{3/} The annual changes in consumption, production, imports and shipments from the Virgin Islands shown in the statistical tables are also presented graphically in charts 1 to 5 in the appendix of this report.

pin-lever watches is attributable principally to their increased consumer acceptance, which in turn, is attributable to (1) their comparatively low prices; (2) the marked increase in the variety of their sizes, shapes, and styles; (3) the increased availability of women's models in smaller sizes; (4) the many improvements in their quality and appearance; and (5) the improved marketing of such watches (particularly by U.S. Time). Another important factor has been the rising cost of repairing jeweled-lever watches; pin-lever watches are more frequently discarded than repaired.

The annual consumption of conventional jeweled-lever watch movements varied irregularly during the period 1954-61, with no apparent trend. Since 1961, however, the trend has been upward, and the number of such movements that entered into consumption was significantly greater in the years 1962-64 than in any other earlier year as far back as 1954. The recent rise in the consumption of such movements has been reflected principally in the increased use of low-priced jeweled-lever movements from the Virgin Islands and foreign countries. * * *

As a result of improvements in pin-lever watches and the increased availability of low-cost jeweled-lever watches (both types generally retailing for no more than \$30 but most for much less), there is much more direct competition between pin-lever and the lower priced jeweled-lever watches now than when the escape action was taken. Currently, at least two-thirds of all watches retail at less than \$30. Virtually the entire increase in annual consumption during the past decade was accounted for by watches retailing in this price range. Such watches include (1) nearly all those incorporating pin-lever movements (domestic and imported),

(2) virtually all those incorporating movements received from the Virgin Islands, (3) a very large share of those incorporating jeweled-lever movements imported from foreign countries, and (4) a small share of those incorporating jeweled-lever movements produced in the United States.

U.S. producers

During 1964 six concerns produced watch movements in the United States; 3 produced only wrist watches, 2 produced both wrist and pocket watches, and 1 produced only pocket watches. 1/ Three (Bulova, Elgin, and Hamilton) produced conventional jeweled-lever movements, 2/ and three (General Time, U.S. Time, 3/ and Ingraham) produced pin-lever watch movements. U.S. Time also produced unconventional jeweled-lever move-

1/ Ingraham produced pocket watches but no wrist watches in 1964. General Time discontinued the production of wrist watches in the United States in 1964, but continued the production of pocket watches.

2/ Bulova, Elgin, and Hamilton also produced some watch movements powered by miniature electric cells (none of which movements have escapements). The Elgin and Hamilton electric movements incorporate balance wheels, but the Bulova model does not. Elgin produced only a limited number of these movements; it no longer produces any. U.S. Time also markets watches that are powered by an electric cell; they are produced in one of its establishments in West Germany. (Several other importers also market in the United States watches powered by an electric cell; they are produced in Switzerland and France.) In this report, unless otherwise indicated, the data for watch movements powered by an electric cell have been included with the data for jeweled-lever watch movements.

3/ In this report, the Eastern Watch Co. of Puerto Rico, which began the production of pin-lever watches in 1959, is treated as a part of U.S. Time. The Eastern Watch Co., owned by the same interests that own U.S. Time, is operated at the direction of the officers of U.S. Time as an integral part of the latter, along with its six other plants located in the United States.

ments. 1/ These 6 concerns currently producing watch movements in the United States do so in 14 establishments; 3 of these concerns produce such movements in more than a single U.S. establishment--U.S. Time does so in 7, and Elgin and Ingraham each produce them in 2. All 6 of these concerns, as well as 2 others, were producing watches at the time of 1954 escape action.

Since 1954 substantial changes in the composition of the industry have occurred. In 1957 Waltham (a producer of jeweled-lever watches) discontinued manufacturing watches. In 1959 the New Haven Clock & Watch Co. (a producer of pin-lever watches) went out of business, and Ingraham ceased producing pin-lever wrist watches. In December 1963, Precision Time, which began producing jeweled-lever wrist-watch movements in 1959, entered bankruptcy; its plant and equipment were sold in July 1964. 2/ During 1963 and 1964 Elgin was in the process of transferring its watch-making facilities from Elgin, Ill., to Elgin, S.C., for the announced purpose of reducing production costs; in 1964 it discontinued its domestic

1/ Since 1961 U.S. Time has produced and marketed in the United States a large number of watches incorporating an unconventional type of jeweled-lever movement containing 21 jewels, both in spring-wound and self-winding models. These movements, although incorporating a jeweled-lever escapement, have most of the basic construction features generally associated with pin-lever movements; the shape and mounting of the pallet jewels and the contour of the teeth of the escape wheel are different from those found in jeweled-lever movements of conventional construction.

In this report, unless otherwise indicated, the data for these 21-jewel movements have been included with the data for domestically produced pin-lever watch movements.

2/ Precision Time, which never accounted for more than a small share of the U.S. production of jeweled-lever watch movements, did not market any watches under its own brand. The watch movements sold by this concern competed principally with the lower priced jeweled-lever watch movements obtained from foreign countries and from the U.S. Virgin Islands, and with both domestic and imported pin-lever watch movements. * * *

production of men's watch movements. In 1964 General Time discontinued its U.S. production of wrist-watch movements, but is continuing production in the United States of pocket-watch parts and pocket watches. 1/

In addition to the conventional stem-wound wrist watches they produced domestically in 1964, two concerns (Bulova and U.S. Time) produced self-winding wrist watches, two (Bulova and Hamilton) produced watches powered by an electric cell, one (Hamilton) produced chronograph watches, and three (General Time, Hamilton, and Ingraham) produced pocket watches. All four of the domestic concerns that produced conventional jeweled-lever movements made both 17-jewel movements and movements containing more than 17 jewels. 2/

During 1964 all six concerns now producing watches in the United States also imported watches and watch movements from foreign countries and prepared such imports for sale in their U.S. watchmaking establishments. Three of these concerns * * * also obtained a large number of watch movements from the U.S. Virgin Islands and prepared them for sale in their U.S. establishments. The imported watch movements and those secured from the Virgin Islands that are prepared for sale by the six

1/ Data relating to the operations of all of the aforementioned producers have been included in this report for the years in which they produced watch movements.

2/ In 1964 the jewel counts of domestically produced movements containing more than 17 jewels ranged from 18 to 30 jewels. The difference between the cost of producing movements containing 17 jewels and that of producing those containing 21 jewels is usually much smaller than the cost of incorporating other features that more significantly affect the nature and quality of performance.

concerns in their U.S. watchmaking establishments are generally sold as an integral part of their watch "lines." Two of these concerns--Elgin and Hamilton--own subsidiaries 1/ which also secure watches and watch movements both from foreign countries and from the U.S. Virgin Islands. These subsidiaries also market these watches and watch movements through their own sales organizations, which are completely separate from those of the parent concerns. 2/

Certain imported watch-movement parts are obtainable at costs (landed and duty paid) significantly lower than the costs at which similar parts can be produced domestically. Although all U.S. producers imported some watch parts between 1954 and 1960, those parts probably accounted for only a small share of the total cost of parts incorporated in their domestic watch movements during those years. 3/ After 1960 some concerns in foreign countries (other than Switzerland) began producing substantial quantities of parts for export, thus facilitating the increased use of foreign parts by certain U.S. producers. Large quantities are currently available from Japan, the United Kingdom, West Germany, and France. Some U.S. producers are increasing their use of imported parts. * * * Since 1956 U.S. Time has been importing an increasing share of the parts it uses. 4/

1/ The Helbros Watch Co. (acquired by Elgin in August 1963) and Vantage Products, Inc. (formed by Hamilton in September 1961).

2/ Inasmuch as the watch movements that have been imported by these subsidiaries are not prepared for sale in domestic watchmaking establishments, data on the operations of these subsidiaries are not included in the data shown in this report except where otherwise indicated.

3/ * * *

4/ In 1962, imported parts (including jewels) accounted for about 50 percent of the total number of the parts used by U.S. Time in its domestically produced watch movements. * * *

In addition to preparing for sale the watches and watch movements that they import, all U.S. producers of watches manufacture other articles in their U.S. watchmaking establishments. The production of many of these other products requires a high degree of precision. Two of the concerns--General Time and Ingraham--are major producers of clocks, which they produce in those establishments.

Since 1954, five of the domestic producers--Bulova, Elgin, General Time, Hamilton, and U.S. Time--have purchased or expanded facilities for producing watch movements in foreign countries. ^{1/} All of them except Bulova had obtained production facilities in the U.S. Virgin Islands by May 1964. ^{2/}

U.S. production, sales, and inventories

Production.--The U.S. production of watch movements both in 1963 and in 1964 (12.2 million and 12.0 million units, respectively) was greater than that in any other year since World War II (table 4). The higher level of production in 1963 and 1964 was a continuation of the upward trend since the escape action was taken. The trend in aggregate production, however, does not coincide with the trends in the production of all types of watch movements.

^{1/} The domestic producers currently own or control 11 establishments in which watch movements are produced or assembled that are located in foreign countries. Bulova owns 2 in Switzerland; Elgin owns 1 in Switzerland; General Time owns 1 in Scotland; Hamilton owns 1 in Switzerland and controls 1 in Japan; and U.S. Time owns 1 in England, 1 in France, 2 in Scotland, and 1 in West Germany.

^{2/} Hamilton purchased the concern that is now its Virgin Island subsidiary in 1961; Elgin, General Time, and U.S. Time established their subsidiaries in the islands in late 1963 and early 1964.

U.S. production of conventional jeweled-lever movements has declined significantly since the early 1950's. * * * The share of the production of conventional jeweled-lever watch movements comprised of 17-jewel movements declined from about 50 percent in 1954 to 13 percent in 1958. After 1958 a shift in the opposite direction occurred; by 1964, movements containing 17 jewels accounted for about 60 percent of all conventional jeweled-lever movements.

In contrast, the trend in the production of pin-lever watch movements has been significantly upward in recent years. * * * The increase in the production of pin-lever watch movements, as well as that in the production of all watch movements since 1954, has been accounted for almost wholly by the increase in the production of pin-lever wrist watches. * * * Since 1950 the output of pin-lever wrist watches has greatly exceeded that of jeweled-lever wrist watches, and since 1952 it has exceeded that of pin-lever pocket watches.

The experience of individual producers of pin-lever movements has varied greatly from one to another. * * * Ingraham discontinued its production of wrist watches in 1959, and General Time did so in 1964. Contributing to the increased output of U.S. Time has been its production of men's 21-jewel watch movements, which began in 1961. * * *

Since the escape action was taken, the annual domestic production of men's 17-jewel wrist-watch movements has decreased both in quantity

and relative to the production of all jeweled-lever movements--men's and women's. * * * 1/

About 9 percent of the wrist-watch movements produced in the United States in 1963 embodied special features. Most of those movements were self-winding movements; a small share of them were powered by electric cells; and an insignificant number were calendar watches and chronographs. 2/

Since the escape action was taken, the share of annual consumption supplied by domestically produced watch movements has varied irregularly between a high of 48 percent of the total and a low of 39 percent, with no discernible trend. In 1964 domestically produced watch movements supplied about 44 percent of the total. 3/ U.S. production of jeweled-lever movements supplied a smaller share of domestic consumption of all watch movements in 1964 * * * than in 1954 * * *. Conversely, U.S. production of pin-lever movements supplied a larger share of domestic consumption of all watch movements in 1964 * * * than in 1954 * * *.

The Commission found it impossible to obtain definitive data on the amount or trend of idle equipment in U.S. plants producing watch movements,

1/ * * * The tariff protection afforded the domestic production of movements containing more than 17 jewels is clearly greater than that afforded the production of 17-jewel movements. Although the duties on 17-jewel movements are greater for women's sizes than for men's sizes, the degree of tariff protection afforded the domestic production of those in women's sizes is not markedly greater than that afforded the production of those in men's sizes.

2/ For a description of the composition of U.S. production in 1963, by type of movement, see table 5.

3/ The share of consumption supplied by domestic production is overstated because the data on apparent consumption does not take account of watches entered by tourists returning to the United States or watches and watch movements smuggled into this country.

nor does the Commission know the extent to which the idle equipment is obsolete. Changes in the level of production by individual concerns do not reflect the extent to which equipment has been worn out, outdated, or sold, or to which specialized equipment has been used only part time when output was insufficient to require its full use. The equipment currently standing idle in individual establishments still producing watch movements ranges from a very small amount to a very large amount, compared with that in use. * * * The equipment formerly owned by Waltham, New Haven, and Precision Time has been either junked or sold to concerns other than those still producing watch movements.

Producers' sales.--The annual sales by U.S. producers of the watches and watch movements they manufactured in their U.S. establishments have varied widely since the escape action was taken, but the trend of aggregate sales has been upward in both quantity and value (table 6). Such sales in 1963 (12.2 million units, valued at \$98.3 million) were greater than in any other year since 1954. As indicated in the foregoing discussion on production, however, the share of total sales accounted for by conventional jeweled-lever movements declined materially between 1954 and 1964, while that accounted for by pin-lever movements increased.

As indicated earlier, all domestic concerns currently producing watch movements have also imported them in recent years. In 1963, U.S. producers' aggregate sales of watches and watch movements (imported and

domestic) 1/ prepared for sale in their U.S. watchmaking establishments totaled 15.0 million units, valued at \$143.8 million, and were greater in both quantity and value than in any of the preceding 10 years. Of the watches and watch movements sold through the U.S. watchmaking establishments, the share accounted for by imports, however, has not changed significantly since the escape action was taken. 2/ In 1963, imports accounted for 19 percent of the quantity and 32 percent of the value of such sales by domestic producers. These averages, however, obscure wide variations in the experience of the individual producers. * * *

The three domestic producers currently producing conventional jeweled-lever movements---Bulova, Elgin, and Hamilton---also import a large number of jeweled-lever movements. They generally market watches containing domestically produced movements at prices higher than those of

1/ The data on the sales by U.S. producers of watches incorporating imported movements that were prepared for sale in their domestic watchmaking establishments have been included in the data on the sales of all products of the establishments. The value added in the establishments to the imported watch movements (dials, timing, cases, bands, and boxes, as well as merchandising costs) accounts for the major part of the sales value of most of the watches containing such imported movements. The bulk of the movements imported by the U.S. producers are cased in the United States in domestically made cases.

2/ This discussion of the sales of watches and watch movements prepared for sale in U.S. watchmaking establishments does not include the sales of watches by U.S. producers through the Helbros Watch Co. (a subsidiary of Elgin) and Vantage Products, Inc. (a subsidiary of Hamilton). Watch movements imported by these subsidiaries were not prepared for sale in the domestic watchmaking establishments. For the share of U.S. imports accounted for by U.S. producers, including these subsidiaries, see the section on U.S. imports.

most of their watches containing imported movements. This practice has operated to restrict sales of watches containing their domestic movements, while the market for their watches containing imported movements has been expanding. * * * This trend, moreover, appears to be continuing. The smaller sales of watches containing domestic movements are reflected in increased unit costs and increased prices; the increased prices in turn lead to further contraction of the market for such watches.

In each of the years since 1954 the concerns producing watch movements in the United States supplied more than half of all watch movements entering consumption. ^{1/} The share they supplied has varied annually since 1954 but with no apparent trend. Their greatest annual participation in 1954-63 occurred in 1963, when they supplied 63 percent; their participation was almost as high in 1964 (59 percent). The respective shares of jeweled-lever and pin-lever watch movements entering consumption that have been supplied by these concerns since 1954 have also varied with no apparent trend. * * * About three-fourths of all the movements these concerns supplied in 1963 were domestically produced; * * * (table 7). These shares were about the same in 1964 as in 1963.

^{1/} In 1954-64 the number of concerns varied from 6 to 8; the number of movements they supplied includes not only domestic production but also their imports and the shipments they received from the U.S. Virgin Islands, as well as the imports and Virgin Island shipments of the two subsidiaries--the Helbros Watch Co. and Vantage Products, Inc.

The share of the total annual sales value of all of the products of the U.S. watchmaking establishments sold during 1956-63 that was accounted for by domestically produced watches and watch movements varied from 44 percent in 1959 to 36 percent in 1961; the ratio in 1963--the latest year for which the Commission has such data--was 42 percent. The share of the total sales accounted for by all watches and watch movements (domestic, imported, and those obtained from the Virgin Islands) prepared for sale in those establishments ranged from 55 percent in 1956 to 68 percent in 1959; the ratio was 61 percent in 1963. During 1953-55 these establishments sold an unusually large amount of products other than watches and watch movements--principally articles supplied under defense contracts. These large sales of other products resulted in domestic watches and watch movements accounting for 29 percent and all watches and watch movements accounting for 44 percent of the total sales in 1953-55.

Before 1964 none of the watches sold through the domestic watchmaking establishments contained movements assembled in the U.S. Virgin Islands. * * * In early 1965, the annual sales through domestic watchmaking establishments of watches containing Virgin Island movements began to increase substantially and probably will continue to do so in the absence of any action specifically directed to prevent it, if the U.S. duties are not reduced significantly on competitive movements imported from foreign countries.

Producers' inventories.--Inventories of domestic watch movements held by U.S. producers were substantially greater at the end of 1963

(1.4 million units) than at the end of any earlier year as far back as 1954 (table 8). * * *

U.S. imports

Annual imports of watch movements have increased substantially during the past decade. Although the number imported was 7 percent smaller in 1964 (12.9 million units) than in 1962, ^{1/} it was 43 percent greater in 1964 than in 1954 (table 3). ^{2/} During 1954-64 the number of movements imported annually ranged from a low of 9.0 million units in 1954 to a high of 13.8 million units in 1962. Notwithstanding the increase in imports during 1954-64, the share of apparent domestic consumption of watch movements supplied by imports fluctuated irregularly with no apparent upward or downward trend for the 11-year period. The ratio of imports to consumption in the period 1954-64 varied from a high of 61 percent in 1957 to a low of about 47 percent in 1964. A decline in the

^{1/} When the number shipped from the Virgin Islands is combined with the number imported from foreign countries, the total number imported was 7 percent greater in 1964 than the total imported in 1962 (table 9).

^{2/} The data on imports of watch movements reported by the Tariff Commission understate the actual quantities of foreign watch movements entering the United States because such data do not include watch movements smuggled into this country or the watches entered by tourists returning to this country. The official statistics on imports of movements reported by the U.S. Department of Commerce tend to understate such imports for the same reason; however, for periods up to Sept. 1, 1963, the Department's statistics on imports of movements tend to overstate such imports, since those statistics include all movements less than 1.77 inches in width that enter commercial channels in clocks. The data on imports of watch movements reported by the Commission have been calculated by subtracting from the data reported by the Department of Commerce the estimated quantities of such small-clock movements.

share occurred in each of the 4 years 1961-64, reflecting not only the increased shipments from the Virgin Islands but also the increased sales of U.S.-produced pin-lever watches. The ratios (based on quantity) of imports of watch movements to apparent U.S. consumption of all watch movements in 1951-64 were as follows: 1/

<u>Year</u>	<u>Ratio</u> <u>(percent)</u>	:	<u>Year</u>	<u>Ratio</u> <u>(percent)</u>
1951	49	:	1958	52
1952	56	:	1959	54
1953	59	:	1960	58
1954	56	:	1961	56
1955	53	:	1962	53
1956	57	:	1963	49
1957	61	:	1964	47

Significant changes have occurred in the composition of imports by type, unit value, and source. The number of jeweled-lever watch movements imported annually declined from 7.0 million units in 1954 to 5.6 million units in 1958; thereafter the number rose, amounting to 8.1 million units in 1962 and 7.3 million units in 1964. 2/ The rise in annual imports of jeweled-lever movements since 1958 is accounted for almost wholly by increased imports by the domestic producers of watch movements. The share of the domestic consumption of all watch movements

1/ Shipments from the Virgin Islands were included in apparent U.S. consumption but not included with the imports in determining these ratios. If shipments from the Virgin Islands, which began in 1959, were added to the imports, the ratios for 1959 and 1960 would remain the same as shown in the tabulation, but the ratios for subsequent years would be as follows: 1961, 57 percent; 1962, 54 percent; 1963, 53 percent; and 1964, 56 percent.

2/ For the purposes of this report, it is assumed that virtually all of the imported movements reported as containing two or more jewels contain seven or more jewels and are jeweled-lever movements.

that was supplied by imported jeweled-lever movements was smaller in 1964 (about 27 percent) than that in 1962 (31 percent). The corresponding ratio based on the aggregate of those imports plus the shipments from the Virgin Islands, however, was greater in 1964 (about 35 percent) than in 1962 (32 percent).

From 1954 to 1959, annual imports of pin-lever watch movements more than tripled, reaching a peak of 6.4 million units in 1959. Such imports decreased almost every year thereafter to 4.9 million units in 1963 and then rose to 5.6 million units in 1964. The share of the domestic consumption of all watch movements supplied by imported pin-lever movements was about 20 percent in 1964, compared with 12 percent in 1954. The rise of imports of pin-lever movements in 1954-59 is attributable principally to their increased consumer appeal. The decline in such imports in 1959-63 resulted principally from the increased sale of Timex watches and the increased shipment of low-cost jeweled-lever movements from the Virgin Islands.

Watch movements containing more than 17 jewels at the time of importation have never accounted for a significant proportion of the imports of all jeweled-lever movements. The number reported, however, has generally understated the number of imported movements that ultimately embody more than 17 jewels when they enter consumption. Some importers add jewels in the United States to movements imported as 17-jewel movements. Although only 28,000 watch movements were reported as containing more than 17 jewels at the time they were imported in 1963, it is estimated that the jewel counts of an additional 200,000 imported 17-

jewel movements were increased after importation. In addition, 384,000 movements containing more than 17 jewels were received from the U.S. Virgin Islands in 1963. The aggregate of the imported watch movements containing more than 17 jewels when they entered consumption in 1963, including those whose jewel counts were increased subsequent to importation, plus the shipments from the Virgin Islands, was probably about 612,000 units. 1/ * * *

The share of imports consisting of self-winding watch movements appears to have increased substantially in recent years. Almost all imported self-winding movements incorporate jeweled-lever escapements. In 1963 an aggregate of 1,162,000 jeweled-lever movements obtained from foreign countries and from the U.S. Virgin Islands incorporated self-winding mechanisms. Self-winding devices (also imported) were attached in the United States to an estimated additional 123,000 imported jeweled-lever movements. 2/ The aggregate of these jeweled-lever movements obtained from foreign countries and the Virgin Islands that embodied self-winding devices when they entered consumption in 1963 (about 1,285,000 units) accounted for 14 percent of all imported jeweled-lever

1/ Available information indicates that the upjeweling of watch movements in the United States has been substantially curtailed since 1960 because low-cost movements containing more than 17 jewels could be readily obtained duty-free from the U.S. Virgin Islands.

2/ There is no economic incentive to add a self-winding device in the United States to an imported pin-lever movement. The type of jeweled-lever movement suitable for use with a self-winding device may also be used without adding such a device.

watch movements and supplied about 90 percent of the self-winding jeweled-lever movements consumed in that year. 1/

Before 1954 virtually all U.S. imports of watch movements came from Switzerland. By 1963 the estimated share of imports supplied by Switzerland had declined to 88 percent of the total; in that year the estimated share supplied by West Germany was 5.9 percent; Japan, 3.5 percent; and France, 2.2 percent. 2/ The share supplied directly and indirectly by each of the latter three countries would be slightly greater, however, and that for Switzerland substantially smaller (71 percent), if the data were adjusted to include shipments from the Virgin Islands classified according to the country of origin of their parts. Almost all of the movements shipped from the islands were assembled from parts and sub-assemblies obtained from West Germany, Japan, and France because the Swiss watch industry has discouraged the exportation from Switzerland of parts that would be used for assembly into watch movements elsewhere. The aggregate shares of the U.S. market supplied both directly and indirectly by each foreign country in 1963 differ significantly from the

1/ Not included in the calculation of the 90-percent ratio were a large number of 21-jewel self-winding movements produced domestically by U.S. Time.

2/ These ratios are based on estimates of the number of watch movements imported, by country of origin, because official import statistics of the U.S. Department of Commerce for periods prior to Sept. 1, 1963, do not distinguish between imports of watch movements and imports of other movements less than 1.77 inches in width that entered commercial channels in clocks. For data on imports of all movements with pillar plates that are less than 1.77 inches in width, as reported by the Department of Commerce, see table 10.

shares of the world market they supplied. During the past decade the great expansion of the watchmaking industries in Japan and the Soviet Union, and to a lesser extent of those in West Germany and France, has operated to reduce the share of the world market supplied by Switzerland.

The annual average foreign unit values of most categories of imported movements have varied irregularly since 1954 with no apparent trend except possibly for 17-jewel movements (table 11). The average unit value of such imported movements declined from \$7.11 in 1954 to \$5.61 in 1961. Notwithstanding a reported slight increase that occurred in the following 2 years, the downward trend in the actual average unit value of imported 17-jewel movements probably continued through 1963. ^{1/} The decline is attributable largely to the increasing share of the total accounted for by lower priced watch movements imported principally from Switzerland, which have been available in increasing number. ^{2/}

As noted earlier, U.S. watch producers have accounted for an irregularly rising share of the aggregate of all watches and watch movements

^{1/} Unit value data for the full year are estimated, inasmuch as actual comparable data are not available for the years after 1962, because of the changes that were made in the method of reporting imports under the Tariff Schedules of the United States, effective Aug. 31, 1963.

^{2/} These watch movements in both men's and women's sizes are among a succession of new or altered models that have been supplied over the years by foreign producers to compete at lower prices in the United States and other countries. The most recently developed movements are frequently referred to as the Swiss battle movements, as they can be imported at costs substantially below those of other jeweled-lever movements, at some sacrifice of quality. These movements are being imported by at least two domestic producers, as well as by other importers that do not produce any movements in the United States.

imported from foreign countries and obtained from the U.S. Virgin Islands since 1954 (table 12). In 1964 they secured 4.2 million units from these sources, which accounted for an estimated (1) 27 percent of that aggregate, * * *. 1/

No reliable estimates are available on the number of watch movements smuggled into the United States each year. Most of those that have been seized by the U.S. Treasury Department have been 17-jewel movements in women's sizes. If smuggling were curtailed, retailers of watches containing smuggled movements would probably sell instead more watches containing other low-cost movements obtained from the Virgin Islands or foreign sources.

Shipments from the U.S. Virgin Islands

A watch-assembly industry has been growing in the U.S. Virgin Islands since late in 1959. Watch parts, including assemblies and sub-assemblies, imported into the islands are dutiable at 6 percent ad valorem. Watch movements assembled in the islands enter the customs territory of the United States free of duty (pursuant to general headnote 3(a) of the TSUS) 2/ if they do not contain foreign materials having a landed cost in the Virgin Islands of more than 50 percent of their appraised value when they enter the United States. All of the watch movements currently assembled in the islands are considered by the U.S. Bureau of Customs

1/ Includes imports by the Helbros Watch Co. and Vantage Products, Inc.

2/ Before Aug. 31, 1963, duty-free treatment was provided for by sec. 301 of the Tariff Act of 1930, as amended.

to meet this requirement. The assembly operations, therefore, provide U.S. importers a means of avoiding the duties applicable to watch movements imported from foreign countries.

Under a program of the Virgin Islands Government designed to stimulate the establishment of industry on the islands, manufacturing concerns may be granted exemptions from major taxes and given rebates of most other taxes paid under certain conditions for periods as long as 10 years. ^{1/} By 1965 four watch-assembly concerns had been granted such subsidies. During the last few years, several other watch-assembly concerns have petitioned for such subsidies, but the subsidies have not yet been granted.

By the close of 1964, 11 concerns were assembling watches in the Virgin Islands; 4 of them are owned by U.S. watch-producing concerns (Elgin, Hamilton, General Time, and U.S. Time), and at least 5 of the other 7 plants are owned by major U.S. importers. During 1964 the output of the plants owned by the aforementioned U.S. producers accounted for a large share of the output of watch movements in the islands, and that share is expected to increase in the absence of any special measures to prevent that expansion.

The number of watch movements shipped into the customs territory of the United States from the islands has increased sharply each year

^{1/} This program provides, among other benefits, for a subsidy equal to 90 percent of the import duties paid, which results in an effective rate of duty on imported watch parts of 0.6 percent for the concerns accorded these benefits.

since such shipments began in late 1959 (table 13). These shipments rose from 4,900 units in 1959 to more than 2.4 million units in 1964.

Virtually all of the shipments have consisted of jeweled-lever wrist-watch movements. The number of such movements shipped from the islands to the United States in 1964 was * * * about 9 percent of all watch movements * * * consumed in the United States. About a sixth of the movements shipped during 1964 contained more than 17 jewels. Most of the movements are conventional types, some of which incorporate self-winding or calendar devices.

The method of assembly used in the islands does not vary greatly from plant to plant. Each concern usually obtains all of the parts for a particular type of movement from the same foreign supplier; the parts are received both as unassembled parts and as subassemblies. Usually the major share of the parts are already assembled. Several plants are attempting to assemble a small number of movements almost wholly from individual parts on an experimental basis. Almost all of the parts are currently obtained from Japan, West Germany, and France; a small quantity is obtained from the Soviet Union. Two concerns which are no longer in business are believed to have used Swiss parts for a very short period.

The movements assembled in the islands are sold in the United States either to their U.S. parent concerns, to retailers of "private" brands, or to other importers, at prices ranging from \$4 to \$8 per movement. Virtually all of such movements are incorporated in watches that are sold at retail at prices ranging from \$12 to \$25. A few of the movements are fitted in expensive cases and sold at higher prices. Most of the move-

ments assembled in the islands are comparable in quality to the lower priced jeweled-lever movements imported from Europe and Japan.

The Virgin Islands concerns appear to have the capacity to produce substantially more jeweled-lever movements in 1965 than they shipped in 1964. It is not currently clear, however, how successfully they could meet any increased competition that might result from reductions in the U.S. rates of duty, which in turn would reduce the difference in landed cost in the United States between movements from the Virgin Islands and those from foreign sources. If any governmental action (e.g., a reduction of U.S. rates of duty on watch movements, or restriction of the U.S. duty-free entry of shipments from the islands) should lead to a reduction or termination of these shipments, the U.S. concerns presently importing Virgin Islands movements would probably turn increasingly to low-priced jeweled-lever watch movements imported from other sources.

Employment in U.S. establishments

Although total employment of workers in the production of watches and watch movements in U.S. establishments was slightly smaller in 1963 than in most earlier years as far back as 1954, there was no discernible trend (table 14 1/); such employment, therefore, did not parallel the

1/ The data on man-hours include only those devoted to production of domestic watches and watch movements. The number of workers includes all those engaged in the production of watches and watch movements (whether domestic, imported, or shipped from the Virgin Islands); almost all of those who worked on imports also worked on the domestic product.

rise in annual production during 1954-63. The rise in employment in the production of pin-lever watches was accompanied by (1) reduced employment in the production of jeweled-lever watches and watch movements, (2) increased use of imported parts by U.S. Time since 1961, and (3) the termination in 1963 by General Time of most of its production of wrist-watch parts.

In 1963 there were 6,575 workers engaged in producing watches and watch movements, and they devoted a total of 12.4 million man-hours to those products in that year. Between 1954 and 1964 the number of man-hours worked annually ranged between a high of 16.5 million (in 1959) and a low of 11.1 million (in 1961). Notwithstanding the increase in employment in the casing, timing, and other processing of imported watches and watch movements in U.S. watchmaking establishments that occurred in 1962 and 1963, such employment was small compared with employment in producing domestic watches and watch movements.

Before 1958, man-hours of employment in the production of watches and watch movements were substantially greater in establishments making jeweled-lever watches than in establishments making pin-lever watches. In 1958 and since then, however, employment in establishments making pin-lever movements has been the greater. Employment in the production of jeweled-lever watches was smaller in 1963 than in most other years of the past decade, but greater than either 1958, 1961, or 1962. On the other hand, employment in the production of pin-lever watches in 1963 about equaled the annual average for all the years since 1954, but was

less than the annual average for the last 6 years, notwithstanding the rise in production that had occurred.

During 1956-62 most of the man-hours worked by the production and related workers employed in U.S. watchmaking establishments (on all products) were devoted to the production of domestic watches and watch movements; in 1963, however, slightly less than half of the total number of man-hours was thus accounted for. Man-hours of employment at these establishments in the production of other products (including imported watches and watch movements) declined almost regularly from 1954 through 1960, but rose slightly in the following 3 years, totaling 13.9 million man-hours in 1963.

There is little opportunity in U.S. watchmaking establishments for shifting workers who would be displaced by reduced or discontinued domestic production of watch movements to employment on imported watch movements. Although imports accounted for 19 percent of all watches and watch movements prepared for sale in U.S. watchmaking establishments in 1963, employment on such imports accounted for only 6 percent of the man-hours worked on all watches and watch movements. Virtually all the man-hours devoted to imports were accounted for by establishments producing conventional jeweled-lever movements. Although more imported than domestic movements were sold through such establishments in 1963, employment on imports accounted for only 11 percent of the total employment in them on all watches and watch movements. * * *

The wide disparity between the employment afforded on imports and that afforded on domestic watches and watch movements sold by any of

the U.S. watchmaking establishments is attributable to the greater amount of labor required to produce a watch movement than to prepare a completed movement for sale. Work on imported movements consists principally of such operations as timing, inspecting, casing, attaching watch bands, boxing, and otherwise preparing the movements for shipment. Work on virtually all domestically produced movements, on the other hand, consists not merely of virtually all that is required to prepare imported movements for sale, but also the much greater amount of labor required to produce parts and assemble them into a movement. In 1963 an average of 3.1 man-hours was worked on each movement in the U.S. establishments making jeweled-lever movements; an average of 0.7 man-hour was worked on each movement in establishments making pin-lever movements. In contrast, an average of 0.3 man-hour was worked in U.S. watchmaking establishments on each imported jeweled-lever watch movement in preparing it for sale.

If the domestic production of watch movements were discontinued but sales of watches and watch movements by U.S. watchmaking establishments were maintained at the 1963 level by an expansion of imports, employment on watches and watch movements in U.S. establishments would probably not equal a third of what it was in 1963.

U.S. producers' profit-and-loss experience

The Commission obtained usable profit-and-loss data for all of the years 1959-63 from all seven domestic concerns that produced watch move-

ments during that period. 1/ The profit-and-loss data included in this report relate only to the 15 U.S. establishments in which these 7 concerns produced watch movements; 1 of the 7 producers--Ingraham--was unable to furnish separate financial data on the manufacture and sale of watches and watch movements, but did furnish data on the overall operations of its establishments in which watches were made. 2/

Aggregate net operating profits on all products for the 15 establishments declined from \$19.9 million in 1959 to \$11.7 million in 1960; thereafter the aggregate profits rose substantially each year and amounted to \$24.0 million in 1963 (table 16). The ratio of aggregate net operating profits to aggregate net sales was 9.7 percent in 1959, 5.8 percent in 1960, 7.8 percent in 1961, 9.0 percent in 1962, and 10.1 percent in 1963.

During 1963, the most recent fiscal year for which financial data are available, almost three-fourths of the income from sales by the seven producing concerns was accounted for by the establishments in which their watches were made (table 15). 3/ Almost two-thirds of the sales income of these establishments, in turn, was derived from sales of watch products (domestic and imported); 41.5 percent was derived from their sales of domestically produced watch products and 19.4 percent from their sales of imported watch products.

1/ The New Haven Clock & Watch Co. is the only concern that produced watch movements during any part of the 1959-63 period for which no profit-and-loss data were obtained. That concern went out of business in 1959. In this report, as stated earlier, the data for the Eastern Watch Co. have been combined with those for U.S. Time.

2/ * * *

3/ * * *

During each of the years 1959-62 the ratio of aggregate net profits to net sales for the watchmaking establishments of the six concerns (all except Ingraham's) was substantially higher for their sales of watches containing imported movements than that for their sales of domestically produced watches (table 16). In 1963, however, the profit ratio for sales of domestic watches was higher than for sales of watches containing imported movements; * * *.

The aggregate net operating profits of six of the concerns (all except Ingraham) on their sales of domestic watches and on their sales of watches containing imported movements are shown below for 1959-63:

Year	<u>Profits on domestic watches</u>		<u>Profits on watches containing imported movements</u>	
	<u>Amount (1,000 dollars)</u>	<u>Ratio to net sales (percent)</u>	<u>Amount (1,000 dollars)</u>	<u>Ratio to net sales (percent)</u>
1959-----	8,549	9.8	6,824	15.4
1960-----	5,548	6.5	4,380	10.6
1961-----	4,402	5.7	5,136	12.2
1962-----	6,932	7.6	5,704	12.3
1963-----	12,394	12.4	3,654	8.0

The decline in the profitability of the sales of domestic watches from 1959 to 1961 was experienced in varying degree by all six concerns. * * *

In 1963 the ratio of net operating profits or losses to net sales for the six concerns (all except Ingraham) on their domestic watches and watch movements varied widely, * * *.

APPENDIX

Table 1.--Watch movements: U.S. rates of duty set forth in the Tariff Schedules of the United States (TSUS)

TSUS item	TSUS appendix item	Article	Statutory rate 1/	Trade-agreement rate 2/	Escape-action rate 3/
(In dollars and cents each)					
716.08		Watch movements, assembled, without dials or hands, or with dials or hands whether or not assembled thereon: Having over 17 jewels-----	\$10.75	\$10.75 4/	5/.
		Having no jewels or not over 17 jewels: Not adjusted, not self-winding (or if a self-winding device cannot be incorporated therein), and not constructed or designed to operate for a period in excess of 47 hours without rewinding:			
		Having no jewels or only 1 jewel: Not over 0.6 inch in width-----	\$1.50	90¢	\$1.35.
716.10	932.10	Over 0.6 but not over 0.8 inch in width-----	\$1.35	75¢	\$1.25.
716.11	932.11	Over 0.8 but not over 0.9 inch in width-----	\$1.20	75¢	\$1.125.
716.12	932.12	Over 0.9 but not over 1 inch in width-----	\$1.05	75¢	\$1.05.
716.13	932.13	Over 1 but not over 1.2 inches in width-----	93¢	75¢	93¢.
716.14	932.14	Over 1.2 but not over 1.5 inches in width-----	84¢	75¢	84¢.
716.15	932.15	Over 1.5 but less than 1.77 inches in width-----	75¢	75¢ 4/	5/.
716.16	932.16	Having over 1 jewel but not over 7 jewels: Not over 0.6 inch in width-----	\$2.50	\$1.80 6/	\$2.50.
716.20	932.20	Over 0.6 but not over 0.8 inch in width-----	\$2.25	\$1.35 7/	\$2.025.
716.21	932.21	Over 0.8 but not over 0.9 inch in width-----	\$2.00	\$1.35 8/	\$2.00.
716.22	932.22	Over 0.9 but not over 1 inch in width-----	\$1.75	\$1.20 9/	\$1.75.
716.23	932.23	Over 1 but not over 1.2 inches in width-----	\$1.55	90¢ 6/	\$1.35.
716.24	932.24	Over 1.2 but not over 1.5 inches in width-----	\$1.40	90¢ 7/	\$1.35.
716.25	932.25	Over 1.5 but less than 1.77 inches in width-----	\$1.25	90¢ 8/	\$1.25.
716.26	932.26	Having over 7 but not over 17 jewels: Not over 0.6 inch in width-----	\$2.50	\$1.80	\$2.50
716.30	932.30	Over 0.6 but not over 0.8 inch in width-----	\$2.25	\$1.35 plus	\$2.025) plus
716.31	932.31	Over 0.8 but not over 0.9 inch in width-----	\$2.00	\$1.35 9¢	\$2.00) 13.5¢
716.32	932.32	Over 0.9 but not over 1 inch in width-----	\$1.75	for each: \$1.20	for each: \$1.75
716.33	932.33	Over 1 but not over 1.2 inches in width-----	\$1.55	jewel	\$1.35
716.34	932.34	Over 1.2 but not over 1.5 inches in width-----	\$1.40	over 7	\$1.35
716.35	932.35	Over 1.5 but less than 1.77 inches in width-----	\$1.25	over 7	\$1.25
716.36	932.36	Adjusted, but not self-winding (and if a self-winding device cannot be incorporated therein), and not constructed or designed to operate for a period in excess of 47 hours without rewinding.		Base rate + \$50¢ for each: adjustment. 8/:	
717.--7/	933.--7/	Self-winding (or if a self-winding device can be incorporated therein), or constructed or designed to operate for a period in excess of 47 hours without rewinding, but not adjusted.		Base rate + 50¢.	Base rate + 75¢.
718.--7/	934.--7/				

See footnotes at end of table.

Table 1.--Watch movements: U.S. rates of duty set forth in the Tariff Schedules of the United States (TSUS)--Continued
(In dollars and cents each)

TSUS item	TSUS appendix item	Article	Statutory rate 1/	Trade-agreement rate 2/	Escape-action rate 3/
719.--7/	935.--7/	Watch movements, assembled, without dials or hands, or with dials or hands whether or not assembled thereon--Continued Having no jewels or not over 17 jewels--Continued Adjusted and self-winding (or if a self-winding device can be incorporated therein), or constructed or designed to operate for a period in excess of 47 hours without rewinding.	Base rate + \$1.00 + 50¢ for each adjustment. 8/	Base rate + 50¢ + 50¢ for each adjustment. 8/	Base rate + 75¢ + 50¢ for each adjustment. 8/
<p>1/ The statutory rates of duty set forth in col. 2, pt. 2E, schedule 7 of the TSUS; they are the same as those imposed under par. 357(a) of the Tariff Act of 1930.</p> <p>2/ Rates of duty set forth in col. 1 or col. 1-a, pt. 2E, schedule 7 of the TSUS, which reflect concessions originally granted in the trade agreement with Switzerland (T.D. 48093), effective Feb. 15, 1936.</p> <p>3/ Temporary rates of duty set forth in pt. 2A of the appendix to the TSUS, which were placed in effect on July 27, 1954, by Presidential Proclamation No. 3062 pursuant to the escape-clause procedure.</p> <p>4/ The statutory rate of duty, although not reduced, was bound against increase by a concession granted in the trade agreement with Switzerland.</p> <p>5/ No change in the rate of duty was made by the escape action.</p> <p>6/ No concession was granted, and the statutory rates of duty remained the most-favored-nation rates of duty with respect to watch movements containing less than 7 jewels and containing a bushing or its equivalent (other than a substitute for a jewel) in any position customarily occupied by a jewel.</p> <p>7/ The full item citation for the movement is the 3 digits shown plus the last 2 digits of the appropriate base rate shown above.</p> <p>8/ Adjustment to temperature is treated as 2 adjustments, as provided in TSUS headnote 3(e), pt. 2, schedule 7.</p>					

Table 2.--Watch movements: U.S. rates of duty placed in effect on watch movements (classified by jewel count) in 1930, 1936, and 1954

Articles	1930 1/		1936 2/		1954 2/	
	0-1 : jewel : els	2-7 : jew-17 : jew-Over 17 : jews : els	0-1 : jewel : els	2-7 : jew-17 : jew-Over 17 : jews : els	0-1 : jewel : els	2-7 : jew-17 : jew-Over 17 : jews : els
Watch movements:						
More than 1.5 inches wide---	\$0.75	\$1.25	\$2.45	\$2.75	\$10.75	\$0.75
More than 1.2 inches but not more than 1.5 inches wide.	.84	1.40	2.60	2.90	10.75	.75
More than 1 inch but not more than 1.2 inches wide.	.93	1.55	2.75	3.05	10.75	.75
More than 0.9 inch but not more than 1 inch wide.	1.05	1.75	2.95	3.25	10.75	.75
More than 0.8 inch but not more than 0.9 inch wide.	1.20	2.00	3.20	3.50	10.75	.75
More than 0.6 inch but not more than 0.8 inch wide.	1.35	2.25	3.45	3.75	10.75	.75
Not over 0.6 inch wide.	1.50	2.50	3.70	4.00	10.75	.90
All the foregoing (except movements containing over 17 jewels):						
If adjusted.		\$1.00 extra for each adjustment.				\$0.50 extra for each adjustment.
If self-winding or if designed to operate in excess of 47 hours without rewinding.		\$1.00 extra				\$0.75 extra
1/ Rates of duty imposed under par. 367(a) of the Tariff Act of 1930.						
2/ Rates in effect beginning Feb. 15, 1936.						
3/ Rates in effect beginning July 27, 1954.						
4/ Rates applicable to movements containing 8-17 jewels are the sums of the rates applicable to movements with 2-7 jewels plus an additional duty for each jewel in excess of 7. That additional duty imposed under par. 367(a) of the Tariff Act of 1930 was 15 cents per jewel; the duty under the trade agreement with Switzerland was 9 cents per jewel; and the corresponding duty pursuant to the escape action is 13-1/2 cents per jewel.						
5/ Not applicable.						

1/ Rates of duty imposed under par. 367(a) of the Tariff Act of 1930.
 2/ Rates in effect beginning Feb. 15, 1936.
 3/ Rates in effect beginning July 27, 1954.
 4/ Rates applicable to movements containing 8-17 jewels are the sums of the rates applicable to movements with 2-7 jewels plus an additional duty for each jewel in excess of 7. That additional duty imposed under par. 367(a) of the Tariff Act of 1930 was 15 cents per jewel; the duty under the trade agreement with Switzerland was 9 cents per jewel; and the corresponding duty pursuant to the escape action is 13-1/2 cents per jewel.
 5/ Not applicable.

Table 3.--Watch movements: Estimated apparent U.S. consumption, by type and origin, 1951-64

(In thousands of units)										
Period	Domestic watch movements					Imported watch movements ^{1/}			All watch movements	
	Jeweled-lever	Pin-lever			Total	Containing--		Total		
		Pocket	Wrist	Total		2 or more jewels	0-1 jewel			
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)		
1951-----	3,093	5,099	3,230	8,329	11,422	8,759	2,248	11,007	22,429	
1952-----	2,312	3,320	2,729	6,049	8,361	8,607	2,270	10,877	19,238	
1953-----	2,301	2,744	3,292	6,036	8,337	9,613	2,262	11,875	20,212	
1954-----	1,670	2,611	2,902	5,513	7,183	7,045	1,972	9,017	16,200	
1955-----	1,871	2,852	3,635	6,487	8,358	6,062	3,293	9,355	17,713	
1956-----	1,996	3,592	3,698	7,290	9,286	6,904	5,358	12,262	21,548	
1957-----	1,453	1,663	4,666	6,329	7,782	6,910	5,333	12,243	20,025	
1958-----	917	2,528	6,003	8,531	9,448	5,581	4,806	10,387	19,835	
1959-----	1,574	2/	2/	9,708	11,282	7,068	6,404	13,472	24,759	
1960-----	2/	2/	2/	2/	9,475	6,846	6,312	13,158	22,677	
1961-----	2/	2/	2/	2/	9,668	6,928	5,699	12,627	22,468	
1962-----	2/	2/	2/	2/	11,919	8,083	5,715	13,798	26,137	
1963-----	2/	2/	2/	2/	12,135	3/ 7,838	3/ 4,907	3/ 12,745	3/ 25,937	
1964 3/-----	2/	2/	2/	2/	11,970	7,298	5,573	12,871	27,210	

^{1/} Virtually all of the movements reported as containing 2 or more jewels contain 7 or more jewels and are jeweled-lever movements (col. 6); all of those containing 0-1 jewel are pin-lever movements (col. 7).

^{2/} Data are confidential; publication would reveal the operations of individual concerns. Data were furnished to the President.

^{3/} Preliminary.

Source: Compiled from data in tables 4, 9, and 13.

Note.--The apparent consumption of "Domestic watch movements" was calculated by subtracting from watch movements produced in the customs territory of the United States the estimated U.S. exports of watches containing such movements; the apparent consumption of "Imported watch movements" was calculated by subtracting from imports from foreign countries (1) the number of watches containing imported movements that were exported with benefit of drawback and (2) for periods prior to Sept. 1, 1964, the estimated number of movements measuring less than 1.77 inches in width that entered commercial channels in clocks; and the apparent consumption of "All watch movements" was calculated by adding "Domestic watch movements" (col. 5), "Imported watch movements" (col. 8), and shipments of watch movements from the U.S. Virgin Islands into the U.S. customs territory.

Table 4.--Watch movements: U.S. production, by type of movement, 1951-64 ^{1/}

(In thousands of units)

Period	Jeweled-lever movements ^{2/}			Pin-lever movements			All movements
	Containing--		Total	Wrist	Pocket	Total ^{4/}	
	17 jewels ^{3/}	More than 17 jewels					
1951-----	1,839	1,286	3,162	3,242	5,084	8,397	11,559
1952-----	1,523	879	2,433	2,758	3,295	6,121	8,554
1953-----	1,110	1,216	2,365	3,314	2,709	6,076	8,441
1954-----	846	870	1,716	3,000	2,596	5,680	7,396
1955-----	701	1,225	1,926	3,680	2,874	6,566	8,492
1956-----	714	1,352	2,066	3,745	3,606	7,383	9,449
1957-----	460	1,073	1,533	4,683	1,681	6,373	7,906
1958-----	116	831	947	6,026	2,498	8,556	9,503
1959-----	263	1,351	1,614	5/	5/	9,720	11,334
1960-----	5/	5/	5/	5/	5/	5/	9,555
1961-----	5/	5/	5/	5/	5/	5/	9,712
1962-----	5/	5/	5/	5/	5/	5/	11,939
1963-----	5/	5/	5/	5/	5/	5/	12,159
1964 ^{6/} -----	5/	5/	5/	5/	5/	5/	11,995

^{1/} Data do not include watch movements assembled in the U.S. Virgin Islands.^{2/} There was no production of jeweled-lever movements containing 7 or fewer jewels in the period covered by this table.^{3/} Includes for some years an insignificant number of jeweled-lever movements having fewer than 17 jewels.^{4/} The small differences between the totals shown and the sums of the production of pocket watches and wrist watches are accounted for by the inclusion in the totals of a small production of watch movements sold as such, and of watches other than wrist watches and pocket watches, in some years.^{5/} Data are confidential; publication would reveal the operations of individual concerns. Data were furnished to the President.^{6/} Preliminary.

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

Table 6.--Sales of products by U.S. establishments in which watch movements were produced, 1951-63 ^{1/}

Year	Watches and watch movements							
	All products	Products other than watches and watch movements	Total		U.S.-produced		Imported	
			Quantity	Value	Quantity	Value	Quantity	Value
	L,000 dollars	L,000 dollars	L,000 dollars	L,000 dollars	L,000 units	L,000 dollars	L,000 units	L,000 dollars
1951	181,829	62,594	2/	2/	2/	88,862	2/	2/
1952	215,862	98,136	2/	117,726	2/	84,829	2/	32,897
1953	287,298	162,829	10,695	124,469	8,769	86,746	1,925	37,723
1954	264,495	159,556	9,444	104,939	7,532	66,066	1,911	38,873
1955	231,552	119,296	10,502	112,256	8,600	76,425	1,903	35,831
1956	212,682	96,300	10,965	116,382	8,895	80,084	2,070	36,298
1957	184,972	72,884	10,590	112,088	8,343	76,916	2,246	35,172
1958	167,018	61,297	11,355	105,721	9,379	72,984	1,976	32,737
1959	195,696	62,278	13,514	133,418	10,776	86,260	2,738	47,158
1960	201,162	74,476	12,534	126,686	9,730	84,470	2,804	42,216
1961	200,310	88,600	12,004	111,710	9,546	73,471	2,458	38,239
1962	222,637	85,861	14,742	136,776	11,511	90,667	3,231	46,109
1963	236,464	92,714	15,019	143,750	12,185	98,296	2,834	45,454

^{1/} Does not include sales by U.S. producers (or their subsidiaries) of watches containing movements produced in foreign countries or the U.S. Virgin Islands when such watch movements were not prepared for sale in the U.S. establishments in which watch movements were produced.

^{2/} Not available.

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

Table 7.--Watch movements: Estimated apparent U.S. consumption, by supplier, origin, and type, 1963

Supplier and origin	Jeweled-lever		Pin-lever		Total	
	movements		movements		movements	
	Number	Percent of total	Number	Percent of total	Number	Percent of total
	<u>1,000</u>		<u>1,000</u>		<u>1,000</u>	
	<u>units</u>		<u>units</u>		<u>units</u>	
U.S. producers:						
Domestic production-----	<u>1/</u>	<u>1/</u>	<u>1/</u>	<u>1/</u>	12,135	47
Imports <u>2/</u> -----	<u>1/</u>	<u>1/</u>	<u>1/</u>	<u>1/</u>	3,774	15
Shipments from the U.S. :						
Virgin Islands <u>2/</u> -----	<u>1/</u>	<u>1/</u>	<u>1/</u>	<u>1/</u>	326	1
Total-----	<u>1/</u>	<u>1/</u>	<u>1/</u>	<u>1/</u>	16,235	63
Other importers:						
Imports <u>3/</u> -----	<u>1/</u>	<u>1/</u>	<u>1/</u>	<u>1/</u>	8,971	34
Shipments from the U.S. :						
Virgin Islands <u>3/</u> -----	<u>1/</u>	<u>1/</u>	<u>1/</u>	<u>1/</u>	731	3
Total <u>3/</u> -----	<u>1/</u>	<u>1/</u>	<u>1/</u>	<u>1/</u>	9,702	37
Total consumption <u>3/</u> -----	<u>1/</u>	<u>1/</u>	<u>1/</u>	<u>1/</u>	25,937	100

1/ Data are confidential; publication would reveal the operations of individual concerns. Data were furnished to the President.

2/ Includes movements imported by the Helbros Watch Co. and Vantage Products, Inc.

3/ Preliminary.

Source: Compiled from data submitted to the U.S. Tariff Commission by U.S. producers and from official statistics of the U.S. Department of Commerce.

Note.--For description of the method used to calculate consumption, see the note to table 3.

Table 8.--Watch movements: Inventories of units produced in the United States, as of Dec. 31, 1952-63 ^{1/}

(In thousands of units)

Date	Jeweled- lever movements	Pin-lever movements			All movements
		Pocket	Wrist	Total	
Dec. 31--					
1952-----	361	761	275	1,036	1,397
1953-----	562	426	300	726	1,288
1954-----	477	288	229	517	994
1955-----	425	59	319	378	803
1956-----	452	437	332	769	1,221
1957-----	331	120	235	355	686
1958-----	125	244	336	580	705
1959-----	<u>2/</u>	<u>2/</u>	<u>2/</u>	<u>2/</u>	1,035
1960-----	<u>2/</u>	<u>2/</u>	<u>2/</u>	<u>2/</u>	768
1961-----	<u>2/</u>	<u>2/</u>	<u>2/</u>	<u>2/</u>	589
1962-----	<u>2/</u>	<u>2/</u>	<u>2/</u>	<u>2/</u>	1,006
1963-----	<u>2/</u>	<u>2/</u>	<u>2/</u>	<u>2/</u>	1,378

^{1/} Data do not include inventories of watch movements assembled in the U.S. Virgin Islands. Data were furnished to the President.

^{2/} Data are confidential; publication would reveal the operations of individual concerns.

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

Table 9.--Watch movements: U.S. imports for consumption, including shipments from the U.S. Virgin Islands, 1958-64 ^{1/}

Period	(In thousands of units)									
	Imports from foreign countries ^{2/}		Shipments from the U.S. Virgin Islands				All imports			
	Containing--	Total	Containing--	2 or more:	O-1	Total	Containing--	2 or more:	O-1	Total
	jewels	jewel		jewels	jewel		jewels	jewel	jewels	jewel
1958	5,581	10,387	-	-	-	-	5,581	4,806	4,806	10,387
1959	7,068	13,472	5	5	5	7,073	6,404	6,404	13,477	
1960	6,846	13,158	42	2	44	6,888	6,314	6,314	13,202	
1961	6,928	12,627	172	1	173	7,100	5,700	5,700	12,800	
1962	8,083	13,798	419	1	420	8,502	5,716	5,716	14,218	
1963 ^{3/}	7,838	12,745	1,055	2	1,057	8,893	4,909	4,909	13,802	
1964 ^{3/}	7,298	12,871	2,361	8	2,369	9,659	5,581	5,581	15,240	

^{1/} Virtually all of the movements reported as containing 2 or more jewels contain 7 or more jewels and are jeweled-lever movements; all of those containing 0-1 jewel are pin-lever movements.

^{2/} Imports from foreign countries were calculated by subtracting from "imports from foreign countries" the number that were exported with benefit of drawback.

^{3/} Preliminary.

Source: Compiled from official statistics of the U.S. Department of Commerce.

Table 10.--Watch movements (including small clock movements): ^{1/} U.S. imports for consumption, by principal sources, 1952-63

Year	Total	Switzer- land	West Germany	Japan	France	United Kingdom	Other
Quantity (1,000 units)							
1952-----	11,657	11,337	303	-	12	4	^{2/}
1953-----	13,367	12,376	884	^{2/}	11	93	^{2/}
1954-----	10,485	9,380	1,062	-	23	18	3
1955-----	10,853	9,459	1,262	-	108	24	^{2/}
1956-----	13,509	11,856	1,571	2	78	2	-
1957-----	13,246	11,680	1,344	4	157	61	-
1958-----	11,315	9,970	1,168	1	156	20	^{2/}
1959-----	14,524	12,534	1,546	9	433	1	1
1960-----	14,284	12,019	1,740	110	409	2	4
1961-----	13,867	11,590	1,644	354	271	4	2
1962-----	15,233	12,584	1,704	504	428	8	4
1963 ^{3/} -----	^{4/} 14,454	11,705	1,921	475	328	12	13
Percent of total							
1952-----	100.0	97.2	2.6	-	0.1	^{5/}	^{5/}
1953-----	100.0	92.6	6.6	^{5/}	.1	0.7	^{5/}
1954-----	100.0	89.5	10.1	-	.2	.2	^{5/}
1955-----	100.0	87.1	11.6	^{5/}	.1	.2	-
1956-----	100.0	87.8	11.6	^{5/}	.6	^{5/}	-
1957-----	100.0	88.2	10.1	^{5/}	1.2	.5	-
1958-----	100.0	88.1	10.3	^{5/}	1.4	.2	-
1959-----	100.0	86.3	10.6	^{5/}	3.0	^{5/}	^{5/}
1960-----	100.0	84.1	12.2	0.8	2.9	^{5/}	^{5/}
1961-----	100.0	83.5	11.8	2.5	1.9	^{5/}	^{5/}
1962-----	100.0	82.6	11.2	3.3	2.8	^{5/}	^{5/}
1963 ^{3/} -----	100.0	81.0	13.3	3.3	2.3	.1	0.1

^{1/} Data include movements measuring less than 1.77 inches in width which entered commercial channels in small clocks, because separate data for watch movements by country of origin are not available for the full years shown. Data do not include shipments from the U.S. Virgin Islands into the U.S. customs territory.

^{2/} Less than 500 units.

^{3/} Preliminary.

^{4/} Does not include 21,785 movements not accounted for by country.

^{5/} Less than 0.05 percent.

Source: Compiled from official statistics of the U.S. Department of Commerce.

Table 11.--Watch movements (including small-clock movements): U.S. imports for consumption, by jewel count, 1951-63 ^{1/}

Year	Movements containing ^{2/} --					All movements ^{3/}
	0-1 Jewel	2-7 Jewels	8-15 Jewels	16-17 Jewels	More than 17 Jewels	
Quantity (1,000 units)						
1951-----	2,448	1,707	660	6,757	4	11,576
1952-----	2,470	1,644	476	7,060	7	11,657
1953-----	2,752	1,845	322	8,432	9	13,367
1954-----	2,532	1,534	190	6,217	13	10,485
1955-----	3,866	1,250	122	5,599	17	10,853
1956-----	5,986	1,272	57	6,177	17	13,509
1957-----	5,805	1,161	38	6,222	20	13,246
1958-----	5,294	1,261	47	4,692	22	11,315
1959-----	6,990	1,368	63	6,082	20	14,524
1960-----	7,085	1,158	51	5,971	19	14,284
1961-----	6,792	1,139	127	5,790	18	13,867
1962-----	6,686	1,682	279	6,553	33	15,233
1963 ^{4/} -----	6,147	1,952	5/	6,313	28	6/ 14,475
Percent of total quantity						
1951-----	21.1	14.8	5.7	58.4	^{7/}	100.0
1952-----	21.2	14.1	4.0	60.6	0.1	100.0
1953-----	20.6	13.8	2.4	63.1	.1	100.0
1954-----	24.2	14.6	1.8	59.3	.1	100.0
1955-----	35.6	11.5	1.1	51.6	.2	100.0
1956-----	44.3	9.4	.4	45.8	.1	100.0
1957-----	43.8	8.8	.3	47.0	.1	100.0
1958-----	46.8	11.1	.4	41.5	.2	100.0
1959-----	48.2	9.4	.4	41.9	.1	100.0
1960-----	49.6	8.1	.4	41.8	.1	100.0
1961-----	49.0	8.2	.9	41.8	.1	100.0
1962-----	43.9	11.1	1.8	43.0	.2	100.0
1963 ^{4/} -----	42.5	13.5	5/	43.6	.2	6/ 100.0
Average foreign unit value						
1951-----	\$1.31	\$3.05	\$5.45	\$6.21	\$54.75	\$4.68
1952-----	1.39	3.20	5.87	6.67	34.30	5.05
1953-----	1.67	3.08	5.51	6.91	38.36	5.29
1954-----	1.82	2.84	5.37	7.11	24.02	5.20
1955-----	1.70	2.71	6.90	7.01	26.27	4.65
1956-----	1.57	3.25	7.69	6.93	31.32	4.24
1957-----	1.65	3.35	10.84	6.83	27.87	4.30
1958-----	1.79	3.45	8.77	6.72	26.90	4.10
1959-----	1.89	3.51	8.18	6.16	35.93	3.91
1960-----	1.83	3.62	9.68	5.85	37.74	3.73
1961-----	1.77	3.46	7.86	5.61	35.92	3.61
1962-----	1.73	3.37	6.24	5.78	27.69	3.80
1963 ^{4/} -----	1.81	3.54	5/	5.99	29.61	8/ 3.95

^{1/} Data include movements measuring less than 1.77 inches in width that enter commercial channels in small clocks, because data for watch movements by jewel count are not available for the full years shown. Data do not include shipments from the U.S. Virgin Islands into the U.S. customs territory.

^{2/} All of the movements containing 0-1 jewel are pin-lever movements; virtually all of those reported as containing 2 or more jewels contain 7 or more jewels and are jeweled-lever movements.

^{3/} Because of rounding, figures may not add to the totals shown.

^{4/} Preliminary.

^{5/} Included with movements having 16-17 jewels.

^{6/} Includes 22,000 watch movements and 12,000 small-clock movements contained in watch cases for which jewel-count description is not available.

^{7/} Less than 0.05 percent.

^{8/} Excludes the 22,000 watch movements identified in footnote 6, because no value data are available for them, but includes the 12,000 clock movements referred to therein.

Source: Compiled from official statistics of the U.S. Department of Commerce for 1951-62 and January-August 1963, and estimates by the U.S. Tariff Commission for September-December 1963.

Table 12.--Watch movements: Share of U.S. imports entered by U.S. producers of watch movements, by type of movement, 1953-63 1/

(In percentages)

Year	Type of movement		All watch movements
	Jeweled-lever movements	Pin-lever movements	
1953-----	<u>2/</u>	<u>2/</u>	18
1954-----	<u>2/</u>	<u>2/</u>	21
1955-----	<u>2/</u>	<u>2/</u>	20
1956-----	<u>2/</u>	<u>2/</u>	18
1957-----	<u>2/</u>	<u>2/</u>	19
1958-----	<u>2/</u>	<u>2/</u>	19
1959-----	<u>2/</u>	<u>2/</u>	20
1960-----	<u>2/</u>	<u>2/</u>	21
1961-----	<u>2/</u>	<u>2/</u>	19
1962-----	<u>2/</u>	<u>2/</u>	23
1963 <u>3/</u> -----	<u>2/</u>	<u>2/</u>	30

1/ Includes shipments received from the U.S. Virgin Islands and imports entered by the Helbros Watch Co. and the Vantage Watch Co.

2/ Data are confidential; publication would reveal the operations of individual concerns. Data were furnished to the President.

3/ Preliminary.

Source: Computed from data submitted to the U.S. Tariff Commission by U.S. producers and from official statistics of the U.S. Department of Commerce.

Table 13.--Watch movements: Shipments from the U.S. Virgin Islands into the U.S. customs territory, by jewel count, 1959-64

Period	Watch movements containing 1/--				All watch movements <u>2/</u>
	0-1 jewel	2-7 jewels	16-17 jewels	More than 17 jewels	
Quantity (1,000 units)					
1959-----	- <u>3/</u>		5	<u>3/</u>	5
1960-----	2	-	38	5	44
1961-----	1 <u>3/</u>		128	44	173
1962-----	1	1	278	140	420
1963 <u>4/</u> -----	2	14	657	384	1,057
1964 <u>4/</u> -----	8	38	1,901	423	2,369
Value (1,000 dollars)					
1959-----	-	1	31	2	34
1960-----	11	-	242	34	287
1961-----	7	1	779	299	1,087
1962-----	2	3	1,638	907	2,551
1963 <u>4/</u> -----	9	93	3,733	2,484	6,319
1964 <u>4/</u> -----	40	187	10,988	2,954	14,169

1/ All of the movements containing 0-1 jewel are pin-lever movements; virtually all of those reported as containing 2 or more jewels contain 7 or more jewels and are jeweled-lever movements. Shipments of movements containing 8-16 jewels, if any, have been combined with those containing 17 jewels.

2/ Because of rounding, figures do not add to the totals shown.

3/ Less than 500 units.

4/ Preliminary.

Source: Compiled from official statistics of the U.S. Department of Commerce.

Table 14.--Employment in U.S. establishments in which watch movements were produced, 1951-63

Year	All plants in which watch movements were produced		Plants in which jeweled-lever watch movements were produced		Plants in which pin-lever watch movements were produced			
	Production and related workers producing-- All : Domestic watch:employees: All : Domestic watch:employees: All : Domestic watch:employees: 1/	products : movements 1/	Production and related workers producing-- All : Domestic watch:employees: All : Domestic watch:employees: All : Domestic watch:employees: 1/	products : movements 1/	Production and related workers producing-- All : Domestic watch:employees: All : Domestic watch:employees: All : Domestic watch:employees: 1/	products : movements 1/		
Average number of employees								
1951	19,060	11,623	2/	9,842	8,379	2/	9,218	3,244
1952	20,691	9,069	2/	9,951	6,561	2/	10,740	2,508
1953	23,663	8,300	2/	10,709	5,951	2/	12,954	2,349
1954	20,169	6,858	2/	9,554	4,199	2/	10,615	2,559
1955	17,036	6,914	2/	8,010	4,072	2/	9,026	2,842
1956	14,800	6,854	2/	6,959	3,955	2/	7,841	2,899
1957	12,401	6,381	2/	5,930	3,621	2/	6,471	2,760
1958	11,901	6,608	2/	4,542	2,596	2/	7,359	4,012
1959	14,128	8,124	2/	3/	3/	2/	3/	3/
1960	12,133	7,398	2/	3/	3/	2/	3/	3/
1961	11,005	6,193	2/	3/	3/	2/	3/	3/
1962	11,753	6,815	2/	3/	3/	2/	3/	3/
1963	12,798	6,575	2/	3/	3/	2/	3/	3/
Man-hours worked (1,000 man-hours)								
1951	38,298	2/	2/	19,284	2/	2/	19,014	6,557
1952	40,395	2/	2/	18,805	2/	2/	21,590	5,051
1953	48,306	2/	2/	20,746	12,303	2/	27,560	4,920
1954	38,973	2/	2/	18,385	8,279	2/	20,588	5,020
1955	33,262	2/	2/	15,269	7,750	2/	17,993	5,844
1956	28,562	2/	2/	13,156	7,308	2/	15,406	5,652
1957	23,170	2/	2/	10,384	6,182	2/	12,786	5,751
1958	23,637	2/	2/	8,531	4,653	2/	15,106	8,487
1959	28,727	2/	2/	3/	3/	2/	3/	3/
1960	24,020	2/	2/	3/	3/	2/	3/	3/
1961	20,739	2/	2/	3/	3/	2/	3/	3/
1962	24,061	2/	2/	3/	3/	2/	3/	3/
1963	26,292	2/	2/	3/	3/	2/	3/	3/

1/ Data include all employment in the preparation of domestic movements for sale, in the production of watch parts sold as such for repair purposes, and in-the-factory servicing of returned domestic watches; data do not include employment in the preparation of imported watches and watch movements for sale.
 2/ Not available.
 3/ Data are confidential; publication would reveal the operations of individual concerns. Data were furnished to the President.

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

Table 15.--Net sales of 7 concerns operating U.S. establishments in which watch movements were produced, 1959-63 ^{1/}

Company and item	1959	1960	1961	1962	1963
Bulova Watch Co. ^{2/}	:	:	:	:	:
Elgin Watch Co. ^{2/}	:	:	:	:	:
General Time Corp. ^{2/}	:	:	:	:	:
Hamilton Watch Co. ^{2/}	:	:	:	:	:
Ingraham Co. ^{2/}	:	:	:	:	:
Precision Time Corp. ^{2/}	:	:	:	:	:
United States Time Corp. ^{2/}	:	:	:	:	:
Total or average:					
Companies, all products-----1,000 dollars	252,583	270,571	274,076	302,364	322,896
U.S. watchmaking establishments:					
All products-----1,000 dollars	205,156	206,742	211,409	227,882	237,951
Domestic watches and watch movements					
1,000 dollars---	89,186	86,102	78,380	92,918	98,790
Ratio to all establishment products-----percent---	43.5	41.6	37.1	40.8	41.5
Imported watches and watch movements					
1,000 dollars---	44,896	41,677	42,548	46,708	46,143
Ratio to all establishment products-----percent---	21.9	20.2	20.1	20.5	19.4

^{1/} The sales of all company products include those of the parent concern as well as those of its consolidated subsidiaries. "Imported watches and watch movements" include only those assembled in foreign countries and the U.S. Virgin Islands that were prepared for sale in the U.S. establishments in which watch movements were produced.

^{2/} Data are confidential; publication would reveal the operations of individual concerns. Data were furnished to the President.

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

Table 16.--Profit-and-loss experience of 7 producers on the operations of their U.S. establishments in which watch movements were produced, 1959-63 ^{1/}

Company and item	1959	1960	1961	1962	1963
<u>Bulova Watch Co. 2/</u>					
<u>Elgin Watch Co. 2/</u>					
<u>General Time Corp. 2/</u>					
<u>Hamilton Watch Co. 2/</u>					
<u>Ingraham Co. 2/</u>					
<u>Precision Time Corp. 2/</u>					
<u>United States Time Corp. 2/</u>					
Total or average:					
All products:					
Net operating profit-----1,000 dollars	19,934	11,731	16,642	20,495	23,966
Ratio to net sales-----percent	9.7	5.8	7.8	9.0	10.1
Domestic watches and watch movements:					
Net operating profit-----1,000 dollars	8,549	5,548	4,402	6,932	12,394
Ratio to net sales-----percent	9.8	6.5	5.7	7.6	12.4
Imported watches and watch movements:					
Net operating profit-----1,000 dollars	6,824	4,380	5,136	5,704	3,654
Ratio to net sales-----percent	15.4	10.6	12.2	12.3	8.0

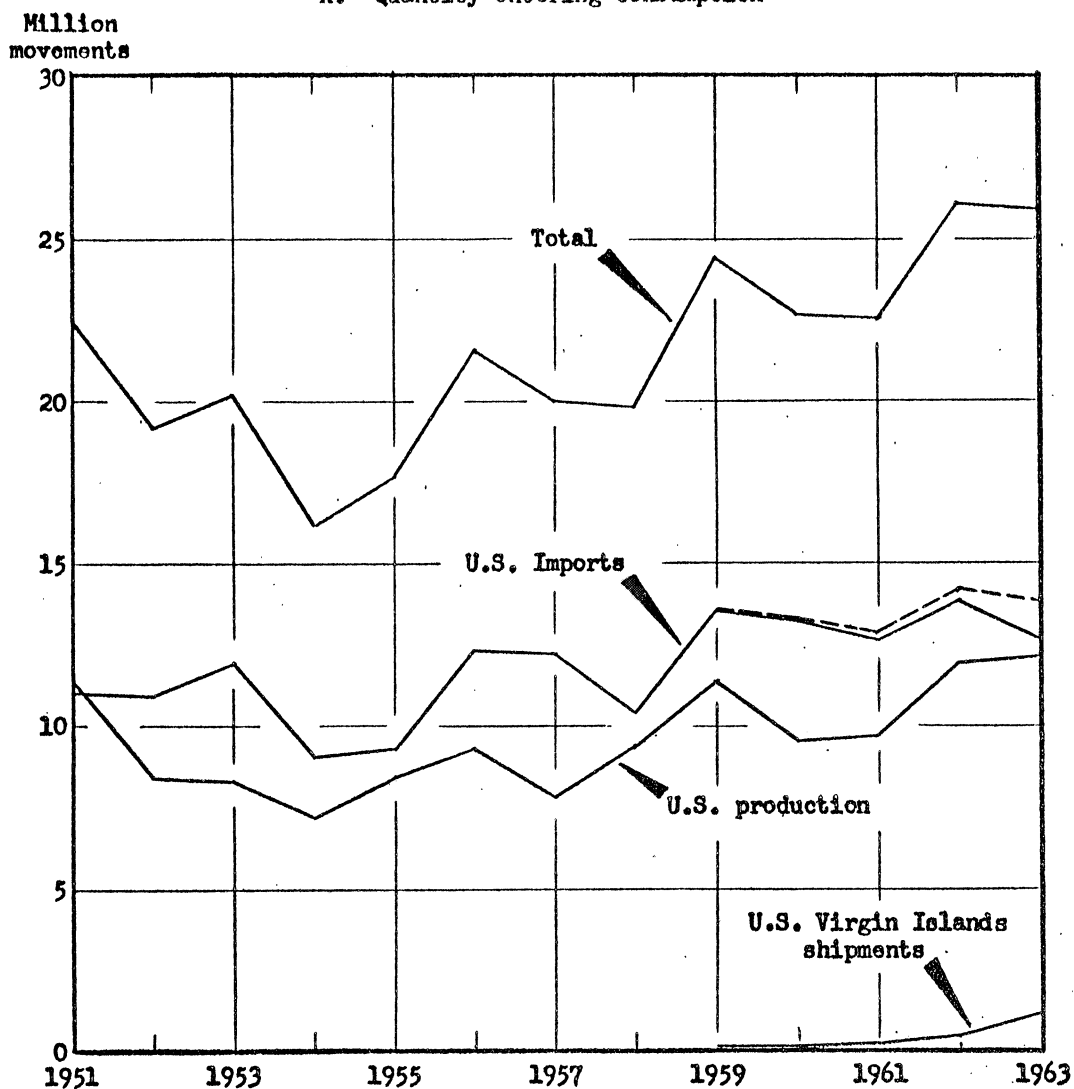
^{1/} Domestic watch movements are watch movements manufactured and assembled in the United States. Imported watch movements are watch movements assembled in whole or in part from other than domestically made parts and also include Virgin Island parts and/or movements assembled in domestic establishments.

^{2/} Data are confidential; publication would reveal the operations of individual concerns. Data were furnished to the President.

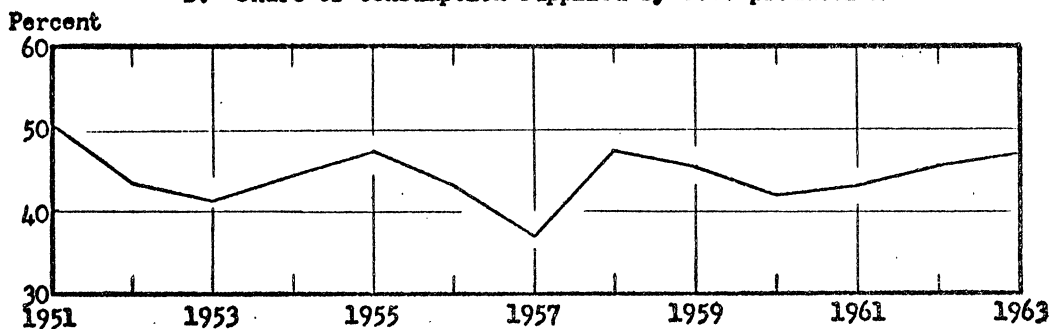
Source: Compiled from data submitted to the U.S. Tariff Commission by the U.S. producers.

Chart I.--U.S. consumption of watch movements, by origin, 1951-63

A.--Quantity entering consumption



B.--Share of consumption supplied by U.S. production



Note: U.S. imports from foreign countries are shown separately and as an aggregate, including shipments from the U.S. Virgin Islands.

