CANADA

foreign trade

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cover In this modern supermarket in Stockholm, the Swedish shopper can choose from a wide range of imported and domestic foodstuffs. Some Canadian exporters of canned foods are making sales in Sweden, but they face stiff competition. For an analysis of this market and advice on entering it, turn to page two.

Canadian Foodstuffs in the Swedish Market

Recent liberalization of imports from dollar countries has made this market more attractive to Canadian exporters. The author discusses most promising opportunities in this field and some of the difficulties that traders must be prepared to overcome.

I. V. MACDONALD,
Assistant Commercial Secretary, Stockholm.

MANY CANADIAN FIRMS are taking advantage of new opportunities presented by the recent dollar import liberalization in Sweden and the "transit dollar"* scheme. As a result, the variety of Canadian foodstuffs exported to Sweden is increasing. The Canadian reputation for high quality suggests that the export gain can be further expanded, but Sweden is no sellers' market and in many lines Canadian firms face stiff competition from domestic and foreign producers.

The fact that Sweden is herself a substantial exporter of food products—especially butter, cheese, eggs, fish, oilcakes, wheat and bacon—tends to obscure the fact that she is also one of Europe's most important foodstuffs importers on a per capita basis. In 1955 imports of foodstuffs for consumption in Sweden amounted to $42 for each person, or $302 million for the year. Import of many products depends to some extent on the size and nature of the Swedish crop. In 1955 the three most important foodstuffs imported for direct human consumption were fresh fruit, sugar and coffee, largely from Spain, Cuba and Brazil respectively. Canned fruit imported from dollar countries included peaches, pears, loganberries, fruit cocktail, green gage plums, apricots, grapefruit, pineapples, citrus juices, grape juice, and similar products not grown locally. Canned vegetable products of greatest interest are asparagus, tomato ketchup, vegetable juices, tomato juice, chili sauce and pickles. Canned corn on the cob from South Africa, the United States and Canada has recently appeared in Swedish shops. Meat products imported from dollar countries (largely the U.S.) include canned pork tongues, pork luncheon meat, chopped beef and Vienna sausage.

* Under the latter scheme, import licences are granted freely for certain listed dollar imports, provided payment is made in so-called transit dollars, which are obtainable from Swedish banks at a slight premium, or if the goods are purchased via a non-dollar country.

Canada's Share of Market

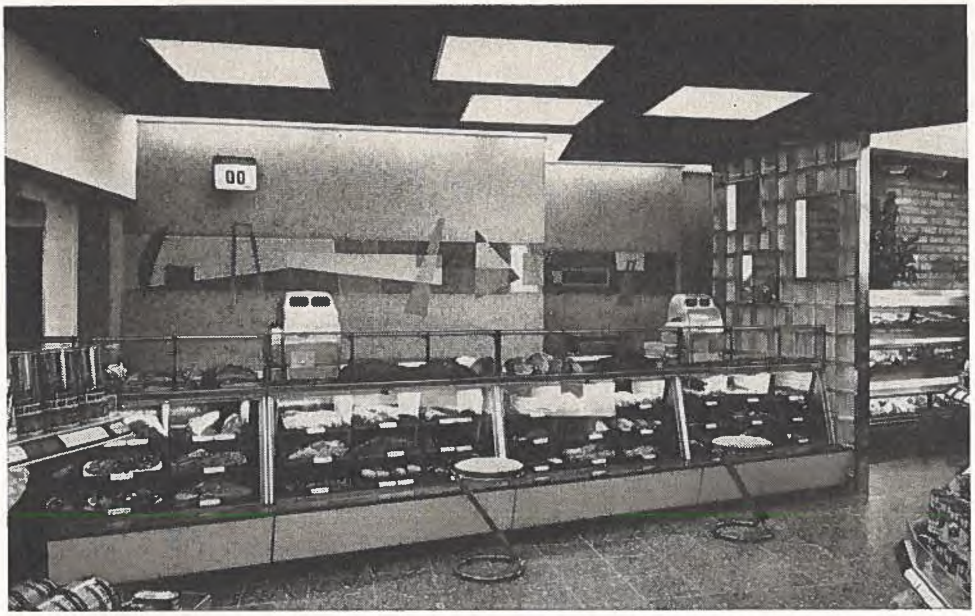
Canada's share of this market is disappointingly small and the decline in total food exports to Sweden in the first half of 1956 shows that it will take effort and initiative to increase it. The accompanying table shows that less than 1 per cent of Sweden's total food imports originates in Canada. Among the leading competitors are Denmark, the United States, the Netherlands, Brazil and Argentina.

Aside from rye and seeds, which are not imported for direct consumption as food, Canadian exports of foodstuffs proper to Sweden began in volume only with the dismantling of exchange restrictions. With greater freedom to choose, Swedish importers and distributors are ready to introduce or re-introduce Canadian brands. The results are shown in the statistical table on page three.

Imports from Canada Up

Swedish imports and exports of foodstuffs during 1955 were affected by the poor harvest. Imports increased by 160 million kronor* over 1954 to 1·5 billion kronor and exports decreased by about the same amount to 327 million kronor. The import surplus of 1·2 billion kronor in 1955 was the highest in the postwar period. The value of Canadian foodstuff sales to Sweden in 1955 increased by over 100 per cent compared with the previous year (from $269,209 to $599,394), well

* Swedish kronor 5·25=Canadian $1.00.



This photograph of the meat counter in a Stockholm store shows the up-to-date design and layout common there. Similarly the Swedish consumer looks for quality in the imported foods which she buys.

above the average increase for other foreign suppliers. Canadian exports of meat and fish products accounted for most of the rise, although canned fruits and vegetables, whisky and maple sugar also contributed. In the spring of 1956 a temporary Swedish market for Canadian potatoes developed, especially for the smaller sizes which suit the Swedish taste. Several small shipments were made direct from Canada and larger shipments via the United States. However, the opportunity arose, unfortunately, only after most Canadian exporters were sold out for the season. Canadian exporters of potatoes should watch Swedish crop conditions carefully because a repetition of last year's crop failure would undoubtedly create opportunities for imports from Canada.

Canadian foodstuffs for which Swedish importers inquire most frequently are canned fruits, deep frozen lobster, shellfish, offals, some canned vegetables, canned meats, frozen chicken and fowl, canned salmon, canned lobster and dried apples. Peas, beans, carrots and beets are produced in abundance in Sweden and are, in fact, exported.

Competition Is Stiff

The chief difficulty facing Canadian exporters of canned fruits and vegetables is the competition from popular U.S. brands which are not only well known but frequently quoted at lower prices. Unless distributors are offered some special incentive to introduce Canadian canned goods, it is difficult to initiate new

CANADIAN EXPORTS OF ALIMENTARY PRODUCTS TO SWEDEN

Commodity	*1954*	*1955*	*First six months of 1955*	*First six months of 1956*
		(in Canadian dollars)		
(a) Canned peaches	0	30,515	0	11,458
(a) Other canned fruit, vegetables, etc.	0	2,393	94	5,666
(b) Fresh apples	1,890	1,872	0	2,400
Potatoes	0	0	0	12,987
Salmon, frozen	0	5,200	0	0
(a) Salmon, mild cured	22,735	55,104	3,050	6,600
(a) Canned salmon	29,908	40,542	26,890	4,314
(a) Canned lobster	92,797	133,193	60,617	47,532
(a) Other fish, fresh, cured or canned	11,778	23,168	13,140	735
Whisky	17,409	25,971	7,180	10,899
(a) Senega root	42,228	26,218	2,901	1,835
(b) Meats	24,412	68,878	68,878	0
(b) Edible offal	14,390	183,464	73,629	72,896
Miscellaneous	11,662	2,876	1,200	1,285
Total Cdn.$	269,209	599,394	257,579	177,607

(a) Products have been liberalized for import from dollar area.
(b) On "transit dollar" list; importer pays small premium to obtain dollar exchange.

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sales and develop goodwill for Canadian brands. Canadian exports of canned salmon to Sweden have been rising satisfactorily and importers agree that the market promises continued expansion. Canadian salmon packers and exporters not already represented in Sweden might well investigate. The outlook for Canadian canned lobster is somewhat influenced by price competition from Russian crabmeat, which has been entering Sweden in increasing quantities. However, competition from other lobster-exporting countries is not significant and exports to Sweden could be increased.

Canadian canned peaches have been selling well since liberalization late in 1954 made possible their introduction to the Swedish market. The limiting factor on this trade at present is not the demand in Sweden but the supply in Canada. Should Canadian prices rise as a result of smaller production, a greater share of the Swedish market would probably go to U.S. canners and Argentine exporters, a relatively new factor in export markets for canned peaches.

Fresh Canadian fruit is subject to controls which affect the development of a secure and permanent market in Sweden. However, depending largely on Swedish crop conditions, import licences for "dollar" fresh fruit may be issued. For example, a short crop in Sweden in 1955 led to the granting of permission to import a limited quantity of Canadian fresh apples in 1956. New opportunities of this nature are drawn to the attention of the trade in Canada through the Department of Trade and Commerce in Ottawa.

Obstacles in Path

Liberalized or "transit" products of possible interest to Canadian exporters, in addition to those in the table on page 3, are (with present main source of supply) canned soups (France and U.K.), dried fruit and berries (U.S., Turkey and Italy), maltose and baby food (Denmark).

IMPORTS OF ALL TYPES OF FOODSTUFFS
1953, 1954, 1955

(quoted in million kronor)

	1953	*1954*	*1955*
EPU countries	562·8	662·3	743·6
of which:			
Norway	62·0	62·3	53·7
Denmark	90·7	126·4	130·8
Netherlands	53·9	56·0	93·5
France	6·2	7·4	20·4
Italy	77·0	88·5	93·6
Dollar countries	133·1	187·3	321·0
of which			
United States	38·2	64·0	109·8
Canada	0·5	3·1	10·8
Latin America	362·9	358·3	298·0
East European countries	35·4	25·4	43·2
Other countries	116·5	119·7	106·2
Total	1,210·7	1,353·0	1,512·0

Swedish Domestic Production

Competition from domestic producers in the Swedish market should not be under-estimated. The Swedish industry employs over 50,000 workers and uses modern techniques. The canning industry, which has made considerable progress during the postwar years, has increased its output of canned herring and other fish, canned fruit and vegetables, and especially of jams and marmalades. Almost all Swedish demand for flour is met by local mills using domestic grain.

Deep freezing in Sweden has gained rapidly in popularity and the foodstuffs industry is expanding its freezing capacity steadily. An export trade in frozen foodstuffs has begun and the Svea shipping company has inaugurated a regular service between Halsingborg and London, with two vessels specially constructed for deep-freeze cargo. The well-known canning firm, AB Bjare, exports frozen broccoli to the United Kingdom regularly. Another larger Swedish canning firm, AB Findus, has specialized in exports of frozen peas, carrots, spinach, beans and broccoli and also has developed an excellent market in the United Kingdom. Frozen fish is exported, but total requirements of the freezing plants are so large that Swedish catches do not furnish enough and fish must be imported. Swedish domestic consumption of frozen foods in 1956 is estimated at about 20,000 metric tons, compared with only 600 tons in 1950; a further increase to about 25,000 tons is predicted by 1958.

The strength of the Swedish frozen food industry should not be a deterrent to Canadian exporters because this development reflects a strong and expanding popular demand for these products. Ocean freights, import regulations and the prices of domestic producers restrict severely the range of Canadian frozen foods which can be marketed in Sweden. However, Canadian packers would be well advised to explore these possibilities carefully, especially for newly developed frozen foods or those in which Canadian producers have a clear price advantage.

Appointing a Representative

Canadian exporters of foodstuffs who believe there is a long-term or continuing market for their products in Sweden will probably wish to appoint a representative. There are many reputable and experienced trading firms in Stockholm, Gothenburg and other Swedish centres which do not yet have Canadian connections. Preferably, a Canadian businessman should visit Sweden to assess the market and interview prospective representatives. When this is not practicable, an agent could be selected by correspondence on the advice of the Commercial Secretary. It is almost essential that the representative chosen should be Swedish or have a licence to do business in Sweden. It is not advisable to appoint a non-Swedish agent for the whole of Scandinavia, if effective coverage of the Swedish market is expected. Canadian firms writing to the Commercial Secretary for agency suggestions should provide full information with their initial letter —including a complete description of their products, whether manufacturers or exporters, whether previously represented in Sweden or selling to Sweden, and prices and terms. (Typical terms of payment offered by Canadian exporters to Swedish foodstuffs importers at present are cash against documents.)

Sweden is a sound market for some Canadian foodstuffs and its consumers are accustomed to high standards and modern techniques. However, it should be borne in mind that the population is only about seven million and that a large number of foreign exporters are competing in this limited market.

Banking Abroad

Austria

Y. B. HEISSLER, *Office of the Commercial Secretary, Berne.*

OVER THE PAST TEN YEARS Austria has enacted considerable legislation designed to re-establish its monetary and credit systems. Among the most recent of these laws was one covering the capital market and another which revised the legal arrangements governing the Austrian National Bank. This legislation, passed about a year ago, established on a sound basis the capital structure of the whole credit system.

The National Bank

The Austrian National Bank, whose legal status was revised under a law proclaimed on September 8, 1955, after a transitory period of ten years, is now a shareholders' bank with a basic capital of A.sh.150 million. Fifty per cent of the shares are held by the Austrian Government and the remainder by private Austrian firms and citizens approved by the Government. The National Bank has the monopoly of note issue. These notes are full legal tender. Under its new statutes the central bank is responsible for safeguarding the national currency. It controls the movement of credit through its discount and open-market policy and is entitled to fix minimum reserves for all banks. These functions are carried out by the Board of Directors. This board is composed of a president appointed for five years by the President of the Federal Republic, two designated vice-presidents, and eleven members, of which five are nominated by the Government. The remainder of the board is made up of two representatives of the Workers and Employees Association, one representing the savings banks, one for other banks, one for industry, trade and crafts, and one representing agriculture.

The Commercial and Private Banks

There are 40 credit institutions known as joint stock banks and private banks, distinguished from other banking institutions principally by the large part they play in commercial credit operations, the floating of capital issues, and stock exchange transactions. This group includes the two "big banks" namely "Creditanstalt-Bankverein" and "Oesterreichische Laenderbank" which were nationalized in 1946. With their excellent world-wide network of correspondents they play an outstanding role in Austrian foreign trade and exchange operations. Also nationalized was the "Oesterreichische Hypotheken-und Credit-Institut AG", another important bank which is particularly active in the mortgage business. Today there are relatively few private banks compared with the years before the annexation of Austria by Germany in 1938. Some of them, however, have considerable capacity and enjoy an excellent domestic and foreign reputation.

Only one foreign bank is currently operating in Austria, the "Central-Wechselstuben AG" of Budapest with offices in Vienna. The "Oesterreichische Kontrollbank AG" in Vienna was founded in 1946 by some of the

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major commercial and private banks as a clearing institution. In addition, this bank is actively engaged in export credit operations. It also serves as a clearing house for stock exchange transactions and acts as a trustee for the Government and the Federal Austrian Railways in various financial transactions.

Other Banking Groups

The provincial mortgage banks, one in each of Austria's nine provinces, are distinct from other banks because they do not possess any capital of their own. Each province is responsible for the entire liabilities of its mortgage bank. Their extension of credit to municipalities and farms is considerable.

Austria also has 173 savings banks, 1,763 credit societies on the Raiffeisen system, a postal savings bank, and 156 smaller banks and credit institutions which, founded under the co-operative law, accept deposits and offer limited credit facilities.

Operating Procedures

Although Austrian banks employ all the conventional means of effecting payment and transfer, there are certain preferred practices. On the domestic market, payments are frequently made through postal account and to a lesser extent by bank clearing. Payment by bank cheque against current accounts is not widely used. Bills of exchange have somewhat declined in importance over recent years.

Financing of Foreign Trade

The financing of foreign trade in Austria is almost entirely the concern of the two large banks—Creditanstalt-Bankverein and Oesterreichische Landerbank AG. Both these banks maintain large and experienced foreign departments and have extensive banking connections throughout the world.

The practice of settling foreign trade accounts by irrevocable letters of credit, so common during the years immediately after the war, is gradually disappearing in Austria. The high cost of short-term credit—as high as 10 or 11 per cent—has encouraged Austrian importers to seek settlement on the basis of cash against documents. More recently, the granting of 30, 60 and 90-day credit has become rather common.

Canadian exporters interested in the Austrian market would do well to recognize that West Germany and other European suppliers are offering liberal payments arrangements and where the credit risk is known, it is necessary to meet this competition.

Quotations are preferred in terms of Austrian schillings, usually c.i.f. European port, but they are also acceptable in Canadian or U.S. dollars.●

Ireland Promotes Tourist Trade

TOURISTS provide one of Ireland's most important sources of revenue, ranking next to agricultural and food products. In 1954 receipts from the tourist trade totalled £29·5 million, of which £3·2 million was spent by visitors from the United States and Canada. The estimated total in 1955 was £31·8 million and, although actual figures are not yet available, it is believed that results in 1956 were equal or even better. Despite bad weather during the summer of 1954, some 3,800,000 tourists came to the Republic; in 1955 the number rose to 4,033,000.

To assist in the work of attracting tourists and of organizing the industry, a new body, the Bord Failte Eireann (Irish Tourist Board), was created and given a government grant. The Board registers, grades and inspects hotels, guest houses, hostels and holiday camps, and makes loans at favourable rates of interest for their improvement. It helps with hotel staff-training schemes, operates architectural and technical advisory services, and erects signposts for roads, cities and towns, national monuments, etc.

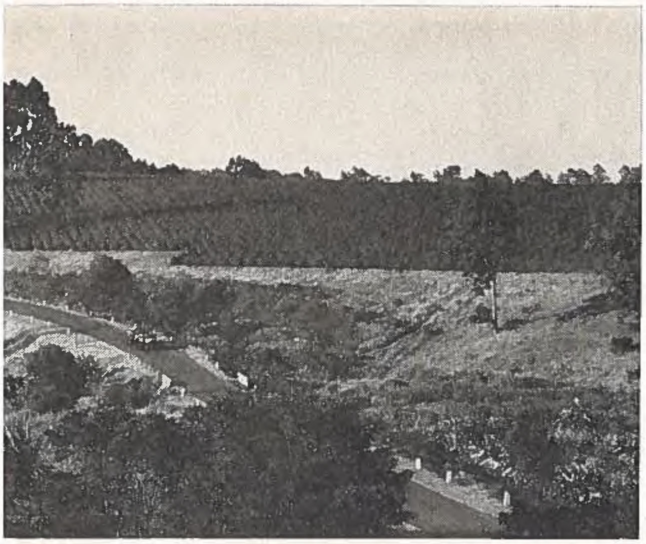
The Board also collaborates with local councils and sporting and cultural bodies to organize "An Tostal", the annual early-season festival held in the second and third weeks of May, in an effort to extend the tourist season.

It is evident that Ireland is making a strenuous effort to attract tourists, not only to help correct its adverse balance of payments, but also to provide business and employment for those parts of the country (particularly in the west) distant from the big urban centres.

Among the problems the tourist industry faces is the serious one of transportation. There are only two direct air routes from the Continent to Ireland, although the recently revised Anglo-Irish Air Transport Agreement includes the provision of extra rights to Aer Lingus to take up traffic in Britain on routes between Ireland and the Continent. Passage by train or automobile from the Continent involves two sea passages and an intermediate journey across England, and European tourists hesitate to make the difficult trip. The great bulk of visitors originate in Great Britain where there is a tradition of holidaying in Ireland. However, the increase in scheduled landings at Shannon Airport and the regular steamship calls at Cobh have brought a notable increase in the numbers from North America.

—T. G. MAJOR,
Commercial Counsellor, Dublin.

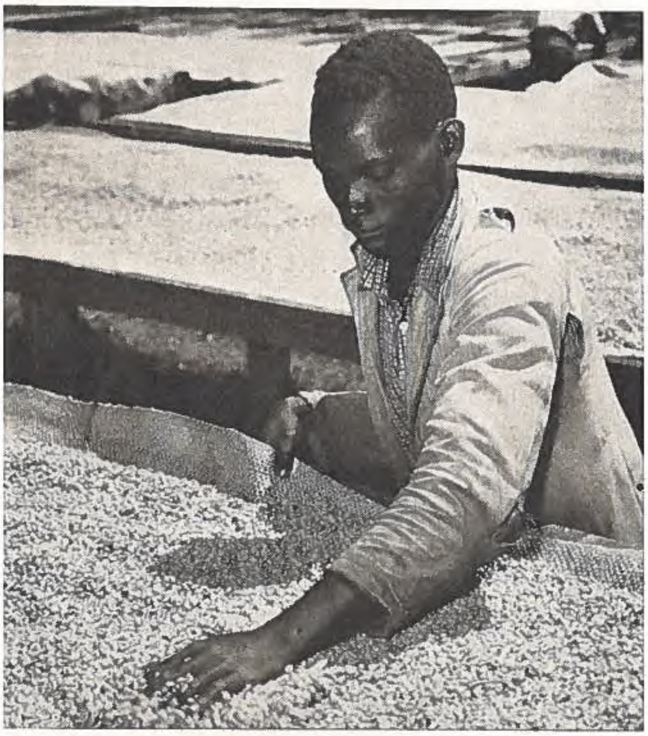
Coffee from Kenya



◀ *The elevation and the temperate climate combine to produce a first-quality "mild" coffee on plantations in the Kenya highlands; in 1955 coffee exports from the colony reached £9 million in value, with Canada the third largest market. The picture shows a coffee estate at Kiambu, near Nairobi.*

▼ *African labour is used extensively on the coffee plantations and picking is done by hand, beginning in July when the main crop comes in. Here native pickers are bringing in their bags of coffee cherries as harvesting at Kiambu begins. All coffee that is grown in Kenya is of the Arabica washed type.*

▲ *As the first stage in getting the coffee to market, the cherries are broken open to expose the coffee bean, then soaked for 24 hours. Afterwards they are washed back and forth through several hundred feet of washing canals, as in the photograph. This removes all the jelly-like substance around the bean.*



◀ *Once they have been washed, the beans are put out in the sun to dry on long counters. This process takes about two to three weeks and the beans must be constantly turned over, as this African boy is doing, to make sure that all surfaces are exposed to the heat and that the beans dry thoroughly and evenly.*

Fairs and Exhibitions

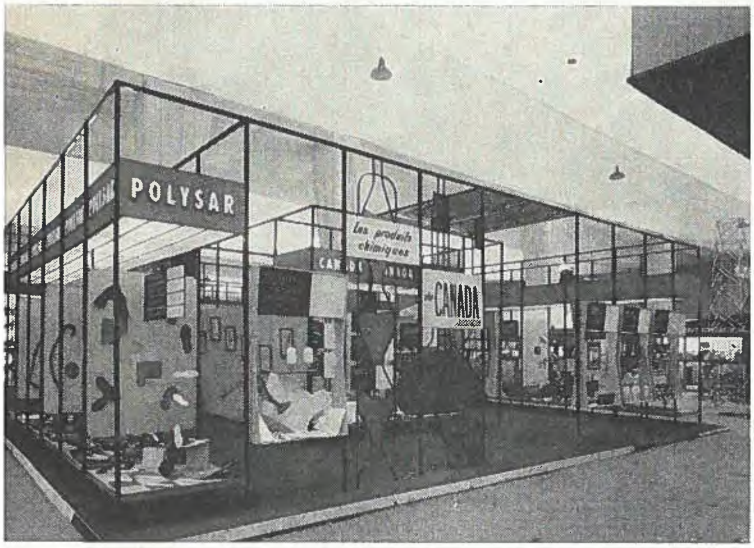
If You're in the Hardware Trade . . .

YOU MAY FIND a visit to London in February worthwhile. The Hardware Trades Fair, exclusively for the trade, expects to attract buyers from all over the world when it opens in the Royal Horticultural Halls, Westminster, on February 25th. It will run for five days.

You will see at the H.T.F. all these products of the British hardware industry:

Adhesives, brushware, basketware, builders' hardware, coffee-makers, cutlery, cutting tools, carpet sweepers, cords and twines, cleaning materials, camping equipment, domestic and kitchen appliances, door furniture, electrical household and heating appliances, electrical hand tools, furniture (steel, wood, garden), garden equipment and tools, and holloware (domestic and builders, galvanized, aluminum, enamel, iron).

Ironing boards and tables, insecticides, kitchen utensils, liquid gas apparatus, locks, oil appliances (heating, cooking, lighting), plastic goods (household and builders), paints, rubber goods, sanitary fittings, shop fittings, tools, water paints, weighing machines, wirewares, woodware, and wooden buildings.



Part of the Canadian display at the fourth "Salon de la Chimie" in Paris, November 21 to December 3. Some 28 Canadian chemical and pharmaceutical firms took part in this display, exhibiting 104 different products of various types.

You can learn all the details about this fair by writing to the organizers: Universal Exhibitions Ltd., 74 Park Holland Park, W 11, London.

British Radio Show

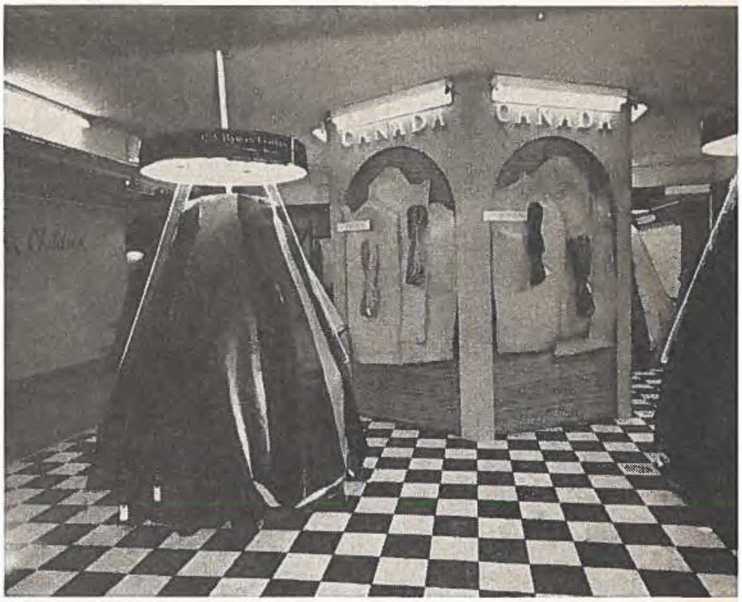
COVERING COMPONENTS for the radio, television, telecommunications and electronic industries in their widest aspects, the British Radio and Electronic Component Show will begin on Monday, April 8 and run to Thursday, April 11. This is the 14th annual exhibition organized by the Radio and Electronic Component Manufacturers' Federation. It was formerly known as the Radio Component Show, but the organizers feel the new name better describes the wide range of its exhibits. The show's continual growth—160 manufacturers are expected to take part this year—has made it necessary to hold it in two sections, at Grosvenor House and Park Lane House. The buildings are conveniently near to each other.

For overseas visitors and other special guests, a preview is being held from 10 a.m. to 2 p.m. on the first day, April 8. Admission is by ticket obtainable from the Secretary, Radio and Electronic Component Manufacturers' Federation, 21 Tothill Street, Westminster, London, S.W. 1.

Coming in the U.S.

- KANSAS CITY IS INVITING the business world to its first venture into the trade fair field. Under the auspices of the Kansas City Association for International Relations and Trade, Inc., the Heart of America International Trade Fair will be held March 17-24 in the city's Municipal Auditorium. Inquiries should be addressed to L. L. Bratschie, Exhibits Manager, Heart of America International Trade Fair, 3230 Broadway, Kansas City 11, Missouri. Space rates range from $150 to $375; groups of three or six exhibits cost $1,000, $1,400, and $1,500.

● WASHINGTON WILL BE A MECCA for photographers and photographic manufacturers from March 22-31 when the capital city will play host to the 1957 International Photographic Exposition. This will be the second in the series of bi-annual world-wide photographic expositions; the first was held in Paris in May 1955. The show will include exhibits by manufacturers, distributors, importers, exporters and retailers of the products used in the photographic business, plus the end result—an exhibition of photographs by leading world photographers. The public will be admitted in the evenings. Six U.S. photographic associations will hold their annual meetings during the exposition. For information, write to: The International Photographic Exposition, R. J. Wilkinson, Executive Manager, 104 East Michigan Avenue, Jackson, Michigan.



Our photograph shows a section of the Canadian exhibit at the 47th Shoe and Leather Fair, London, October 1-5. Ten Canadian tanneries co-operated with the Department of Trade and Commerce to produce the display. The fair attracted a large number of visitors from abroad and more than one-third of the inquiries received at the Canadian stand were from countries other than the U.K.; a number of British firms were interested in representing Canadian tanneries in the U.K.

Coming . . . in Montreal's Show Mart

Quebec Upholstering Manufacturing Association, January 7-16. For information: M. Rene Cimon, 4590 Hochelaga Street, Montreal.

Hardware Show, January 21-24. For information: Eastern Canada Exhibitions Inc., Room 257, Show Mart, Montreal.

Hotel and Restaurant Suppliers Association, January 29-February 1. For information write to the Association at 1638 Sherbrooke Street W., Montreal.

Agriculture Show, February 8-17. For information: M. G. Renaud, Exposition Agricole Inc., 152 Notre Dame Street E., Montreal.

Better Home Builders Show, February 21-27. For information: Eastern Canada Exhibitions Inc., Room 257, Show Mart, Montreal.

Montreal Gift Show, March 4-7. For information: Show Merchandising Limited, 9 Duke Street, Toronto.

Automotive Show, March 13-15. For information: Eastern Canada Exhibitions Inc., Room 257, Show Mart, Montreal.

Business as Usual in Brussels

AMID THE MIGHTY UPROAR of builders getting to work on the great International and Universal Exhibition of 1958, the 31st Brussels International Industries Fair will open its doors next spring in a calm and orderly manner, officials promise. Total area of the fair will be practically no smaller in spite of the loss of some buildings to the Universal Exhibition, and arrangements have been made to make transportation and parking smooth and easy for visitors and exhibitors. The Industries Fair runs from April 27 to May 12.

Over 4,000 exhibitors will occupy the 111 thousand square metres of space provided; Canada will be represented by a government-co-ordinated display featuring consumer goods and canned fish. The fair offers 31 classifications in which products may be displayed—including agriculture, building, engineering, electrical, foodstuffs, furnishings, games and toys, heating, jewellery, leather, machinery, motors, metallurgy, mechanics, packing, perfumery, photography, plastics, and stationery. More than one million visitors, including 15,000 overseas buyers, are expected.

The management invites overseas visitors to write for a membership card which entitles the holder to a free passport visa, to the reduction (about 25 per cent) granted by certain transport companies, and to the foreign buyer's badge which permits free permanent entry to the fair and the use of special services. The fair is open every day, including Sunday, from 9 a.m. to 6 p.m. For complete information write to: Administration Generale de la Foire Internationale de Bruxelles, Palais du Centenaire, Bruxelles, Belgium. ●

Markets in Europe for Plastic Raw Materials

AUSTRIA—*Production of primary and finished plastics is expanding rapidly but Austria depends on foreign suppliers for polystyrene, polyethylene, polyurethane, acrylics and several other plastic raw materials. Canadian sales are rising and should increase because many primary plastics no longer require import licences.*

THE AUSTRIAN PLASTICS INDUSTRY has shown substantial progress in recent years; existing factories have been modernized, production capacity increased, and new products turned out. The Austrian market is small and the primary plastics industry concentrates on producing the more important thermoplastic and thermosetting resins. Output is sufficient to meet the needs of domestic moulding firms.

Semi-manufactured Plastics

In line with the rapid expansion of the domestic plastic raw materials industry, production of semi-manufactured plastics has developed considerably during the past year. Plates, foils, hose, tubes and bars made from acetyl cellulose polyvinyl chloride, and from imported polystyrene and polyethylene, are currently manufactured; so are plastic foils and synthetic leathers from polyvinyl chloride.

These semi-manufactured plastics form a sound basis for domestic production of numerous plastic consumer goods; many semi-finished products are also imported.

About 200 firms make plastic consumer goods and almost 50 per cent of the products are based on polyvinyl chloride. The industry turns out a wide variety of finished articles for the domestic market and has developed an appreciable export trade. Exports totalled 380 metric tons in the first half of 1956, an 84 per cent increase over the first six months of 1955.

The demand for plastic goods in the country has expanded greatly in the past decade. From 1,500 metric tons in 1937 and 2,080 tons in 1948, consumption rose to 12,000 tons in 1954 and may have reached 21,000 tons during 1955. The constimption per capita works out to approximately six to seven pounds, or about the same as in the United Kingdom.

Output of Primary Plastics Rises

Currently, seven Austrian firms are producing plastic raw materials of various kinds. Some products, such as resins and moulding materials of the phenol formaldehyde group, artificial horn, and vulcanized fibre were manufactured before the war; these still are available in sufficient amounts to meet the demand.

Production of urea formaldehyde resins and moulding materials is a more recent development; output has expanded, reducing imports to a minimum. Austrian manufacturers also produce various resins for protective coatings in addition to those mentioned above—examples are alkyd resins and more recently melamine resins. One large company now makes cellulose acetate.

In mid-1953, Austria began to produce polyvinyl chloride; output of this material and the required plasticizers has expanded rapidly and imports are no longer needed. Some other plastic raw materials are produced in Austria but imports also are necessary.

Austrian Imports of Synthetic Resins

Origin	1954 metric tons	1954 A.Sch.	1955 metric tons	1955 A.Sch.	1st half 1956 metric tons	1st half 1956 A.Sch.
West Germany	2,341·5	48,324,000	4,090·1	84,567,000	2,114·0	43,749,000
United States	964·7	20,605,000	525·1	11,980,000	740·0	15,808,000
United Kingdom	557·4	11,714,000	1,030·2	19,813,000	516·1	11,214,000
Switzerland	631·4	11,775,000	750·0	15,414,000	614·8	10,450,000
Canada	70·7	1,265,000	174·8	2,812,000	314·9	5,105,000
Italy	55·2	1,016,000	301·2	4,082,000	217·3	3,921,000
Netherlands	49·0	1,295,000	89·5	2,508,000	72·3	2,215,000
Belgium-Luxembourg	16·9	682,000	44·1	1,528,000	34·3	955,000
Denmark	0·0	1,000	37·8	604,000	45·3	726,000
France	2·0	102,000	14·5	329,000	38·2	661,000
Sweden	17·4	387,000	16·0	375,000	3·7	99,000
Others	82·8	54,000	20·7	320,000	0·0	0,000
Total	4,709·0	97,220,000	7,094·0	144,314,000	4,710·9	94,903,000

These include polyester resins for moulding, melamine moulding materials, and polyvinyl acetate emulsions and related products which have been made under licence since early 1955. Softeners such as ethyl, dibutyl and methyl phthalates are also available from domestic producers.

Several new projects are planned and one calls for the production of low-pressure polyethylene. Another important future development will be the manufacture of vinyl acetate under licence.

Austria's production of primary plastics in 1954 totalled 7,500 metric tons, or 47 per cent more than in the preceding year; output almost doubled from 1954 to 1955. During the first half of 1956 total output reached 7,750 metric tons. Austrian synthetic resin manufacturers have lately shown considerable interest in export markets. Their exports in 1955 totalled 1,029·4 metric tons valued at A.Sch. 18·4 million and in the first six months of 1956, 606·7 metric tons worth A.Sch. 10·2 million. Principal markets are Czechoslovakia, Portugal and Denmark.

Imports Also Rise

Austria must depend on foreign suppliers for many primary plastics; it does not make polystyrene, polyethylene, polyurethane, acrylics, epoxies, polyamides, fluorine plastics, specialty coating resins and silicones.

Although trade statistics do not give the quantities of each plastic raw material imported, the table above shows the total quantity and value of imports by countries.

The reader will note that imports of primary plastics during the first half of 1956 were equal in volume to total imports in 1954, a good indication of the expanding output of plastic goods in recent years. West Germany is by far Austria's major supplier largely because of shipments of vinyl, styrenes, phenolic resins, etc. It is followed by the United States, the United Kingdom, and Switzerland (which supplies mainly aminoplasts and melamines). The Netherlands is recognized as a source of lac-resins. Imports of plastic raw materials are expected to remain high for some time to come.

Canadian Sales Rising

Canada, in spite of the requirement for an import licence (not necessary for most supplies from OEEC countries) has been doing rather well in the Austrian market for synthetic resins. In fifth position, Canada's deliveries show considerable gains, rising from 71 metric tons in 1954 to 175 tons in 1955, and reaching 315 metric tons during the first half of 1956. A major part of Canadian sales is polystyrene. These figures not only reflect Canada's competitive position in this market but also the improved dollar situation; dollar import licences are easier to get than in the past. Duties are currently levied on a weight basis and range as high as 30 per cent of the value on primary plastics.

Because the weight basis is used for duties on finished goods, some lighter plastic articles enter the market at a rate which works out as low as 5 per cent of the value. A new customs tariff being prepared will levy all duties ad valorem.

Effective October 15, 1956, Austria liberalized imports of a number of commodities from the United States and Canada. The new list of liberalized goods contains the following plastics: cellulose acetate, polyisobutylene, polystyrene, polyamides, polyethylene, synthetic acrylic resins, acetophenone resins, cellulose acetate butyrate, cellulose propionate, epoxy resins, ketone resins, polyvinyl ether, polyvinyl carbazol, and unexposed films.

All other plastics imported from dollar countries require an import licence.

—Y. B. HEISSLER,
Office of the Commercial Secretary, Berne.

81587—3

FRANCE—*Output of primary plastics rising rapidly but imports still important in some areas. Canada's sales decreased in 1955; main competition came from United States, Britain, and West Germany.*

THE GROWTH OF THE FRENCH PLASTICS INDUSTRY can rightly be called phenomenal. In four years, output of synthetic resins trebled and in 1955 reached 96,250 metric tons, or 27 per cent more than in 1954. This expansion has continued, especially in polyvinyl chloride, polystyrene, and polyethylene. The following table* gives details on the production and consumption of the leading synthetic resins:

	Estimated Capacity	*Production (in 000 m. tons)*			*Consumption*		
	1956	*1955*	*1954*	*1953*	*1955*	*1954*	*1953*
Cellulose resins	9·0	4·8	5·0	4·0	5·7	5·2	4·8
Polyvinyl chloride (dry weight)	38·0	32·2	24·0	16·0	30·7	21·8	17·4
Polyvinyl acetate	7·5	5·0	3·0		5·8	3·9	
Polyamides (nylon)†	5·5	3·2	0·8	0·5	1·4	0·8	1·2
Polystyrene	18·0	11·6	8·0	3·6	12·4	12·1	8·9
Polyethylene	9·0	4·0	1·8	....	6·8	5·5	1·3
Phenolic resins	20·0	14·5	11·5	6·2	17·2	13·8	7·7
Aminoplastic resins	15·0	10·5	9·4	4·7	14·5	12·1	6·8
—adhesives	....	7·8	7·0	....	....	....	....
—moulding	....	2·7	2·4	4·7	....	....	....
Alkyd resins‡	20·0	7·8	7·8	7·7	10·8	8·4	8·1
Polyesters	3·5	0·9	0·07	....	1·0	0·2	....

† Does not include nylon for textile industry.

‡ To this can be added 4,000 tons produced by paint manufacturers for their own use.

In 1955, imports of plastic raw materials totalled 22,000 metric tons; the United States, West Germany and the United Kingdom together accounted for 63 per cent of the total. Canada slipped from second place in 1954 and third in 1953 to seventh place as a supplier. The main imports from each supplying country in 1955 were:

Supplier	*Item*
United States	Polystyrene, polyethylene and acetobutyrate.
West Germany	Polyvinyl chloride and acetate, acrylics.
United Kingdom	Aminoplastic resins, cellulose acetate.
Switzerland	Aminoplastic resins, polyvinyl acetate.
Sweden	Aminoplastic resins, alkyd resins.
Italy	Polyvinyl chloride, polyethylene.
Canada	Polystyrene, polyethylene.
Belgium-Luxembourg	Alkyd resins, cellulose acetate.

* The figures used in this report are taken from *Production et Consommation Francaises en 1955, Industries des Plastiques Modernes,* April 1956.

The following paragraphs give further information about these imports:

Polyvinyl Group

Imports in 1955 reached 4,349 tons worth 1,231 million francs and exports totalled 4,735 tons worth 1,314 million francs, or about the same as in 1954. West Germany supplied 990 tons, Italy 680 and Switzerland 155.

Exports went mainly to Belgium-Luxembourg, 947 tons, Argentina 572, the United States 372, West Germany 311, and French territories 610.

Polyvinyl chloride—Total production in France in 1955 was 32,200 tons; 3,790 tons were exported and 2,272 tons imported.

Polyvinyl acetate—Production began in the second quarter of 1955 with one plant turning out mostly type 84/16, for a total of 1,500 tons. Exports reached 768 tons and imports 541. By the middle of 1955, a second plant was in production, turning out type 96/4.

Polyvinyl alcohol—No production figures available; exports stood at 132 tons and imports at 121 tons in 1955.

Polyvinylidene chloride—This is not made in France; it was one of the main components of the 70 tons of "miscellaneous" vinyl imports in 1955.

Phenolic Resins Group

The production figures for phenolic resins in the table are for resins in the pure state; when converted for industrial use, the total output in 1955 represents 16,300 tons. Total consumption in the same period was 17,200 tons, of which 55 per cent was used for moulding. Production of laminates for general purposes has been increasing rapidly but for electrical purposes remains static. Phenolic emulsions and solutions are being used increasingly, particularly for adhesives.

Resins for moulding—imports 171 tons, exports 135 tons, total consumption 9,540 tons.

Resins for compounding—imports 308 tons, exports 40 tons, total consumption 3,200 tons.

Resins for paints and laminates—imports 840 tons; consumption 4,450 tons.

Aminoplastic Resins Group

There are at least 60 moulders in France using aminoplastics; they consumed in 1955 about 200 tons of melamine resins and 2,500 tons of urea resins. It is estimated that 500 tons (dry weight) of aminoplastics were imported for laminates and as much again for coatings.

One plant went into production of melamine moulding resins in '55 and another has just come into production of melamine resins for paints.

Total imports in 1955 stood at 4,439 tons, made up as follows: melamine and urea moulding powders (mainly urea) 1,097 tons; adhesives, 2,579 tons; for laminates, textiles, paper, etc., 1,083 tons, and miscellaneous, 73 tons. Britain supplied 2,182 tons, Switzerland 998, Sweden 725, and West Germany 534.

Polystyrene Group

A fourth producer appeared early in 1955 and output now meets nearly all domestic requirements. Imports in 1955 totalled 2,432 tons with the United States supplying 1,598, Canada 718, and West Germany 116. Canada did not sell any to France in 1956. Consumption of high impact polystyrene in sheets is about 280 tons a year, but this is expected to rise substantially.

Alkyd Resins Group

Output of soluble resins comprises mainly glyptals used for paints and varnishes. In addition to the figures in the table, paint companies imported 4,000 tons of soluble resins for their own use. Imports of all types totalled 1,734 tons in 1955; main suppliers were Sweden 125, Belgium and Luxembourg 376, and the United Kingdom 222. No details on other alkyds are available.

Polyethylene Group

Consumption trebled from 1953 to 1955 and now equals 6,780 tons; production totalled 3,990 tons in 1955. French capacity will reach 9,000 tons this year and ample supplies of ethylene are available from coal gas and oil refining.

Total imports (which are far from satisfying demand) reached 2,790 tons in 1955 divided as follows: United States 951, Italy 579, United Kingdom 461, West Germany 296. There is an important movement toward the manufacture of polyethylene by the low-pressure method (Ziegler & Philips). Three new plants are expected to be built shortly. A fourth plant producing high-pressure polyethylene will begin production early in 1958.

Nylon Group

There are two manufacturers of polyamides; consumption last year was 1,418 tons, imports 568, exports 1,826.

The increased use of polyamides for the plastics industry has resulted from the development of technical applications. The sales of polyamides (for plastics and textiles combined) by the two French producers in 1956 is expected to be five times greater than in 1955.

Statistics for polyamides used by the textile industry are collected separately. Those destined for the plastics industry last year were used for the following purposes: moulding 60 per cent; cable sheathing 30, extrusions 31·5, miscellaneous 5·5 per cent.

Increased use of polyamides is expected in bottles and for food and other wrappers.

Plasticizers Group

It is estimated that converters of vinyl resin used 14,300 tons of plasticizers in 1955, of which half consisted of dioctylphthalate. Second in importance was tricresylphosphate. Dibutylphthalate is in fourth position but is being replaced by dioctylphthalate.

The breakdown for 1955 was octylphthalate 7,410 tons; dibutylphthalate 2,710 tons; phosphates (mainly tricresylphosphate) 2,350 tons; adipates and sebacates 970 tons; nonyl and decylphthalates, synthetic rubbers, sulfonated hydrocarbons, plasticizers, polyesters 2,120 tons (of which 1,250 tons were absorbed by the paint and explosives industries).

—R. CAMPBELL SMITH,
Commercial Secretary, Paris.

GREECE—*The Greek market for primary plastics is openly competitive and free from quantitative import and exchange restrictions. European suppliers grant generous credit terms but Canadian firms cautioned to study local industry before following suit.*

THE PLASTICS INDUSTRY IN GREECE has progressed steadily from a total of 36 plants in 1948 to more than 70 of various kinds at present. However, only ten of the plants can be considered important; the others are mainly small workshops that have sprung up in a rather haphazard manner. These marginal producers have been largely responsible for expansion of the Greek plastics industry beyond the needs of the local market. Output of finished plastic products rose from 612 metric tons in 1951 to 1,850 tons in 1954.

Production costs are high and the larger firms badly need more working capital to increase their efficiency. The industry is hampered further by low consumer purchasing power and the lack of systematic advertising of plastic goods. A better sales record cannot be achieved by trying to export plastic goods to neighbouring countries because the Greek products are expensive.

81587—3½

There is no primary plastics industry in Greece and only a limited amount of moulding compound is made locally. The usual array of plastic articles is manufactured and these require a wide range of plastic raw materials. The principal imported primary plastics are:

Thermoplastics

Polyvinyls and their copolymers, including vinylidene
Cellulose acetate, acetate-butyrate, proprionate
Ethyl cellulose
Polystyrene and copolymers
Polyethylene
Acrylics
Polyamide moulding compounds or extrusion powder

Thermosetting Plastics

Phenolics and urea resin
Melamine moulding powders
Silicone
Neoprene and other synthetic latices
Polyesters

Greece also buys considerable quantities of PVC sheeting for making tablecloths and curtains.

Official statistics do not give the amounts of individual plastic materials imported nor their country of origin. During the eleven-month period from August 1955 to June 1956, imports were as follows:

Description	*Weight (kilograms)*	*Value (drachmas)*
Plastic raw materials	1,704,024	33,264,639
Semi-finished plastic products	469,843	12,840,546
Fabrics covered with plastic raw materials	11,269	585,623

(1 drachma=Can.$0·03208)

The main suppliers of primary plastics, as classified above, were Germany (491 metric tons), the United States (461 metric tons), the United Kingdom (293 metric tons), and Italy (256 metric tons). Canada's share of the market amounted to only 28 tons. Canadian (DBS) statistics show a sharp decline in our sales of polystyrene from 4,208 cwt. in 1953 to only 370 cwt. in 1955. Our sales of other synthetic resins totalled 5,700 pounds last year; in 1953 and 1954 no exports to Greece were recorded.

Imports Not Restricted

Most dollar imports into Greece have been liberalized since April 1953; import permits are granted automatically provided the necessary foreign exchange is available. Nearly all goods can thus be imported freely from all countries. This makes Greece one of the most competitive markets in the world for a large number of commodities, including plastic raw materials. European suppliers are granting exceptionally generous credit terms, permitting payment from 60 to 90 days after the goods arrive at the port of Piraeus.

In August 1955, the Greek customs authorities introduced a new tariff class, No. 294, under which all plastic raw materials and plastic products now are listed. The following rates are applicable to countries entitled to most-favoured-nation treatment, including Canada and many others:

Item 294a	Plastic raw materials	9 per cent ad valorem
Item 294b	Semi-finished plastic products	22 per cent ad valorem
Item 294c	Fabrics impregnated or covered with plastic materials	30 per cent ad valorem

(*Note*: In addition, there is a 75 per cent surcharge on the duty.)

To sum up, the Greek plastics industry is experiencing difficulties in finding markets for its output and is in dire need of more capital. The Canadian exporter of plastic raw materials should investigate any Greek buyer's financial position before he grants the generous credit terms offered by his European competitors.

—G. BASTOUNIS,
Office of the Commercial Secretary, Athens.

IRELAND—*Both British and U.S. suppliers outselling Canada in this market; casein sheets only basic material made domestically.*

PROSPECTS FOR DEVELOPING a large market in the Republic of Ireland for Canadian primary plastics are currently not bright. United Kingdom suppliers have a strong hold and if Canada is to compete, landed costs of Canadian materials must at least equal these offers and those from United States companies, and delivery dates must be carefully observed. Canada shipped only small amounts of polystyrene and various other synthetic resins valued at £31,491 last year; materials in sheets or rolls totalled £10,854. In comparison, Britain's total sales exceeded £327 thousand and those of the United States £52,000.

Currently, 14 firms produce only plastic goods, perhaps 30 more make plastic articles with other products, and about 25 manufacture paints. Most of the finished plastics which can be produced economically for the domestic market now are being made here. The volume could increase and the range of goods be extended, because high duties and special levies restrict imports of manufactured plastic products. There are also possibilities for developing markets in the United Kingdom for Irish plastic articles.

All plastic raw materials are imported in ready-to-use form. Casein sheets for making buttons are the only basic material manufactured in the country and there are no plans to make others. No mixing, blending, colouring or compounding is carried out. Finished plastics are imported only where demand is too small to warrant home production.

Opportunities for plastic raw materials in the Republic includes thermosetting phenol and urea formaldehyde moulding powders, acrylic sheet, polyethylene, polystyrene, polyvinyl chloride sheeting, and alkyd resins. Moulding powders are admitted duty-free and plastic materials in sheets or rolls carry a duty of 25 per cent ad valorem from the United Kingdom and Canada, and 37½ per cent from other sources.

—T. G. MAJOR,
Commercial Counsellor, Dublin.

NORTHERN IRELAND—*Two moulding plants use largely primary plastics imported from England.*

NO PLASTIC RAW MATERIALS are produced here and all primary plastics required by the two main processing firms come from Britain. Imports of semi-fabricated materials are limited to the needs of three companies making display fixtures, handbags, shopping bags, and watch straps. It is highly improbable that local output of plastic goods will ever expand to the point of meeting consumer and industrial demands.

One of the two moulding plants is a branch of a textile machinery company and uses nylon, cellulose acetate, and polyethylene to make bobbins and pirns for its own use and occasionally for outside orders. The other is a more diversified plastics plant using phenol formaldehyde and urea formaldehyde, both paper-filled and wood-filled, to mould buttons; rubber-filled phenol powder for pirns and bobbins; and cellulose acetate, polystyrene, nylon and polyethylene to produce kitchen utensils, toys and bobbins. All these materials are purchased in powder or granule form ready for moulding.

Data on imports of primary plastics or production of finished goods are not available; they are classified under "miscellaneous". Import regulations and duties are the same as for the United Kingdom.

—E. ROY,
Office of the Trade Commissioner, Belfast.

NETHERLANDS—*Output of the primary plastics industry is expanding rapidly in the Netherlands, but production of finished goods rising as well. Exporters of plastic raw materials should find a growing market here for some time.*

INCREASED PRODUCTION OF FINISHED PLASTIC PRODUCTS in the Netherlands provides an opportunity for foreign manufacturers of plastic raw materials. It has also stimulated development of the country's own primary plastics industry because secondary plastics manufacturers use most of the more common primary materials, including polymers, moulding compounds, and semi-manufactured goods. With local output of basic chemicals and monomers steadily increasing, the Netherlands production of primary plastics will probably rise substantially in the near future.

Plastic Materials Produced

The Netherlands primary plastics industry is diversified and output is rising. Although little official information on production is available, the following outline gives a good indication of the development of the industry.

Adhesives—A number of local factories make adhesives using phenol and urea formaldehyde. They also make polyvinyl acetate and neoprene adhesives.

Alkyd resins—Seven companies make these materials which are used by the country's 250 paint and lacquer manufacturers.

Casein plastics—Two plants manufacture them but no production figures available.

Cellulose acetate sheets—These are produced in pilot-plant quantities but full-scale production will start in the near future.

Coumarone-indene resins—One company produces them.

Epoxy resins—Output ranges from 1,000 to 1,500 metric tons a year and is used exclusively to make paints.

Polyvinyl acetate—This is polymerized from the monomer by some manufacturers of adhesives and for use in emulsion paints.

Melamine formaldehyde resins—These are not yet manufactured in the Netherlands, because a foreign firm holds patent rights for this country which will not expire until 1957.

Plastic Foams—Urea formaldehyde (one firm), polyurethane (two firms), polyvinyl (one firm).

Polyacrylics—The pilot plant turns out polyacrylnitrile fibres. It is not yet known when full-scale production will begin.

Polyamides—The company manufactures 2,000 metric tons in the form of yarns and 430 tons in the form of injection moulding material and semi-fabricated articles. The whole Netherlands output of phenol and caprolactem is used to make these materials.

Polyester resins—Full-scale production will start in the near future.

Polyethylene—Large-scale production will start in the latter half of 1957.

Polystyrene—This is not yet made in the Netherlands. Production will start in the near future.

Polyvinyl acetate—This is polymerized from the monomer by some manufacturers of adhesives and for use in emulsion paints.

Polyvinyl chloride—In 1954 the annual production was 2,000 metric tons but currently it is much higher.

Urea and phenol formaldehyde—Two firms make about 5,000 metric tons of moulding powder a year. Urea and phenol formaldehyde resins also are manufactured on a fairly large scale for making crease-resistant textiles.

Urea—Approximately 50,000 metric tons are produced, and mainly used to manufacture alkyds and plasticizers.

Vinyl acetate monomer—This is a product of one plant but there is no production data.

Imports Still Important

The Netherlands already produces or plans to manufacture a wide variety of primary plastics, but the plastic goods industry still looks to foreign suppliers for at least some of its needs. For example, in 1955 it had to buy more than 7,000 metric tons of polyvinyl chloride, 3,000 tons of urea and melamine formaldehyde, 1,200 tons of polyethylene, and 1,000 tons of polystyrene. Imports of all plastic raw materials totalled 15,677 tons in that year and reached 14,000 tons in the first eight months of 1956.

Import figures for 1955 show that West Germany shipped 5,325 metric tons of primary plastics, the United Kingdom 4,000 tons, Belgium-Luxembourg 3,623 tons, and the United States 1,323 tons. Netherlands statistics place imports from Canada at 305 metric tons.

—W. R. HICKMAN,
Assistant Commercial Secretary, The Hague.

NORWAY—*Local plastics industry buys considerable quantities of monomer polystyrene, polyesters, polyvinyl acetate, alkyds, nylon, and phenol formaldehyde. Output of the polyvinyls is increasing rapidly and exports of polyvinyl chloride are substantial.*

THE VOLUME AND VARIETY OF GOODS produced by Norway's plastics industry is increasing steadily and the number of firms in the business now totals about 200. The local industry (and the market for plastic raw materials) should continue to expand unless exchange difficulties in the future make stricter import regulations necessary.

The Canadian manufacturer of primary plastics, however, needs to keep in mind the development of such manufacturing in Norway, especially production of the polyvinyls. Output of emulsion, suspension, and paste types of polyvinyl chloride is currently 2,500 tons a year and will rise soon to 5,000 tons; at present 1,500 tons are exported. Norway also produces phenol and urea formaldehyde resins, phenol moulding powders and (to some extent) cellulose acetate. Polyvinyl acetate emulsion is expected to appear on the market this year and Norwegian firms will probably produce monomer vinyl acetate in large quantities within two years. Although Norway is rapidly approaching self-sufficiency in some plastic raw materials, it will have to import several primary plastics for at least several years to come.

Phenol formaldehyde required for local production of phenol moulding powders, polystyrene, polyesters, polyvinyl acetate, alkyds and nylon are the main plastic raw materials imported. Last year imports of primary plastics from all countries reached \$5·6 million in value. Figures for individual plastics are not available at present and the latest breakdown of amounts by country of origin is for 1954, when the United Kingdom shipped 3·7 million pounds, the United States 790 thousand pounds, Sweden 749 thousand pounds, and West Germany 552 thousand pounds. Canada's share of the market in that year was 42,600 pounds.

The duty on plastic raw materials is 30 per cent from all countries; they enter Norway under a global quota —that is, all countries manufacturing these materials may compete until the annual import quota is reached. Although primary plastics made in Norway are included in the list, the duty severely limits competition in the case of PVC and possibly other materials produced in the country.

—J. C. DEPOCAS,
Commercial Counsellor, Oslo.

PORTUGAL—*Dollar shortage means that Portuguese obtain nearly all raw materials needed by plastics industry from European suppliers.*

NONE OF THE PRIMARY PLASTICS required by Portugal's steadily expanding plastics industry are produced in the country. A few local firms import polyvinyl chloride and make their own moulding compounds but imports of ready-to-mould PVC are much greater. Two firms which make compounds from phenol formaldehyde have a combined output of about 200 tons a year, but these compounds are also imported. Portugal buys PVC sheeting but the demand for polyethylene film is met from local production. Estimates for 1955 place imports of polystyrene at 500 tons, polyvinyl chloride at 400 tons, polyethylene at 300 tons, and phenol formaldehyde at 100 tons. Raw materials used in the local industry include all the above, plus polyvinyl acetate and negligible amounts of polyesters and alkyds.

Because of foreign exchange restrictions almost all plastic raw materials are obtained from European countries. The United Kingdom, France, Germany, Belgium and Italy all have a share of the market, with the United Kingdom the largest supplier. Occasionally plastic materials are obtained from the United States but these imports will remain sporadic unless exchange controls are removed; imports in volume from dollar countries are not probable unless some new and superior plastic material is developed which is not available from any other source.

Portugal's plastics industry is protected by high customs tariffs on finished goods from other European countries and the foreign exchange controls plus duties practically rule out buying them from dollar countries. The local industry now turns out a wide variety of plastic products including household articles, toys, cable insulation, rigid pipe, electric and telephone apparatus, stoppers, adhesives, paints, leather cloth, etc.

—RICHARD GREW,
Commercial Counsellor, Lisbon.

SPAIN—*Industry uses about 8,000 tons of primary plastics a year but imports restricted to non-dollar sources and outlook for Canadian suppliers unpromising.*

SPAIN'S PLASTIC GOODS INDUSTRY includes more than 1,000 firms employing 22,000 workers and consumes about 8,000 tons of primary plastics a year—mainly phenolic, urea, vinyl and acrylic resins. The extent of the country's primary plastics industry is not known but several types of resins are produced, including phenol and urea formaldehyde; casein, vinyl, acrylic, and cellulose products; polyesters; glycerol phthalate, maleics and polyvinyl acetate. The industry could use as much as 15,000 tons of plastic raw materials if the Government were to allow sufficient imports. Purchases of these materials however, are limited strictly to amounts established in the various trade agreements Spain has concluded with other countries. The industry can make up its large deficit in plastic raw materials only if the Ministry of Commerce is willing to grant special accounts for this purpose; the current policy of the Ministry is gradually to eliminate such accounts.

No figures are available giving the amounts of primary plastics imported from individual countries but melamine resins, vinyl chloride, polystyrene and polyethylene are listed as coming in from Austria, The Netherlands, Norway, Japan, West Germany, Switzerland, and the United Kingdom.

Spain is currently suffering from an acute shortage of dollars and grants import licences for goods from dollar countries only if they are highly essential and not available from any other source. Thus, in spite of the country's urgent need for primary plastics, there is little likelihood that Canada will be considered a source of supply under present circumstances.

—M. T. STEWART,
Commercial Counsellor, Madrid.

New Uses for Plastics

Jute cloth coated with polyvinyl chloride is replacing the large canvases currently used in Greece for drying currants. The new plastic-coated tarpaulins, 32 square meters in size, are cheaper and more resistant to weathering than the older type. Another plastic product peculiar to Greece is a large combination tap and valve made entirely of hard PVC. This type of tap is supplanting the metal taps and valves formerly used for large brine barrels in the olive-processing industry. The new plastic taps resist corrosion effectively.

SWEDEN—*Polyvinylchloride, phenol resins and moulding compounds, polyethylene and polystyrene are among the main plastic raw materials which Sweden needs. Country has a well-developed organic chemical and primary plastics industry using its vast cellulose resources.*

SWEDEN OFFERS A GOOD MARKET for exporters of plastic raw materials mainly because the country lacks coal and oil. However, tremendous supplies of cellulose come from Sweden's forests and there is an extensive organic chemical industry based on this product. The drive for self-sufficiency in plastic raw materials has spurred research into production of cellulose-based synthetics and Sweden has already achieved self-sufficiency in certain types of primary plastics. Her chemical industry produces many basic materials for the primary plastics industry—including aliphatics and formaldehyde, pentaerythritol and trimethylol propane, butyl and octyl alcohol, ethylene glycols, butyl acetate, calcium cyanamide, vinyl chloride, melamine, urea, monochloracetic acid, and methylmethacrylate monomers.

The tremendous expansion in chemical output in recent years is a good measure of the country's potential for making primary plastics; the value of chemicals produced reached $20 million in 1953. The plastics fabricating industry has kept pace, with some 500 firms now in the field. An estimated 300 of these are moulding plants.

Types of Plastics Produced

Plastic raw materials produced here consist chiefly of alkyd resins, polyvinylchloride, phenolic coatings and moulding powders, and amino plastics. To produce polystyrene the industry must import the monomer; however, the one company that makes it exports more than half of its output. Only one company in Sweden makes PVC resin. One of the latest plastic materials produced in Sweden is polytetrafluorethylene which, until recently, was made only by a small number of firms in the United Kingdom and the United States.

Plasticizers, such as diethyl phthalate, are products the industry has produced since 1942 and at the present time it also makes butyl, octyl and dicyclohexyl phthalates, octyl adipate and sebacate, and tricresyl phosphate. Total production of plasticizers amounts to about 6,000 tons a year, part of which is exported.

Prospects for Exporters

Figures for 1954 show that in that year Sweden imported 16,326 tons of plastic raw materials. The main synthetic resin purchased was polyvinyl chloride (3,285 tons), followed by phenol resins and phenol moulding compound (1,290 tons), polyethylene (1,012 tons), and polystyrene (657 tons). Principal suppliers of primary plastics were West Germany (4,069 tons), the United Kingdom (2,936 tons), and the United States (1,343 tons). (Exporters who would like more detailed statistics on other plastic materials or on supplying countries should write to the Chemicals Division, Department of Trade and Commerce, Ottawa.)

SWEDISH PRODUCTION OF NON-PROCESSED PLASTICS

	1953		*1954*	
	Tons	*1,000 kr.*	*Tons*	*1,000 kr.*
PHENOLICS				
Coatings	2,304	5,019	3,221	6,835
Adhesives	1	2	....	....
Moulding powders	1,522	3,494	1,769	3,833
AMINO PLASTICS				
Coatings	2,299	3,596	2,662	4,917
Adhesives	1,363	1,675	1,556	1,996
Moulding powders	1,295	3,841	1,651	5,069
Others	4	7	10	15
ALKYD RESINS	3,497	8,543	5,071	11,462
OTHER THERMOSETS FOR VARNISHES	665	1,196	679	1,166
OTHERS	339	920	367	1,116
POLYVINYL CHLORIDE	3,241	8,978	4,263	11,219
POLYSTYRENE (of imported monomer)	942	4,364	1,334	5,539
ACRYLICS	86	416	70	364
NITROCELLULOSE*	1,091	4,624	....	....
OTHER CELLULOSE (incl. ethers)	1,125	4,937	1,516	6,196
OTHER THERMOPLASTICS	228	1,165	103	81
Total	20,002	52,777	24,272	59,808

* excl. of explosives.

Canadian exports of polystyrene to Sweden rose in value from $141,261 in 1954 to $278,093 in 1955 and exports of other synthetic resins from $24,297 to $197,780. DBS figures for the first six months of 1956, however, show a mild reversal of this upward trend.

With the production of plastic goods expanding rapidly, Sweden should continue to offer foreign manufacturers of plastic raw materials a good market; the scarcity of raw materials and absence of a petrochemical industry reinforce this view. However, the proportion of this market which Canadian and foreign exporters of plastics raw materials can secure will depend to some extent on the ability of Sweden's organic chemical industry to use further her vast forest resources to meet the needs of the primary plastics industry. All plastic raw materials are on the Swedish dollar free list; tariff rates range from 10 to 15 per cent.

—I. V. MACDONALD,
Assistant Commercial Secretary, Stockholm.

SWITZERLAND—*Domestic production falls short of needs of booming plastics industry and foreign purchases large. West Germany and U.S. hold major share of market but Canadian sales there recently doubled.*

SWITZERLAND, with its population of five million, is a highly industrialized country with no dollar problem and with few trade restrictions except in the agricultural field. It does, however, lack all essential raw materials with the exception of hydro-electric power, and depends heavily upon imported supplies.

To minimize the dangers of this shortage of basic materials, the Swiss have worked hard at developing specialty and quality products which need a high degree of skilled labour. This is true of the chemical field in general and the production of plastics in particular. But the lack of oil refineries and large gasworks makes the manufacture of certain plastic raw materials extremely difficult.

However, Switzerland showed interest in plastics as early as 1913 and systematic research was undertaken by some of the larger chemical firms in Basel about 1924. At that time and in the following years, attention was mainly devoted to urea formaldehyde condensation products. But gradually other domestic compression-moulding materials and derivatives of albuminoids, as well as polymerization products, wood glues, and plastic raw materials for the lacquer industry, appeared on the market and found rapid acceptance because of their excellent quality. Simultaneously, products based on aniline formaldehyde condensation began to appear and, on the basis of melamine resins, Switzerland began to turn out amino plastics.

Raw Plastics Produced

Switzerland does not publish production statistics. The following table, however, illustrates the rapid development of the Swiss plastic raw materials industry over the past few years. (The index 100 was arbitrarily chosen for the year 1950.)

Product Groups	*Production Index* 1950	1953	1954
Condensation, polymerization and polyadditive products	100	174	212
Polymerization and copolymerization products	100	275	315
Cellulose derivatives	100	109	142
Hard albuminoid derivatives	100	148	201

Today there are approximately ten Swiss firms producing plastic raw materials and aminoplastics account for an important part of total production. This category includes urea and melamine resins used for various moulding powders; wood glues; resins for the paper, textile and leather industries; solvents for manufacturing laminated panel boards, and raw materials for the protective coating industry. The Swiss industry has valuable protected patents for certain products, especially in the melamine resin group.

A large variety of other synthetic resins made in Switzerland are used as raw materials for the protective coating industry. Apart from the aminoplastics already mentioned, these include glycerolphthalate, phenolic, vinyl, maleic and epoxy resins.

In the thermoplastics group, Swiss-made polyvinyl chloride is outstanding. Careful estimates suggest that 75 per cent of annual requirements of this commodity (between 1,000 and 1,500 metric tons) originates from local sources, mainly from the plants of one large company with headquarters in Basel. This material is principally used in electric cables and wires, floor and wall covering, calendered sheets, and plates and tubes. It also serves as an auxiliary product for the textile industry and as a raw material in the manufacture of varnishes.

Polyvinyl acetate is manufactured in Switzerland in increasing quantities for the paint and glue industries. Among cellulose derivatives, Switzerland makes nitrocellulose and cellulose acetate, and also cellulose plates, tubes and bars. Artificial horn is principally produced from casein of the domestic dairy industry.

Among the more recent developments is the turning out of larger quantities of epoxy resins used as raw materials for coatings and for the production of adhesives for metals and solvents for laminated products. In the form of moulding resins, they are extensively used by manufacturers of electrical apparatus. Recently the Swiss have also taken up the production of polyesters and polyamides.

Trade in Plastics

With the exception of melamine resins and to a lesser extent polyvinylacetate, polyvinylchloride and certain specialty products, domestic production is still insufficient to meet Swiss requirements and foreign supplies are appreciable. Total imports into Switzerland moved from 1,715 metric tons in 1938 to 4,014 metric tons in 1953, 6,183 tons in 1954 and 10,211 tons in 1955.

There are no detailed foreign trade statistics. It was, however, possible to obtain figures on imports of three important products, which show that Swiss purchases abroad of plastic raw materials are increasing rapidly.

SWISS IMPORTS OF PLASTIC RAW MATERIALS

	1953		*1954*		*1955*	
Commodity	*metric tons*	*million Sfrs.*	*metric tons*	*million Sfrs.*	*metric tons*	*million Sfrs.*
Polyvinyl chloride (powder)	387	1·1	943	3·0	1,334	4·0
Polyethylene	137	0·6	468	2·0	1,143	4·2
Polystyrene	438	1·4	649	2·2	1,093	3·3

Switzerland's major suppliers are West Germany and the United States. The first supplies the major part of total Swiss imports of polyvinyl chloride and polystyrene as well as various other products. The United States sells Switzerland principally polystyrene, polyethylene and polyvinyl chloride, and also supplies alkyds. From the United Kingdom come large quantities of polyvinyl chloride and polyethylene. France is a more marginal source and its deliveries consist principally of polyamide and polystyrene. Principal plastic raw materials shipped from Canadian plants to Switzerland are polyvinyl chloride and polystyrene; value of Canadian supplies totalled approximately Sfrs. 1·5 million in 1955. From 1954 to 1955 Canadian deliveries to Switzerland doubled, an indication that in many products Canada is competitive. Italy, Belgium and The Netherlands have also entered this market.

With the development of the plastic raw materials industry, the production of semi-manufactured plastics has also expanded during recent years. Total investment in the Swiss plastics industry is estimated at about Sfrs. 45 to 50 million. The principal semi-manufactured products include sheets, plates, foils, bars, tubes and hose. Output is, however, still insufficient to cover domestic requirements, and although no statistics are available, imports are reported to be substantial.

—BRUCE I. RANKIN,
Commercial Secretary, Berne.

UNITED KINGDOM —*Steady increase in production of plastic raw materials slowed down in 1956 but long-term prospects good and industry plans expansion. Canada dropped to fourth place as supplier of plastic materials in 1956; Canadian sales should increase when U.K. able to lift restrictions on dollar imports.*

THE PRODUCTION OF PLASTIC RAW MATERIALS and primary shapes is one of the most rapidly growing industries in the United Kingdom. Output, increasing at an average rate of 15 per cent a year, has jumped from just over 100 thousand tons* in 1948 to 324 thousand tons in 1955. If the industry's plans to increase capacity are carried out, production should reach at least 500 thousand tons by 1960. Imports of plastic materials have also increased, from 11,400 tons in 1952 to 28,200 tons in 1955.

The following table gives an indication of the production level reached in various types of plastic raw materials and shapes in 1954 and 1955:

Net Sales (Output) of Plastic Materials 1954 and 1955

	Tons 1954	1955
ALL PLASTIC MATERIALS: TOTAL	278,630	324,120
THERMOSETTING MATERIALS	143,203	160,111
Alkyds:		
Solid and liquid resins	30,620	29,596
Other	3,098	6,254
Aminoplastics:		
Solid and liquid resins (including solutions)	23,904	26,938
Moulding and extrusion compounds	19,060	20,017
Casein plastics:		
Sheet, rod, tube and profile shapes	2,096	2,732
Phenolics and cresylics:		
Straight solid and liquid resins	12,802	12,503
Modified solid and liquid resins	5,254	5,977
Moulding and extrusion compounds	27,567	31,176
Sheet, rod, tube and profile shapes (laminated and cast, including decorative sheet)	14,786	19,889
Solutions, emulsions and dispersions (net resin content)	1,745	1,682
Polyesters	420	897
Other thermosetting materials	1,853	2,450
THERMOPLASTIC MATERIALS	135,427	164,009
Cellulose plastics:		
Moulding and extrusion compounds	6,666	6,563
Other (including photographic film base)	4,537	5,331
Vinyl chlorides:		
Moulding and extrusion compounds	29,320	33,243
Sheets of up to ·012 inch thickness	5,019	8,395
Other sheet, rod, tube and profile shapes	7,892	9,151
Solutions, emulsions and dispersions (net resin content)	2,011	1,582
Polystyrene:		
Moulding and extrusion compounds	20,909	20,572
Other	486	687
Other thermoplastic materials (including acrylics, polyamides, polytetrafluorethylene, polyethylene, vinyl acetate and vinyl chloride polymers and copolymers)	58,587	78,486

* Quantities are in long tons of 2,240 lb.

In 1950 the output of thermosetting materials was double that of thermoplastics, but now the latter is the higher.

In the thermoplastic field, only polystyrene failed to advance in 1955. Production of both polyethylene and the vinyl chlorides increased by more than 20 per cent over the previous year, with polyethylene taking over part of the polystyrene market.

Figures for the first seven months of 1956 show that the British industry has been producing at no greater rate than in 1955. This first major pause in its postwar expansion is the result of the recession in the consumer goods field in the United Kingdom because of the Government's anti-inflationary "credit squeeze". However, the industry's large capital expansion program has not been cut back because long-term prospects are still considered good.

The plastics industry in the United Kingdom has developed both through local research and development and by the establishment of subsidiaries of overseas firms, often in association with United Kingdom interests. For example, polyethylene, one of the most successful of the modern thermoplastic products, was developed by a British firm. Production of polyethylene in 1955 reached between 30,000 and 35,000 tons; in 1956, it is likely to total about 42,000 tons, and in 1958 about 85,000 tons, based on the expansion plans announced by a number of firms. Since petroleum chemicals are an important source of raw materials for plastics, the large increase in postwar oil refinery capacity in Britain has played a vital part in the growth of the plastics industry.

Exports and Imports Grow

United Kingdom exports of plastic materials have been growing as production has risen. Between 1952 and 1955, exports of synthetic resins, moulding powders, sheet, rod, tube, film and foil, and scrap and waste increased from 42,300 to 84,900 tons. In 1955, the industry's most important export markets were Australia, South Africa, India, the Netherlands and Sweden, and its leading exports were plasticized and unplasticized vinyl resins, urea formaldehyde resins, and polystyrene moulding powders. In the first seven months of 1956, plastic exports rose by about 16 per cent above the same period of 1955.

Imports have also risen, reflecting the very substantial increase in demand for plastic products; from 1952 to 1955, they increased more than two and a half times to 28,000 tons. In 1956, however, imports dropped by 16 per cent because of the decline in domestic demand which is also affecting local production. The following table shows the main sources of plastic materials (synthetic resins, moulding powders, sheet, rod, tube, film and foil) in 1952 and 1955:

Country	*1952* Quantity (cwt.)	*1952* Value (£000)	*1955* Quantity (cwt.)	*1955* Value (£000)
United States	82,459	4,088	239,652	6,458
West Germany	77,194	929	136,595	2,334
CANADA	25,212	358	55,757	1,231
Netherlands	19,209	218	53,390	768
Other	24,385	525	79,278	1,237
Total	228,459	6,118	564,672	12,028

Canada has ranked as the United Kingdom's third largest supplier of imported plastic materials for a number of years. In the first seven months of 1956, U.K. imports of Canadian plastic materials were valued at £167,270, compared with £994,794 in the same period of 1955. This means that Canada has now dropped to fourth position as a source of supply. The United Kingdom still maintains restrictions on the import of dollar-area plastic materials because of its balance-of-payments problem.

The effect of these restrictions is generally to prohibit the import of plastic materials from Canada or the United States when domestic production can meet the demand at home. On the other hand, imports from West Germany are admitted more freely because both countries are members of the Organization for European Economic Co-operation. It is impossible to forecast when the import restrictions on Canadian materials will be lifted, although the Government's policy is to proceed with the liberalization of imports as quickly as the balance-of-payments position permits. Therefore, while restrictions continue, Canadian exporters will be limited in the variety of products which they may ship to the United Kingdom. However, prospects are good for many Canadian plastic raw materials when import licensing ends in this country, because our prices are competitive.

—T. M. BURNS,
Commercial Secretary, London.

WEST GERMANY—*The plastics industry is thriving, with production of plastic raw materials expanding rapidly. Although the country is a net exporter of primary plastics, imports are also increasing.*

PRODUCTION OF PLASTIC RAW MATERIALS in West Germany has been increasing at an annual rate of 25 to 30 per cent in recent years; output reached 425 thousands tons in 1955, a 27 per cent increase over 1954. Recovery of the industry has been rapid since the war; in 1947 production reached only 23,000 tons.

The following table shows prewar production of primary plastics and the rapid growth of this industry since 1950.

	1936	*1950*	*1951*	*1952*	*1953*	*1954*	*1955*
	(1,000 metric tons)						
Cellulose derivatives	31	28	31	29	39	47	50
Condensation products	44	40	81	80	97	130	175
Polymerization products	2	30	56	81	104	148	200
Total*	77	98	168	190	240	325	425

* The above statistics were supplied by courtesy of the Association of Plastics Producing Industries and Allied Sectors, Frankfurt.

Immediately after the war West Germany imported large quantities of plastic raw materials. But the country now has emerged as a major world supplier of primary plastics; shipments totalled 87,500 metric tons in 1955 valued at DM 297 million, an increase of 43 per cent in volume and 35 per cent in value over the previous year. About 70 per cent of the exports by value went to European countries. Polymerization products such as polystyrene, PVC, and polyethylene accounted for more than 56,800 metric tons.

Plastics Industry Growing

New plants in West Germany to manufacture polymerization and condensation products have been established, partly to make up for lost capacity when the country was partitioned. The value of plastics production reached 1·2 billion DM in 1955, or about 9 per cent of the value of the West German chemical industry's total production; it now exceeds in value any other division of the chemical industry. About 60 manufacturers now produce plastic raw materials. There have been no serious shortages of basic materials during the past year. Output from recently expanded plants has made available much larger quantities of special grades of polystyrene, polyvinyl chloride, and polyethylene.

Capacity of German oil refineries has expanded greatly (see article "West Germany Expands Petrochemical Production" in the Oct. 13, 1956, issue of *Foreign Trade*) and the volume of olefins is rising steadily; these products are an important source of basic material for synthetic resins.

The West German primary plastics industry currently produces a wide range of raw materials and more products are being added to the list. Newer developments include production of polyethylene, polyester resins, silicones, and high-viscosity polyamides.

Production figures for 1955 for several plastic materials appear in the following table:

Type of Primary Plastic	*No. of Plants*	*1955 Production*	*Expected Production*
		(in metric tons)	
Polyvinyl chloride	6	65,000	100,000
Polystyrene	....	20,000	30,000
Polyethylene*	3	started 1956	48,000
Acrylics	....	11,200	....
Phenoplastics	....	77,500	....
Aminoplastics	....	55,000	....
Polyester resins	....	est. 4,000 tons in 1956	....

* For further details about plans for producing polyethylene see the article mentioned above in the Oct. 13 issue of *Foreign Trade*.

Two firms turn out polyvinyl acetates but their production figures are not published. In the fluorocarbon group only polytrifluorochloroethylene is produced at present but more use for special purposes should increase demand for this material. In addition to various co-polymers, materials such as polyvinyl ether, polyisobutylene, polyvinyl carbazole and polyacrylonitrile are processed in Germany. The cellulose derivative group includes nitrocellulose, ethyl cellulose and cellulose acetate; production in 1956 was expected to remain about the same as in 1955. Emulsion and suspension polymerizates of vinyl chloride are growing in importance.

Imports of Primary Plastics 1955

	Condensation Products (incl. alkyd resins)		*Polymerization Products (incl. polystyrene, PVC, and polyethylene)*		*Cellulose Derivatives (incl. ethyl cellulose)*	
Country of Origin	*100 kilos*	*1,000 DM*	*100 kilos*	*1,000 DM*	*100 kilos*	*1,000 DM*
Belgium	....	....	2,714	549	5,933	9,357
Luxembourg	....	....	65	21	....	....
Denmark	80	22	480	114	146	21
France	74	95	4,587	998	1,585	652
United Kingdom	1,935	824	33,265	4,708	3,298	1,345
Italy	....	....	30,385	6,075	1,073	284
Yugoslavia	....	....	1,610	286	....	....
Netherlands	5,591	3,724	4,296	872	488	150
Austria	....	....	911	216	126	43
Sweden	3,860	850	724	167	1,761	687
Switzerland	12,119	4,219	7,282	1,912	1,822	2,284
Spain	....	....	13	15	....	....
United States	7,621	2,793	34,559	14,381	9,524	3,714
Czechoslovakia	....	....	....	....	600	66
Canada	309	308	6,643	2,195	....	....
TOTAL IMPORTS	32,206	13,057	129,671	33,542	26,800	18,733
TOTAL EXPORTS	180,032	62,219	568,564	186,984	115,198	44,344

Although West Germany is a net exporter of plastic raw materials, she also imports substantial amounts. Her imports of primary plastics rose to 21,300 metric tons valued at DM 67 million in 1955 from 17,870 metric tons valued at DM 55 million in 1954; details for 1955 for the three main plastics groups appear in the table on page 22.

Import licences are required for polyethylene, polystyrene, and alkyd resins but German agents of Canadian manufacturers of these materials have encountered little difficulty in obtaining clearance. Importers of polyvinyl chloride and ethyl cellulose do not require a licence. The current rates of duty for the above materials are: alkyd resins 15 per cent, polyethylene 19 per cent, polystyrene 15 per cent, polyvinyl chloride 19 per cent, ethyl cellulose (free); these items are subject to a turnover tax of 4 per cent on the duty-paid value, except for reflection material which is 6 per cent.

The West German plastics industry will probably continue to expand; basic materials from the huge coal-chemical industry and the rapidly expanding petrochemical industry are assured.

The country's plastics fabricating and processing industry is also highly developed with perhaps 1,000 firms geared entirely to plastics and possibly a further 500 plants producing some plastic goods.

A great future is forecast for the thriving West German plastics industry. Output of both plastic materials and finished products is widely diversified and the industry as a whole is well integrated.

—S. G. BARKLEY,
Commercial Secretary, Bonn.

Transportation Notes

Spain Modernizes Merchant Fleet

SOME 95 PER CENT of Spain's foreign trade and 60 per cent of her domestic trade is carried by sea, but only 40 per cent of the ships used are of Spanish registry. Now Spain has launched a program to build more ships—a program that should mean substantial savings of foreign exchange, particularly dollars and sterling.

A law recently enacted by the Spanish Government for "the protection of navigation" also makes provision for the renovation of the national merchant fleet. It provides for the construction of one million tons during the ten years 1956-1966, at the rate of 100 thousand tons a year. By 1966 it is expected that the fleet will have increased 25 per cent over the present tonnage and will be composed of more modern ships. The number of ships over 25 years old will be reduced from 57 to 13 per cent. Last year the merchant marine totalled 1·2 million tons.

The project will be state-financed through naval credits at 2 per cent interest, which will cover 80 per cent of the value of each ship. To reduce building costs to a level comparable with those of foreign shipbuilders, the State will also grant "premiums of construction" representing 9 per cent of the value of each ship. Both credits and premiums are exempt from taxation and shipbuilders enjoy a 50 per cent reduction in real estate duties. They may also draw on naval credits for the renovation and modernization of their installations.

The cost of financing the million-ton program will reach some two thousand million pesetas but this heavy burden will be compensated by the enormous saving in foreign freight charges which, at present, total about $32 million. On completion of the shipbuilding program the estimated saving will be some 13,000 million pesetas, or about ten times the annual foreign freight bill. It is expected that a large part of the foreign exchange saved will be spent on new machinery, etc., to promote industrial expansion.

Some 60,000 tons of special steel plate are required for the shipbuilding program, although at present only 25,000 tons are available from national production and the remainder will have to be imported. However, in about two years' time, when the Avilés steel plant is working to full capacity, there will be enough nationally produced steel plate to meet the requirements of the Spanish shipyards.

Included in the new shipbuilding plans is the construction of a number of large oil tankers and two ocean liners, each of 15,000 tons.

—M. T. STEWART,
Commercial Counsellor, Madrid.

Austria

NEW AIRLINE FOUNDED—A new Austrian airline, to be known as Austrian Air Traffic Ltd. (OELAG), has recently been formed. Thirty-six per cent of the capital of this joint stock company will belong to Air Austria, 24 per cent to Austrian Airways, and the remaining 40 per cent will be shared by the Dutch KLM and the Scandinavian SAS. It is expected that the new Austrian company will begin its flights about the middle of April 1957. The first routes will probably lead from Vienna to western, southern and southeastern Europe and to the Soviet Union—Berne, Dec. 14.

Chile

FREIGHT SURCHARGE AT ARICA—Freight destined for the free port of Arica in northern Chile, and also freight en route through the port to Bolivia, will be subject to a freight surcharge of 15 per cent over existing rates. The surcharge is effective, presumably, from the date on which notice of it was published—December 13, 1956. The increase has been agreed to by the International Conference on Freight Rates of the Atlantic, Pacific and European regions. It is applicable to cargo from North America. The decision to apply the surcharge is the result of the delay ships have experienced because of congestion in the port—Santiago, Dec. 13.

Federation of Rhodesia and Nyasaland

ROAD-RAIL LINK WITH KENYA—In the past, transport of merchandise between the Federation of Rhodesia and Nyasaland and the Union of South Africa on the one hand, and on the other the East African territories of Kenya, Uganda and Tanganyika, has been impeded through lack of organized road or rail transport. The slower Indian Ocean sea route has had to be used. This situation is soon to be rectified by a new arrangement whereby goods from the Federation and the Union will be transported to Ndola, Northern Rhodesia, by rail and there handed over to the representatives of a Nairobi transport company who will convey them by heavy road vehicles to Kenya, 700 miles to the north. This means that South African and Rhodesian goods will soon be delivered in Nairobi in about one-quarter of the present time. Trade should increase substantially as a result—Salisbury, Dec. 4.

Greece

SHIPBUILDING—Greek-born shipping magnate Stavros Niarchos is investing over $8·6 million in the construction of a shipbuilding and ship repair yard in Greece, capable of servicing ships up to 50,000 tons capacity. The contract signed on September 12th provides that the new installations shall include at least one floating or drydock capable of accommodating tankers of the 50,000 ton d.w. class, landings of a minimum total length of 1,200 metres, and a repair and shipbuilding yard. The State is prepared to provide a guarantee up to a $4 million loan if required. Mr. Niarchos has not decided upon the site but engineering surveys are being made on the Greek mainland and the islands—Athens, Dec. 6.

United Kingdom

EXPORT EXPRESS SERVICES—British railways have inaugurated a fast factory-to-ship rail service for export traffic from 35 industrial centres to London docks. Full truckloads of exports from major manufacturing centres in all parts of Great Britain will be given assured "next-morning" arrival at specified docks. Less-than-carload lots will be assembled into full loads at concentration depots established at Birmingham, Leicester and Longport. The new service is the result of a review by the British Transport Commission, in conjunction with the Federation of British Industries and the Port of London Authority, of arrangements for improving export traffic by rail. It is intended to extend this express service as soon as possible to shipments from other centres to London docks and from main cities to other ports—London, Dec. 18.

Venezuela

NEW SHIPPING SERVICE—The Alcoa Steamship Company has announced the establishment of a new shipping service from East Coast Canadian ports to La Guaira and Puerto Cabello. The initial sailing on this new service left Montreal on November 2nd and arrived in La Guaira on November 16th. The company plans a regular schedule with ships leaving Canadian ports approximately every two weeks. The growing trade between Canada, Venezuela and other Caribbean ports is given as the reason for Alcoa's new venture—Caracas, Dec. 3.

Export Drawbacks: How They Work

To encourage exports, the Government refunds to Canadian companies 99 per cent of the duties and taxes they pay on imported goods that are afterwards exported in the same or in a different form. This twenty-first article in our series on the techniques of export trade gives a digest of the regulations governing these "export drawbacks".

W. J. CALLAGHAN, *Tariff Consultant.*

MOST CANADIAN MANUFACTURERS, IMPORTERS AND EXPORTERS are aware that our customs and excise tax laws and regulations provide for a drawback of the duties and taxes paid on imported goods exported in the same condition as they were imported, and on imported goods used in, wrought into or attached to goods exported. Many companies, however (particularly the smaller ones) do not take advantage of these drawback privileges.

Drawback on Imported Goods Exported

Section 275(1)(*a*) of the Customs Act states that "the Governor-in-Council may, under regulations made by him for that purpose, allow, on the exportation of goods which have been imported into Canada and on which a duty of Customs has been paid, a drawback equal to the duty so paid with such deduction therefrom as provided for in such regulations". Section 46(7) of the Excise Tax Act states that "a drawback of ninety-nine per cent of the taxes imposed by Parts IV, V and VI and paid on or in respect of goods exported may be granted under regulations of the Governor-in-Council". Part IV covers excise taxes on automobiles, beverages, cigars, etc.; Part V covers excise taxes on playing cards and wines; Part VI covers consumption or sales tax.

Regulations governing the drawback on goods imported into and then exported from Canada have been issued from time to time by the Governor-in-Council. The latest are those covered by P.C.125/4317 passed on October 18, 1946. These regulations are also set forth in Department of National Revenue Memorandum Series D No. 17, DB-5 dated November 1, 1947. This Memorandum states that when imported goods on which customs and excise duties and taxes have been paid are exported from Canada, a drawback of 99 per cent of the duty and taxes paid thereon may be allowed, subject to the following conditions.

1. "The drawback shall be paid to the exporter of the goods.
2. "Whole packages of goods as imported may be broken and part only exported, but no use shall have been made in Canada of the goods exported.
3. "The quantity and identification of such goods imported and exported and the amount of duties and/or taxes paid thereon shall be ascertained.
4. "Claims for drawback submitted on and after September 1, 1946, shall not cover goods exported for a period of more than twelve consecutive months and must be filed with the Collector and complete evidence attached thereto within a period of six months from the date of the last export entry covered by the claim. Such drawback claims shall not be paid unless the duties and/or taxes have been paid on the goods within three years of the date of exportation thereof, nor unless the entered value for duty of the goods exported, on which claim is made, is in the aggregate more than fifty dollars.
5. "Claims for drawback shall be made under oath before a Collector, Justice of the Peace or Commissioner for Taking Oaths, in such form as the Minister of National Revenue shall prescribe and shall, before payment, be verified to the satisfac-

tion of the Minister, who may require, in any case, the production of such further evidence, in addition to the usual averments, as he deems necessary to establish the bona fides of the claim. Nothing in these regulations shall be deemed to alter or amend the law, or to affect any discretion vested in the Minister with respect to the payment or non-payment of drawbacks, and the Minister shall be the sole judge as to whether any claims for drawback shall be paid in whole or in part.

6. "Upon the exportation of the goods entitled to drawback, export entry in triplicate, in the usual form (with the words 'Subject to Drawback' marked on the face), shall be filed with the Collector at the port of exit from Canada, naming the conveyance by which and the country or place to which the goods are to be exported and fully describing the kind and quantity thereof and also the marks and numbers on the packages.

7. "The following documents shall be delivered with the claim for drawback:—

   (*a*) "A copy of the import entry showing payment of duties and/or taxes on the goods imported and exported, on which drawback is claimed. If a copy of the import entry, however, has been furnished with a previous claim for drawback, it will be sufficient to 'refer' to such copy and indicate the claim to which it was attached, without furnishing a further copy of the entry.

   (*b*) "A certified true copy of the export invoice.

   (*c*) "A copy of the export entry, duly numbered and certified by the Collector at the port of exit where the goods were entered for exportation from Canada.

   (*d*) "A certificate of importation, sale or transfer, in form prescribed by the Minister, when the claimant entitled to drawback is not the importer of the goods.

8. "Drawback is not payable in respect of Customs penalties imposed on imported goods.

"Drawback is not payable in respect of goods referred to above which are returned to the country from whence they were imported, except and provided evidence satisfactory to the Minister of National Revenue is furnished that the goods are first, exported after processing in Canada as ordered at time of importation; second, are being temporarily exported to be further processed and reimported into Canada; or third, are purchased for export by the Canadian Commercial Corporation."

Drawback claims should be filed monthly unless otherwise instructed and should be submitted on Forms No. K.35 (Claimant's Oath and Statement of Claim) and No. K.32A (Certificate of Importation, Sale or Transfer). Four copies of the Form K.35 and two copies of the Form K.32A should be filed with the Collector of Customs and Excise. These forms may be obtained from the nearest Collector of Customs and Excise and detailed information may be obtained at District Drawback offices located at Amherst, Nova Scotia; Montreal and Quebec City, Quebec; Ottawa, Oshawa, Toronto, Hamilton, London and Windsor, Ontario; Winnipeg, Manitoba; Calgary, Alberta, and Vancouver, British Columbia.

Drawback on Materials in Canadian Exports

Section 275(1) (*b*) of the Customs Act states that "the Governor-in-Council may, under regulations made by him for that purpose, allow a drawback equal to the duty paid, with such deduction therefrom as is provided for in such regulations or a specific sum in lieu of such drawback, in respect of materials used in, wrought into or attached to goods exported, or in respect of materials (not to include fuel or plant equipment) consumed in the manufacture or production of any such goods."

Section 276(1) of the Customs Act states that "the Governor-in-Council may under regulations made by him for that purpose, allow, on the exportation of goods manufactured in Canada and in the manufacture of which both imported materials and materials of domestic manufacture or production of the same class are used, a drawback equal to the duty paid, less such deduction therefrom as is provided in such regulations, on all such materials imported and used by the manufacturer in the manufacture of the goods exported and other goods; but such drawback shall not be allowed unless a like quantity of materials of the same class, whether imported or of domestic manufacture or production was used in, wrought into or attached to articles manufactured in Canada and exported." The statutory provision for the payment of drawback of excise taxes in the case of goods described in this paragraph is Section 46(7) of the Excise Tax Act, which has already been outlined in the second paragraph of this article.

Regulations respecting drawback on goods manufactured or produced in Canada and exported have been issued from time to time by the Governor-in-Council, the latest being those covered by P.C. 3687 passed on July 18, 1951. These regulations are also set forth in Department of National Revenue Memorandum Series D No. 17, DB-4 (1st Revision) dated July 20, 1951. This Memorandum states that:

(1) "When goods on which customs duties or customs duties and excise and/or sales taxes have been paid are used or directly consumed in, wrought into or attached to any articles manufactured or produced in Canada and exported therefrom, there may be allowed a drawback of ninety-nine per cent of the duties and/or taxes paid thereon.

(2) "When imported materials and/or materials of domestic manufacture or production of the same class are used in Canadian manufactured goods exported, there may be allowed a drawback of ninety-nine per cent of the customs duties or customs duties and excise and/or sales taxes paid on the imported materials, in quantity sufficient to produce the exported goods, provided it be established that the imported goods upon which drawback is claimed were used in the plant producing both the exported goods and similar goods not necessarily exported, during the twelve consecutive months' period relative to the manufacture of the goods exported.

(3) "Except as may be otherwise provided by Order of the Governor-in-Council, the whole of the drawback shall be paid to the manufacturer or producer or exporter of the goods as exported.

(4) "The quantities of the goods used and the amount of duties and/or taxes paid thereon shall be ascertained.

(5) "Satisfactory evidence shall be furnished in respect of the manufacture or production of the articles in Canada and exportation therefrom.

(6) (*a*) "Claims for drawback submitted on and after the 1st August, 1951, shall not cover goods exported for a period of more than twelve consecutive months and shall be filed with the Collector of Customs and Excise and complete documentary evidence attached thereto within a period of six months from the date of the last export entry covered by the claim.

(*b*) "Such drawback claims shall not be paid unless the duties and/or taxes have been paid on the goods so used as aforesaid within three years of the date of the exportation of the Canadian article, nor unless the claims as presented at any one time aggregate ten dollars or over.

(7) (*a*) "Claims for drawback shall be made under oath before a Collector, Justice of the Peace or Commissioner for Taking Oaths, in such form as the Minister of National Revenue shall prescribe and shall, before payment, be verified to the satisfaction of the Minister, who may require, in any case, the production of such further evidence, in addition to the usual averments, as he deems necessary to establish the bona fides of the claim.

(*b*) "Nothing in these regulations shall be deemed to alter or amend the law, or to affect any discretion vested in the Minister with respect to the payment or non-payment of drawbacks, and the Minister shall be the sole judge as to whether any claim for drawback shall be paid in whole or in part.

(8) "Upon the exportation of any article entitled to drawback, export entries, in triplicate, in the usual form (with the words 'Subject to Drawback' marked on the face) shall be filed with the Collector at any port of exit from Canada, naming the conveyance by which and the country or place to which the goods are to be exported and fully describing the kind and quantity thereof and also the marks and numbers on the packages.

NOTE—"In the case of Less than Carload Lot shipments, as it is not possible for the exporter to state on the export entry the number of the car in which his shipment will be carried, this information must be noted on all copies of the relative export entry by the Customs Officer at the port of exit.

"Export entries relating to shipments forwarded and exported by truck are to be endorsed 'exported by truck' at the frontier port of exit.

"In the case of export shipments which upon arrival at the frontier port of exit go forward by vessel, the number of the outward report of the vessel must be noted on all copies of the relative export entry.

(9) "Drawback is not payable in respect of Customs penalties imposed on imported materials nor when the article exported is subject to a bounty to be paid by the Government of Canada on such article when made in Canada.

(10) (*a*) "Where it appears to the satisfaction of the Minister that the process of manufacture into which imported goods have entered has resulted in the production of saleable by-products retained in Canada, the drawback otherwise payable on the export of such goods (or in respect of materials used in, wrought into, or attached to such goods, or materials consumed in the

manufacture or production of such goods) shall be reduced by a sum proportionate to the value of such by-products; that is to say, by a percentage equivalent to the percentage value of the by-product in relation to the total value of the goods manufactured or produced.

(*b*) "Where it appears that the process of manufacture has resulted in the production of merchantable scrap or waste, not exported, drawback otherwise payable shall be reduced by a sum to be arrived at by applying to the Canadian sales value of the merchantable waste or scrap, the prevailing rates of duty and/or taxes, if any, on merchantable waste or scrap of the same kind, if imported as such; provided that the prevailing rates of duties and/or taxes, if any, on the merchantable waste or scrap are not in excess of the rates of duties and/or taxes applicable to the prime imported goods; but where the prevailing rates for the merchantable waste or scrap, imported as such, are in excess of the rates applicable to the prime imported goods, the rates of duties and/or taxes applicable to the prime imported goods shall be used.

(11) "The following documents shall be delivered with the claim for drawback:

(*a*) "A copy of the import entry showing the payment of the customs duties or customs duties and excise and/or sales taxes on which drawback is claimed. (If a copy of the import entry, however, has been furnished with a previous claim for drawback, it will be sufficient to 'refer' to such copy and indicate the claim to which it was attached, without furnishing a further copy of the entry. If the tax for which drawback is claimed was paid on a domestic sale, the original invoice or a certified true copy thereof, representing such domestic sale, showing thereon the amount of tax paid and the number and date of the excise entry in which was included the amount of such tax paid to a Collector, shall be furnished. Should the domestic invoice, however, have been furnished with a previous claim for drawback, it will be sufficient to 'refer' to such and indicate the drawback claim to which it was attached.)

(*b*) "A certified true copy of the export invoice.

(*c*) "A copy of the export entry, duly numbered and certified a true copy by the Collector at the port of exit where the articles were entered for exportation from Canada.

(*d*) "A certificate of importation, sale or transfer, in form prescribed by the Minister, when the claimant entitled to drawback is not the importer of the goods.

(*e*) "A certificate of sale for exportation, in form prescribed by the Minister, when the claimant is the manufacturer or producer but not the exporter."

Drawback claims respecting goods manufactured or produced in Canada and exported should be filed quarterly unless otherwise instructed and should be submitted on Forms No. K.32 (Claimant's Oath and Statement of Claim), No. K.32A (Certificate of Importation, Sale or Transfer) and No. K.32B (Certificate of Sale for Exportation). Form K.32B contains a declaration to be completed by the purchaser in Canada when the goods covered are not shipped direct from the claimant's plant to the foreign purchaser, but pass into the hands of a Canadian purchaser who in turn exports same. Four copies of Form K.32 and two copies of the Forms K.32A and K.32B should be filed with the Collector of Customs and Excise. These forms may be obtained from the nearest Collector of Customs and Excise and detailed information may be obtained at the District Drawback offices located at Amherst, Montreal, Quebec City, Ottawa, Oshawa, Toronto, Hamilton, London, Windsor, Winnipeg, Calgary and Vancouver.

Drawback on CCC Purchases

Regulations have been established governing a drawback of 99 per cent of the customs and excise duties and taxes paid on goods purchased by the Canadian Commercial Corporation, on and after January 2, 1948, for exportation from Canada, and for the remission or refund of the sales and excise taxes payable in respect of such goods to be exported. The present regulations were approved by Order-in-Council P.C. 113/1995 of May 17, 1946. These regulations are also contained in Department of National Revenue Memorandum Series D No. 17, DB-9 (1st Revision). Claims respecting Canadian Commercial Corporation purchases should be filed on Forms No. K.39 (Claimant's Oath and Statement of Claim) and No. K.32A. These forms may be obtained from the nearest Collector of Customs and Excise.

For Further Information

The full text of the regulations governing drawback on goods imported into Canada and exported from Canada and the regulations respecting drawback on goods manufactured or produced in Canada and exported have been set forth in this article. No attempt has been made to deal with the various administrative problems that arise from time to time in connection with drawbacks. If an importer, manufacturer or producer requires an official ruling on any point not covered by these regulations, he should communicate directly with Mr. G. E. Aust, Director of Customs Drawbacks, or Mr. P. P. Last, Assistant Director of Customs Drawbacks, Department of National Revenue, Ottawa.

How Idaho Sells Its Potatoes

More and more of Idaho's famous potatoes today are marketed in processed form. For fresh potatoes, smaller consumer packages are gradually replacing the familiar 100-pound bag.

W. C. HOPPER, *Agricultural Counsellor, Washington.*

TO MANY CANADIANS, the State of Idaho is best known for its potatoes; only Maine grows more of this all-important vegetable. This year the state harvested an estimated 33,115,000 hundredweight from its late or fall crop; the late summer crop totalled 1,890,000 hundredweight. Idaho farmers told me, when I visited that area recently, that Idaho potatoes are so good that, although the per capita consumption of potatoes in the United States has been declining, the consumption of Idaho potatoes has been increasing. They attribute this to the fact that the variety most widely grown there—Russet Burbank, Idaho Russet or Netted Gem—is higher in percentage of starch than other varieties, because of the special type of soil and the climatic conditions. Main varieties harvested in late summer are White Rose, Pontiac, and Bliss Triumph. All Idaho potatoes are grown on irrigated land—land which has an estimated value of $600 to $800 an acre.

Sold to Processing Plants

The Idaho potato has proved to be especially adapted to processing in various ways: in 1955 about 30 per cent of the crop went to processing plants and the 1956 percentage is expected to be even higher. One plant in the state uses about 1·2 million pounds of potatoes a day and can be operated practically the year round. These potatoes are processed into potato chips, frozen french-fried, hash brown, frozen patties, and granular and shredded potatoes sold in both consumer and institutional packages. Dehydrated diced potatoes are sold in quantity to commercial food companies which make beef hash, soups and other canned products, potato starch, and potato flour. New processing plants are springing up not only in Idaho but also in Washington and Oregon. One of them, it is reported, will turn out frozen baked potatoes in addition to other potato products.

The processors use largely field-run potatoes which cost, under contract, about $1.00 per hundred pounds. The processor usually does the grading himself so that he can use the different sizes to best advantage. For example, the larger potatoes are most suitable for french-fried cuts; the smaller ones go into patties or dehydrated products. Some of the processors believe that the overall decline in U.S. consumption

—USDA Photo

Idaho potatoes are grown chiefly on small acreages of irrigated land, worth about $600 to $800 an acre. Here on this 80-acre farm near Ashton, Idaho, contour ploughing, irrigation and other modern practices help to keep the yield up.

of potatoes will be halted or reversed as more processed potatoes are turned out.

Selling Them Fresh

Fresh Idaho potatoes have a high reputation and are very popular with consumers. To capitalize on this popularity, growers are making a start at stamping each potato with the words "Grown in Idaho", employing a machine which has been adapted from the one used in California for stamping lemons. Some 60 per cent of the fresh or unprocessed potatoes is sold in 100-pound sacks; the other 40 per cent is packaged in consumer containers such as mesh bags, paper bags with windows, and polyethylene bags containing five to ten pounds. Because the potatoes cannot be packaged successfully in the farmers' storage quarters —chiefly pits or cellars covered with earth—more and more potatoes are being stored in centralized packing houses. Only about 5 per cent of the crop consists of the large potatoes known as "Idaho bakers". Main markets for fresh Idaho potatoes are in the Central States, followed by the Midwest, the Eastern States, the South, and the Pacific Coast States.

Cutting Production Costs

Naturally, the use of consumer packages increases marketing costs substantially. To cut this cost down, machines are being developed which will package the potatoes automatically. To assist in the grading, a roller grading table, like that used to grade citrus fruits in California, is being introduced. Farmers too are working to slash growing costs by using labour-saving machinery and equipment. Because most of the potato crop is grown by farmers with small acreages, much of this machinery is being bought co-operatively. Already about three-quarters of the potatoes harvested are elevated to motor trucks direct from the potato-digging machines, to save the labour of picking up the potatoes by hand after digging.

Future Trends

Experimental work is already under way in Idaho on the irradiation of potatoes to preserve them and on the inhibiting of sprouting by applying a chemical spray to the vines three or four weeks before harvest. Research is also going forward on the incorporation of non-fat milk solids with potato granules. Because some of the land on which the potatoes are grown is showing signs of a deficiency in organic matter, growers are introducing more livestock into their farm operations, mainly to obtain more farm manure.

Production of Idaho potatoes is expected to increase in the future, with more and more of the crop going to the processing plants. In fact, in the not far distant future, most of the crop will be sold in processed form. Fresh potatoes will be largely sold in consumer packages instead of in the present 100-pound containers.●

South Africa's Fruit Industry

THE PRODUCTION AND PROCESSING OF FRUIT is one of South Africa's fastest growing industries and an important foreign exchange earner. Its rapid expansion is reflected in increasing demand for fertilizers, insecticides, packaging materials, processing machinery and agricultural implements—products that Canadian firms might supply.

The industry falls naturally into three classifications—citrus, deciduous and sub-tropical fruits. The two former are the most important, but cultivation of the latter variety, particularly pineapples, is increasing.

The phenomenal growth in the production of citrus fruits is evident from export statistics. During 1955, 6·4 million cases were exported compared with 5·2 million cases in 1954 and it is expected that this will increase to 7·7 million cases in the present season.

Exports of deciduous fruits in 1955 amounted to 69,436 tons—an increase of 29 per cent over the previous year. The United Kingdom was the largest purchaser (54,867 tons), followed by Sweden (5,554 tons). The remainder went mainly to other European countries.

With the exception of pineapples, sub-tropical fruits are grown mainly for domestic consumption. Export markets purchased 32·75 million pounds of canned pineapple from South Africa in 1954, an increase of 52 per cent over sales in the preceding year. A continued rise in output is expected in this sector of the industry.

Production of canned fruits, including apricots, peaches, pears, pineapple and grapes, totalled 152·6 million pounds in 1955 compared with 136·8 million pounds in 1954. The largest individual increase was in canned apricots which jumped by 25 per cent to 36·2 million pounds.

Dried fruit production in 1955, at 16,425 tons, was slightly below that of 1954 but 7 per cent higher than the average output for 1951-1954.

South Africa's production of fruit has undergone tremendous development in the past few years. Although this thriving industry is faced with some marketing and transportation problems, future prospects are encouraging. Canadian firms may well look to this country as a source of supply of fruit as well as a market for many products which this industry needs.

—A. WORDEN EVANS,
Trade Commissioner, Cape Town.

Commodity Notes

Argentina

GLYCERIN-STEARIN AND STEARIC ACID—By Ministry of Commerce and Industry Resolution No. 1406, effective November 14, 1956, the export of glycerin, stearin and stearic acid has been freed from close government control. This action cancels the previously existing quota system and the trade is hopeful that exports will increase considerably. The Government is now being urged to release industrial tallow—Buenos Aires, Dec. 10.

Australia

SEWING MACHINES—The Pinnock Manufacturing Company Pty. Ltd. is to build a £1 million sewing machine factory on a ten-acre site near Adelaide, South Australia, which may be the first in the world to produce sewing machines by automation. Production is planned for early 1957, with output of 2,000 machines a month by the end of that year—Melbourne, Dec. 4.

URANIUM—A uranium find at Rossarden in northeastern Tasmania last March may prove to be one of the richest in Australia, following the discovery that a sample of ore has been yielding a uranium content of 4 per cent. This was stated by a member of the six-man syndicate which made the strike. The area is to be diamond drilled—Melbourne, Dec. 4.

Austria

PHARMACEUTICALS—Imports of medicinal and pharmaceutical products into Austria during the past five years have increased steadily; from 252 metric tons valued at A. Sch. 65·5 million in 1952 they climbed to 849 metric tons worth A. Sch. 180·1 million in 1955. During the first half of 1956 imports totalled 420 tons valued at A. Sch. 83·3 million, and for the full year are expected to reach last year's record figure. Austrian production increased to A. Sch. 250 million during the first nine months of 1956, compared with A. Sch. 190 million during the same period of last year.

Certain products, such as raw vitamins and purified vaseline, may be imported from dollar countries without an import licence. Licences are still required for other pharmaceuticals but are freely available—Berne, Dec. 12.

Brazil

BICYCLES—For the first time in its economic history, Brazil will export bicycles, manufactured by the Mercantil Suica of Santo Andre. The bicycle industry in Brazil is growing daily; the Mercantil Suica alone has the facilities to produce 170 thousand bicycles a year—São Paulo, Dec. 7.

Cuba

COFFEE—Coffee production at the end of the 1955-56 crop year, 1,181,695 cwt., set an all-time record, exceeding last year's crop by 343 thousand cwt., and the 1949-50 crop (largest in the last 18 years) by 317,250 cwt. Output of "washed" coffee at 255,592 cwt. set another record. Coffee control legislation earmarks 65 per cent of production for home consumption and the remainder for export. Exports, similarly, are proceeding at a very satisfactory pace; more than 330 thousand cwt. have been exported in the first six months of 1956—Havana, Dec. 3.

Federation of Rhodesia and Nyasaland

CORUNDUM—A trial shipment of corundum is being sent to the United States for experimental purposes from what is claimed to be the only mine producing this material anywhere. It is estimated that the deposit contains 250 thousand tons of this rock, which is hard enough to withstand the attacks of diamond drills, standard gelignite charges, and tungsten carbide-tipped drills. The actual breaking-up method used is an advanced development of the flame-drilling techniques used in the U.S.

The corundum ore is baked, crushed and processed into bricks for use in refractory work. The world's biggest blast furnace at Scunthorpe in

Lincolnshire is lined with bricks made by a South African company from Rhodesian corundum. The current price is approximately £8 ($21.68) per ton, f.o.b. mine—Salisbury, Nov. 29.

India

FRUIT PULP AND FRUIT JUICE POWDERS—A new process to produce fruit pulp and fruit juice powders from mangoes, oranges and papayas has been developed at the Central Food Technological Research Institute, Mysore. Fruit juice powders are not made in India at present. Under the new process, pretreated fruit juice is concentrated, mixed with powdered sugar, fortified with vitamins, colouring and flavouring agents, etc., then dried in an ordinary cabinet dryer or vacuum dryer, powdered and packaged. Pilot plant trials of fruit pulp manufacture have also been carried out—New Delhi, Nov. 27.

Israel

OIL—It has been reported that, as a result of the Middle East crisis, Soviet Russia has terminated its July 1956 agreement with Israel which provided for the shipment of some $18-20 million worth of Soviet oil to Israel over the next two years. During 1955-56, Israel obtained about $7 million worth of crude from Russia against shipments of citrus, bananas and other items of barter trade. Israel normally spends approximately $40 million a year on imported crude and other oil products. The country's current domestic output of crude, following the first oil discoveries just over a year ago, does not exceed 45,000 tons a year—Athens, Dec. 4.

Italy

MERCURY MINERAL—Mercury mineral production in Italy in the first six months of 1956 increased considerably to 141,121 tons, compared with 108,783 tons in the same period of 1955. Mercury metal production also rose, to 1,011 tons compared with 883 tons in the same period of the previous year. Exports of mercury metal in the first eight months of 1956 totalled 1,722 tons compared with 583 tons exported in the same period in 1955—Rome, Dec. 17.

South Africa

WOOL—Earnings from the present wool clip are expected to reach £58 million compared with £53 million last year. This estimate is based on the higher prices prevailing and the size of the clip which, at 320 million pounds, is seven million pounds above last year's—Cape Town, Dec. 11.

WHEAT—The latest estimate of the forthcoming wheat crop, at 9,562,000 bags of 200 pounds, is well above that of the previous season's output, estimated at 8,746,000 bags—Cape Town, Dec. 11.

GOLD—The prosperity of the Union's gold mining industry is indicated by the figures for the first nine months of 1956. Dividends at £16·2 million were £4·9 million above those for the same period of 1955 and almost double the 1954 figure. However, the average working costs per ton milled rose from 40/1d. in 1955 to 42/4d. this year—Cape Town, Dec. 11.

Sweden

IRON—Exports of Swedish iron ore for the first six months of 1956 have increased to 7·5 million tons from 6·5 million tons in the first half of last year. Other comparative figures for the half-year follow. Exports of pig iron have decreased from 24,000 tons to 16,100 tons. Total exports of iron and steel have increased from 108 thousand tons to 162 thousand tons and imports have decreased from 480 thousand tons to 329 thousand tons. Production of pig iron rose from 603 thousand tons to 666 thousand tons; iron sponge from 29,900 tons to 63,800 tons; ordinary ingot iron from 842 thousand tons to 942 thousand tons, and best-quality ingot from 242 thousand to 269 thousand tons. Total iron and steel shipments (including material sold to other ironworks) have increased from 758 thousand to 824 thousand tons—Stockholm, Dec. 12.

Tanganyika

PYROCHLORE—An exploration company backed by British and Dutch capital has made good progress in developing deposits of pyrochlore, estimated at between one and two million tons, at Mbeya in the southern part of Tanganyika. A pilot plant is now in operation and bigger machinery and equipment has been ordered. Pyrochlore is used in making heat-resistant alloys and to a large extent future development will depend on world prices and demand. The Government of Tanganyika is interested in the project and is lending all possible assistance and encouragement—Salisbury, Dec. 4.

Yugoslavia

TRACTORS—A plan of investment to mechanize agricultural and forestry activities has been drawn up by a special committee of the Executive Federal Council of Yugoslavia for the period 1956-1959. Expenditures are estimated at $67 million, of which $27·5 million will be used to buy agricultural tractors. Of these, 2,000 units will be produced by local industries, and the remainder, some 7,000 units, will be imported—Rome, Dec. 12.

Trade and Tariff Regulations

Bermuda

IMPORT RESTRICTIONS EASED—The list of products that cannot be imported into Bermuda from dollar countries will be further reduced by deleting the following items on and after the dates shown: January 1, 1957—radio receiving and television sets; February 1, 1957—ventilating bricks, china, concrete mixers, earthenware, matches, toys—New York, Dec. 5.

A notice covering the new Bermuda Deferred List, effective from December 1, 1956, was published in the November 10 issue of Foreign Trade *on page 31.*

New Zealand

DOLLAR IMPORT LICENCES—The New Zealand Minister of Customs announced November 30, 1956, that licences will be granted on the following basis for imports of textile piece goods from Canada or the United States during 1957:

Item No.	Class of Goods	Allocation
ex 180 (1-7)	Textile piece goods (excluding jute piece goods other than scrim, circular knitted cotton piece goods)	70 per cent of 1956 licences for similar goods.
ex 180 (8)	Terry and jacquard towels	100 per cent of 1956 licences for similar goods.

Pakistan

IMPORT POLICY ANNOUNCED—Cabled advice from the Canadian Commercial Secretary at Karachi reports that the import licensing policy for the first half of 1957 was announced on December 12th. According to the cable, there are no particular or significant changes of interest to Canada. Approximately 20 items were deleted from the list of licensable goods, of which the only one of interest is pressure lamps and parts. Three new items are added: mustard seed oil, cotton yarn of fine counts and tallow. Additional items covering industrial requirements may be added later. There will be some provision for licences to newcomers under the new policy.

Complete details will be available when the notice containing the official text of the new policy is received from Karachi.

Philippines

SOME IMPORTS DECONTROLLED—Twenty-seven items under three categories—foodstuffs, drugs and medicines, biologicals and pharmaceuticals imported in bulk as raw materials—have been decontrolled by the Central Bank of the Philippines in cases where they are imported by qualified Filipino importers. Imports by alien importers are limited to the amount of letters of credit opened by them during the first half of 1956. Twenty other items were decontrolled in 1955, so that there are now 47 items which are not restricted.

The food items decontrolled in this latest order are smoked, dried, or salted beef; dietetic and baby foods made from dairy products; canned mackerel and canned herring. Among the food items decontrolled in 1955 were canned sausages, beef and corned beef, evaporated milk, canned salmon, and flour.

Included in the ten drugs and medicines now decontrolled are insulin, anaesthetics, and medicated bandages and dressings. The decontrolled bulk pharmaceuticals are penicillin, antibiotics, sulfonamides, analgesics and antipyretics in bulk, and vitamins in bulk form for pharmaceutical manufacturing.

Some other items previously decontrolled are textbooks, technical and scientific books, new issues of periodicals and newspapers, and printed music—Manila, Dec. 3.

South Africa

REPRESENTATIONS RESPECTING THE TARIFF—The South African Board of Trade and Industries has received the following representations respecting the tariff:

Increase of duty on:

Alternators of the following types: (1) 1½ to 6 kw., single phase, 50 cycles, in voltages from 110 to 250 volts, and (2) 3 to 7½ kw., three phase, 50 cycles, in voltages 125 to 500, from free (minimum rate) and 5 per cent ad valorem (intermediate rate) to 10 per cent and 15 per cent ad valorem respectively.

Electric welding generators, up to 250 amps., alternating and direct current types, from free (minimum rate) and 5 per cent ad valorem (intermediate rate, reduced to 3 per cent under the GATT) to 10 per cent and 15 per cent ad valorem, respectively.

Sheet lead, from 2s. per 100 lb. to 25 per cent ad valorem.

Tubular copper waste traps, from free (minimum rate) and 5 per cent ad valorem (intermediate rate) to 25 per cent and 30 per cent ad valorem respectively.

Shackles and rope clamps, from various rates of duty to 30 per cent ad valorem.

Bringing into operation of the suspended duty on:

Lighting sets of the dynamo type for bicycles, to the extent of the whole suspended duty.

Couplings for use with domestic copper tube, in sizes ½ in., ¾ in. and 1 in., and "Talbot" type ferrules in sizes ½ in. and ¾ in., to the extent of the whole suspended duty.

Rayon tire cord fabric, to the extent of 10 per cent ad valorem.

Animal gelatine, to the extent of the whole suspended duty. (The suspended duty, if brought into effect, would be additional to any existing duties.)

Interested Canadian firms may wish to have their views on these tariff inquiries placed before the Board of Trade and Industries. The most effective way for them to do so is to request their representatives in South Africa to act on their behalf before the Board. Since these matters are normally reviewed soon after the announcements are made, it is advisable to take action as soon as possible.

One of Finland's leading iron makers is planning to erect a large new steel works near Ekenas in southern Finland. A deep harbour will be constructed nearby to service the factory.

Construction Booms in Venezuela

THE DARING MODERN ARCHITECTURE of Caracas, the capital city, attests to the prosperity of oil-rich Venezuela. Spacious office buildings, ultra-modern apartment houses and luxury homes, magnificent public buildings, and broad sweeping boulevards pace new construction in the booming Caracas valley. Real estate is the favoured private investment in the country and also accounts for a big share of government expenditure. The mushrooming Caracas area attracts 70 per cent of all new building.

Land values in the big city have pyramided to the point where most new industries now bypass the capital for other centres. Valencia is the city most favoured although there is considerable industrial expansion in Barquisimeto, Maracay, and Puerto Cabello. Caracas, however, remains the bustling metropolis.

The steady demand for construction materials has encouraged rapid expansion of domestic production. Basic materials such as cement, brick, ceramic tile, doors and window frames, and paint, are now mostly produced in the country. Builders' hardware, bathroom and kitchen units, machinery and equipment for contractors are mainly imported.

Bathroom fixtures and plumbing installations are the biggest import group. Canada does not share in the market for bathroom fixtures; U.S. firms account for 60 per cent of it. However, we do supply a few plumbing valves, couplings, and certain types of water pipes. The United Kingdom, Germany and Italy have replaced the United States as the main sources of plumbing materials. Germany and Italy control most of the builders' hardware business and goods used by electrical contractors come mainly from Europe, chiefly Italy. United States manufacturers dominate the market for construction equipment.

Lumber is not used much as a construction material except for cement forms and supports. Canadian mills have been supplying large timbers (10 inches or more on each face) in increasing amounts; there is no duty on the large sizes. No market exists for imported plywood, wallboard, or decorative veneers.

The competition is keen but there are opportunities for Canadian exporters to increase sales of builders' supplies. A trip to Venezuela and interviews with agency prospects is essential to provide a satisfactory sales arrangement.

—F. B. CLARK,
Commercial Secretary, Caracas.

The following nominal quotations may prove useful in checking prices. Canadian traders should consult their banks before making any firm commitments.

Conversions into Canadian dollar equivalent and units of foreign currency per Canadian dollar have been made at cross rates with sterling or the United States dollar on the date shown.

Except when buying and selling rates are specified, the mid rates only are quoted. The buying rate is that at which banks purchase exchange from exporters. The selling rate is that at which banks sell exchange to importers.

When several rates are indicated, the rate applicable depends on the commodity traded. Information on the rate for any specific commodity may be obtained from the International Trade Relations Branch, Department of Trade and Commerce, Ottawa.

Rates used exclusively in non-merchandise trading are *not* included in the table.

For conversion to United States dollar equivalent multiply by 1·0403.

foreign exchange rates

Country	Unit	Type of Exchange	Can. dollar equivalent Dec. 20	Units per Canadian dollar	Notes (See below)
Argentina	Peso	Official	·05340	19·29	(1)
		Free	·02704	36·98	
Austria	Schilling		·03697	27·05	
Australia	Pound		2·1420	·4669	
Belgium, Belgian Empire and Luxembourg	Franc		·01916	52·19	
Bolivia	Boliviano	Official	·005059	197·67	
British West Indies	Dollar		·5578	1·79	(2)
	Pound		2·6775	·3735	(3)
	Dollar	British Honduras	·6694	1·49	
Brazil	Cruzeiro	Effective selling* *Category I	·0181	55·20	*Nov. 14 (4)
		Category II	·0105	95·57	
		Category III	·0067	148·67	
		Official buying	·0524	19·10	(5)
Burma	Kyat		·2019	4·95	
Ceylon	Rupee		·2008	4·98	
Chile	Peso	Free	·001804	554·32	(15)
Colombia	Peso	Basic	·3845	2·60	(7)
		Free*	·1560	6·41	*Dec. 5
Costa Rica	Colon	Official	·1712	5·84	
		Controlled free	·1447	6·91	
Cuba	Peso		·9613	1·04	tax 2% (4)
Czechoslovakia	Koruna		·1335	7·49	
Denmark	Krone		·1392	7·18	
Dominican Republic	Peso		·9613	1·04	
Ecuador	Sucre	Official	·06409	15·6	
		Free	·05030	19·88	
Egypt	Pound	Official	2·7603	·3623	(6)
El Salvador	Colon		·3845	2·60	
Fiji	Pound		2·4122	·4146	
Finland	Markka		·004179	239·29	
France, Monaco and North Africa	Franc		·002747	364·03	(8)
French Colonies in Africa	Franc		·005495	181·98	(9)
French Pacific	Franc		·01511	66·18	(10)
Germany	D Mark		·2290	4·37	
Greece	Drachma		·03204	31·21	
Guatemala	Quetzal		·9613	1·04	
Haiti	Gourde		·1923	5·20	
Honduras	Lempira		·4806	2·08	
Hong Kong	Dollar	Free*	·1524	6·56	*Dec. 7
		Official	·1673	5·98	
Iceland	Krona	Official	·05902	16·94	
		Special selling	·0345	29·00	(11)
India	Rupee		·2008	4·98	
Indonesia	Rupiah	Basic	·08465	11·81	(12)
Iran	Rial	Certificate	·0127	78·80	
Iraq	Dinar		2·6915	·3715	
Ireland	Pound		2·6775	·3735	
Israel	Pound		·5340	1·87	
Italy	Lira		·001543	648·08	
Japan	Yen		·002670	374·53	

* Latest available quotation date.

Country	Unit	Type of Exchange	Can. dollar equivalent Dec. 20	Units per Canadian dollar	Notes (See below)
Lebanon	Pound	Free	·2995	3·34	
Mexico	Peso		·07690	13·00	
Netherlands	Florin		·2510	3·98	
Netherlands Antilles	Florin		·5058	1·98	
New Zealand	Pound		2·6775	·3735	
Nicaragua	Cordoba	Effective buying	·1456	6·87	
		Official selling	·1364	7·33	
Norway	Krone		·1346	7·43	
Pakistan	Rupee		·2008	4·98	
Panama	Balboa		·9613	1·04	
Paraguay	Guarani	Official	·01602	62·42	(6) (13)
Peru	Sol	Certificate	·05059	19·77	
Philippines	Peso		·4806	2·08	
Portugal & Colonies	Escudo		·03355	29·98	(14)
Singapore & Malaya	Straits dollar		·3124	3·20	
Spain & Dependencies	Peseta	Basic buying	·04389	22·78	(6)
		Basic commercial selling	·0585	17·08	
		Free	·02468	40·52	
Sweden	Krona		·1858	5·38	
Switzerland	Franc		·2243	4·46	
Syria	Pound	Free*	·2717	3·68	*Nov. 15
Thailand	Baht	Free	·04678	21·38	(6)
Turkey	Lira		·3433	2·91	
Union of South Africa	Pound		2·6775	·3735	
United Kingdom	Pound		2·6775	·3735	
United States	Dollar		·96125	1·04	
Uruguay	Peso	Free*	·2521	3·97	
		Basic buying	·6329	1·58	(6)
		Principal selling	·4587	2·18	(16)
Venezuela	Bolivar		·2869	3·49	
Yugoslavia	Dinar		·003204	312·11	(6)

* Latest available quotation date.

notes

1. Argentina: additional rates result from exchange retentions on export proceeds and surcharges on imports.
2. Barbados, Trinidad, Tobago, Leeward and Windward Islands, British Guiana.
3. Bahamas, Bermuda, Jamaica.
4. Tax of 10 per cent affects selling (import) rates only. Tax is based on official rate, and is therefore 1.88 cruzeiros per U.S. dollar.
5. Brazil: currency certificates auctioned for five import categories. Effective selling rate is official rate of 18.82 to U.S. dollar plus price of certificate. Exporters receive cruzeiros at official rate plus exchange premiums ranging from 18.70 to 48.64 cruzeiros per U.S. dollar, depending on product. Three rates shown cover bulk of transactions for auction.
6. Additional rates are in effect.
7. Colombia: stamp taxes of 3, 10, 30, 80 and 100 per cent on imports depending on essentiality. The free rate applies to minor exports and less essential imports.
8. Includes Algeria, Tunisia, Morocco, Guiana, Guadeloupe, Martinique.
9. Equatorial Africa, West Africa, Cameroons, Togoland, Somaliland, Madagascar, Reunion, St. Pierre and Miquelon.
10. New Caledonia, New Hebrides, Oceania.
11. Iceland: special selling rate applies to certain designated commodities.
12. Indonesia: basic rate applies to most exports and a few essential imports. Purchase of exchange for other imports is subject to surcharges of 50, 100, 200 and 400 per cent depending on products.
13. Official rate applies to exports and essential imports. For non-essential imports there is a surcharge of 25 Guaranis per U.S. dollar.
14. Portugal: approximately same rate for Portuguese Territories in Africa.
15. Chile: free rate applies to exports and to imports, except prohibited imports. Chilean importers must deposit local currency in amounts ranging from 5 to 200 per cent, depending on product, prior to shipment of goods.
16. Certain essential imports are subject to a fixed rate of 2.10 pesos per U.S. dollar, and no longer require import permits. Other imports are subject to the free rate, and are under quota. Exports are subject to a variety of rates according to the product. Exports will be divided into eleven categories for exchange rate purposes. Depending on the product, the export rates which will apply range from 100 per cent of the free rate to 100 per cent of the basic export rate of 1.519 pesos per U.S. dollar.