

THE DEMAND FOR CANNED FRUITS

Report of an Investigation by the Economic Section of the Empire Marketing Board into the Retail Marketing of Canned Fruits in the United Kingdom.



MARCH, 1931.

LONDON:

PRINTED AND PUBLISHED BY HIS MAJESTY'S STATIONERY OFFICE
To be purchased directly from H.M. STATIONERY OFFICE at the following addresses:

Adastral House, Kingsway, London, W.C.2; 120, George Street, Edinburgh;

York Street, Manchester; 1, St. Andrew's Crescent, Cardiff;

15, Donegall Square West, Belfast;

or through any Bookseller.

1931.

Price is. od. Net.

70-221-37.

CONTENTS.

			4								
_	_								1		PAGE
Forev	vord	• •	• •	••	••	• •	• •	• •	1.	• • *	3
T	Introduction	• •									5
	Period and		f Engu		••	••					5
	Classificatio	-	_	-	•		••				6
	Classificatio	n or on	ops vis	itta	••	••	••	• •	• •	•	·
II.	Supply					••	• •		• •		7
	Home Prod	uction	••		• •				• •		7
	Total Impo	rts of C	anned l	Fruits	• •	• •				/	· 7
	Imports of					s	••			••	.8
777	Retail Stocks										: 11
111.				••	• •	• •	. • •	• •	••	• •	
	Peaches, Pe		-	ots	• •	• •	• •	• •	• •	• •	13
	Pineapples	••	• •	••	• •	• •	••	. •	: •	••	21
	Fruit Salad		••	• •	• •	• •	• •	• •	••	• •	24
	Loganberrie		• •	• •	• •	. • •	• •	• •	• •		25
	Strawberrie	_			Black C	urrants	• •	• •	• •	• •	26
	Plums, Dar			rries	• •	`••		• •	• •		27
	Miscellaneo	us Frui	ts						• •	• •	29
	Empire and	l Foreig	m	••	••	• •	• •	• •	••	••	29
IV.	General Aspec	ts of th	e Trade	e							30
	Trend of Sa				••		••	••	••		30
	Methods of		ution	••	••	•	••	••	••	••	33
	Labels	2131110	411011	••	••	••	••	• •	••	••	34
	Shop Adver	rticina	. ••	••	••	• •	••	. • •	• •	••	35
	Shop Adve	tising	••	• •	••	••	••	••	••	• •	33
V.	Summary					•			,		36
• •	J	• •	••	••	••	••	••	• • •	• •	•	
Appe	endix—Grade	Standaı	:ds	••	••	••	••	••	***.	• •	41
Diag	rams—										
		ts of Ca	nned F	rnite i	nto the	United	d King	dom 19	201_29		
	g. II. Propor	tion of ned Fru	the S				_				
	•		-								I
3/31	(3522) (5656) W	L P141/107	3/26 500	4/31 I	Hw. G.3						A 2

FOREWORD.

THE need for a more thorough study of the retail demand for Empire products has been emphasised both by the Imperial Economic Committee and by the Agricultural Economics Committee of the Empire Marketing Board. It is of considerable importance to oversea producers to understand the working of the agencies through which their produce passes, and to ascertain as closely as possible the preferences of consumers in the matter of quality, grading and presentation.

The retail trade constitutes a particularly difficult problem for study since so little exact knowledge is available. The number of retailers selling foodstuffs is very large, and they do not specialise in the sale of a few commodities as in the wholesale trade. Further, retail shops differ greatly in size, type of management, class of trade, and in many other respects. It is impossible, therefore, by reference to a few firms only, to obtain a clear picture of the variations in conditions and in policy; it is necessary to study the practice of a large number of shops before reliable knowledge of the retail marketing of even one commodity can be obtained.

The Empire Marketing Board has accordingly set on foot a systematic study of the retail demand for certain Empire products, starting with those on which the Imperial Economic Committee have

already published the results of their more general survey.

The present report on the Demand for Canned Fruits is the third of the series and follows similar studies published recently on the Demand for Cheese in London (E.M.B.22) and the Demand for Empire Butter (E.M.B.34). The object of the enquiry was to examine the position of Empire canned fruits in the retail shops of the main centres of population in the United Kingdom, and to estimate the extent and nature of the competition from fruits of foreign origin.

The information was obtained by interview with the proprietors or managers of the retail shops visited, and the Board has been gratified with the sympathetic response with which the enquiry has been received by the Trade. Acknowledgment and thanks are here given to members of the wholesale and retail distributive trades for the assistance they so willingly afforded.

Economic Section,

Empire Marketing Board.

December, 1930.

THE DEMAND FOR CANNED FRUITS.

I. INTRODUCTION.

Period and Scope of Enquiry.

The object of the enquiry was to examine the position of Empire canned fruits in the retail markets of the main population centres, to estimate the extent and nature of the competition from canned fruits of foreign origin, and to obtain information on certain aspects of retail policy in relation to regional preferences.

The major part of the survey was undertaken in 1929. In any detailed comparison of results, some allowance must be made for seasonal variation both of demand and supply since all the areas were not surveyed simultaneously. Examination of the data from this angle, however, reveals little material difference, and in view of the nature of the commodity, it is probable that the time factor does not on the whole seriously affect the position.

The enquiry was conducted in 24 towns, the total population of the districts covered being approximately 15 millions. In all, 1,436 retail shops were visited and information was obtained, according to a standard questionnaire, by personal interview with the proprietor or manager of the shop.

The towns visited have been grouped into seven areas as shown in Table 1.

In apportioning the number of visits in each town, consideration was taken of population and variation in conditions within the area, and an attempt was made to include a fair representation of each type of organisation, size of shop and class of trade. As the required information is not available, no attempt has been made to "weight" the returns from individual shops according to their volume of sales, or the samples of groups according to their relative importance.

In addition to the visits paid to retail shops, information was obtained by personal interview from over 60 importers, brokers and wholesale grocers; from 20 head offices of multiple and co-operative

organisations representing more than 1,000 branches; and from • 16 catering firms controlling over 1,200 restaurants and 61 hotels in various parts of the country.

TABLE 1.

Area.	Towns.	Number of Shops visited.
London and the South	County of London & Home Counties, Southampton, Brighton.	396
Bristol and South Wales	Bristol, Bath, Cardiff, Newport, Swansea.	236
Midlands	Birmingham, Wolverhampton, Coventry, Leicester.	171
Lancashire	Manchester, Liverpool	313
Yorkshire	Sheffield, Leeds, Hull	128
Glasgow	Glasgow	99
Belfast	Belfast	93
	Total—All areas	1,436

Classification of Shops visited.

For the purpose of analysis, the shops visited have been classified in three ways: first, according to organisation of business—whether independent or multiple; secondly, according to class of trade; and thirdly, according to size, as measured by the number of assistants employed.

The term *independent* refers here to a firm with a single shop; shops of this type constituted nearly 70 per cent. of the total. The second group includes branches of co-operative societies and multiple organisations: the latter may be sub-divided into *local multiple*, where the branches are confined to a particular town; and *non-local multiple* with branches in more than one town, thus including organisations of national scope. Of the 451 shops in the second or multiple group, about 55 per cent. were of the local multiple type, 30 per cent. non-local, and 15 per cent. co-operative.

The classification according to class of trade is necessarily somewhat arbitrary, but for purposes of comparison it is possible to secure a reasonable basis for grouping. In this case a variety of factors was taken into account, such as the character of the district in which the shop was situated; the method of trading, e.g., whether cash or credit, counter or delivery; and the nature and grades of all stocks carried. On this basis 15 per cent. of the shops visited have been classified as "high", 40 per cent. as "middle" and 45 per cent. as " low ".

For the purpose of the classification according to size, shops where six or more assistants were employed were classed as "large", shops with three to five assistants as "medium," and shops employing not more than two assistants as "small". Analysed on this plan, 16 per cent. of the shops were classified as "large", 50 per cent. as "medium", and 34 per cent. as "small".

II. SUPPLY.

Home Production.

The home canning industry, which was relatively inconsiderable some five or six years ago, has in recent years undergone rapid development and shows every sign of even greater expansion. This development has been fostered by the activities of the National Food Canning Council and by the introduction, in June, 1930, of the National Mark Scheme by the Ministry of Agriculture and Fisheries.

The following estimates of home-grown fruits canned in England and Wales are based on returns supplied by producers to the Ministry of Agriculture and Fisheries.

> 1928. Total estimated output, 96,000 cwts. 1929. 166,000 cwts.*

It should be noted that the home output consists mainly of fruits which are imported only in relatively small quantities.

Total Imports of Canned Fruits.

In the United Kingdom Trade Returns, imports of canned and bottled fruits are divided into three categories: (1) Pineapples preserved in sugar; (2) other canned or bottled fruits preserved in sugar; (3) canned or bottled fruits preserved without sugar.

^{*}Estimated output for 1930, 291,000 cwts.

The third group, "canned or bottled fruits preserved without sugar," consists mainly of fruit pulp and canned apples. Of the total import (431,000 cwts.) in 1929, the United States and Spain together accounted for about 80 per cent. and oversea Empire countries for about 5 per cent. Empire supplies consisted chiefly of canned apples from Canada, and fruit pulp from Australia, South Africa and Malaya. As fruit pulp was never found in retail shops and canned apples were very rarely stocked, this group is not dealt with in the report.

The 1929 import figures for groups (1) and (2) are shown in Table 2.

The import of all fruits preserved in sugar during the present century is shown in Figure I; pineapples were not classified separately in the Trade Returns prior to 1913.

If a comparison is made between the averages for all fruits for the four years 1909-12 and 1926-29, it will be seen that the total import has increased nearly five-fold. In the earlier years the Empire contribution consisted almost entirely of Malayan pines, but Canada, Australia and South Africa are now supplying increasing quantities of fruits. Comparing the averages for the two periods under review, the imports from Malaya have trebled, and those from Canada have risen from one to 30 thousand cwts. The average for Australia in the later years was 106 thousand cwts. and for South Africa 21 thousand cwts., whereas the imports from both these countries were negligible before the War.

In 1929, nearly 80 per cent. of the total import into the United Kingdom of fruits preserved in sugar was received through the ports of London and Liverpool.

Imports of Peaches, Pears and Apricots.

The imports of peaches, pears and apricots are not shown separately in the Trade Returns for the year 1929. In Table 3, an attempt has accordingly been made to estimate the quantities of these fruits imported during that year by reference to the export statistics of the chief countries concerned. No figures are available for South African pears, but this omission does not seriously affect the total.

TABLE 2.—Imports into the United Kingdom, 1929.

A.—Canned Pineapples.

Country of Origin.		Imports. (000 Cwts.)	Percentage of Total Imports.
South Africa Malaya		13 647 1	2 84 —
Total Empire Countries	•••	661	86
United States and Hawaii Other Foreign Countries	••	102 3	13 1
Total Foreign Countries		105	14
Total all Countries	••	766	100

B.—Canned Fruits (other than Pineapples) Preserved in Sugar.

Country of Origin.	· Imports. (000 Cwts.)	Percentage of Total Imports.
Canada	34 136 8 4	2 7 —
Total Empire Countries	182	9
United States	1,689 83	87 4
Total Foreign Countries	1,772	91
Total all Countries	1,954	100

TABLE 3.—Estimated Imports of Peaches, Pears and Apricots into the United Kingdom, 1929.*

Fruit.		U.S.A.	Australia.	Canada.	Total.
Peaches Pears Apricots	••	(000 Cwts.) 581 431 205	(000 Cwts.) 69 30 33	(000 Cwts.)	(000 Cwts.) 650 496 238
Total	••	1,217	132	35	1,384

The imports in 1929 of peaches, pears and apricots amounted to 51 per cent. of the total imports of canned or bottled fruits preserved in sugar. Pineapples, which represented 28 per cent. of the total, were next in importance.

On the basis of this estimate the relative position of the principal fruits imported in 1929 is shown in the following table.

TABLE 4.—Imports of Principal Fruits, 1929.

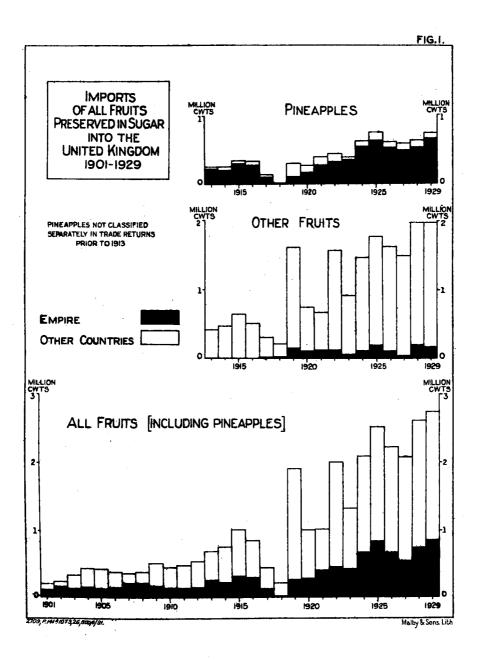
Fruit.	Imports. (000 Cwts.)	Percentage of Total Imports.
Pineapples	766 650 496 238 570	28 24 18 9 21
Total	2,720	100

^{*} U.S.A.—Monthly Summary of Commerce of the U.S.A. for December, 1929.

Canada.—The Trade of Canada (Imports for Consumption and Exports), Calendar

Year, 1929—Department of Trade and Commerce.

Australia.—The figures supplied by the Australian Canned Fruits Board relate to the total imports into the United Kingdom of fruit of the 1928–29 pack.



Supplies of canned fruits are shipped to the United Kingdom from the various exporting countries all the year round, and the seasonal distribution of imports is not particularly marked. In 1929, the largest import of Australian fruits occurred over the period April-August: the import of South African pineapples was greatest during April and May: supplies from U.S.A. were heaviest in the months October to April. Rather more than half of the supply of Malayan pineapples was received in the second six months of the year, July and August being the months of maximum import. The bulk of Canadian canned fruits is normally received in the period November to May.

III.—RETAIL STOCKS.

Throughout the enquiry a record was taken of the fruits stocked in each shop visited: the information is analysed in this section according to kind of fruit, country of origin, grade, size and price.

Table 5 shows the percentage of shops stocking the chief fruits.

The classification of stocks according to grade has been restricted to peaches, pears, apricots and pineapples. With the exception of the English fruits, many of the others, such as fruit salad, loganberries, strawberries and raspberries, are packed in some or all of the recognised commercial grades. Owing, however, to the numerous brands of these fruits and the difficulty of identification in a number of cases, no attempt has been made to analyse stocks and prices according to grade. A note on grade standards is given in the Appendix.

In some countries, the dimensions of certain standard sizes of cans are defined by statute, in others they are governed by trade custom. The sizes are generally known by numbers which indicate roughly the gross weight in lbs. The sizes most commonly used for peaches, pears, apricots and fruit salad are No. 2½, No. 2, No. 1 or 1½, and 8 oz.; for pineapples the same sizes are used with the exception of the 8 oz. and with the addition of the 1½. Most of these sizes are also in use for the other fruits. In view of the possibility of confusion as between the 1½ size and the No. 1, which are frequently referred to in the trade as "halves", these sizes have been classified together throughout this report as No. 1, except in the case of Italian cherries.

TABLE 5.—Percentage of Shops in each Area stocking the chief Fruits.

	Peaches.	Pears.	Apricots.	Pine- apples.	, Fruit Salad.	Logan- berries.	Straw- berries.	Plums.	Rasp- berries.	Damsons.	Cherries.	Black Currants.
London and the South Bristol and South Wales Midlands Lancashire Yorkshire Glasgow Belfast	100 100 100 100 100 100	99 100 100 100 100 100 100	97 98 98 94 98 75 63	99 100 98 100 97 98 100	83 95 87 68 89 81 81	44 36 55 18 30 8 27	21 25 52 25 56 18 13	28 42 48 23 25 11	21 23 42 6 37 12 10	4 11 17 21 8 —	9 3 20 11 9 4 6	12 6 2 - 1 2
All Areas	100	100	93	99	82	34	29	29	21	10	9	5

A few general comments may be made here on prices, which are treated in detail below. The most striking feature of the records is the wide range of prices for canned fruits of the same description. The figures given in the tables include all parts of the country, but in general the range was nearly as wide in each of the areas. This may be due, to some extent, to seasonal changes in price over the period of the enquiry, and also to differences in quality of brands nominally of the same grade; but when these factors are taken into account, it is clear that the variation is largely due to differences in the trade of individual shops.

Although the extreme range for each description of fruit was wide, the majority of prices recorded did not generally differ very greatly. The distribution over the range was in most cases fairly normal, except that a marked tendency to avoid certain prices was apparent while other prices appeared to be particularly attractive. Above one shilling, there was a definite avoidance, with the exception of 1s. $6\frac{1}{2}d$., of prices involving an odd half-penny; 1s. 5d. was also rare. Below one shilling, half-penny prices appeared on the whole to be rather more popular than others.

Retail price records have been summarised in this section according to kind of fruit, country of origin, grade and size: no distinction has been made in the price tables as between different brands of the same description of fruit. Since a shop sometimes stocked more than one brand of a particular fruit at different prices, the number of prices recorded in the following tables for any one fruit is sometimes greater than the number of shops recorded as stocking that fruit.

Peaches, Pears and Apricots.

Stocks.—Throughout the country, every shop visited (1,436) was stocking peaches: five shops were not stocking pears, and 101 shops were not stocking apricots. In Glasgow and Belfast, 25 and 37 per cent. respectively of the shops carried no stocks of apricots.

Australian fruits were found in all the towns visited, the proportion of shops stocking these fruits being highest in London and the South, and lowest in the Northern areas and Belfast.

Canadian pears were found in all towns except Bath and Coventry. The number of shops carrying stocks, however, was comparatively small except in Belfast where the proportion was considerably above

the average. In the Southern areas, Australian pears were more frequently stocked than Canadian pears; in the Northern areas, particularly in Glasgow and Belfast, the position was reversed.

TABLE 6.—Percentage of Shops stocking Peaches, Pears, and Apricots.

			Peac	ches.		Pea	Apricots.			
Are	U.S.A.	Aus- tralia.	U.S.A.	Aus- tralia.	Can- ada.	South Africa.		Aus- tralia.		
London and the Bristol and So Midlands Lancashire Yorkshire Glasgow Belfast			98 97 97 100 99 99	57 20 24 6 12 10	96 99 97 100 100 100 99	36 12 18 4 5 6	10 10 5 12 9 18 43	3 - 2 - 2 -	93 95 95 94 97 75 61	35 12 12 3 6 6
All areas	• •	• •	98	26	98	17	13	1	91	14

For all areas, the proportion of shops stocking Australian fruits was slightly higher in the multiple group. This tendency was not observed in the case of Canadian pears except in the Yorkshire area, Glasgow and Belfast.

Brands.—The information collected on the number of brands stocked affords an indication of the extent of the competition in the canned fruit trade and also reflects certain variations in policy as between the different types of retail organisation.

TABLE 7.—Percentage of Independent and Multiple Shops stocking various Numbers of Brands.

Type of Shop.			Peaches	.		Pears.		Apricots.			
		5 or more brands	3 or 4 brands	1 or 2 brands	5 or more brands	3 or 4 brands	1 or 2 brands	5 or more brands	3 or 4 brands	1 or 2 brands	
Independent Multiple	••	11 24	48 43	41 33	8 12	44 47	48 41	2 4	23 32	67 61	
All shops	••	16	46	38	9	45	46	2	26	65	

The majority of the shops stocked more than two brands of peaches and pears; in the case of apricots, one or two brands were most usual. Peaches offered the largest selection and in several instances shops carrying eight brands were noted. On the whole, shops in the multiple group stocked a larger number of brands than the independent shops: this applied particularly to the branches of co-operative societies.

Grades.—Table 8 shows the percentage of shops stocking the various grades. It will be seen that for the country as a whole the order of preference was Standard, Choice, Seconds and Fancy, but it is to be remembered in this connection that these figures refer only to the number of shops and not to the volume of sales.

TABLE 8.—Percentage of Shops stocking Fancy, Choice, Standard and Seconds Grades.

	Peaches.				Pears.				Apricots.			
Area.	Fancy.	Choice.	Standard.	Seconds.	Fancy.	Choice.	Standard.	Seconds.	Fancy.	Choice.	Standard.	Seconds.
London and the South Bristol and South Wales Midlands Lancashire Yorkshire Glasgow Belfast	12 19 14 15 41 12 7	54 30 65 67 72 60 69	88 90 85 69 67 84 70	55 62 32 33 39 31 59	11 13 13 15 39 11	49 25 65 61 73 63 69	73 85 74 71 64 80 82	56 73 20 37 36 57 73	10 9 13 15 41 9	42 19 56 55 68 41 32	72 79 68 58 52 42 41	49 56 18 13 22 10 8
All areas	16	57	81	47	15	54	75	52	14	48	67	33

Except in Yorkshire, the Standard grade was stocked in a higher percentage of shops than the other grades. The proportion of shops stocking Standard grade peaches and apricots was highest in the Southern areas and Midlands; in the case of pears, the highest proportions were recorded in Bristol and South Wales, Glasgow and Belfast.

The percentage of shops stocking Choice grade fruits, on the other hand, was lowest in the Southern areas and highest in Yorkshire.

In regard to the Seconds grade, the highest proportions for peaches and apricots were again noted in the Southern areas; the proportion of shops stocking Seconds grade apricots was noticeably small elsewhere. Seconds grade pears were highest in Bristol and South Wales and in Belfast.

The percentages of shops stocking Fancy grade fruits were relatively small and fairly uniform except in Yorkshire where they were considerably above the average; in Belfast they were, in all cases, appreciably lower.

In general it appeared that Choice and Standard grades formed the most usual combination in the Midlands and North, but that in the Southern areas Standard and Seconds were more frequent. Yorkshire showed a comparatively high percentage of Fancy and Choice grade fruits.

On the whole, multiple shops carried a wider range of grades than independent shops; this tendency was particularly noticeable in the case of co-operative societies which, especially in the North, usually stocked all four grades. In the larger multiple shops, however, it seemed more usual to restrict the number of grades: many of these shops were stocking Choice, Standard and Seconds, but the majority carried only Standard and Seconds.

Fancy grade fruits were mainly found in shops doing a high-class trade. Choice, Standard and Seconds grades were noted in all classes of shops, but as a general rule few poor-class shops stocked Choice and few high-class shops stocked Seconds. Some marked variations from this practice, however, were observed in the Midland areas.

The quantity of Empire Choice grade fruits on the British market is practically negligible. As a large percentage of the shops visited were stocking this grade in foreign fruits, however, the question as to how far the proportion of Choice grades might be increased is worth consideration. Retail and wholesale distributors in many parts of the country commented on this subject and a number suggested that the Australian canners in particular might explore the possibilities. It was pointed out that retailers, especially those engaged in a high-class trade, were unable to offer to their customers grades of Empire canned fruits which could compete with the higher grades of Californian fruits.

The general improvement which has been effected in the grading of Empire fruits within recent years was the subject of very favourable comment throughout the trade.

Sizes—Of the total of 1,436 shops, all except 18 were stocking the $2\frac{1}{2}$ size.

Size 2 is not normally used for peaches, pears and apricots, but is still used to some extent for Canadian pears; it was stocked in very few instances except in Belfast where the proportion of shops stocking Canadian pears was higher than in other areas.

Size 3 was occasionally observed during the survey, but was almost exclusively confined to shops carrying on a high-class trade.

Of the independent shops, 75 per cent. were stocking size 1 as compared with 65 per cent. in the multiple group. The distribution as between areas was fairly even except in the case of Belfast where only 50 per cent. of the shops were stocking this size.

The proportion of shops stocking the 8 oz. can was relatively small (19 per cent.), but in Belfast the percentage was rather above the average.

The sale of peaches, pears and apricots in the $2\frac{1}{2}$ size appeared to be considerably greater than the combined sale of the 1 and the 8 oz. sizes. The demand for size 1 is nevertheless appreciable, and according to the statements of retailers in every area is increasing. In 14 per cent. of the shops visited, the demand for size 1 was stated to be at least as great as the demand for size $2\frac{1}{2}$; the majority of these shops were carrying on a relatively poor class of trade.

In shops of all types and classes of trade, it was suggested that size 1 should be more extensively used for Australian fruits; this suggestion was also repeatedly made by members of the wholesale trade. It was pointed out that size 1 is largely used for Californian canned fruits and that the smaller size was useful in introducing a new brand, since customers will try a size 1 can of an unknown brand when they will hesitate to buy a larger can. Further, as consumers usually prefer to dispose of a can of fruit at one meal, the size 1 can is more suitable for a small family.

Trade opinion was divided in regard to the 8 oz. size, although in some cases it was stated that its popularity was growing. In this

17

connection the following extract from the report of a Canned Peach Survey conducted by the California Department of Agriculture and summarised in the California Fruit News, March 16th and 23rd, 1929, is of interest. "The 8 oz. can is still considered to be in the experimental stage and while there is great interest, considerable speculation exists regarding the outcome of the experiment. Some of the large distributors think it may reduce tonnage sold".

Retail Prices.—In all shops, records of prices were obtained for the different fruits stocked. These are summarised in the following tables according to country of origin, grade and size.

Size.	Grade.	Country of Origin.	Number of Price Records.	Extreme Range.	Significant Range.*	Most usual Price.	Aver- age Price.	
21	Fancy Choice Standard Seconds	U.S.A U.S.A {U.S.A Australia U.S.A	175 888 1,038 374 937	9½ to 1 7½ 7½ to 1 4	s. d. s. d. 1 2 to 1 6 11½ to 1 3 9½ to 1 0 9½ to 11 8½ to 10½	s. d. 1 2 1 0 10½ 10½ 9½	s. d. 1 3·2 1 0·8 11·1 10·3 9·5	
1	Fancy Choice Standard Seconds	U.S.A U.S.A U.S.A U.S.A	113 352 702 112	6 to 11 5 to 10½	· 8½ to 10½ 7 to 9 6½ to 8 5½ to 6½	10½ 7½ 7½ 6½	10·1 7·9 7·1 6·2	

Twenty-eight shops were stocking Choice grade Australian peaches. With two exceptions the cans bore the labels of wholesale distributors and the majority were of one well-known brand. The most popular price was 1s., the average being the same as that for the Californian variety, viz., 1s. 0.8d.

^{*}In this and subsequent tables, the "Significant Range" includes approximately four-fifths of the prices recorded.

In a few shops in London, Australian peaches packed in size 1 cans were noted. These were all of one brand and were being retailed at $6\frac{1}{2}d$. or $7\frac{1}{2}d$. per can.

TABLE 10.—Retail Prices of Pears.

Size.	Grade.	Country of Origin.	Number of Price Records.	Extreme Range.	Significant Range.	Most usual Prices.	Average Price.	
21/2	Fancy Choice Standard Seconds	U.S.A U.S.A U.S.A Australia Canada U.S.A	201 814 814 219 79 1,051	1 0 to 1 6	s. d. s. d. 1 5 to 1 9 1 3 to 1 6 1 2 to 1 4 1 1 to 1 3 10½ to 1 2 11½ to 1 2	s. d. 1 6 1 4 1 2 {1 2 1 3 1 0 1 1	s. d. 1 7·0 1 4·5 1 2·6 1 2·2 1 0·1 1 0·7	
2	Standard	Canada	73	7 to 1 2	7½ to 9½	7½	8.9	
1	Fancy Choice Standard Seconds	U.S.A U.S.A U.S.A U.S.A U.S.A	60 299 430 54	7½ to 1 2 6 to 1 0	10 to 1 0 9 to 10½ 7½ to 10 6½ to 8½	9	11·0 9·7 8·9 7·7	

The average price of Fancy grade pears, size $2\frac{1}{2}$, in Glasgow and Belfast was considerably below the general level.

In Yorkshire the average price of Fancy grade, size 1, was lower than elsewhere, but this was the only area where its sales appeared to be at all considerable.

In a few instances Choice grade Canadian, Australian and South African pears in the $2\frac{1}{2}$ size were noted. Canadian pears were observed only in Glasgow where they were on sale at 1s. 2d. and 1s. 4d. The usual price for Australian pears, which were marketed under the brands of a wholesale distributor, was 1s. 4d.; the South African, all of one brand, were offered in most cases at 1s. 3d. and 1s. $3\frac{1}{2}d$.

A few shops were stocking Canadian Standard grade pears in size 1 cans, at prices varying from $5\frac{1}{2}d$. to $8\frac{1}{2}d$., $6\frac{1}{2}d$. being the price most frequently noted. A small number of shops in London were also stocking Australian pears in this size at $8\frac{1}{2}d$. per can.

TABLE 11.—Retail Prices of Apricots.

Size.	Grade.	Country of Origin.	Number of Price Records.	Extreme Range.	Significant Range.	Most usual Prices.	Aver- age Price.	
21	Fancy Choice Standard Seconds	U.S.A U.S.A U.S.A Australia U.S.A	177 616 634 209 533	s. d. s. d. 1 2 to 1 10 9½ to 1 8 7½ to 1 5 9½ to 1 3 7½ to 1 2	s. d. s. d. 1 3 to 1 6 1 0 to 1 4 10½ to 1 1 10½ to 1 0 9½ to 11½	$ \begin{array}{c cccc} s. d. \\ 1 & 4 \\ 1 & 2 \\ 1 & 3 \\ 1 & 11\frac{1}{2} \\ 1 & 0\frac{1}{2} \end{array} $	1 0-1	
1	Choice Standard Seconds	U.S.A U.S.A U.S.A	229 412 52	6½ to 1 0 4½ to 1 0 5 to 8½	7½ to 9 7 to 8½ 6 to 7	8½ 7½ 6½	8·6 7·6 6·5	

Fancy grade apricots, packed in size 1 cans, were occasionally observed at prices varying from $7\frac{1}{2}d$. to 1s.

Australian fruits, Choice grade, size $2\frac{1}{2}$, under the labels of whole-sale distributors were stocked in a few instances in all areas except Lancashire and Glasgow. Prices ranged from 1s. to 1s. 6d.

Standard grade apricots in size 1 cans were found only in London and in a few shops in Bristol and South Wales.

Prices in Different Areas.—Since all the areas were not surveyed simultaneously, it is not possible to make a detailed comparison of prices. The enquiry in each area lasted about two months and the whole extended over a period of a little more than a year.

As no very striking changes in the level of wholesale prices for canned fruits occurred during this time, however, certain general inferences may reasonably be drawn.

On the whole, prices for Californian fruits appeared to be relatively high in the Midlands area. For the $2\frac{1}{2}$ size this applied more especially to the Fancy and Choice grades, but for size 1 it was true of all fruits and all grades.

In the Yorkshire area, and in Glasgow and Belfast, the level of prices seemed generally lower, particularly in Belfast where prices were the lowest encountered during the survey.

In the two Southern areas, prices appeared to be fairly level and the averages approximated fairly closely to the average for the whole.

Prices for Australian Standard grade fruits varied to a less extent than those for the Californian fruits of the same grade. In every case the average price of the Australian fruits was lower than that of the Californian, though in some areas the difference between the averages was small.

So far as they go, the figures of average prices for Canadian pears show a somewhat higher level in London and the South.

Margins between grades.—In every case, the range of prices for each grade overlapped the range for the grade above or below it; in a number of cases this applied also to the prices for the different sizes. For example, prices for peaches (U.S.A.) Fancy grade ranged from 1s. 1d. to 1s. 8d. for the $2\frac{1}{2}$ size, the prices for Choice grade ranging from $9\frac{1}{2}d$. to 1s. $7\frac{1}{2}d$.; similar prices for size 1 cans were Fancy, 8d. to 1s. and Choice 6d. to 11d.

Pineapples.

Stocks.—All except twelve of the shops visited were carrying stocks of pineapples. Ninety per cent. were stocking the Malayan fruit. Fewer shops were stocking Hawaiian pineapples; the proportions varied from 45 per cent. in Bristol and South Wales to 73 per cent. in the Midlands area, the average being 56 per cent. Apart from London and the South, the number of shops stocking South African pines was relatively small.

Queensland pineapples were observed in two shops, and one shop was stocking a brand packed by a Canadian firm.

TABLE 12.—Percentage of Shops stocking Pineapples.

Area.		Malaya.	Hawaii.	South Africa.
London and the South Bristol and South Wal Midlands Lancashire		88 90 88 93 87 91	57 45 73 48 66 .61	25 11 5 8 6 2 11
All Areas	••	. 90	56	12

The proportion of shops stocking Hawaiian and South African pineapples was somewhat higher in the multiple group.

In the majority of cases it seemed customary to stock two kinds; the most usual combination was Malayan and Hawaiian, but in 69 shops Malayan and South African were stocked.

Brands.—Fewer brands of pineapples were stocked than in the case of peaches and pears. Nearly 75 per cent. of the shops were stocking only one or two brands: less than a quarter were stocking three or four brands, and a negligible proportion five or six brands.

Grades.—There are two commercially recognised grades for Hawaiian canned pineapples, namely, Extras or Fancy and Standard. South African pines are also packed in two grades which are in all essentials similar to those used by the American packers.

The bulk of the trade in Malayan pineapples in this country is confined to a grade known as G.A.Q. (Good Average Quality), small quantities of specially selected fruit being graded as "Golden." In view, however, of the difficulty of identification, no attempt has been made to classify the returns according to grade.

In regard to Hawaiian pineapples, the Fancy Grade clearly predominated, 90 per cent. of the shops stocking this grade as compared with 13 per cent. stocking the Standard grade. This tendency was more marked in the Midlands and Northern areas than in the South.

Of the shops stocking South African pineapples, only 35 per cent. were selling Fancy grade, while 69 per cent. were stocking Standard. This proportion applied generally to all areas except Lancashire.

Sizes.—The $1\frac{1}{2}$ can is used very largely for the Malayan pack, and of the shops stocking this fruit, 98 per cent. were selling the $1\frac{1}{2}$ size.

The $2\frac{1}{2}$ size was next in importance, but only a small proportion of the shops were stocking Malayan pineapples in this size.

Comparatively few shops were stocking the No. 1 size.

Size 2 was used to a small extent for the Malayan and Hawaiian fruit. In two instances South African pines were stocked in this size.

Many retailers in various parts of the country suggested that the $1\frac{1}{2}$ size (flat) might with considerable advantage be extensively used for South African pineapples, as the small can was well established in popular favour.

TABLE 13.—Retail Prices of Pineapples.

Size.	Grade.	Country of Original.	Number of Price Records.	Extreme Range.	Significant Range.	Most usual Prices.	Average Price.	
21/2	Fancy Standard —	{ Hawaii { South Africa } Hawaii { South Africa Malaya	106	1 1 to 1 4 10½ to 1 4 11½ to 1 3	s. d. s. d. 1 1 to 1 3 1 1 to 1 3 1 0 to 1 3 1 0 to 1 2 9½ to 1 0	$\begin{array}{cccc} s. & d. \\ 1 & 2 \\ 1 & 1 \\ 1 & 1 \\ 1 & 0 \\ 1 & 1 \\ 10\frac{1}{2} \end{array}$	s. d. 1 2·4 1 1·9 1 1·3 1 1·0	
2	-	Malaya	57	7½ to 10½	8½ to 9½	$ \begin{cases} 8\frac{1}{2} \\ 9\frac{1}{2} \end{cases} $	9.0	
11/2		Malaya	1,679	4½ to 8	5½ to 7½	$6\frac{1}{2}$	6.3	
1	Fancy Standard	Hawaii Hawaii	57 35]	7½ to 10 6½ to 9	$ \begin{cases} 7\frac{1}{2} \\ 9 \\ 7\frac{1}{2} \end{cases} $	8·7 7·5	

The prices of the Fancy and Standard grades differed very little and South African fruit was generally about the same price as the Hawaiian.

The range of prices for Malayan pines in the $1\frac{1}{2}$ size was small considering the very large quantity of fruit sold; less than 3 per cent. of the price records were outside the range $5\frac{1}{2}d$. to $7\frac{1}{2}d$.

South African pines in the No. 1 size were stocked by three shops in the Fancy grade and by four shops in the Standard grade. The price for both grades ranged from 7d. to $8\frac{1}{2}d$.

A few shops were stocking Hawaiian pineapples, Fancy grade, in the size 2 can. The most usual price was $10\frac{1}{2}d$., the range being from $9\frac{1}{2}d$. to 1s. 4d.

On the whole no marked variations in price were found as between the different areas. Prices for Hawaiian fruit were somewhat higher in Yorkshire than in the other areas, but in this area the price of Malayan pineapples, in the 2½ size at least, was generally lower. For South African Fancy grade fruit, prices were rather higher in London and the South, where, however, Standard grade prices were generally lower than in the other areas.

Fruit Salad.

Of the total number of shops visited, 82 per cent. were stocking fruit salad; the highest proportion (95 per cent.) occurred in the Bristol and South Wales area, and the lowest (68 per cent.) in the Lancashire area.

Ninety-three per cent. of the shops stocking fruit salad carried American brands and 14 per cent. English. The preponderance of the former was very marked in all areas except in the Midlands where 40 per cent. of the shops were stocking English brands; the proportion stocking English brands in the Southern and Midlands areas was higher than in the Northern areas.

Brands.—Throughout the areas, 73 per cent. of the shops selling fruit salad stocked one brand, 22 per cent. stocked two brands and five per cent. stocked three or four brands.

Sizes.—For the American pack, size $2\frac{1}{2}$ and size 1 seemed to be equally popular, each being stocked in two-thirds of the shops. Stocks of 8 oz. cans were found in about a quarter of the shops: in

Lancashire, Glasgow and Belfast, the proportion was as high as one third, but in the Midlands and Yorkshire areas it was considerably lower.

For English fruit salad, sizes $2\frac{1}{2}$, 2 and 1 were all relatively popular, but the 8 oz. size was found in three instances only.

TABLE 14.—Retail Prices of Fruit Salad.

Size.	Country of Origin.	Number of Price Records.	Extreme Range.	Significant Range.	Most usual Prices.
21	U.S.A United Kingdom	752 102	s. d. s. d. 1 3 to 2 3 1 6 to 1 10½	s. d. s. d. 1 6 to 1 10 1 8 to 1 9	$ \begin{vmatrix} s. & d. \\ 1 & 8 \\ 1 & 9 \\ 1 & 8 \cdot 1 \end{vmatrix} $ 1 8 · 2
2	United Kingdom	61	1 2 to 1 6	1 2½ to 1 4½	$\begin{bmatrix} 1 & 4 \\ 1 & 4\frac{1}{2} \end{bmatrix} 1 3.8$
1	U.S.A United Kingdom	814 91	9 to 1 5 9½ to 1 2½	10½ to 1 1 10½ to 1 0	1 0 11·6 11 11·3
8 oz.	U.S.A	333	4½ to 8½	5½ to 7	$ \left\{ \begin{array}{cc} 6 \\ 6\frac{1}{2} \end{array} \right. 6 \cdot 3 $

Loganberries.

Over all areas, 34 per cent. of the shops were stocking loganberries. The proportion was highest in the Midlands (55 per cent.) and lowest in Glasgow (8 per cent.). In general this fruit was more frequently stocked in the Midlands and Southern areas than in the North, although it was stated that it was coming more into favour in Glasgow.

The United States was the principal source of supply; 98 per cent. of the shops stocking loganberries were selling American brands.

Size 2 cans were stocked in practically every instance. Other sizes were found in a few shops only.

Size.	Country of Origin.	Number of Price Records.	Extreme Range.	Significant Range.	Most usual Price.
2	U.S.A	439	s. d. s. d. 8½ to 1 6	s. d. s. d. 9½ to 1 2	s. d. s. d. 11·3

TABLE 15.—Retail Prices of Loganberries.

Less than one-twentyfifth of the prices noted were above 1s. 2d., but all prices from $9\frac{1}{2}d$. to 1s. 2d. were relatively frequent. In Manchester and Belfast 1s. was the most usual price.

Strawberries, Raspberries and Black Currants.

Strawberries were stocked in 29 per cent. of the shops, raspberries in 21 per cent., and black currants in 5 per cent. As regards strawberries and raspberries, the proportions in the Midlands area and in Yorkshire were appreciably above the average; but the proportion of shops in Lancashire stocking raspberries was very low (6 per cent.). Most of the shops stocking black currants were in London; for the other fruits London was below the average.

In the case of strawberries and raspberries, practically all the shops stocking these fruits were selling English brands. Thirteen shops were stocking Australian raspberries, two shops Australian strawberries, and one Canadian raspberries; a few shops were stocking American, Dutch or French strawberries and American, Swiss or French raspberries. Black currants were mostly of English or Australian origin.

For strawberries and raspberries, sizes 2 and 1 were by far the most popular, and for black currants sizes $2\frac{1}{2}$ and 1.

TABLE 16.—Retail Prices of English Strawberries and Raspberries.

Fruit.	•	Size.	Number of Price Records.		Extreme Range.			Significant Range.			Most usual Prices.		Average Price.			
Strawberries	••	2 1	218 207	s. 1	d. 1½ 8½	to to	1	d. 6 2	s. 1	<i>d</i> . 2 10½	to to	d. 4 0	s. 1	<i>d</i> . 2 10½	s. 1	d. 2·8 11·1
Raspberries	••	2 1	187 150	1	1 9	to to		5 2	1	2 10½	to to	3	1	2 10½	1	2·4 10·9

The prices of these fruits were remarkably uniform. More than half the prices recorded were at 1s. 2d. for size 2, and $10\frac{1}{2}d$. for size 1.

In the few shops selling American brands of strawberries, prices ranged from 1s. 2d. to 1s. 5d. for size 2, and from $10\frac{1}{2}d$. to 1s. for size 1, while the Swiss fruit was retailed at 1s. 2d. to 1s. 4d. size 2, and 10d. to 1s. 3d. size 1.

Thirteen shops were selling American brands of raspberries size 2 at prices from 1s. 2d. to 1s. 6d.; ten shops in London were selling Australian fruit, size 1, from $9\frac{1}{2}d$. to $11\frac{1}{2}d$., and seven shops were selling raspberries from European countries at prices varying from 11d. to 1s. 8d. for size 1. Two shops were retailing English raspberries in size $2\frac{1}{2}$ cans at 1s. 6d. and 1s. $7\frac{1}{2}d$. respectively.

Australian black currants were retailed in London in size $2\frac{1}{2}$ and 1 cans. Prices for size $2\frac{1}{2}$ ranged from 1s. $4\frac{1}{2}d$. to 1s. $9\frac{1}{2}d$., and for size 1 from 10d. to 1s. $1\frac{1}{2}d$., the most usual prices being 1s. $5\frac{1}{2}d$. and 1s. respectively.

English black currants were found in size 2 and size 1; prices ranged from 1s. 2d. to 1s. 9d. and from 10d. to 1s. respectively.

Plums, Damsons and Cherries.

Plums were stocked in 29 per cent. of the shops, damsons in 10 per cent. and cherries in 9 per cent. The highest proportions were noted in the Midlands area and the lowest in Glasgow and Belfast.

Stocks of plums and damsons were very largely English. Of the 423 shops stocking plums, 89 per cent. had English brands, 6 per cent. were stocking Canadian and 5 per cent. American. In addition, seven shops held stocks of Australian and Swiss plums.

In regard to damsons, only English fruit was found.

Cherries were mainly of Italian origin; three shops stocked English cherries, two Canadian, and 19 had American or Swiss brands.

Nearly all the English plums were in the $2\frac{1}{2}$ size can, but a few shops in Manchester were stocking size 2 and size 1. English damsons were found in all three sizes, but size 1 was very rare except in Manchester.

For Canadian plums, size 2 was most usual; and for American, size $2\frac{1}{2}$.

Cherries were observed in all sizes, but 1½ was the size most frequently used for the Italian fruit.

TABLE 17.—Retail Prices of Plums, Damsons, and Cherries.

Fruit (Country of Origin).	Size.	Number of Price Records.	Extreme Range.	Significant Range.	Most usual Prices.
Plums (United Kingdom).	2½ 2 1	341 38 33	s. d. s. d. 10 to 1 7 8½ to 1 0 5½ to 9½	s. d. s. d. 11½ to 1 3 8½ to 10½ 7 to 9	$ \begin{bmatrix} s. d. \\ 11\frac{1}{2} \\ 1 & 0 \\ 1 & 2 \\ 9\frac{1}{2} \\ 7 \\ 7\frac{1}{2} \end{bmatrix} $ s. d. $ \begin{array}{c} 0.9 \\ 9.3 \\ 7.6 \end{array} $
Damsons (United Kingdom).	2½ 2 1	42 41 51	1 0 to 1 8 10½ to 1 3½ 6½ to 1 0	1 2 to 1 6 10½ to 1 2 7½ to 11½	$ \begin{array}{c ccccccccccccccccccccccccccccccccccc$
Cherries (Italy)	11	· 60	7½ to 10	9 to 9½	91/2 9.4

The few shops stocking American plums in the $2\frac{1}{2}$ size were selling at prices ranging from $10\frac{1}{2}d$. to 1s. 2d. The Australian fruit was on sale at $10\frac{1}{2}d$. to 1s. $2\frac{1}{2}d$., and Canadian plums in size 2 cans at 6d. to $10\frac{1}{2}d$.

Prices for damsons varied widely and little significance can be attached to the averages quoted.

In the case of Cherries, occasional instances of sizes other than $1\frac{1}{4}$ were noted. For size $2\frac{1}{2}$, prices were 1s. 4d. and 1s. 6d.; for size 2, $10\frac{1}{2}d$.; for size 1, $8\frac{1}{2}d$.; and for the 8 oz. size, 6d. and $6\frac{1}{2}d$.

Miscellaneous Fruits.

Grapefruit, mainly of American brands, was stocked in 74 shops. Two shops were stocking South African fruit.

English greengages were found in 48 shops, ten shops were stocking Canadian fruit and four Australian. One shop was stocking an American brand.

Stocks of gooseberries were either of English or Australian origin; 32 shops were stocking the former and eight the latter.

A total of 21 shops carried stocks of apples. Eighteen shops stocked American brands, two Canadian, and one English.

Other fruits occasionally found included oranges, grapes, red currants, blackberries, golden berries, prunes, and figs.

Brands.

In a few instances, shops with two brands of loganberries, strawberries, raspberries, black currants and plums were observed, but only one brand in each shop was noted in the case of damsons, cherries and the miscellaneous fruits referred to in this section.

Empire and Foreign.

Table 18 shows the percentage of shops in each area stocking peaches, pears, apricots and pineapples, analysed according as the fruits were of Empire or foreign origin. This table forms the basis of Figure II.

TABLE 18.—Percentage of Shops stocking certain Canned Fruits (Empire and Foreign).

Area.	Pea	ches.	Pe	ars.	Apri	icots.	Pineapples.		
Alea.	Empire.	Foreign.	Empire.	Foreign.	Empire.	Foreign.	Empire.	Foreign	
London and the South.	57	98	47	96	35	93	93	57	
Bristol and South Wales.	20	97	22	99	12	95	93	45	
Midlands	24	97	24	97	12	95	92	73	
Lancashire	6	100	15	100	3	94	95	48	
Yorkshire	12	99	16	100	6	97	88	66	
Glasgow	10	99	24	100	6	75	93	61	
Belfast	14	99	56	99	4	61	97	54	

Empire pines were stocked in a high percentage of the shops in all areas. In the case of Empire peaches and apricots, the highest percentages were recorded in London and the South; in the case of Empire pears, the highest proportion was recorded in Belfast.

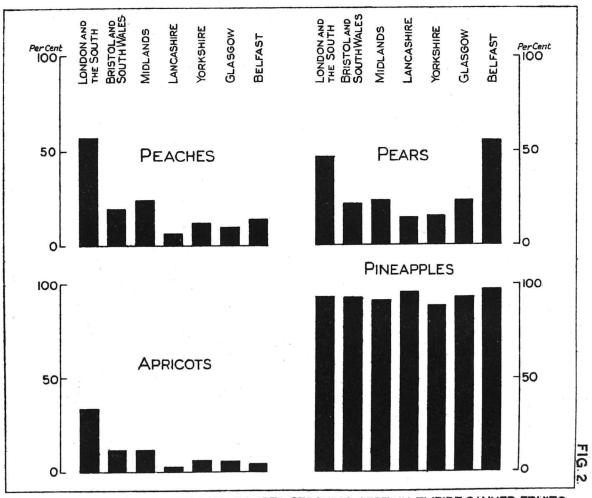
English brands of fruit salad were stocked in 11 per cent. of the total number of shops visited; in the Midlands the proportion was as high as 40 per cent.

Of the other fruits, plums, damsons, strawberries and raspberries were mainly of English origin and were most frequently found in the Midlands area.

IV.—GENERAL ASPECTS OF THE TRADE.

Trend of Sales.

Within recent years there has been a substantial increase both in home production and in the import of canned fruits. According to information received from wholesale distributors and retailers, the largest increases in sales have been in London and the South. The main reasons advanced for the general upward trend were the decline in the prejudice against canned foodstuffs in general and the increased supply of small-sized cans.



PROPORTION OF THE SHOPS IN EACH AREA STOCKING CERTAIN EMPIRE CANNED FRUITS

English canned fruits found their main market in the Midlands.* In regard to canned fruits of oversea Empire origin, increased sales were most frequently reported in London and the South.

On the question of seasonal fluctuation in demand, the majority opinion was that the demand for canned fruits was at a maximum in the late spring and summer, but it was generally agreed that winter sales in all areas were on the increase. From the evidence it appeared that the trend towards a general consumption throughout the year was much more marked in London than elsewhere.

Preference for certain Fruits.—Since no information as to volume of sales was obtained, it has not been possible to estimate the relative consumption in each area of the different fruits, but some indication of the general position can be given. It should, however, be borne in mind in this connection that demand fluctuates from year to year and also throughout the year.

From the information supplied, pineapples and peaches appeared to be most popular in London and the South, and in the Midlands. In the Bristol and South Wales area, particularly in the South Wales towns, there was clearly a preference for pears which, it is understood, is well established. Pears also appeared to be the favoured fruit in Glasgow and Belfast.

Of the other fruits, an increased demand for fruit salad was reported in Manchester, Sheffield and Glasgow; in Glasgow, also, it was stated that interest in loganberries was increasing though relatively few shops were stocking the fruit at the time of the survey. In many parts of the country, reference was made to the growing demand for sliced peaches in the smaller sizes of cans: this variety was said to be particularly popular in the poorer class shops where it competed favourably with pineapples.

Bottled Fruits.—The information obtained points, on the whole, to a diminishing demand for bottled fruits, particularly for fruits in syrup. Fruits bottled in water appear to be used chiefly during seasons when fresh fruits of a similar kind are not obtainable. The demand for the more expensive fruits bottled in syrup seemed to be confined mainly to the better-class trade, and to the diminishing number of

^{*}The estimated output of the home canning industry for 1930 (see footnote to page 7) suggests that English fruits would have shown a much stronger position had the survey taken place even a year later.

people who still have a prejudice against canned goods of any kind. The improvement in the quality of canned fruits was said to have won the confidence of the general public who appear to be no longer willing to pay the higher price for bottled fruit.

Dried Tree Fruits.—The majority of retailers had noticed no relation between the sales of dried tree fruits and of the canned varieties, and maintained that the two branches of the trade were distinct. Dried tree fruits, it was pointed out, were cheaper and continued to meet a ready sale where price was the chief consideration. A few retailers stated, however, that with the increase in their sales of canned fruits, sales of dried tree fruits had tended to decrease, the decline being ascribed to the fact that the latter require preparation whereas canned fruits are ready for the table. In Glasgow the small demand for canned apricots was attributed mainly to the extensive use of dried apricots for jam-making.

Catering Trade.—In the catering trade, it was stated that the growing demand for fruit which had been noted in recent years was being increasingly met by canned fruits. In high-class hotels and restaurants, fresh fruits were served when available, but even in these establishments the use of canned fruits was spreading rapidly. In the experience of the firms interviewed, popular taste favoured peaches and pears in approximately equal proportions; the demand for pineapples was substantial, but the demand for apricots was estimated to be less than half that for peaches or pears. A large and increasing demand for fruit salad was reported, and loganberries also appeared to be in favour. In most instances, fruit salad was served from the cans as received from the packer or importer, but in some cases it was said to be prepared from cans of individual fruits.

Considerable emphasis was laid on the need for regular grading. In the case of large catering organisations where issues to branches are made from a central store, it is essential for the purpose of accounting that the number of pieces in each can should be known with a fair degree of accuracy. The pieces should also be of uniform size in order that equal portions may be served. The high standard of grading of the United States packers was frequently referred to and it was stated that large catering organisations, prepared to buy in substantial quantities, experienced no difficulty in obtaining fruits packed to their own specifications. It was also pointed out that in cases where no special pack was prepared, the number and uniformity of pieces were frequently covered by a guarantee.

Of the 16 firms interviewed, only two used Empire canned fruits, the remainder considered that the grading, particularly in the case of peaches, was not sufficiently reliable for the catering trade, though the quality of the fruits was the subject of frequent favourable comment.

Methods of Distribution.

The channels of trade by which canned fruits pass from cannery to retail shop are fairly similar whatever the country of origin of the fruits. There are, however, certain slight modifications in regard to supplies from Australia, South Africa and Malaya which may be noted.

The marketing of Australian canned fruits is supervised by the Australian Canned Fruits Board which was set up by the Commonwealth Government under the Commonwealth Canned Fruits Export Control Act of 1926. The Board has an agency in London. Six firms, each representing a cannery or group of canneries, have been appointed to act as primary distributors and frequent meetings with the London agency of the Board are held.

The distribution in this country of South African pineapples is directed by a branch agency of the packers in London acting in the capacity of broker.

A special feature of the marketing of Malayan canned pineapples, the only canned fruit exported from Malaya, is the large quantity imported into the United Kingdom under the labels of shippers or importers. A proportion is, however, exported by the canners under their own labels and for some time efforts have been made to increase this practice. A further feature is that in this country the bulk of the trade is confined to a quality known as G.A.Q. (Good Average Quality for the season). This is not a grade in the usually accepted sense, but is an estimate of general quality in any one season. Specially selected parcels are graded as "Golden". The No. 2 Grade is not intended for shipment to the United Kingdom.

In the canned fruit trade, transactions are normally carried out through importers or brokers, but some of the more important American canners have their own selling organisations in the United Kingdom. In general, wholesale grocers obtain their supplies through brokers after inspecting samples. Brokers as a rule deal with importers, but the two functions may be combined.

The independent retailer usually obtains his supplies of canned fruits from the wholesaler from whom he purchases his supplies of

other commodities. Branches of multiple firms and co-operative societies are generally supplied from their headquarters. A comparatively recent development is the formation of retail buying associations which are now operating in a number of towns. As a rule these associations appear to take the form of registered trading companies, the main object being to secure the advantages of superior bargaining power by buying in large quantities. Direct sale by packers to retailers is said to be increasing, but no information as to the extent of this development is available.

Among the special inducements offered by the wholesale trade to retailers, the packing of special cases of mixed fruits was said to be a method quite frequently employed to assist sales.

It is of interest to note here that the principals of some of the larger packing houses in the United States make a practice of visiting their more important customers in this country before the canning of the new season's fruit has started, in order to discuss requirements for the coming season and make arrangements for shipment. This personal contact between producers and distributors was the subject of frequent favourable comment by the trade during the course of the enquiry.

Labels.

An appreciable quantity of the import of United States fruits is marketed under the labels of British importers, wholesale grocers and multiple organisations. In some cases arrangements are made for the packer to affix the labels, which are printed in the United States from specimens sent from this country; in others, the labels are affixed here; or both methods may be used by the same firm according to particular circumstances.

The advantages of private labels were frequently referred to in the course of interviews with members both of the wholesale and retail trades. It was pointed out that the use by wholesale distributors of their own labels was in effect a guarantee of quality to retailers, and that having built up a trade on their brands they were forced in their own interests to deal with canners who would satisfy their requirements in this respect. It was also suggested that, as wholesale distributors were more keenly interested in their own brands, it was to the advantage of canners to grant the privilege of private labels, since it tended to stimulate sales.

In all sections of the trade, the importance of the label as a factor in promoting sales was constantly stressed. It was emphasised repeatedly that labels should be attractive in appearance in order that retailers might be encouraged to give the brand prominence in shop displays. In the selection of goods for display either in the window or within the shop, the retailer is naturally influenced to a considerable extent by the appearance of containers and the attractiveness of labels. Most shops carry a large number of lines and brands of commodities: the retailer cannot display them all and he will tend, therefore, other things being equal, to give preference to those with the best appearance. Emphasis was laid on the need for careful selection of colours, the use of good glazed paper and suitable paste, and the effective representation of the fruit. No unnecessary printed matter should be used. In regard to Empire labels, it was considered that the name of the country of origin of the fruit should be prominently displayed.

There was abundant evidence to show that the standard of American labels was on the whole regarded as higher than that of Empire labels, though it was generally agreed that there had been considerable improvement in the latter during recent years. It was repeatedly stated that American labels excelled in brightness and attractiveness and in the clarity and simplicity of the wording and design. The faults most frequently found with certain Empire labels were that they lacked finish and were often dull in colouring. In some cases the labels were obscured by too much printed matter; in others the paper was not of the right quality, and the use of unsuitable paste caused discolouration and blistering. Special emphasis was laid on the selection of an attractive brand name which was always preferable to the use of initials or letters.

Retail Shop Advertising.

In view of the importance attached to shop publicity, retailers were asked to state which of several methods of shop advertising they considered the most effective, and suggestions as to other methods were invited. More than half the retailers throughout the country favoured window displays, while about a quarter gave preference to price tickets and descriptive counter-cards. Special shop demonstrations appealed only to a very small number: in the average shop it is difficult to provide floor space for a demonstration stand and for the distribution of samples.

Attention was drawn by some London retailers to the advertising methods of a well-known American firm which supplied free of charge large dummy tins and scenic effects for window display. Others pointed out that an attractive price ticket was not only a help to the salesman when recommending a particular brand, but was frequently a deciding factor in the selection of goods for the window. A glass container showing the contents of a can was suggested as an excellent method of drawing attention to a particular fruit. In shops with a high-class family trade, the use of leaflets for enclosure with parcels or accounts was considered an effective form of advertisement. As regards the poorer class of trade neither leaflets nor press advertising were thought to avail much; the presentation of the goods in the shop-window and in the shop itself were stated to be the important factors.

V. SUMMARY.

1. The object of the enquiry was to examine the position of Empire canned fruits in the retail shops of the main centres of population in the United Kingdom, and to estimate the extent and nature of the competition from fruits of foreign origin.

The major part of the survey was carried out during the year 1929. Information was obtained by personal interview from 1,436 retailers representative of all classes of trade and types of business; from over 60 importers, brokers and wholesale grocers; from 16 catering firms controlling large numbers of restaurants and hotels in all parts of the country; and from the head offices of 20 multiple and co-operative organisations.

- 2. In the Trade Returns, canned fruits are divided into three main categories:—
 - (a) Pineapples preserved in sugar.
 - (b) Other canned or bottled fruits preserved in sugar.
 - (c) Canned or bottled fruits preserved without sugar.

Of the total imports (3,151,000 cwts.) in 1929, fruit preserved without sugar represented about 14 per cent., pineapples 24 per 36

cent., and other fruits preserved in sugar (chiefly peaches, pears, and apricots) 62 per cent.

The chief sources of supply of the main fruits preserved in sugar were as follows:—

(a) Pineapples ... Malaya ... 84 per cent. Hawaii ... 13 per cent. South Africa 2 per cent.

(b) Other Fruits (chiefly peaches, pears and apricots). Canada Australia South Africa 9 per cent.

Home production of canned fruits in 1929 is estimated by the Ministry of Agriculture and Fisheries to have been about 166,000 cwts.

3. The following table shows the percentage of the total number of shops visited which were carrying stocks of the various fruits; percentages less than one are omitted.

TABLE 19.—Percentage of Shops stocking various Fruits, classified according to Country of Origin.

Fruit.	United King- dom.	Canada.	Aus- tralia.	South Africa.	Malaya.	United States.	Other Coun- tries.	Total.
Peaches Pears Pears Pines Apricots Fruit Salad Loganberries Plums Strawberries Raspberries Damsons Cherries Grape Fruit Blackcurrants Greengages Gooseberries Apples		13 	26 17 14 	1 12 	90	98 98 56 91 76 33 2 2 1 — 5 —	 	100 100 99 93 82 34 29 29 21 10 9 5 5 4 3

In addition, the following fruits were occasionally found—golden berries, prunes, red currants, blackberries, grapes, figs and oranges.

Pineapples and peaches appeared to be most popular in London and the South, and in the Midlands. In the Bristol and South Wales area, particularly in the South Wales towns, there was a distinct preference for pears. Of the other fruits, an increased demand for fruit salad was reported in Manchester, Sheffield and Glasgow. In many parts of the country, reference was made to the growing demand for sliced peaches in the smaller sizes of cans: this variety was said to be particularly popular in the poorer class shops where it competed favourably with pineapples.

In the catering trade, it was stated that the growing demand for fruit which had been noted in recent years was being increasingly met by canned fruits. Popular taste favoured peaches and pears in approximately equal proportions; the demand for pineapples was substantial, but the demand for apricots was estimated to be less than half that for peaches or pears. A large and increasing demand for fruit salad was reported, and loganberries also appeared to be in favour.

Australian and South African fruits found their main market in London and the Home Counties. Canadian pears were found chiefly in Belfast and Glasgow. Malayan pines were stocked in about 90 per cent. of the shops in all areas.

Home canned fruits were most frequently found in the Midlands.

4. The majority of shops were stocking two or three brands of peaches and pears: for pines and apricots one or two brands were more common; it was unusual to find a shop stocking more than one brand of any other fruit.

On the basis of the relative numbers of shops carrying stocks, the order of preference of the various grades of peaches, pears and apricots appeared to be Standard, Choice, Seconds and Fancy: Choice and Standard was the most usual combination in the North, and Standard and Seconds in the South. For Hawaiian pineapples the Fancy grade was the most frequent, but South African pines were more often found in the Standard grade.

The most popular sizes for peaches, pears, apricots and fruit salad were $2\frac{1}{2}$ and 1; and for pineapples $1\frac{1}{2}$. For the other fruits, sizes $2\frac{1}{2}$, 2 and 1 were all relatively common.

In all areas, retail prices for canned fruits of the same description showed a wide range. In different shops, prices of fruit of the same size and grade often differed by about 2d. or 3d. The average prices of the grades in the larger sizes differed by about 2d.; and the No. 1 size was generally about two-thirds the price of the $2\frac{1}{2}$ size. Empire fruits were, on the whole, slightly cheaper than foreign fruits of the same description.

In shops of all types, it was observed that above one shilling, with the exception of 1s. $6\frac{1}{2}d$., there was a marked avoidance of prices involving an odd half-penny.

5. During the present century, the volume of imports of canned fruits has risen steadily. In the four years ending 1929, the total for all fruits preserved in sugar was five times as great as that for the four years ending 1912. In the earlier years the Empire contribution consisted almost entirely of Malayan pineapples, but recently Canada, Australia and South Africa have exported canned fruits to this country in growing quantities. The home canning industry also has expanded rapidly within the past few years.

From the evidence collected during the enquiry, it appeared that the greatest increase in the consumption of canned fruits had been in London and the South.

The reasons most frequently advanced for the increased consumption were the decline in the prejudice against canned foodstuffs in general and the increased supply of small-sized cans.

Generally speaking, the increase in the sales of canned fruits did not appear to have materially affected the demand for dried tree fruits.

In regard to the question of seasonal fluctuation in demand, the majority opinion was that the maximum sales were reached in the summer months, but there was general agreement that winter sales were on the increase. From the evidence it appeared that the trend towards a general consumption throughout the year was much more marked in London than elsewhere.

Wholesalers and retailers were unanimously of the opinion that the demand for fruits bottled in syrup was diminishing. This was thought to be due largely to the improved quality of the canned varieties and their relative cheapness.

6. In regard to Empire fruits, emphasis was laid on the need for still further improvement in grading, particularly with regard to the number and uniformity of pieces; and in the design, colour and finish of the labels. It was also suggested that the Choice grade might be used to a much greater extent. In the case of peaches, pears, and apricots, size 1 cans were recommended as catering for a growing demand and as being suitable for the introduction of new brands; it was further considered that size 1½ (flat) should be more extensively used for South African pines.

APPENDIX.

GRADE STANDARDS.

In Canada and the United States (both in California and the North-West Coast area), canned fruits are packed in four grades, Fancy, Choice, Standard and Seconds; in Australia the regulations governing the packing of canned fruits for export provide for Fancy, Choice and Standard but only the last two are commonly used. In the definitions for each grade, the main stress is laid on quality and maturity of the fruit, and size of the pieces. As regards Australia and the United States, quantity is defined by stating the maximum and minimum number of fruits which each size of can shall contain; in the case of Canada, weight of the fruit and minimum net weight of the can are specified.

Apart from the California Canned Fruit Standardisation Act of 1925, which lays down standards for sizes of cans and defines the Seconds grade, the grading of canned fruit has not so far been the subject of legislation in the United States; the specifications in operation in California have been prepared by the Canners' League, while those in use in the North-Western States have been issued by the North-West Canners' Association. In Canada, standards are governed by regulations issued under the Meat and Canned Foods Act; in Australia, regulations applicable to the canning of fruits for export are made under the Customs Act, 1901–1925, and the Commerce (Trade Descriptions) Act, 1905.

There are no official grades for Hawaiian canned pineapple. Two grades, Extras or Fancy and Standard are recognised, but apparently no specifications have been published by the Association of Packers of Hawaiian pineapple. South African pineapple is packed in two grades. Provision is made in the Canadian regulations for the packing of pineapples in the four recognised grades. Australian pineapple canned for export may be packed in three grades, Fancy, Choice, and Standard, the quality of the syrup being the same as that used for the equivalent grades of apricots and peaches. No official standards are in force for Malayan pineapple, but it is understood that the grades packed are Special Golden, Good Average Quality (G.A.Q.), No. 2 and No. 3. No. 2 is packed in very small quantities and is intended for the Eastern markets.

England and Wales.

In June, 1930, the National Mark Scheme was applied to home-grown fruits canned in England and Wales. The scheme is open to all canners complying with the procedure and conditions laid down by the Ministry of Agriculture and Fisheries (Marketing Leaflet No. 20) and authority to apply the National Mark is granted by the National Mark Committee under the Agricultural Produce (Grading and Marking) (Canned Fruits, Peas and Beans) Regulations, 1930, which define statutory grades.

PUBLICATIONS OF THE EMPIRE MARKETING BOARD.

E.M.B.1.	AGRICULTURAL ECONOMICS IN THE EMPIRE. Report of a Committee appointed by the Empire Marketing Board	6 d.	(7d.)
E.M.B.2.	TROPICAL AGRICULTURAL RESEARCH IN THE EMPIRE, with special reference to Cacao, Sugar Cane, Cotton and Palms. By C. A. Barber, Sc.D., C.I.E.	Out of p	rint.
E.M.B.3.	REPORT ON DEVELOPMENT OF AGRICULTURE IN TRINIDAD. By H. C. Sampson, C.I.E.	3 <i>d</i> .	(3½d.)
E.M.B.4.	REPORT ON DEVELOPMENT OF AGRICULTURE IN BRITISH GUIANA. By H. C. Sampson, C.I.E.	Out of p	rint.
E.M.B.5.	REPORT ON DEVELOPMENT OF AGRICULTURE IN LEEWARD AND WINDWARD ISLANDS AND BARBADOS. By H. C. Sampson, C.I.E	6 đ.	(7d.)
E.M.B.6.	GEOPHYSICAL SURVEYING. Report of a Sub-Committee of the Committee of Civil Research	6 d.	(7d.)
E.M.B.7.	THE CHEMISTRY OF WINE MAKING. A Report on Oenological Research. By J. T. Hewitt, M.A., D.Sc., Ph.D., F.R.S 1s. ()d. (1	s. 2d.)
E.M.B.8.	GRASS AND FODDER CROP CONSERVATION IN TRANSPORTABLE FORM. By A. N. Duckham, B.A., Dip. Agric. (Cantab.) 1s. ()d. (1	s. 2d.)
E.M.B.9.	EMPIRE MARKETING BOARD, MAY 1927 TO MAY 1928 1s. 6)d. (1	s. 2 <i>d</i> .)
E.M.B.10.	EMPIRE GROWN SISAL and its importance to the Cordage Manufacturer: Memorandum prepared by the Imperial Institute	6 d .	(84.)
	All prices are net; those in parentheses include posta	ıge.	

Obtainable from the sale offices of

HIS MAJESTY'S STATIONERY OFFICE