

INDUSTRIAL RECORD 1919-1939

A REVIEW OF THE
INTER-WAR YEARS

Second Impression
June 1945

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CADBURY BROTHERS LTD., BOURNVILLE
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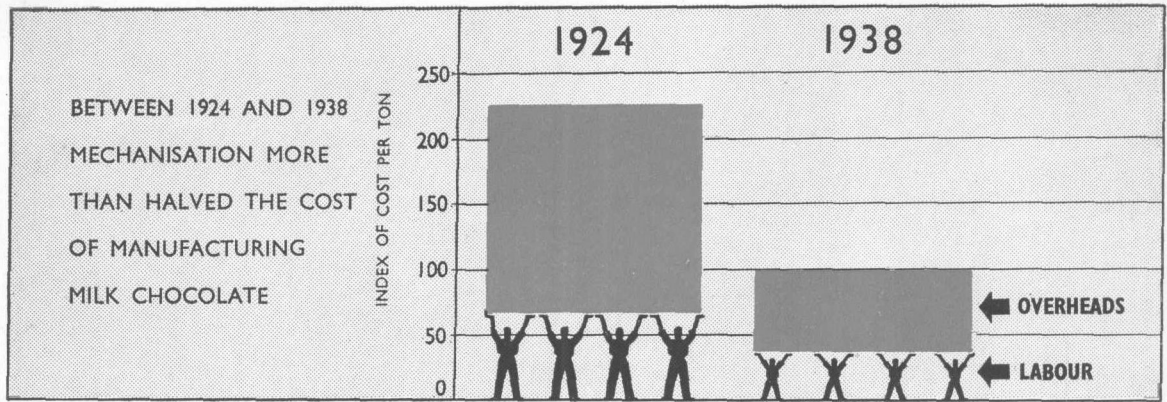
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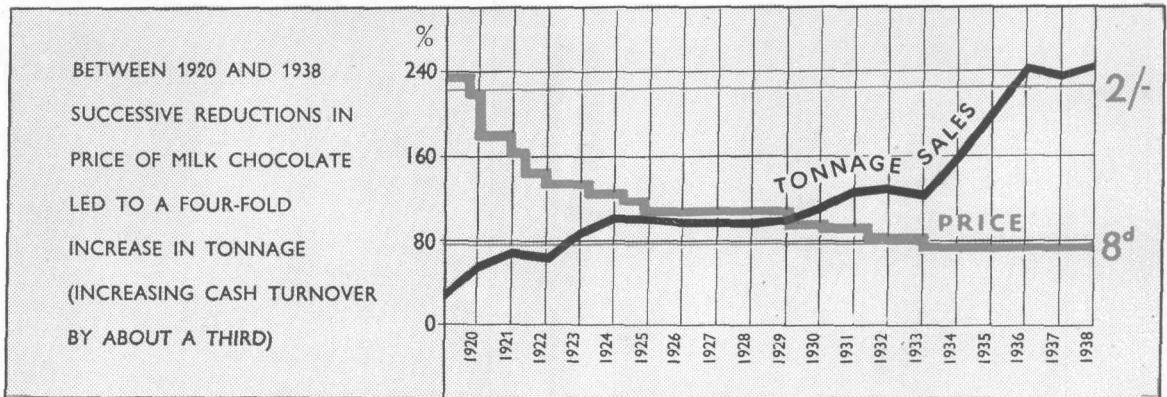
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EXPERIENCE HAS EMPHASISED THESE POINTS

1 Mechanisation is basis of competitive power

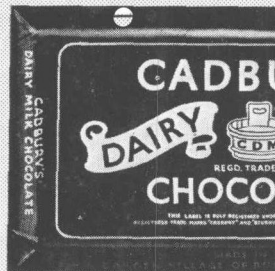


2 Interests of Producer and Consumer can be reconciled



3 Distribution in Britain is too costly

SELLING AND DISTRIBUTION
COSTS ARE MAINLY
OUTSIDE THE CONTROL OF
THE MANUFACTURER BUT
THEY TOO SHOULD BE
CAPABLE OF REDUCTION



55% COST OF MATERIALS
AND MANUFACTURE



45% COST OF SELLING
& DISTRIBUTION

INTRODUCTION

IN a world which has to make good so much wastage and destruction the problem of the post-war reorganisation of Industry and Commerce is engaging widespread attention. It is of great importance to this country that Industry should prepare itself for the tasks that lie ahead if the best use is to be made of the opportunities in the task of reconstruction.

Starting with the assumption that Capital and Labour, Management and Workers, Manufacturers and Distributors, are to be collaborators in the enterprise of serving the community, it is worth while trying to determine the sort of industrial organisation which can pursue this aim most effectively. How can changing public taste and variations of demand best be met? How far should the economies of mass production be sacrificed to variety? How can products be distributed most efficiently? What opportunities can the workers be given to fit themselves for positions of responsibility? How can the introduction of labour-saving machinery be reconciled with the claims of the displaced worker?

In the inter-war years this business, which is centred at Bournville, faced these and many kindred problems with varying degrees of success. The aim of this book is to record the experiences of one particular firm working in a highly competitive branch of Industry. It is hoped that they will be useful as evidence in the general discussion on post-war industrial problems, and helpful when activities are again adjusted to peace conditions.

CHAPTER I

ORGANISATION AND MANAGEMENT

THE DEVELOPMENT OF THE FAMILY BUSINESS

FOR the Bournville business the inter-war period was one of continuous and, at times, rapid expansion. As the volume of sales grew and the range of products increased, new problems presented themselves and new methods of management and control had to be developed. The foundations of the business had been solidly laid and there was no need to disturb them, but a more elaborate superstructure, with numerous extensions, gradually grew up on the comparatively simple basis of 1919.

To the outside observer, the most striking single feature of the Bournville business is that, unlike most enterprises of comparable size, it has retained all the essential features of a family firm, notwithstanding that it was converted from a partnership to a limited company as long ago as 1899, and has since grown so greatly.

This combination of ownership with actual practical management affected the running of the business in numerous ways. It has always seemed natural and obvious to pay great attention to such things as the general amenities of the factory, its surroundings and architecture, and to facilitate such developments as Pension Funds, Sick Benefit and Holiday Schemes, and Family Allowances.

THE CONSTITUTION OF THE BOARD

Since its inception the control of the Company has been vested in a Board of Managing Directors, one of whom since 1919 has been a woman. These appointments have been preceded by a period of practical training in the daily routine of the various departments. The Directors meet formally as a Board once a week—or oftener if necessary—and as each Director is personally responsible for a particular section of the business and is in constant touch with his or her colleagues, a close degree of co-ordination is achieved between the policies and programmes of the different departments.

While retaining many features of a family concern, the Company has appreciated that Industrial Management is a highly skilled profession involving careful recruitment and training. This has been recognised for many years by grading the Management Staff into definite groups, each with clearly defined privileges and status. In 1943 three members of the senior Management Staff joined the Board as Managing Directors.

ORGANISATION BY DEPARTMENTS AND COMMITTEES

The executive conduct of day-to-day business is based, as it must be, on a departmental organisation involving a chain of individual responsibility. On the other hand, the formulation of policies, both general and departmental, is in the hands of a number of committees, each meeting under the chairmanship of a Director, through whom it reports to the Board. As each Director is at the same time responsible for the daily activities of a group of departments, the Board becomes an efficient co-ordinator of the policies framed by the committees and the actual departmental conduct of business. An attempt to bring out the main features of the organisation by committees is provided by the chart on page 9.

Although certain members of the Management Staff are more concerned with policy and others with execution, the executive managers and the members of the committees consist in the main of the same individuals functioning in different but complementary spheres. The organisations are thus interlocked at more than one level, whilst each culminates in and is ultimately responsible to the same body—the Board of Directors.

COMMITTEES—THEIR FUNCTIONS AND USES

The main committees usually consist of eight or ten regular members, including two or three Directors, one of whom is the Chairman. In addition to the principal executives on the side of the business with which the committee deals, the members include representatives of other departments likely to be closely affected by its decisions. For instance, very few decisions can be taken by the Marketing Committee, which is responsible for Sales Policy, without, on the one hand, calling for the co-operation of the production departments, and, on the other hand, raising issues relating to cost. The membership of this Committee therefore includes the Director in charge of Factory Production and the Director in charge of Costs, as well as the Directors and Senior Staff who deal directly with Selling, Marketing, Advertising and Market Research. Similarly, the Production Committee, though consisting mainly of members immediately concerned with the technical and factory departments, also includes the Sales Director, and officials representing the Cost Office, the Statistics Department and the Buying Office. This interlocking of membership ensures that the various committees take account of the whole factory situation and minimises the work involved in co-ordinating their decisions at a higher level.

Each main committee normally appoints a number of sub-committees or “groups,” partly out of its own membership and partly sometimes of more junior members of the staff, to settle details arising out of its decisions and to give preliminary consideration to questions which subsequently figure on the agenda. Co-ordination is further assisted by arranging for the part-time attendance at committee meetings of officials

or Directors who, although not regular members, may be specially interested in a particular subject of discussion.

EXAMPLE OF COMMITTEE AND DEPARTMENTAL WORKING IN THE INTRODUCTION OF NEW LINES AND DESIGNS

Whilst space does not permit of a detailed discussion of the functioning of the committee system, some idea of how it works may be gained by a brief consideration of the method of introducing new lines and designs.

Before 1914 the introduction of new lines and designs was regarded as almost exclusively a matter for the Sales Department. It was of course essential to know that a proposed new line was practical, and to have a close estimate of its cost. Subject to this, however, and to the necessity of giving the Factory Departments adequate notice of the proposed date of introduction, the exact shape of a block or bar, or the size of packing or arrangement of an assortment, was to a large extent a matter of indifference to the Factory and Production Departments, whose job was regarded as being to provide what the Sales Department ordered.

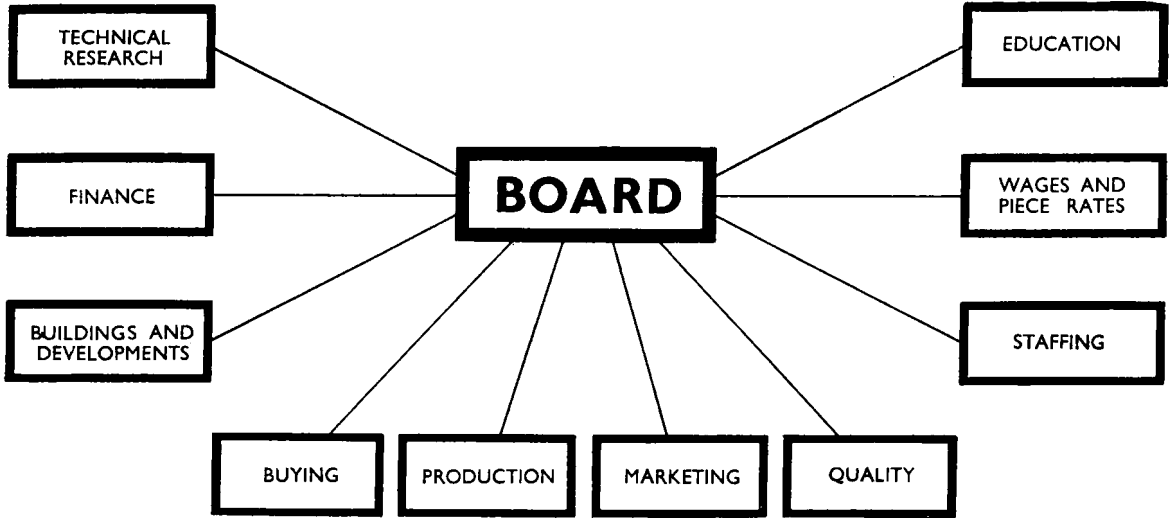
To-day the position is very different. Plant is far more specialised and processes more mechanised. A slight variation in shape or size will almost certainly upset the rhythm of production unless the most convenient manner of achieving it has been carefully considered from the technical point of view. A completely new line may well require the installation of specially designed machines and possibly even necessitate structural alterations in the factory buildings themselves. This evidently means that its introduction must be the subject of close collaboration between the Sales and Production Departments, not merely or mainly at the Board level, but at all stages from its first tentative inclusion in a future marketing programme to the settlement of the final specification and the precise dates on which production, advertising and selling are to commence.

Once the line has been established, its progress reverts to the departmental machinery. Here the central task of providing goods at the right price and of the right quality rests with the Buying and Production Departments, that is with the buyers who purchase the raw materials, and the engineers, chemists, production technicians and other experts who control the factory processes.

On the other hand, it is the Sales side of the business which has both the first and the last word in the life-history of its products. The first word, because with the Sales Department rests the primary responsibility for drawing up the marketing programme—and hence the production programme. For this purpose it must estimate, on the basis of past experience, of continuous study of current public demand, and of the Firm's intentions in the field of advertising and price policy, the probable sales of every line and packing in the Firm's price list. The last word,

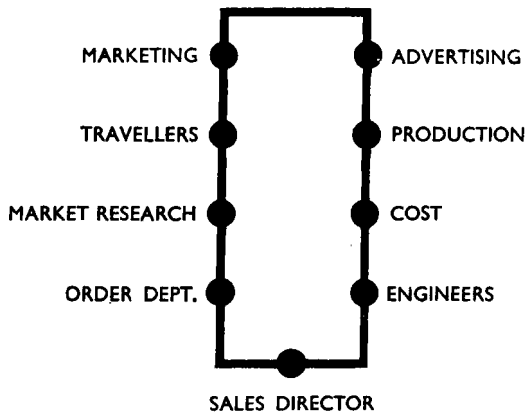
THE BOARD AND ITS COMMITTEES FORMULATE POLICY AND CO-ORDINATE THE DEPARTMENTS

THE PRINCIPAL COMMITTEES

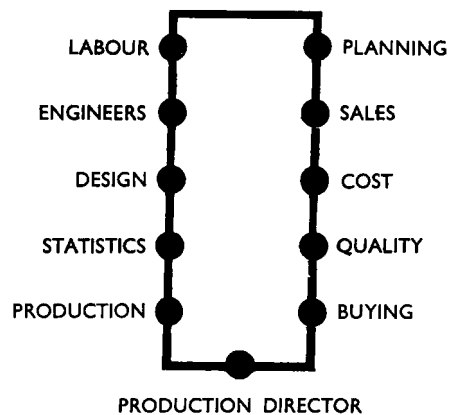


VARIOUS DEPARTMENTS ARE REPRESENTED ON EACH COMMITTEE TO ENSURE CO-ORDINATION—e.g.

MARKETING COMMITTEE



PRODUCTION COMMITTEE



OTHER MEMBERS OF STAFF MAY BE REQUIRED TO ATTEND

The establishment of interlocking Committees (e.g., as between Sales and Production), each under the Chairmanship of a Director, ensures close co-operation in the framing and carrying out of policy. Each Director is also in charge of several departments, so that the Board has effective control over the day-to-day running of the business.

because when the goods have been made and put into the stockrooms and depots, it depends on the efforts of the Representatives on the road and their colleagues in the Sales and Advertising Departments at headquarters whether the sales actually made fall short of, equal, or exceed those anticipated in the estimates.

THE PLACE OF SERVICE DEPARTMENTS

The activities of the three main branches of the business—buying, production and selling—are naturally facilitated and supplemented by many departments of the “service” type. Some of these form part of the essential structure of any commercial or industrial undertaking—for instance, the General Office, which keeps sales ledgers, prepares invoices and handles all routine correspondence with the Firm’s customers. Others, like the Legal Department, also perform functions which are essential, but for which in the case of a small firm a specialised department would not be necessary. Yet others, including many of those which are responsible for the amenities of the factory, *e.g.*, the Doctors and Dentists, the Education and Pension Offices, the Gardeners, and the Works Magazine Office—engage in activities which are ancillary to the main undertaking, however valuable and, indeed, essential they may be in relation to the long-term welfare of the enterprise and its employees.

Some of these activities are referred to in a later chapter, but there are two “service” departments—the Planning Office and the Cost Office—without whose collaboration neither the Buyers nor the Factory nor the Sales Department could function effectively, and which therefore occupy a key position in the mechanism of departmental control. The primary function of the Planning Office is to ensure a regular flow of work through the factory, thus avoiding congestion and delays, and ensuring that goods will be ready for sale by the scheduled delivery dates; that of the Cost Office is to keep a close and constant watch over all expenses, and to ensure that every item of expense is correctly reflected in the selling price of the finished article.

THE PLANNING OF PRODUCTION

Production planning at Bournville was started some thirty years ago, with the principal objects of centralising production control and maintaining an even flow of work, daily and weekly, through the factory. If this can be done, employment is stabilised; by minimising production changes and avoiding delays and the necessity for waiting for materials, employees’ earnings are maintained at a high level. In order to secure the most flexible control of production, actual work orders are issued mainly on a daily basis; but wherever conditions permit production in each department is kept in continuous flow throughout the year, as this leads to the maximum economy and smoothness of working and calls for the least oversight.

The starting point for the work of the Planning Department consists of the forward estimates of sales which the Sales Department periodically provides. From these are derived block estimates of materials required, which are passed to the Buying Departments and on the basis of which purchases are made to meet future requirements over a longer or shorter period, according to market conditions. As materials have to be procured from all parts of the world, preliminary sales estimates are obtained months ahead, and factory requirements notified to the Buyers in some instances eighteen months before the supplies will actually be needed. The Planning Office next uses the estimates to plan factory production week by week and month by month, endeavouring to maintain it at a steady total level, irrespective of seasonal or chance fluctuations in the rate of sale of individual lines or in the Firm's turnover as a whole. As manufacturing proceeds, the original sales estimates are revised, and production is checked against actual current sales and the Sales Department's revised estimates of forward requirements. A strict keeping limit for finished goods is observed, so as to maintain the standard of freshness necessary for high quality foodstuffs. The Planning Office must therefore keep a tight control over the size of stocks, including both finished goods and work in progress. It is also entrusted with the task of planning despatches of finished goods to the Firm's sixteen depots in the United Kingdom, in strict relation to local requirements and to the total stock available. Finally, as the link between the Buying Office and the Factory, it controls the entire stocks of ingredients and packing materials, numbering altogether several thousand items.

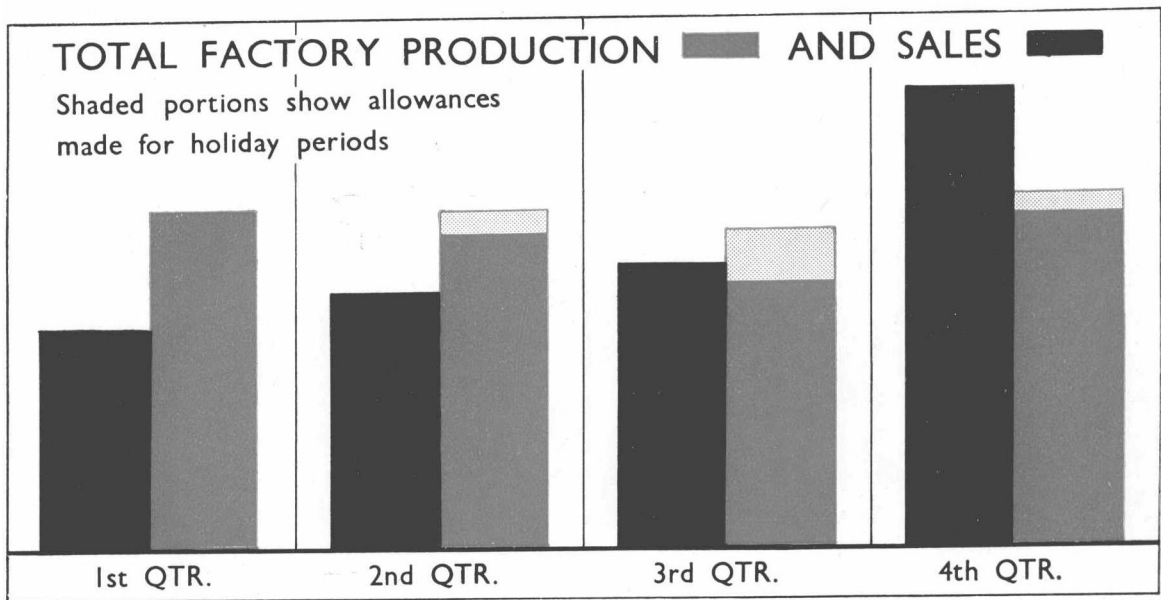
RESPONSIBILITIES OF THE COST OFFICE

The Cost Office performs three main functions. The first is to determine the price at which each line and packing can be sold; the second is to act as a check over all the processes of production and distribution so as to bring to light any kind of waste, and any increase or decrease in costs; the third is to act as a channel for the issue of authorities and instructions.

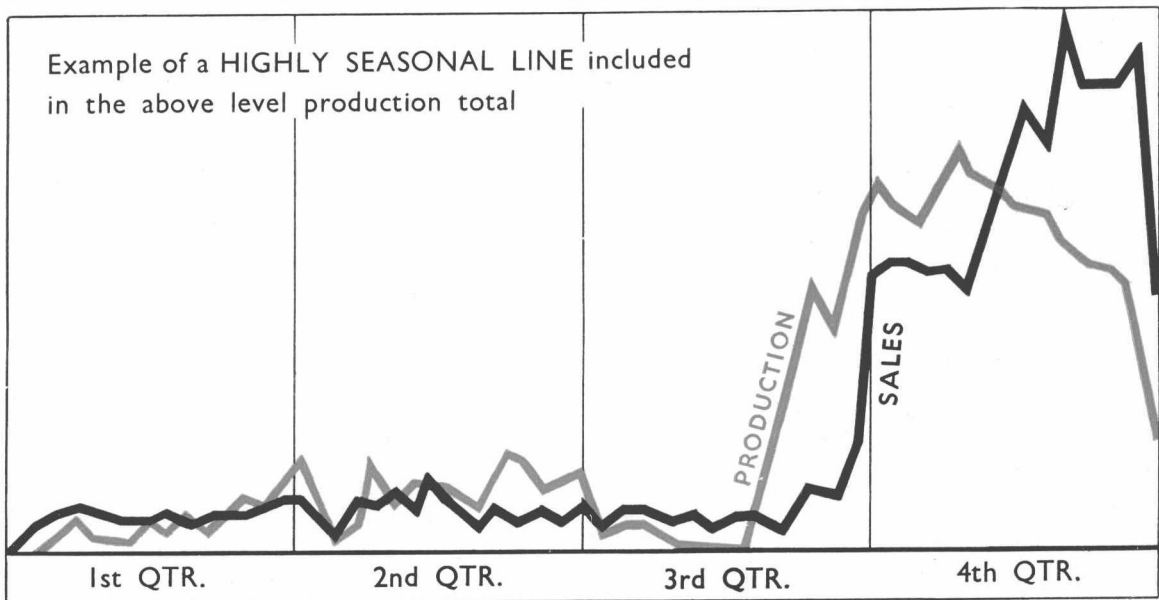
In its first capacity, the Cost Office estimates the selling price of proposed new lines. Working in conjunction with the Sales, Production, and Time Study Departments, it takes into account the expected volume of sales, the detailed specification and the method of manufacture of each line. If the Sales Department considers the estimated price unsatisfactory, the other departments concerned discuss the adjustments necessary to bring the price and quality, and the method and volume of production of the line, to a satisfactory balance.

In its second capacity, the Cost Office records, compares and analyses all expenditure to enable it to review the cost of each line at regular intervals. This brings to light any variations caused by waste or unavoidable changes in costs.

PLANNING MUST STABILISE PRODUCTION WHEN SALES ARE SEASONAL



In spite of seasonality of demand and limitations of storage period and space, the actual rate of production is steady throughout the year.



In achieving a steady rate of production the Planning Department has had to fit in many seasonal lines like the above.

The illustration on page 15 shows the form in which such periodic cost reviews are presented. On the basis of these statements, the Cost Office suggests to the Marketing Committee what variations in price, either up or down, are necessary. If costs have fallen, then the Committee will decide whether to reduce the price; or, if the fall is not sufficient to achieve a price reduction, how to absorb the economies by improved value. If costs have risen, the possibility will first be explored of introducing slight modifications into the line itself, or in its packing and presentation, to offset the increased costs. If this cannot be done without unduly impairing the quality or attractiveness of the line, it will be for the Sales Department to decide whether to accept a price increase or, in an extreme case, to withdraw the line from the price list.

In its third capacity, the Cost Office acts as the channel for the issue of instructions, referred to colloquially as "Blue Notes" from the distinctive coloured paper of the form. "Blue Notes" are the pre-requisite authority for the introduction of new lines, laying down the standard processes, recipes and prices, and for variations in existing lines and normal procedure. The system of canalising through the Cost Office all instructions setting up standards and sanctioning deviations has the double value of ensuring that no change can take place without bringing to light its cost aspect, and that, as all "Blue Notes" must be signed by a Director, the instructions are consistent with the Board's policy.

IMPORTANCE OF EVOLUTION IN MANAGEMENT

It will be apparent that a smoothly working machine of the kind described is not the growth of a week or a month or a year, but is the result of many years' gradual adaptation and of patient trial and error. The salient feature of this organisation, like that of the British Constitution, is that it is unwritten and therefore flexible. Because the voice of the individual is heard at its committee meetings, it ensures that personal initiative is not submerged; and because of the departmental staff hierarchy, that individual responsibility is not surrendered.

A large organisation which seeks to preserve individuality and yet achieves efficient co-ordination cannot be easily designed and developed *ab initio*, as the growing pains of the war-time Government departments have demonstrated. Whatever changes in the organisation and structure of industry may loom ahead, it is to be hoped that those responsible for introducing them will be slow to scrap administrative machinery of proved efficiency until they are fully satisfied that they can develop something better to put in its place. Above all, it will be important for them to preserve the roots of personal endeavour and individual responsibility, and it is difficult to see how this can be done without a larger degree of decentralisation and localisation of authority than some of the protagonists of "State Planning" seem to envisage.

COST OF EACH LINE IS REGULARLY REVIEWED

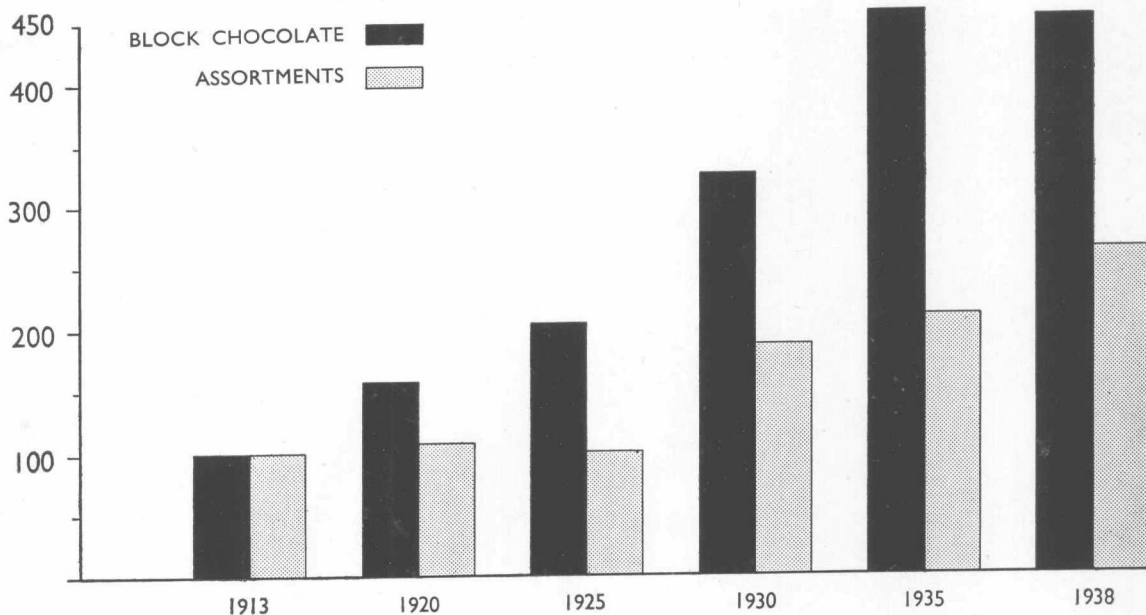
FORM OF COST STATEMENT

NAME OF LINE <i>3^d "Hypothetical" Block.</i> Date <i>June 1944</i>	SALES { 1941 Tons 1942 Tons 1943 Tons																																																																																																																																											
PRICES OF MAIN INGREDIENTS PARTICULARS OF LINE Weight Packed Weight in Box Boxes to 100 lbs. Price less 1¼% Cash Discount = per 100 lbs. To Retail at	<table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <th style="text-align: center;">PRESENT COSTING *</th> <th style="text-align: center;">PREVIOUS COSTING</th> </tr> <tr> <td>Raw Cocoa <i>56/8 cwt.</i></td> <td>Raw Cocoa <i>56/8 cwt.</i></td> </tr> <tr> <td>Cocoa Butter <i>1/5½ lb.</i></td> <td>Cocoa Butter <i>1/5½ lb.</i></td> </tr> <tr> <td>Sugar <i>50/10 cwt.</i></td> <td>Sugar <i>50/10 cwt.</i></td> </tr> <tr> <td><i>32 drams min.</i></td> <td><i>32 drams min.</i></td> </tr> <tr> <td><i>4 doz.</i></td> <td><i>4 doz.</i></td> </tr> <tr> <td><i>6 lb.</i></td> <td><i>6 lb.</i></td> </tr> <tr> <td><i>16. 66.</i></td> <td><i>16. 66</i></td> </tr> <tr> <td><i>8/2½ per outer</i></td> <td><i>8/2½ per outer</i></td> </tr> <tr> <td><i>135/1</i></td> <td><i>135/1</i></td> </tr> <tr> <td><i>3^d each.</i></td> <td><i>3^d each.</i></td> </tr> </table>	PRESENT COSTING *	PREVIOUS COSTING	Raw Cocoa <i>56/8 cwt.</i>	Raw Cocoa <i>56/8 cwt.</i>	Cocoa Butter <i>1/5½ lb.</i>	Cocoa Butter <i>1/5½ lb.</i>	Sugar <i>50/10 cwt.</i>	Sugar <i>50/10 cwt.</i>	<i>32 drams min.</i>	<i>32 drams min.</i>	<i>4 doz.</i>	<i>4 doz.</i>	<i>6 lb.</i>	<i>6 lb.</i>	<i>16. 66.</i>	<i>16. 66</i>	<i>8/2½ per outer</i>	<i>8/2½ per outer</i>	<i>135/1</i>	<i>135/1</i>	<i>3^d each.</i>	<i>3^d each.</i>																																																																																																																					
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WRAPPING & BOXING	Materials	2	8½				2	7½																																																																																																																																				
	Process	5	10½	8	7		5	6½	8	2																																																																																																																																		
FACTORY COST				105	-				103	8																																																																																																																																		
DISTRIBUTION				6	6				6	9																																																																																																																																		
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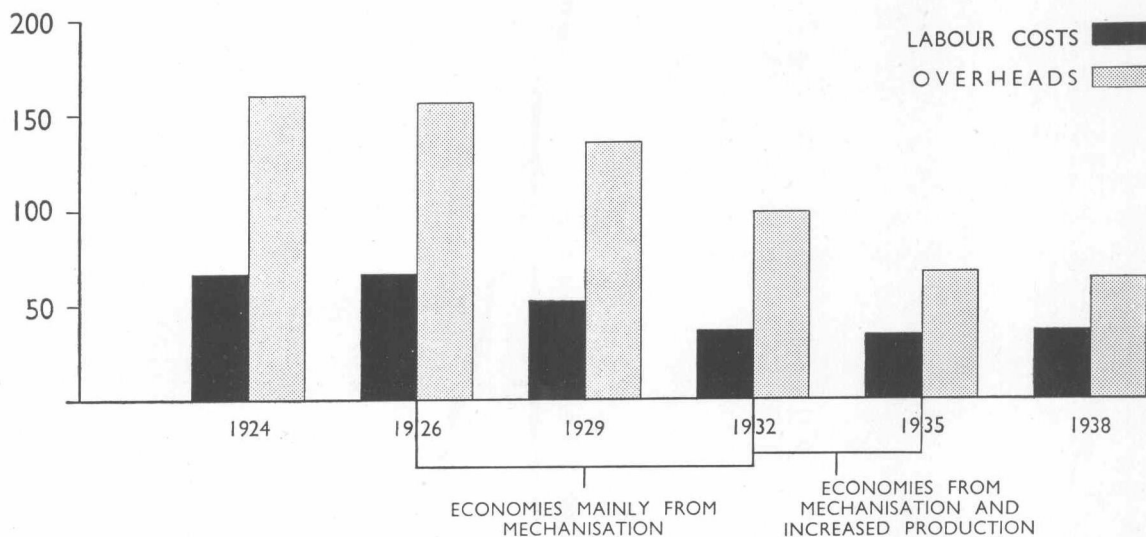
As a result of periodic reviews of the cost of each line, the Cost Office suggests to the Marketing Committee what variations, if any, in price or costs are necessary to give the required margin.

MECHANICAL PROGRESS of the inter-war years

(A) RISING OUTPUT PER DIRECT WORKER AT BOURNVILLE



(B) FALLING COSTS OF PRODUCING MILK CHOCOLATE



The rising output per direct worker (A) is an indication of the great strides made in the mechanisation of processes, which resulted (inter alia) in the reduced cost of the production of Milk Chocolate (B). In (B) 100 is taken as the total of labour costs and overheads in 1935.