



## MESSRS. FOSTER BROS., GLOUCESTER BRANCH OF THE BRITISH OIL AND CAKE MILLS, LTD.

The Pioneer Oil and Cake Mills in  
Great Britain.

THE oil and cake mills carried on by Foster Brothers, the Docks, have the distinction of being the pioneer industry of the kind in Great Britain, having been operated continuously for nearly two centuries. The business was established at Evesham, Worcestershire, in 1730, remaining there until 1862, when the entire plant was transferred to Gloucester. Upon the removal of the mills to Gloucester the Company saved the heavy inland transit charges, this port affording excellent facilities for receiving their frequent large importations of seeds. It should be added that while the Gloucester Oil and Cake Mills have practically the same port facilities as Bristol, Liverpool, and other seaboard towns, they are still the most inland transit mills of the kind in the kingdom. In addition to the excellent water transportation facilities, the mill premises are provided with a private railway siding.

Upon the selection of the present site plans were made for erecting one of the finest and most completely equipped plants in the entire country, a description which is as appropriate and accurate to-day as it was forty years ago. Frequent enlargements and alterations have been made to adapt them to the requirements of a trade which has been marked by an almost unbroken growth. The buildings now form one of the most imposing of Gloucestershire's factories, being conspicuous alike for their extent and for the solid and substantial character of their construction. The premises comprise, in addition to the mill, a seven-storey seed warehouse, several adjoining buildings, including the boiler-house, the fitting shop, the oil stores and refinery, the offices, etc. In all of these the same characteristic is noticeable throughout—the thorough and substantial manner in which every addition has been planned and carried out.

The mechanical equipment, which is in keeping with the buildings in which it is installed, may safely be said to have no superior in any mill in the country. The Company have been quick to adopt new machines and appliances whenever by so doing they could increase the capacity of the plant or lessen its cost, and, at this writing, material additions to the equipment are being made. In referring to the machinery installed in the various departments mention should be made of a feature which is too often noticeable by its absence. We refer to the very unusual cleanliness everywhere in evidence. From the large 400 h.-p. engine down to the minutest detail, the machinery and shafting are constantly kept in the best possible condition, a state of things which not only reveals the excellent management of the mills, but which must appreciably add to the efficiency of the plant.

Among other noticeable features are the admirable lighting of all the departments, 250 sixteen candle-power electric lights being used, the electricity being generated on the premises; the double iron doors between the different departments; and the hydrants and fire hose placed at convenient intervals, to minimise the risk from fire.

The nature of the manufactures of Messrs. Foster Brothers is perhaps sufficiently indicated by the title of their mills, linseed cake and cotton-seed cake, feeding oilcake, decorticated cotton cake, sheep and lamb food, and similar products forming the larger part of their output. The Company obtain their linseed principally from the Indian, Argentine, and Russian markets, usually making their importations direct to the Sharpness docks, whence they are transferred by lighters to the mills. The larger

part of the cotton seed is imported from Egypt. By means of the large elevator the seed may be conveyed from the vessels to any part of the warehouse at the rate of forty tons an hour. An idea of the magnitude of the business may be gained from the fact that not less than 800 tons of seed weekly are manufactured into various products, the various operations requiring the services of upwards of 120 workmen, who work in spells day and night.

It would be impossible in the limited space allowed us here to describe in detail the various interesting processes of manufacture, and it would be difficult for the general reader to understand them. It is enough to say that, as might be inferred from the character of the mills and their equipment, the manufactured product is of the highest standard of excellence. All of the Company's products are marked with their own brands, and are favourably known to buyers throughout this entire section. The oil cakes are sold principally throughout the Midland and West Midland counties, the situation of the Gloucester mills giving them a decided advantage throughout this territory. Upwards of fifty markets are attended weekly by the Company's representatives. Their linseed and cotton-seed oils, besides enjoying an extensive home trade, are also largely exported to Germany, the Colonies, and other foreign countries.

Up to 1895 the Firm was composed of Messrs. T. Nelson and R. G. Foster, and was managed by them in Gloucester for thirty-three years. In that year it was converted into a limited liability company, and four years later it became a branch of the British Oil and Cake Mills, Limited, now forming one of the leading mills in the combination. The present manager of the Gloucester mills is Mr. N. B. Foster, who is also a director on the London board. Associated with him is his brother, Mr. F. K. Foster, who supervises the manufacturing processes. These gentlemen are entitled to the credit of maintaining what is in every respect one of the best types of Gloucestershire industries, a compliment which will be fully appreciated by those who are conversant with the high standard for which the county's more important industries have become noted.

## TURNER, NOTT & CO., LTD., GLOUCESTER.

Corn Merchants.

AMONG the companies which have done a great deal toward maintaining Gloucester's importance as a port that of Messrs. Turner, Nott and Company, Limited, of Gloucester and Bristol, deserve special mention. The Company was established about forty years ago, the present limited liability company being organised in 1897. For some years after the establishment of the business the Company occupied premises in Commercial Road, subsequently securing the present more convenient and more commodious quarters. It is interesting to know that their office was for many years used by the old-established and widely known firm of W. C. Lucy and Company.

The present Gloucester premises occupied by the Company comprise a large six-storey warehouse having a capacity of 30,000 sacks of grain, the kiln-house, and the offices. The second of the accompanying engravings—kindly loaned by the Company for use in this publication—gives an excellent front view of the warehouse and kiln, the first engraving showing the interior of the managing director's private office. It should be added that the office is one of the most commodious and most tastefully appointed in Gloucester or the district. It is not only equipped with electric lights, local and long distance 'phones, and every facility for the convenient transaction of business, but the furnishings and the wall and ceiling decorations make it particularly attractive.

As has been indicated in the heading to this brief notice, Messrs. Turner, Nott and Company, Limited, are importers of foreign grain, which they receive direct from all parts of the world. For a number of years they have ranked among the largest importers in Gloucester, and for the past several years their importations have been quite the heaviest. The Company have also had the distinction, jointly with another firm, of importing the largest single cargo of grain ever discharged at the Gloucester port. The steamer containing this cargo made Sharpness from the River Plata, South



A corner of the Managing Director's Private Office, Turner, Nott & Co., Ltd.



America, and contained over 30,000 quarters of wheat, the average cargo being about 15,000 or 16,000 quarters. The larger part of the grain imported by the Company is sold locally and throughout the Midlands.

In addition to their operations as importers, the Company are large manufacturers of "dredge," a well-known food for cattle and horses. This preparation has created a wide demand, its manufacture now forming an important industry of itself.

Messrs. Turner, Nott and Company, Limited, have their registered offices in Bristol. The directors are Messrs. J. Holman, George Blood, (of the firm of Blood, Holman and Company), Edward Lowther, and Henry G. Norman, the two latter being joint managing directors. It is but just to acknowledge the courtesy of Mr. Norman, to whom the reader is indebted for the foregoing brief reference to an important industry.



## CHELTINE FOODS, LTD., CHELTENHAM.

The only Food Specialists in Gloucestershire.

GLoucestershire's possibilities as a manufacturing district are attested not only by the quite remarkable variety, as well as the general excellence, of her manufactured products, but by the almost constant additions to her already long list of successful industries. Among the more notable of our new industries is that of the Cheltine Foods, Limited, a company which has the distinction of being the pioneer, and still the only industry of the kind, in the county. In spite of the keen competition which has always existed in the preparation of food products, this Company has in the course of a few years built up a business which is favourably known in every part of the kingdom, and which continues to increase at a gratifying rate.

The business was established in 1899, on the premises still occupied by the Cheltine Works, by Mr. N. J. Bloodworth, a director of the present Company, and a practical and scientific baker of many years' experience. The business was begun on a small scale, and for some months was restricted to the manufacture of specially prepared foods for diabetics, invalids, infants, dyspeptics and anæmics. The unique excellence of these preparations almost at once created a wide demand, and the Company were

encouraged to add other scientific food specialities from time to time. Several of the more important of these specialities were introduced by Mr. Ley Wood, the present chairman of the Company, and Mr. J. F. Steele, the general manager and secretary. The latter introduced the manufacture of the Cheltine Malted Milk Chocolate, the Cheltine Nutrient Milk Chocolate, and the Cheltine Malted Milk Cocoa, three preparations which have met with special favour, and which of themselves form the basis of a very considerable industry.

As the business grew it became necessary to make frequent enlargements to the plant, the most recent improvement being the erection and equipment of an entire new factory, a substantially constructed and admirably arranged two-storey building facing the office. The plant now includes several large buildings, with ample reserve ground for the other additions which seem inevitable, and which are, indeed, already planned. It should be added, in this connection, that the Cheltine Works have the advantage of an unusually advantageous location, being entirely isolated from any other factory of any kind, and therefore removed from the smoke and dust inseparable from manufacturing districts. The premises are the Company's freehold property.

This advantage has been enhanced by the great care to ensure cleanliness everywhere in and about the buildings. In the main bakery, for instance, the smooth tile floor, the white-glazed walls, and the glazed ceiling, which are thoroughly washed daily, are absolutely germ-proof. In every department, indeed, the same scrupulous cleanliness is everywhere observable—a point which should be strongly emphasised, as in the preparation of food products this feature is most essential.

The mechanical equipment, being wholly new, is thoroughly up-to-date. The bakery is equipped with seven large ovens which embody all the best features known to this branch of manufacture. The steam mixing and kneading machines, the rolling, cutting and stamping machines, and the complicated patented apparatus used in the preparation of certain products, are all of the most approved pattern. Except for the final work of packing, the hand processes have been almost entirely dispensed with, the products not being touched by the hand from the moment the flour enters the factory until it leaves as a scientifically prepared food. The entire premises are lighted by electricity; lifts connect the several floors; steam heat is used throughout; and in every respect the factory is a model, giving evidence of the most careful planning.

It would be impossible in this brief notice to even barely mention all the Cheltine food specialities, which, by the way, are invariably put up in exceptionally neat packages, which at once dispose one in their favour. It may, however, be proper to refer to several which have been the subject of particularly favourable comment both by the medical profession and by the general public.

The diabetic foods, breads and biscuits, and infants', invalids', anæmic and dyspeptic foods and biscuits—upon which the reputation of the Cheltine Foods, Limited, was first established—have special important peculiarities both in the nature and proportion of their ingredients and the manner of their treatment. They are extremely palatable, and patients do not tire of their exclusive use. They are highly nutritious. All the important properties of the germ of the varieties of grain composing them have been utilised by special and original methods of manufacture. Although the diabetic specialities are unique preparations in which some of the starch of the cereals used still exists in the completed preparations as starch, and still reacts to the usual tests for starch, the object aimed at has been to so treat the starch during the processes of manufacture that in the body of the diabetic it should behave differently from the ordinary starch under the various physiological conditions and processes which meet it in the passages from food to tissue, and that it should serve its normal purpose in the nutrition of the body instead of being excreted as diabetic sugar. When other forms of starch are rigidly excluded from the diet, and when all other necessary dietary and hygienic conditions are duly observed, clinical experience testifies that the object has been successfully attained, and that the diabetic does materially improve—in some cases to complete recovery.

The Cheltine Soluble Maltose Food, for children and invalids, is also a scientific preparation of quite exceptional value. This food, which is made from selected cereals, is so treated that the nature of the grain is entirely changed, all of the starch being converted into a partly digested food. It is equally adapted to children of all ages, invalids, and elderly people, who naturally return to a physiological condition which requires a food as easily digested as in the case of children. Since the process of manufacture is a closely-guarded secret, it would be an ill-acknowledgment of the Company's courtesy to refer to it at length; it is enough to say that the process is the result of several years' experimenting, and that not a package was put on the market until the food was perfected.

The Cheltine Malted Milk Chocolate is another preparation which, considering its recent introduction, has had a phenomenal success. It is prepared of the finest cocoa and full cream milk, with a proportion of the Cheltine Malted Food, the latter adding to its nutritive value and imparting to it a peculiarly delicious flavour. Its fine creamy texture, as well as its delicate flavour, equal that of the finest Swiss confections, and mark a distinct advance over the milk chocolates heretofore produced by English manufacturers.

The Cheltine series of infants' foods form a progressive dietary of exceptional value for infants from birth. They include the Cheltine Soluble Milk Food (No. 1) for infants from birth to three months of age, Cheltine Soluble Milk Food (No. 2) for infants from three months to six months of age; Cheltine Malted Infants' Food, for infants after six months. The manufacture of these is based on the most modern scientific principles.

All of the Cheltine preparations are prepared after formulæ which are tested by the Company's consulting physician and consulting chemist and analyst, a fact which largely explains their high character. They have been used, and are being used, by some of the leading