

## Glo'stershire Industries.



## Gloucestershire Industries.

Origin of some of the County's More Notable Manufactures.

HOSE who have glanced through the foregoing pages (in which upwards of one hundred of Gloucestershire's leading industries are described) cannot fail to be impressed with the variety and importance of the county's manufacturing interests. The following additional particulars, pertaining to the origin of several forms of industry, and illustrating the high reputation the county's manufactured products have always enjoyed, may also be of interest.

In every country the first form of industry is that of agriculture. In this respect Gloucestershire has been, and is, peculiarly favoured, its climate topography and soil adapting it to every form of husbandry. For centuries Gloucestershire cheeses (particularly those produced in the far-famed Vale of Berkeley) were celebrated throughout Great Britain; and, indeed, the art of cheese-making is alleged, on good authority, to have originated in this county. It is gratifying to know that the manufacture of "Gloucestershire cheese" has in the past few years been successfully revived, and this delicacy is being sent from this county to all parts of the kingdom. In "King Henry IV." Shakespeare, who was familiar with the county, gave another of its productions a peculiar advertisement. In that play Sir John Falstaff says of one of his companions that his wit is as thick as Tewkesbury musturd." As applied to the object of the jest the comparison may not have been flattering, but it unmistakably indicated the strength and pungency of the mustard. Many other products of the soil, some of which are not now cultivated, owing to the easier importation form other countries, were scarcely less famous, particularly the vineyards in the Stroud Valley.

Milling—always one of the staple industries in the county—originally owed its great importance to the fertility of Gloucestershire and the adjoining counties. The improved means of transportation made possible by the construction of railways and canals has given the county, by reason of its peculiarly favourable location, an increased advantage, and it still supplies a considerable part of the Midlands and the West of England with flour. In Gloucester also are located the oldest, and still one of the largest, linseed oil and cake mills in the kingdom, dating back nearly a century and a-half, their establishment having originally been due to the flocks and herds bred in Gloucestershire pastures.

In the manufacture of food products generally Gloucestershire has in recent years gained an increasing prominence. There are in the county several noted firms devoted to the manufacture of steam fruit preserves, from the fresh fruit gathered in the orchards. Another very thriving and progressive firm has erected large works for the manufacture of scientific health foods, such as malted milk, maltose, diabetic bread and biscuits, etc., this being the only factory of the kind in the district. This firm has also recently began the manufacture of a chocolate which has been pronounced as being fully equal in texture and flavour to the best Swiss makes. Bacon curing is also extensively carried on here, and has been for one hundred years, the county having the first firm in the kingdom that employed factory methods in the production of the famous Wiltshire bacon.

But pre-eminently the greatest industry that has sprung directly from Gloucestershire soil is the weaving of cloth, with the allied industries of making clothing, shirts, hosiery, etc. For hundreds of years the Cotswold sheep were famous for the fineness of their fleeces, and the greatest wool marts in the kingdom were located in this county. Several of our Cotswold villages—notably Chipping Campden and Painswick—give unmistakable evidence of their former wealth and importance as wool marts, in their large and finely-constructed stone mansions, once inhabited by the moss celebrated wool-staplers in the kingdom. The word "Nailsworth" (the name of one of our thriving Cotswold towns) is a corruption of two obsolete words, meaning "wool mart."

For a long period much of the wool was exported to be woven, being returned into the country as finished cloth; but this anomally was changed when King Edward III., early in the fourteenth century, brought into the county the first Flemish weavers. From that date to this the "West of England" cloth has been everywhere considered as representing the highest stage of the art of weaving.

Gloucestershire's topography gave further great advantage to the early weavers. Owing to the configuration of the county, almost every part of it was intersected by small streams which furnished excellent water power; the purity of the water was also largely responsible for the fine colours which have always been a distinguishing feature of Gloucestershire cloth. The stone and timber of which the mills were constructed were also taken from the hills in the immediate neighbourhood of the factories; and so the requisites for building the mills, the power for operating them, and the raw material to be used in them were all found in the same spot.

But a few generations ago there were literally hundreds of cloth mills scattered throughout the county, and particularly in and near the Stroud Valley. The application of steam and the construction of

railways have largely neutralised the first advantage given by water power, and one by one the mills were suspended, until now scarcely a tithe remains. Wherever one goes in the cloth weaving district he may see ruins of older mills, or what were once cloth factories, now devoted to some other branch of manufacture.

From this circumstance many have naturally supposed that the cloth industry in Gloucestershire has declined. Nothing could be more erroneous. To-day there is more, and better, cloth woven in Gloucestershire than ever before. The great size of the existing mills as compared with those of a century ago, and the wonderful increase in the productive power of the operatives brought by modern science and invention, have more than counterbalanced the loss to the industry occasioned by the suspension of the antiquated mills.

A striking illustration of the enormous superiority of the present mills over those of but fifty years ago is afforded by several of the engravings shown in the preceding pages. One of these engravings (to give but a single instance) shows a bird's-eye view of one of our largest mills. In this engraving may be easily distinguished the original building as it was in 1859, then a four-floor structure not exceeding 100 feet by 50 feet in dimensions; to-day the entire premises cover eight acres of ground, probably one-half of which his under roof. Other engravings showing interior views afford convincing evidence of the equally marked improvement that has been effected in the mechancial processes.

The iron and engineering trades have sprung naturally from the wealth of Gloucestershire's mineral deposits. From the time of the Romans until comparatively recent years the iron obtained from the Forest of Dean district has been the basis of a great industry. value of the iron deposits was greatly enhanced by the proximity of excellent steaming coal, these collieries still being worked on a large scale. Latterly the iron mines have been almost abandoned owing to the discovery of richer and more accessible seams elsewhere. The first forms of iron working were probably those connected with agricultural implements, dairy appliances, etc., and the manufacture of these yet forms one of our most important industries. In Gloucestershire, by the way, was invented the steam plough—an implement which has much been put to such good use in other countries. To-day our engineers successfully engage in the manufacture of almost every article of which iron forms a part, and Gloucestershire engines, railway trucks, milling, cloth weaving, and linoleum making machinery, paint and colour grinding machinery, electrical appliances, spades and shovels, and innumerable specialities are to be found in every part of the globe.

The timber trade, which is now, and which has long been, one of the most important industries of the country, originated in the forests which once clothed both hill and valley. Everyone is familiar with the prominent part the oak obtained from the Forest of Dean has taken in the creation of England's sea power. In the same manner a number of our industries which would now seem to be exotics—the manufacture of umbrella and walking sticks, rake, hoe, axe, and brush handles, all kinds of turned work, furniture specialities, etc.—found their origin in the variety and peculiar excellence of our native woods. With the growth of commerce Gloucestershire's geographical position has favoured the importation of foreign woods, and several of our timber importing firms rank among the most important in the country.

Until easy means of transportation were provided by the railways the manufacture of brick, tile and terra-cotta goods, and the quarrying of stone for building purposes was restricted to local needs. But to-day there are in the county several modern brick-making plants whose productions are in demand in distant parts of the kingdom, while the quarries are now being very extensively worked. As is pointed out in a separate article on the geographical characteristics of the county, Gloucestershire is peculiarly rich in the variety and extent of its clays and building stones, the latter comprising nearly every shade and varying in hardness from those which can be cut with a knife to those which are almost too hard to be worked.

But although many of the county's industries resulted from its natural advantages, there are many more which owe their origin entirely to the inventiveness and adaptability of our people. electric telegraph—the development of which has become one of the wonders of our age-had its inception in the brain of a Gloucestershire inventor in the early part of the last century. The art of enamelling slate was invented here, now forming the basis of a very important industry. The best existing automatic machinery for the manufacture of pins, hair-pins, and hooks and eyes was invented here, and to-day there are made in the county a greater number of hair-pins and hooks and eyes than in any other like area in the world. Paper making, though not one of the largest industries in the county, has become highly developed; and our letterpress, lithographic and photomechanical printing, paper-bag making, and similar establishments are reckoned among the best in the kingdom. Among the first railway trucks made in the country were those manufactured in Gloucestershire, an industry suggested by, and since keeping pace with, the rapid development of railways. And scores of other thriving industries which have now become inseparable from our industrial prosperity owe their origin to unaided inventive genius, and their perpetuity to intrinsic worth.