

CHAPTER XIX.

The West-Midland and North-Midland Counties.—Birmingham.—Hardware.—The Potteries.—Glass.—Nottingham.—Stockings.—Lace.—Derby.—Silk.—Lead Mines.—Lincolnshire.—Salt.—Soda.—Soap.—Lancashire before the Cotton era.—Manchester.—Liverpool.—Linen Trade.—Yorkshire.—The Clothing Villages.—Leeds.—Sheffield.—Hull.—The Greenland Trade.—Newcastle.—Cumberland and Westmorland.—Scotland.—Agricultural Counties.—Norwich.—South-Eastern Coasts.—Cinque Ports.—Brighton.—Dover.—Portsmouth.—Southampton.

The progress of Manufactures in districts favourable to their pursuit is decidedly marked by the rapid increase of population. The extension and improvement of Cultivation are not ordinarily followed by any such proportionate increase of the numbers of the people. Thus, of the West Midland Counties, Herefordshire, Shropshire, Worcestershire, did not add more than one fourth to their population throughout the eighteenth century. Warwickshire and Staffordshire, which before the end of that period had become great seats of the iron and hardware trade, and of the trade in earthenware, had doubled their population. In the same manner, though not in the same degree, of the North Midland Counties, Leicestershire, Nottinghamshire, Derbyshire, which had grown up into large hosiery districts, added half to their numbers during that century. Of Lincolnshire, in the same period, the population was nearly stationary.

Bishop Berkeley, in 1737, by way of example to the Irish of the rapid turning of money, asks "Whether the small town of Birmingham alone doth not, upon an average, circulate every week, one way or other, to the value of fifty-thousand pounds?"* The iron-ware of Birmingham was in repute long before the beginning of the eighteenth century. In the time of Henry VIII. Leland wrote that "a great part of the town is maintained by smiths, who have their iron and sea-coal out of Staffordshire." The people of Birmingham were then makers of knives, of bridle-bits, of nails. In the reign of Charles II. they still manufactured scarcely anything more than iron tools and husbandry implements. Their forges were open to the public streets, by the side of the rough

* "The Querist"—Works, vol. ii. p. 273, ed. 1843.

shop where the spade and the bag of nails were exposed for sale. Under the encouragement given by William III., Birmingham began in his reign to make fire-arms. But how insufficient at that period was the home production of iron articles we may judge from the table of duties on imports,* in which we have iron pots, backs for chimneys, frying-pans, anvils. The vast surface of the great coal and iron field around Birmingham was then scarcely penetrated. The blaze of the furnaces that now lights up the country for miles, was then a very feeble illumination from the few works where iron was smelted by wood. The anvils of Wolverhampton, Dudley, Walsall, Bilston, Wednesbury, were then employed in the humblest work of iron manufacture. Birmingham before the middle of the eighteenth century, had attempted no manufactures in brass; and the greater part of that wonderful variety of industry which has given Berkeley's "small town" a population of a quarter of a million of souls was quite unattempted. The great prosperity of Birmingham belongs even to a much later period than that in which Burke called it "the toy-shop of Europe." It was always employed at work more important than toy-making. It supplied England and its Settlements with many articles of convenience and utility, before it became famous through the world for those manifold products of ingenuity and taste which no nation can rival. Every house that was newly built in England during the eighteenth century gave a stimulus to the activity of Birmingham to provide its locks and bolts. Every acre of ground that was cleared for building in the American Plantations made a similar demand upon the labour of the iron-working district. The Sheffield axe hewed down the woods. The Birmingham spade trenched the ground, and the thorns crackled under the Birmingham cauldron. Slowly but certainly did the exports increase of those articles which we imported at the beginning of this eighteenth century, until, in 1856, the exports of hardware alone amounted to three millions seven hundred and fifty thousand pounds sterling.

In that district of North Staffordshire, now known as The Potteries—a district of many towns, extending, with few intervals, for eight miles—there was a manufacture of common cooking ware at one of these towns, Burslem, at the beginning of the eighteenth century. It had been discovered that the Brown-ware could be glazed with salt, instead of with pulverised lead-ore; and thus Burslem, in 1700, had twenty-two glazing ovens. This district

* 2. Gul. & Mar. Sess. 2. c. 4.

abounded in clays fit for earthenware; but the art of producing the finer sorts was wholly neglected. These clays were prepared and dried in the sun; and from these "sun-kiln potteries" was turned out a coarse porous ware, which was called "butter-ware"—from its property of keeping butter cool. Burslem was marked in maps as the "Butter Pottery." About the time of the Revolution, superior clays were introduced; and an improved ware was manufactured in small quantities. Nevertheless, the coarse white ware of Holland, known as Delft, was a luxury for the rich. The wooden trencher was the plate of the cottager and the small tradesman. Any approach to a home manufacture of porcelain was far distant. The East India Company imported ornamented ware known as China, for which the introduction of Tea created a demand. The middle of the eighteenth century was passed, before Josiah Wedgwood brought his science and taste to the manufacture of earthenware; and finally produced specimens as admirable for their beauty of design as for their general utility. It is impossible to overrate the blessing to the great body of the people of cheap and good crockery. This is indeed a higher national advantage, even, than the amount of industry, and of high artistical skill, called into activity by our present manufacture of earthenware; which employs thirty-six thousand persons, and of which the exports amount to nearly a million and a half sterling.

The manufacture of Glass was one of those industries to which William III. was solicited to give encouragement. The government, in the unwise spirit that has not altogether died out with reference to other manufactures, had thought fit to subject glass to an excise. The duties were partially repealed, and they were wholly removed before the end of the seventeenth century. By a Statute of 1698, they are declared to be very vexatious and troublesome, and of small advantage to the Crown; would lessen the duties on Coals much more than the duty on Glass would yield; and would endanger the loss of the manufacture to the kingdom.* In 1746 duties on glass were re-imposed; and for another century the profitable employment of capital and labour in this admirable manufacture was repressed. A wise statesman abolished the duties, and we look upon the result with wonder and admiration. The manufacture, at the beginning of the eighteenth century, and during its first half, was principally confined to green glass and the commonest window glass. Defoe says, "there were, when I was

* 10 Gul. III. c. 24.

there, no less than fifteen glass houses in Bristol, which is more than are in the city of London."† The glass-houses of London had nothing of the character of factories about them. They were scattered in obscure districts amidst a wretched population. Colonel Jack, the hero of one of those fictions of Defoe which have all the truth of real life, says, "As for lodging, we lay in the summer-time about the watchhouses, and on bulk-heads and shop-doors, where we were known; and in winter we got into the ash-holes and nealing-arches, in the glass-house called Dallow's Glass-house, in Rosemary Lane, or at another glass-house, in Ratcliff-Highway."

Leicestershire had the reputation of producing the largest sheep and horses in England. The graziers, in some places, were so rich that they had become gentlemen. † But Leicestershire was also a manufacturing county. The long wool of the Leicester sheep gave rise to the worsted stocking-trade. In the town of Leicester, and in other neighbouring towns, the weaving of stockings by frames had become the general employment. "One would scarce think it possible," says the tourist of the early part of the eighteenth century, "that so small an article of trade could employ such multitudes of people as it does."‡ The wonder, no doubt, proceeded from the fact that the great body of the people did not wear stockings; and hence stocking-weaving was "so small an article of trade." At Nottingham and Derby Defoe saw the same industry affording general employment for labour in combination with machinery. The stocking-loom of William Lea was invented in 1589. In 1670 there were only six hundred and sixty looms in the kingdom, and these were chiefly employed upon silk stockings. At the close of the reign of queen Anne there were nine thousand looms. In the early part of the reign of queen Victoria, the stocking-loom of Leicestershire, Derbyshire, and Nottinghamshire were computed at forty-three thousand. In the northern counties, stockings long continued to be made by hand. At Richmond there was "a market for woollen and yarn stockings, which they make very coarse and ordinary, and sell accordingly. Here you see great and small a-knitting."§ It was the same in Westmorland. Machinery more effective than the stocking-frame is now extensively employed in the production of hosiery.

Nottingham is at present the great seat of the Lace-trade—of

* "Tour," vol. ii. p. 251.

† Defoe, "Tour," vol. ii. p. 332.

‡ *Ibid.*

§ *Ibid.*, vol. iii. p. 115.

the Lace produced by that wonder of mechanical ingenuity, the Bobbin-net-frame, invented in 1809. But at the beginning of the eighteenth century the Western and Southern counties were the great seats of the bone-lace manufacture—of that lace which “the free maids who weave their thread with bones” had been fabricating in the days of Elizabeth and James I. In the reign of William III. the importation of foreign bone-lace was prohibited. The Flemings, who had been accustomed to send us their rich point-lace, refused in consequence to take our woollen cloth; and then the prohibition was removed, “by being the occasion that our woollen manufactures are prohibited to be imported into Flanders.” Bone-lace making was not exclusively a feminine industry. There is a charming passage in Berkeley’s “Word to the Wise,” in which he exhibits the domestic industry of England, as a reproof to the Irish labourers “who close the day with a game on greasy cards, or lying stretched before the fire.” “In England, when the labour of the field is over, it is usual for men to betake themselves to some other labour of a different kind. In the northern parts of that industrious land, the inhabitants meet, a jolly crew, at one another’s houses, where they merrily and frugally pass the long and dark winter evenings; several families, by the same light and the same fire, working at their different manufactures of wool, flax, or hemp; company meanwhile mutually cheering and provoking to labour. In certain other parts you may see, on a summer’s evening, the common labourers sitting along the streets of a town or village, each at his own door, with a cushion before him, making bone-lace, and earning more in an evening’s pastime than an Irish family would in a whole day.”* Alas, for the bone-lace makers. Their industry was almost extinguished by the inexorable machine of 1809. But a change of fashion is bringing their labour again into repute. The endowment in 1626 of a free-school at Great Marlow, to teach twenty-four girls to knit, spin, and make bone-lace, had become a provision for the continuance of obsolete arts and unprofitable labour. The revival of the prettiest of these arts is one of the many proofs that whilst machinery does its proper work for the great bulk of comforts and luxuries, there are elegancies and niceties of hand-labour which machines cannot wholly supersede.

Lombe’s famous silk-mill at Derby, completed in 1717, was not the first attempt to supersede the foreign thrown, or spun, silk, by the conversion of the raw silk into what was called organzine. The

* Works, vol. ii. p. 227.

silk-mill at Derby, “afterwards much improved by sir Thomas Lombe, was first erected by one Soracole, a man expert in making mill-work, especially for raising water to supply towns for family use.”* The almost exclusive use of woollen cloth had been entrenched upon before the end of the reign of Charles II., by the silks of France.† In 1699, it was bitterly complained of, that “the unreasonable and indiscreet preference of India manufactures, especially that of India silks and stuffs, hath almost wholly overthrown, and unhinged, this profitable and necessary trade of silk throwing and weaving.”‡ The clamour was so great against Indian silks and printed cottons, that after the 29th of September, 1701, the wearing all wrought silks, of the manufacture of Persia, China, or East India, and all calicoes, painted, dyed, or stained therein, was absolutely prohibited.§ If we may believe the advocates of prohibition, this Statute had the effect of repeopling Spitalfields, “that looked before like a deserted place.”|| The weavers went blithely to work; and an ingenious experiment was tried to furnish them with silk spun by machinery. Yet the weavers of silk would not be satisfied with the home manufacture. The mercer tried to palm off the wares of Spitalfields as French goods illicitly imported.¶ Bishop Berkeley, with the large view of a philosopher, saw the reason of this preference; and, when the clandestine importation went on, to a great extent, in spite of all custom-house vigilance, asks “whether France and Flanders could have drawn so much money from England, for figured silks, lace and tapestry, if they had not had Academies for Design?” We should have remained till this day inferior in design, and in every other quality of the silk manufacture, had not a great statesman, who was denounced as “a hard-hearted political economist,” made a partial beginning of that system of free trade which has raised this particular manufacture, as it has raised so many others, to an eminence which utterly disregards every danger of foreign competition. The country which in 1825, was to be ruined by the importation of foreign silks, now exports silk of native manufacture, to an extent little short of two millions value in one year.

The Lead mines of the High Peak, in Derbyshire, were worked in the period of which we write, without much mechanical aid. The miner descended into the pit by a narrow square opening

* Defoe, “Tour,” vol. iii. p. 33.

† Smith on Wool, vol. ii. p. 44.

‡ Smith, vol. ii. p. 191.

§ Smith on Wool, vol. i. p. 259.

¶ 11 & 12 Gul. III. c. 10.

|| “English Tradesman,” vol. ii. p. 199

called a groove, in the angles of which groove pieces of wood were inserted. He ascended with his load of ore in the same rude fashion. "We saw," says Defoe, "the poor wretch working and heaving himself up gradually, as we thought with difficulty. * * * He was clothed all in leather; had a cap of the same without brims; and some tools in a little basket which he drew up with him. * * * Besides his basket of tools, he brought up with him about three-quarters of a hundred weight of ore." This poor man, who could not express himself intelligibly, signified through an interpreter that he was at work sixty fathoms deep; but that there were five other men of his party, two of whom were eleven fathoms deeper, and the other three fifteen fathoms deeper. These had an easier labour, for they had a way out at the side of a hill. Such was mining, in days before the steam engine. The lead mines have always been worked with the expectation of obtaining silver, for the extraction of which modern chemistry has afforded facilities. In 1699 one impediment to such experiments was removed. By a Statute of Henry IV., the "multiplying" gold and silver was made felony. This law, directed against the alchemist, made the attempt to extract gold and silver, by refining metals, a high penal offence; and men of "study, industry, and learning," who in metallurgy had "arrived to great skill and perfection, dare not exercise their said skill." The Act of Henry IV. was therefore repealed. * Such are the mistakes of legislation, when it fancies that matters wholly belonging to its own time will have a perpetual endurance. Our Statute book is full of such examples of blind lawgiving; and the remedy seldom comes till the evil has become insupportable.

Lincolnshire is now universally acknowledged to be the most fertile county in England. At the beginning of the eighteenth century it numbered 40,590 houses, and a consequent population of about two hundred and three thousand. In 1801 it contained a population only of about two hundred and eight thousand. In 1851 its numbers reached four hundred and seven thousand. This is the most remarkable example of the increase of a purely agricultural population, by the application, upon the largest scale, of the resources of mechanical and chemical science. Defoe looked upon the fen-country—the "often-drowned country," whose very ditches were navigable, and whose inhabitants went from town to town in boats. Here he heard the hoarse voice of the bittern.

* 1 Gul. & Mar. c. 30.

Here he saw the Decoys for wild-fowl, which were taken in incredible quantities for the London market. The bittern no longer shakes "the sounding marsh;" the Decoys are swept away to yield a better supply of beef and mutton. The drainage of the Fens was in progress when Defoe wrote; and there were large outlays of capital upon this great undertaking. But, "notwithstanding all that hands could do, or art contrive, yet sometimes the waters do still prevail, the banks break, and whole levels are overflowed together." * The work which the Romans began; which the skilful monks of the middle age continued; which spirited adventurers undertook in the time of Charles I., but were interrupted by the rapacity of his unwise government, and the subsequent troubled times; which was set on foot again in 1668; and which was an especial subject of legislation in 1697,—has steadily gone forward. The time may arrive when the Great level of the Fens may become as wholly firm land, as the remains of ancient roads and trees below the surface show it once to have been. The contrast between the great corn-bearing and grazing country of our own times, and of the period of the Revolution, is sufficiently impressive, although some land has yet to be reclaimed from the dominion of the waters.

The brine springs of Cheshire and of Worcestershire had been producing Salt from time immemorial. On all parts of the coast sea-water had been evaporated for salt, from days probably coeval with the earliest labour of the fisherman. In 1670, the first bed of rock salt was discovered at Nantwich, in Cheshire. Defoe mentions that after this discovery of rock-salt, the salt of the brine springs was not so much in request. At the beginning of the eighteenth century England was known to possess an unlimited supply of the material of salt; yet the manufacture was so imperfect, that the only salt fit for the tables of the opulent was imported. There was no gabelle, as in France, to prevent the free consumption of salt; but the nauseous taste, and the deleterious effects, of our common salt, necessarily limited its use. Then came the long era of injudicious taxation. A duty was imposed upon salt in the reign of William III., and in a century it was increased to twelve times the value of the article taxed. But this was not enough for the grasp of self-defeating fiscal rapacity. The duty was raised at last to fifteen shillings a bushel, or forty times the value of the article taxed. In 1823 the salt duties were wholly

* "Tour," vol. ii. pp. 341-344.

abolished. Then this necessary of life was to be used without stint; and salt was also to become one of the most important materials of chemical manufacture. It is curious to trace the changes in industry produced by the magic relief from taxation. The abolition of the duty on salt produced the manufacture of soda. The cheapness of soda, and its certain and unlimited supply, wholly altered the manufacture of soap. The alkali which was obtained on every shore of England and Scotland, by burning the sea-weed to produce kelp, now comes from the chemical works of Newcastle and Glasgow, at a price which renders the labour of the meanest peasant who earned the scantiest pittance by collecting the weed, far too costly for the purposes of commerce. Every farmer, in the middle of the last century, endeavoured to prevent any clause being inserted in his lease to regulate his cutting of underwood. He wanted not the underwood for his own hearth. He wanted to burn the wood to make ashes for the soap-boiler. In Suffolk, the soap-boiler's men were always travelling the round of the hamlets. They visited every house with light quartering carts, to collect the wood ashes. There were scarcely any roads impracticable to these vehicles.* The misery of a country with bad salt and dear soap—both evils chiefly produced by misdirected taxation—can scarcely be overestimated. The contrast of these matters of the present and the past is astounding. The annual consumption of salt by every individual of the population of Great Britain was estimated at twenty-two pounds in 1839.† Upon a population of twenty-one millions, this would give a consumption of four hundred and sixty-two million pounds, or eight million two hundred and fifty thousand bushels. In addition, we now export thirty million bushels of salt. Soap duties are now also abolished. The first excise of a penny per pound was imposed in the reign of Anne. The duties on soap went on increasing, till they were utterly repealed in the reign of Victoria. The consumption of soap in 1851 was four times as great as that of 1801.

If the fire-nymphs and water-nymphs, and earth-nymphs of Darwin had been endued with the spirit of prophecy—if his “nymph *Gossypia*,” ‡ especially, had looked back upon the past, and predicted of the future—the population of Lancashire, when Darwin wrote in 1790, would have incredulously listened to facts

* Cullum's *Hawsted*, p. 250.

† M'Culloch, “*Statistics of British Empire*,” vol. i. p. 592.

‡ A name derived from *Gossypium*, the cotton plant.

such as these, whether told in sonorous verse or simple prose: You numbered two hundred thousand souls at the beginning of the eighteenth century; you will number two million souls in the middle of the nineteenth century. The vegetable fibre of which you scarcely knew the use when the first ship entered the first dock of Liverpool, in the year 1700, and when Liverpool and Manchester had no water communication, shall be brought from North America, from Brazil, from Egypt, and from India, in quantities that will annually reach a thousand millions of pounds. This cotton-wool shall be worked by machines which in their elaborate contrivances shall make the “spinning jenny” of Arkwright appear a feeble substitute for fingers. Enormous factories for converting the wool into yarn, and for weaving the yarn into cloth by mechanical power, shall rise up in barren districts, where the human foot now scarcely treads; and villages, each with a few hundred souls scattered around its parish church, shall become enormous towns, with their thousands of inhabitants. The products of this industry shall furnish twenty millions of our own nation with fabrics of wondrous cheapness, and of beauty far surpassing the painted calicoes of the East, which were so jealously prohibited about a century ago. Foreign nations shall purchase these cotton manufactures to the annual amount in money value of nearly forty million pounds. This manufacture shall give direct employ to half-a-million of people in the factories, and to a hundred thousand engineers and machinists in connexion with these mills. All these wonderful results shall be accomplished by almost incredible skill and perseverance, during a period not longer than the ordinary term of human life. But the most marvellous expansion of this industry, and of all other industries, shall take place in the generation succeeding you; and at the termination of the first half of the nineteenth century, three persons shall subsist on this soil of Lancashire where one subsisted at its commencement; and ten shall subsist where one subsisted a hundred years earlier.

To look at the condition of Lancashire before the cotton era is to look at the Hercules in his cradle. But we must endeavour to continue the sketch which we have attempted of other districts about the beginning of the eighteenth century.

Manchester, in the early part of the reign of Charles II., was reckoned to contain six thousand people.* Fifty years later its population was estimated at fifty thousand; but this estimate

* Macaulay; *History*, vol. i.

included "the suburb, or village, on the other side of the bridge."* There were no very precise data for this estimate, beyond the manifest increase of buildings and of trade; the increase of inhabitants having demanded a new church, that of St. Anne. "If this calculation be just, as I believe it really is," writes Defoe, "you have here an open village, which is greater and more populous than most cities in England: neither York, Lincoln, Chester, Salisbury, Winchester, Worcester, Gloucester, no, nor Norwich itself, can come up to it." † The social condition of Manchester, at the end of the seventeenth century, was very primitive. Its manufactures of fustian, girth web, ticking, tapes, were carried on by small masters, who had apprentices residing in their houses. These lads were employed in the servile offices of turning the warping-mills, and carrying packages from place to place. The master and his young men breakfasted together upon "water-pottage, boiled thick," and a bowl of milk stood upon the table, into which all dipped their spoons. ‡ In 1702 there was the portentous entry in a tradesman's household book, of a sum expended for tea and sugar. In the reign of George I. it was held that "the luxury of the age will be the ruin of the nation; and one of the proofs of this degeneracy was that "the wholesome breakfast of water-gruel and milk-pottage is changed for coffee and tea." § The present mill-owners of Manchester, each with his enormous transactions, represented by hundreds of thousands of pounds in a year, furnish a remarkable contrast to "those travelling tradesmen whom we call Manchester-men." To every town the fustians and "small things called Manchester-ware" were borne by horse-packs; "the Manchester men being, saving their wealth, a kind of pedlars who carry their goods themselves to the country-shopkeepers everywhere." || The perils of their land journeys were not trifling: "The horse is driven away by some sudden flood, or falls down in the water and spoils the goods." ¶ Manchester had few rival neighbours in its trade of fustians and dimities, in which a little hand-spun cotton was used. Towns such as Bolton, to which "the cotton manufacture had reached," did not presume to compete with Manchester's warping-mills, and Manchester's looms, "which work twenty-four laces at a time," as is recorded with wondering commendation. At Bury, the cotton manufacture was

* Defoe, "Tour," vol. iii. p. 174.

† "Tour," vol. iii. p. 174.

‡ "Complete Tradesman," vol. i.

§ "Augusta Triumphans."

¶ *Ibid.*, vol. ii.

ended, and the woollen manufacture of coarse sorts begun. At Preston, the tourist "had come beyond the trading part of the country." This gay town, known as Proud Preston, was full of attorneys, proctors, and notaries.* Between the trading towns there was very imperfect communication; and until the Mersey, the Irwell, and the Weaver were made navigable, land-carriage to and from Liverpool was an important addition to the cost of exported and imported goods.

The traveller entering Lancashire from the Western part of the country would be ferried over the Mersey to Liverpool. Instead of steamers and magnificent landing-places adjusting themselves to the rise or fall of the tide, the traveller in the reign of Anne, having reached the flat shore in the ferry, was carried "on the shoulders of some Lancashire clown, who comes knee-deep to the boat's side to truss you up." † Liverpool, at the date of the Revolution, had no proper harbour and no quay. The trading-ships lay in the offing, and their cargoes were borne to them or from them in boats. In 1700 Liverpool had built a Dock—now known as the Old Dock. "The like of this Dock was not to be seen in any place of England, London excepted." ‡ From the beginning of the eighteenth century the rapid progress of Liverpool may be dated. In 1709 it had eighty-four ships, and nine hundred sailors. Its Customs soon became next in amount to those of Bristol, which was only exceeded by London. Its warehouses were filled with tobacco and sugar from the Plantations. Thus Liverpool went on increasing for a century and a half, until in 1851 it numbered three hundred and seventy-five thousand inhabitants; and the British and Foreign vessels entering the port exceeded four thousand in one year. When the detestable Slave Trade was abolished, the ruin of Liverpool was predicted. It had been engaged in that traffic from the beginning of the eighteenth century, and it strove to rival Bristol in the extent of the iniquity. Yet we must not forget that in this matter the heart of trading England was long hardened. The merchants of Lyme, in 1700, petitioned Parliament against the apprehended monopoly of the African Company; and prayed "to be allowed to trade to the plantations, and kidnap on the coast of Africa." §

Warrington, whilst Manchester was making its dimities, was the

* "Tour," vol. iii. p. 180-83.

† *Ibid.*, p. 168.

‡ Defoe, "Tour," vol. iii. p. 164.

§ Roberts' "Southern Counties," p. 467.

seat of a considerable Linen trade. The table-linen, called Huck-aback, was extensively made in the neighbourhood of this place. But every discouragement was given to the English linen manufacture. It was maintained that Divine Providence had appointed, the especial employment of manufacturing England, and that the first acceptable sacrifice to His omnipotency was that of the flock. Ireland might grow flax and make linen, as some compensation for the injustice that had been committed towards her in absolutely prohibiting the importation of her cattle.* But let England attempt no other manufacture than the woollen manufacture which had been for ages the support of the nation.† The same dread of permitting any wear for the living or the dead but that of woollen, made the flock-masters and clothiers frantic, when printed cottons, of English production, had become not only fashionable but common in 1719. Drapers' wives, and even maid-servants and children, it is alleged, wore calicoes or printed linen, attracted by their lightness, cheapness, and gaiety of colour. The example of the gentry had corrupted the common people; and so the manufacture of light woollen stuffs would be ruined.‡ The result of this clamour was an Act of 1721, to preserve and encourage the Woollen and Silk Manufactures, by prohibiting the use and wear of all printed, painted, stained, or dyed Calicoes, in apparel, household stuff, or furniture.§ Of course such legislation was nugatory: but here is the evidence, amongst many other proofs, of the supreme ignorance and folly of law-makers, who, from the earliest days of the loom and the plough in England, have struggled to "regiment" all industry—to encourage or to prohibit—to determine what wages labourers should be paid, and what should be the profit of capitalists—to crush rising industries by taxation—to compel the people to eat dear food for the supposed benefit of the landowner—and, finally, to find out that the nation was never so universally prosperous as when its industry was wholly left to the care of itself, under the guidance of God's natural laws.

Yorkshire had a population at the beginning of the eighteenth century of five hundred and thirty thousand. The great woollen manufacture, chiefly of the stuffs known as Yorkshire Kerseys, had raised five centres of this manufacture, which were known as Clothing-towns—Bradford, Huddersfield, Wakefield, Halifax, Leeds. The inhabitants of these five towns are now equal to a

* 18 Car. II. c. 2.

† *Ibid.*, vol. ii. p. 195.

‡ Tract of 1671.—Smith on Wool, vol. i. p. 384.

§ 7 Geo. I. c. 7.

fifth of the whole population of Yorkshire. They were, a hundred and fifty years ago, small places, but full of busy and enterprising dealers. It is noted as a remarkable proof of the importance of the commerce of this district, that a cross-post had been established to connect the West of England with the North, which post began at Plymouth and ended at Hull.* Defoe followed the course of this post-road from Liverpool to Bury, and thence to Halifax. There are few things in the books of the modern tourist that can compare with his life-like picture of this country, then in some parts almost inaccessible, but now covered with a web of railways, more complicated than in any other portion of the island. It was the end of August. The snow, even then lying on the hills, appeared alarming. At Rochdale the travellers were offered a guide; but they apprehended no danger, and went on, satisfied with a description of the land-marks. They ascended Blackstone Edge amidst a snow-storm, but the way down was a very frightful one. In the valley they had to cross a brook knee-deep. Again they had to mount a hill, and again to cross a stream; and in a journey of eight miles they repeated this labour eight times, much to their discontent. The tourist records not the picturesque beauties of these Yorkshire valleys; but he has given us a charming sketch of their industry. As he approached nearer to Halifax the houses were closer together, in every bottom and on every hill-side. After the third hill was passed, the country became one continued village, though every way mountainous; and as the day cleared up, he could see at every house a tenter, and on almost every tenter a piece of white cloth, sparkling in the sun. Every house on the hill-side had its little rill, conveyed in gutters from the springs above; and on the heights there was coal, so that the great necessities of the manufacture were close at hand. In every house the women were carding and spinning. The men were some at the loom, some at the dyeing vat.* Not an idle person was to be seen. The corn of this region, and of other part of the great clothing district, was supplied from the East Riding, and from Lincolnshire and Nottinghamshire. In the autumn the markets for black cattle were prodigiously thronged, for the clothiers then bought as many oxen as would serve their families for the whole year, salted, and hung up in the smoke to dry. One product of Yorkshire was abundant amongst them—"the store of good ale which flows plentifully in the most mountainous part of this country." The domestic system

* Defoe, "Tour," vol. iii. p. 72.

of the cloth-making villages of Yorkshire has not been wholly driven out by the factory system; but it is very different from the time when the clothier kept "his one horse to fetch home his wool and his provisions from the market, to carry his yarn to the spinners, his manufacture to the fulling-mill, and, when finished, to the market to be sold."*

If the inhabitants of the clothing villages are now essentially different in their mode of life, how much more striking is the difference between the Leeds of queen Anne and the Leeds that assembled a quarter of a million of people to greet queen Victoria in 1858. The great cloth-market of Leeds was, in the seventeenth century, kept upon the bridge over the Aire. As the market increased it was removed to the High-street. From the Bridge to the Market-house tressels were placed in the street, and a temporary counter was formed. The clothiers came in from the country, few bringing more than one piece of cloth; and, after the refreshment of a pot of ale, a bowl of porridge, and a trencher of beef, regularly provided for twopence by the public-house keepers, they were at their tressels by six o'clock in summer and by seven in winter. Each clothier placed his cloth lengthwise upon the counter;—"a mercantile regiment drawn up in line." The factors come; examine the cloth; and conclude a bargain in a whisper. In a short time the clothiers begin to move, each bearing his piece of cloth to the buyer's house. In an hour the business is over, and the market is left to the shoemakers, hardware-men, and other retailers. Such was the Cloth-market also at Halifax and Bradford, before the days of the Cloth Hall of Leeds, which was built in 1711.† The Linen manufacture of Yorkshire did not then exist. There was no flax-factory to give employment to a thousand spinners under one roof, attending upon the movements of innumerable steam-driven wheels and spindles. Yet in the small industry of the West Riding in the eighteenth century, we see the germ of its gigantic operations in the nineteenth; and we are by no means sure that in the twentieth century the mighty industry of our own day may not be looked upon as an imperfect development of the resources of English wealth and energy.

Sheffield had been famous for its Cutlery from the time of Edward III. At the end of the seventeenth century it had machinery which had lent no aid to the fabrication of the whittle which Chaucer's Miller of Trumpington wore in his hose. Sheffield had

* Defoe, "Tour," pp. 73-84. † Thoresby's "Leeds" and Defoe's "Tour."

one mill for turning grindstones. The "grinders" of Sheffield are now of themselves a large population. It was boasted that around Sheffield were six iron-furnaces, supplied by its neighbouring woods. How many wood-furnaces would now be required for the production of its steel, and for the almost innumerable products of this great metropolis of steel, giving employment to a population of a hundred and fifty thousand?

Hull was an exceedingly prosperous port at the beginning of the eighteenth century; although it had no dock till 1788. Its commerce on the Northern shore of the Humber included shipments to London, to Holland, and to the Baltic, of the woollens of the West Riding, the hardwares of Sheffield, and the lead of Derbyshire. Its imports were of iron, copper, flax, and linen. But the exports of corn from Hull exceeded those of any other port. One trade, however, was lost to Hull at this period. An Act of 1692 recites that "the trade to Greenland and the Greenland seas, in the fishing for Whales there, hath been heretofore a very beneficial trade to this kingdom;" and the preamble concludes by saying that "the said trade is now quite decayed and lost." The Company then established had little success; and the Whale Fishery was not resumed till 1750. England had little need of oil during the first half of the eighteenth century; for London and all other towns were lighted chiefly by lanterns and link-boys. When light could no longer be dispensed with, the parliament granted a heavy bounty to all ships engaged in the Whale Fishery; and many ships were sent out "as much certainly in the view of catching the bounty as of catching the whales."* The whales, however, shifted their course; and the Greenland fishery came nearly to an end, in spite of the Act "for the regaining, encouraging, and settling the Greenland trade."†

The tourist whom we have followed in his observant course, says that from Durham to Newcastle the mountains of Coal, lying at the mouth of numerous pits, gave a view of the unexhausted store which supplies not only London but all the South part of England. The people of London, he remarks, when they see the prodigious fleets of ships which come constantly in with coal for that increasing city, wonder whence they come, and "that they do not bring the whole country away." The quantity of sea-borne coal brought to London in 1856 was above three million tons, or ten times the amount required about the end of the seventeenth

* M'Culloch, "Statistics," vol. i. p. 609 (ed. 1839). † 4 Gul. & Mar. c. 17.

century. But the foreign export of coal from the northern pits is now enormous; and large quantities are borne by railway and canal. It has been calculated that if three million five hundred thousand tons of coals were raised annually, it would require a period of seventeen hundred years to exhaust the coal-pits of Durham and Northumberland. The colliers of the Thames will not speedily "bring the whole country away." The wondrous coal-trade, and the other industries of the towns of Newcastle, Tynemouth, Gateshead, South Shields, and Sunderland, have raised up a population of nearly two hundred and fifty thousand, being considerably in excess of the entire population of Northumberland and Durham in the early part of the eighteenth century. But we must not forget that the vast expansion of mining and manufacturing industry which we have recorded in this our general view, may be dated, in great part, from a Private Bill of the tenth year of the reign of William III., entitled "An Act for the encouragement of a new Invention of Thomas Savery, for raising Water, and occasioning Motion in all sorts of Mill-Work, by the impellant force of Fire." Nor must we overlook the fact, that in the time of Charles II., Roger North describes the admiration of his brother at the ingenuity of the coal-workers of Newcastle, whose "manner of carriage was, by laying rails of timber, from the colliery down to the river, exactly straight and parallel; and bulky carts are made with four rowlets fitting these rails; whereby the carriage is so easy that one horse will draw four or five chaldron of coals, and is an immense benefit to the coal-merchant."*

The population of Cumberland and of Westmorland was, at the beginning of the eighteenth century, by far the smallest of any English county. The two counties did not contain more than twenty-one thousand houses, and a hundred and six thousand inhabitants. They had increased by one-half in 1801; which number was again increased by another half in 1851. They did not contribute much more than Rutland to the Aid of 1689. The Fells of Westmorland were held to be almost impassable. Kirkby-Lonsdale and Kirkby-Stephen, Appleby and Kendal, were considered pleasant manufacturing towns; but all the rest of the district was proclaimed to be wild, barren, and horrible. Penrith was said to be a handsome market-town, and of good trade. The people made woollen cloth, as they had made from the old times when the outlaws of Sherwood were clothed in Kendal Green. Pack-

* "Life of Lord Guilford."

horses travelled about the villages with cloth; and the pedlar continued to be the principal merchant, as he was up to the days of "The Excursion." Whitehaven was a port of shipping coals, chiefly to Ireland. The copper-mines of the Derwent Fells, which had been wrought in search of gold, in the time of queen Elizabeth, had been abandoned. The Black Lead mine of Borrowdale had also been worked at that period: it continued to be worked in the days when pencils were in small demand; and it still yields its rare and valuable produce, but in quantities unequal to the demand of our own times. After the Union, the castles and great houses of the Border went most of them to ruin. Carlisle had its Cathedral, its Castle, and its walls; but it was a small city of old buildings; and its population of twenty-six thousand had to be created after a century was past. There was one remarkable industry of this remote district. The salmon taken in the Derwent were carried fresh to London, by horses which travelled day and night without intermission. They travelled faster than the post, and the extraordinary price of the luxury—from half-a-crown to four shillings a pound—repaid the cost of carriage.* Railways serve London with salmon at a cheaper rate.

The industry of Scotland before the Union, in 1707, was so limited in its character, that this is scarcely the period to attempt any comparison between its productive and commercial power previous to that fortunate consummation, and its present condition of agricultural and manufacturing excellence. The two countries, when under separate legislatures, offered a wretched example of mutual prohibitions, under which the smaller country was by far the greater sufferer. Scotland would not admit the English woollen-cloth. England would not permit a Scotch trade with her Colonies. These miserable rivalries came to an end. A Glasgow vessel of sixty tons first crossed the Atlantic in 1718; and from that period Scotland steadily went forward in a noble career of generous emulation with her sister kingdom. Her progress was for many years slow. Capital was not rapidly accumulated after generations of clan hostility. The hordes of beggars, that Fletcher of Saltoun would have sold to slavery in 1698, could not be wholly removed by the absorption of profitable labour in a few years. The violent religious and political hostilities of six reigns could not wholly subside when George I. came to the throne. But the parochial school establishment of Scotland, which dates its effi-

* Defoe, "Tour," vol. iii. p. 192.