

Rides on Railways eBook

Rides on Railways by S. S. McClure

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LIST OF ENGRAVINGS.

Euston square, London
Harrow-on-the-hill
viaduct over the river Colne, near Watford
looking from the hill above Boxmoor station towards Berkhamsted
Berkhamsted station
Leighton Buzzard
Denbigh hall bridge
the Wolverton viaduct
bridge in the Blisworth embankment
view from top of Kilsby tunnel, looking towards Rugby
Coventry
the SHERBORNE viaduct, near Coventry
the Avon viaduct
the Aston viaduct
Aston hall
Newton road station, near Birmingham
the railway near Penkridge
Stafford
view near Whitmore
vale-royal viaduct
excavation at Hartford
viaduct over the Mersey and Mersey and Irwell canal, Kingston
the Dutton viaduct
the Warrington viaduct

LONDON AND NORTH WESTERN RAILWAY.

According to Mr. Punch, one of the greatest authorities of the day on all such subjects, the nearest way to Euston Station is to take a cab; but those who are not in a hurry may take advantage of the omnibuses that start from Gracechurch Street and Charing Cross, traversing the principal thoroughfares and calling at the George and Blue Boar, Holborn, the Green Man and Still, Oxford Street, and the Booking Offices in Regent Circus.

Euston, including its dependency, Camden Station, is the greatest railway port in England, or indeed in the world. It is the principal gate through which flows and reflows the traffic of a line which has cost more than twenty-two millions sterling; which annually earns more than two millions and a-half for the conveyance of passengers, and merchandise, and live stock; and which directly employs more than ten thousand servants, beside the tens of thousands to whom, in mills or mines, in ironworks, in

steam-boats and coasters, it gives indirect employment. What London is to the world, Euston is to Great Britain: there is no part of the country to which railway communication has extended, with the exception of the Dover and Southampton lines, which may not be reached by railway conveyance from Euston station.

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The Buckinghamshire lines from Bletchley open the way through Oxford to all the Western counties, only interrupted by the break of gauge. The Northampton and Peterborough, from Blisworth, proceeds to the Eastern coast of Norfolk and Lincoln. At Rugby commences one of several roads to the North, either by Leicester, Nottingham, and Lincoln, or by Derby and Sheffield; and at Rugby, too, we may either proceed to Stafford by the direct route of the Trent Valley, a line which is rendered classical by the memory of Sir Robert Peel, who turned its first sod with a silver spade and honoured its opening by a celebrated speech; or we may select the old original line through Coventry, Birmingham, and Wolverhampton, passing through a network of little railways leading to Warwick and Leamington, the result of unprofitable competition. A continuation of the Trent Valley line intersects the Pottery district, where the cheapest Delft and the most exquisite specimens of China ware are produced with equal success; and thus we reach Liverpool and Manchester by the straightest possible line.

At Stafford we can turn off to Shrewsbury and Chester, or again following the original route arrive at Crewe, the great workshop and railway town of the London and North Western. Crewe affords an ample choice of routes—1st, to Leeds by Stockport (with a branch to Macclesfield) and Huddersfield, or from Leeds to York, or to Harrogate, and so on by the East Coast line through Durham, Newcastle, and Berwick, to Edinburgh; 2dly, direct to Manchester; 3rdly, to Warrington, Newton, Wigan, and the North, through the salt mining country; and, 4thly, to Chester. At Chester we may either push on to Ireland by way of the Holyhead Railway, crossing the famous Britannia Tubular Bridge, or to Birkenhead, the future rival of Liverpool.

At Liverpool steamers for America warranted to reach New York in ten days are at our command; or, leaving commerce, cotton, and wool, we may ride through Proud Preston and Lancaster to Kendal and Windermere and the Lake district; or, pressing forward through “Merry Carlisle,” reach Gretna at a pace that defies the competition of fathers and guardians, and enter Scotland on the direct road to Glasgow, and, if necessary, ride on to Aberdeen and Perth.

A short line from Camden Station opens a communication with the East and West India Docks and the coast of Essex, and another, three miles and a half in length, from Willesden Station, will shortly form a connexion with the South Western, and thereby with all the South and Western lines from Dover to Southampton.

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The railway system, of which the lines above enumerated form so large a part, is barely twenty-five years old: in that space of time we have not only supplied the home market but taught Europe and America to follow our example; even Egypt and India will soon have their railways, and we now look with no more surprise on the passage of a locomotive with a few hundred passengers or tons of goods than on a wheelbarrow or Patent Hansom Cab. Grouse from Aberdeen, fat cattle from Norfolk, piece goods from Manchester, hardwares from Sheffield, race horses from Newmarket, coals from Leicestershire, and schoolboys from Yorkshire, are despatched and received, for the distance of a few hundred miles, with the most perfect regularity, as a matter of course. We take a ticket to dine with a friend in Chester or Liverpool, or to meet the hounds near Bletchley or Rugby, as calmly as we engage a cab to go a mile; we consider twenty miles an hour disgustingly slow, and grumble awfully at a delay of five minutes in a journey of a hundred miles. Millions have been spent in order to save an hour and a half between London and Liverpool; yet there are plenty of men not much past thirty who remember when all respectable plain practical common sense men looked upon the project for a railway between London and Birmingham as something very wild if not very wicked; and who remember too, that in winter the journey from London to Liverpool often occupied them twenty-two hours, costing 4 pounds inside and 2 pounds out, besides having to walk up the steepest hills in Derbyshire,—the same journey which is now completed in six hours at a cost of 2 pounds 5s., and in twelve hours for 16s. 9d., by the Parliamentary train in an enclosed carriage.

It may be perhaps a useful wholesome lesson to those who are in the habit of accepting as their just due—without thought, without thankfulness—the last best results of the industry and ingenuity of centuries, if, before entering the massive portals of Euston Station, we dig up a few passages of the early history of railways from dusty Blue Books and forgotten pamphlets.

In 1826, the project of a railway from Liverpool to Manchester came before a Committee of the House of Commons, and, after a long investigation, the principle was approved, but the bill thrown out in consequence of defects in the survey. The promoters rested their case entirely on a goods' traffic, to be conveyed at the rate of six or seven miles an hour. The engineer was George Stephenson, the father of the railway system, a man of genius, who, although he clearly foresaw the ultimate results of his project, had neither temper nor tact enough to conciliate the ignorant obstinacy of his opponents; in fact, he was a very bad witness and a very great man. It is curious, in reading the evidence, to observe the little confidence the counsel for the bill had in their engineer, and the contempt with which the counsel for the opposition treated him. The promoters of the railway expected

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few passengers, hoped to lower the rates of the canals, and had not made up their minds whether to employ locomotives or horses; George Stephenson looked forward confidently at that same period to conveying the greater portion of the goods and passenger traffic by a complete railway system; but he either would not or could not explain the grounds of his confidence, and therefore we find Mr. Harrison, the most eminent Parliamentary counsel of that day, speaking in the following insolent strain of a man whose genius he and his friends were unable to appreciate:—

“Every part of this scheme shows that this man (George Stephenson) has applied himself to a subject of which he has no knowledge, and to which he has no science to apply. . . . When we set out with the original prospectus, we were to gallop at the rate of twelve miles an hour, with the aid of the devil in the form of a locomotive, sitting as postillion on the fore horse. But the speed of these locomotives has slackened. The learned Sergeant would like to go seven, but he will be content with six miles an hour. I will show that he cannot go six. Practically, or for any useful purposes, they may go at something more than four miles an hour. The wind will affect them: any gale of wind which would affect the traffic on the Mersey, would render it impossible to set off a locomotive engine, either by poking the fire, or keeping up the pressure of the steam until the boiler burst. A shower of rain retards a railway, and snow entirely stops it.”

In reply, Mr. Adams modestly observed, “I should like my learned friend to have pointed out any part of the publication in favour of the Liverpool and Manchester Railway, which justified his statement that we professed that goods were to be carried at the rate of twelve miles an hour; we have proved that they can be carried at seven miles an hour, and it was never intended they should be conveyed at a higher rate.”

In the following year the Liverpool and Manchester Bill was carried, and in 1830 the career of the civilizing locomotive commenced, but it took many more years to convince “Practical men” that the Railway would successfully compete with the Coach and Canal.

When, in 1831, the scheme of a Railway between London and Birmingham was made public, a very clever pamphlet appeared under the title of “Beware the Bubbles,” in which we find the following comical prognostications of the results of Railways:—

“After all, what advantage does the London and Birmingham Railway hold out? Only one,—celerity of motion; and, after all, the ten miles an hour is absolutely slower than the coaches, some of which go as fast as eleven or twelve miles an hour; and, with the length of time that the engine and its cumbrous train requires ere it can stop, and the other contingencies, there would be little difference in the time of a twelve miles an hour coach and a fifteen miles an hour engine, supposing twenty or thirty stoppages, to pick up little parcels, between London and Birmingham. The conveyance is not so safe as by coach.”

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After enumerating a series of theoretical dangers, he proceeds. "Another consideration, which would deter invalids, ladies, and children from making use of the Railway, would be want of accommodation along the line, unless the Directors of the Railway chose to build inns at their own expense. But those inns the Directors would have, in great part, to support, because they would be out of the way of any business except that arising from the Railway, and that would be trifling. Commercial travellers would never, by any chance, go by the Railroad. The occasional traveller, who went the same route for pleasure, would go by the coach-road also, because of the cheerful company and comfortable dinner.

"Not one of the nobility, the gentry, or those who travel in their own carriages, would really like to be drawn at the tail of a train of waggons, in which some hundreds of bars of iron were jingling with a noise that would drown all the bells of the district, and in momentary apprehension of having his vehicle broken to pieces, and himself killed or crippled by the collision of those thirty-two ton masses. Even if a man had no carriage of his own, what inducement could he have to take so ungainly a conveyance. Three hours is more than the maximum difference by which the ordinary speed of coaches could be exceeded; and it is not one traveller in a thousand to whom an arrival in London and Birmingham three hours sooner would be of the slightest consequence.

"Then as to goods. The only goods that require velocity in coming to London, are ribands from Coventry. Half the luggage room of a coach, on a Saturday night, is quite adequate to the conveyance of them. The manufacturers of Coventry will never be such fools as to send their property on an errand by which it must travel further and fare worse. For heavy goods, the saving by canal would be as twelve to one, beside the perfect safety. In the canal boat there is no danger of fracture, even to the most delicate goods; whereas, if fine China goods were to be brought by the rapid waggons, the breakage would probably be twenty-five per cent.

"As to the profits of the undertaking let us be extravagantly liberal. Suppose that the Railway was to get one-third of the goods, as well as one-third of the passengers, see what they would make of it:—

One-third of the Goods . . . 96,540 pounds
One-third of the Passengers . 30,240

126,780 pounds

Annual expenses 385,000 pounds
Returns. 126,780

Annual deficiency 258,220 pounds

To meet an outlay of 7,500,000 pounds.

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“But the probability is that canals would reduce their rates one-half; and thus, competing wholesomely, extinguish the railway. The coach-masters would do the same thing—run for twelve months at half the present fares, and then not one man in his senses would risk his bones on the railway. The innkeepers would follow a course precisely similar, and give nice smoking dinners, foaming tankards and bottles of beeswing at so cheap a rate, and meet their customers with so good humoured faces, and do so many of those kind offices that legions would flock to the hospitable road. And while all this was going on, and the thousands of men which the authors of this ridiculous scheme had expected to send upon the parish were thriving, the solitary stranger who had nobody to tell him better would go swinging at the tail of the engine, bumping first on the iron plates on this side and then on the iron plates on that side; and if he escaped being scalded to death by the bursting of his engine, or having all his bones broken by collision with another, he would be fain to rest for the night within some four bare walls and gnaw a mouldy crust which he brought in his pocket, or, as an alternative of luxury, wade some ten miles through the mire, and feast upon a rasher of rusty bacon and a tankard of the smallest ale at the nearest hedge alehouse.”

All this now sounds inexpressibly droll, and yet this prophet of evil was not entirely wrong; nay, in some important particulars he was more right than the railway promoters, whom he so heartily detested. The railway did cost nearly seven millions instead of four millions as calculated by the projectors, and the cost of working before the amalgamation with the Grand Junction did amount to 380,000 pounds per annum: two figure facts which would have effectually crushed speculation could they have been proved in 1831; but then the per contra of traffic was equally astounding in its overflow, instead of one-third of the existing traffic, or 126,780 pounds a-year allowed by the pamphleteer, the London and Birmingham earned a gross revenue of nearly 900,000 pounds, while still leaving a traffic in heavy goods on the canals sufficient to pay from 6 to 30 pounds per cent. to the proprietors, in spite of a reduction of rates of upwards of 50 pounds per cent. Indeed this traffic actually increased on the Grand Junction Canal, since the opening of the Birmingham Railway, from 750,000 pounds in 1836, to 1,160,000 pounds in 1847.

Perhaps on no point would the expectation of the most sanguine among the early projectors of railways been more satisfactorily exceeded than in regard to safety. Swiftiness, and cheapness, and power, acute intelligent engineers foresaw; but that millions of passengers should be whirled along at a speed varying from twenty to fifty miles an hour with more safety than they could have secured by walking a-foot, would have seemed an anticipation of the very wildest character. Yet such is the case. In 1850, upwards of seventy millions of souls were conveyed by railway; when eleven passengers were killed and fifty-four injured, or less than one to each million of passengers conveyed.

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Even at the risk of seeming trite, prosy, and common-place, it is right to remind the young generation who consider the purchase of a railway ticket gives them a right to grumble at a thousand imaginary defects and deficiencies in railway management, how great are the advantages in swiftness, economy, and safety, which they enjoy through the genius, enterprise, and stubborn perseverance of George Stephenson and his friends and pupils in 1825.

EUSTON STATION.

This station was an after-thought, the result of early experience in railway traffic. Originally the line was to have ended at Camden Town, but a favourable opportunity led to the purchase of fifteen acres, which has turned out most convenient for the public and the proprietors. It is only to be regretted that it was not possible to bring the station within a few yards of the New Road, so as to render the stream of omnibuses between Paddington and the City available, without compelling the passenger to perspire under his carpet-bag, railway-wrapper, umbrella, and hat-box, all the way from the platform to the edge of Euston Square.

The great gateway or propylaeum is very imposing, and rather out of place; but that is not the architect's fault. It cost thirty thousand pounds, and had he been permitted to carry out his original design, no doubt it would have introduced us to some classic fane in character with the lofty Titanic columns: for instance, a temple to Mercury the winged messenger and god of Mammon. But, as is very common in this country,—for familiar examples see the London University, the National Gallery, and the Nelson Column,—the spirit of the proprietors evaporated with the outworks; and the gateway leads to a square court-yard and a building the exterior of which may be described, in the language of guide books when referring to something which cannot be praised, as “a plain, unpretending, stucco structure,” with a convenient wooden shed in front, barely to save passengers from getting wet in rainy weather.

[*Euston square, London:* ill1.jpg]

As Melrose should be seen by the fair moonlight, so Euston, to be viewed to advantage, should be visited by the gray light of a summer or spring morning, about a quarter to six o'clock, three-quarters of an hour before the starting of the parliamentary train, which every railway, under a wise legislative enactment, is compelled to run “once a-day from each extremity, with covered carriages, stopping at every station, travelling at a rate of not less than fifteen miles an hour, at a charge of one-penny per mile.” We say wise, because the competition of the Railway for goods, as well as passengers, drove off the road not only all the coaches, on which, when light-loaded, foot-sore travellers got an occasional lift, but all the variety of vans and broad-wheeled waggons which afforded a slow but cheap conveyance between our principal towns.

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At the hour mentioned, the Railway passenger-yard is vacant, silent, and as spotlessly clean as a Dutchman's kitchen; nothing is to be seen but a tall soldier-like policeman in green, on watch under the wooden shed, and a few sparrows industriously yet vainly trying to get breakfast from between the closely packed paving-stones. How different from the fat debauched-looking sparrows who thrive upon the dirt and waste of the old coach yards!

It is so still, so open; the tall columns of the portico entrance look down on you so grimly; the front of the booking-offices, in their garment of clean stucco, look so primly respectable that you cannot help feeling ashamed of yourself,—feeling as uncomfortable as when you have called too early on an economically genteel couple, and been shown into a handsome drawing-room, on a frosty day, without a fire. You cannot think of entering into a gossip with the Railway guardian, for you remember that “sentinels on duty are not allowed to talk,” except to nursery maids.

Presently, hurrying on foot, a few passengers arrive; a servant-maid carrying a big box, with the assistance of a little girl; a neat punctual-looking man, probably a banker's clerk on furlough; and a couple of young fellows in shaggy coats, smoking, who seem, by their red eyes and dirty hands, to have made sure of being up early by not going to bed. A rattle announces the first omnibus, with a pile of luggage outside and five inside passengers, two commercial travellers, two who may be curates or schoolmasters, and a brown man with a large sea-chest. At the quarter, the scene thickens; there are few Hansoms, but some night cabs, a vast number of carts of all kinds, from the costermonger's donkey to the dashing butcher's Whitechapel. There is very little medium in parliamentary passengers about luggage, either they have a cart-load or none at all. Children are very plentiful, and the mothers are accompanied with large escorts of female relations, who keep kissing and stuffing the children with real Gibraltar rock and gingerbread to the last moment. Every now and then a well-dressed man hurries past into the booking-office and takes his ticket with a sheepish air as if he was pawning his watch. Sailors arrive with their chests and hammocks. The other day we had the pleasure of meeting a travelling tinker with the instruments of his craft neatly packed; two gentlemen, whose closely cropped hair and pale plump complexion betokened a recent residence in some gaol or philanthropic institution; an economical baronet, of large fortune; a prize fighter, going down to arrange a little affair which was to come off the next day; a half-pay officer, with a genteel wife and twelve children, on his way to a cheap county in the north; a party of seven Irish, father, mother, and five grown-up sons and daughters, on their way to America, after a successful residence in London; a tall young woman and a little man, from Stamford, who had been up to

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London to buy stone bottles, and carried them back rattling in a box; a handsome dragoon, with a very pretty girl,—her eyes full of tears,—on his arm, to see him off; another female was waiting at the door for the same purpose, when the dragoon bolted, and took refuge in the interior of the station. In a word, a parliamentary train collects,—besides mechanics in search of work, sailors going to join a ship, and soldiers on furlough,—all whose necessities or tastes lead them to travel economically, among which last class are to be found a good many Quakers. It is pleasing to observe the attention the poor women, with large families and piles of packages, receive from the officers of the company, a great contrast to the neglect which meets the poorly clad in stage-coach travelling, as may still be seen in those districts where the rail has not yet made way.

We cannot say that we exactly admire the taste of the three baronets whom a railway superintendent found in one third-class carriage, but we must own that to those to whom economy is really an object, there is much worse travelling than by the Parliamentary. Having on one occasion gone down by first-class, with an Oxford man who had just taken his M.A., an ensign of infantry in his first uniform, a clerk in Somerset House, and a Manchester man who had been visiting a Whig Lord,—and returned third-class, with a tinker, a sailor just returned from Africa, a bird-catcher with his load, and a gentleman in velveteens, rather greasy, who seemed, probably on a private mission, to have visited the misdemeanour wards of all the prisons in England and Scotland; we preferred the return trip, that is to say, vulgar and amusing to dull and genteel. Among other pieces of information gleaned on this occasion, we learned that “for a cove as didn’t mine a jolly lot of readin and writin, Readin was prime in winter; plenty of good vittles, and the cells warmed.”

It must be remarked that the character of the Parliamentary varies very much according to the station from which it starts. The London trains being the worst, having a large proportion of what are vulgarly called “swells out of luck.” In a rural district the gathering of smock-frocks and rosy-faced lasses, the rumbling of carts, and the size, number, and shape of the trunks and parcels, afford a very agreeable and comical scene on a frosty, moonlight, winter’s morning, about Christmas time, when visiting commences, or at Whitsuntide. No man who has a taste for studying the phases of life and character should fail to travel at least once by the Parliamentary.

The large cheap load having rumbled off from the south side of the station, about nine o’clock preparations are commenced for the aristocratic Express, which, on this line, is composed of first-class carriages alone, in which, at half the price of the old mail coach fares, the principal stations on the line are reached at railway speed.

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To attend the departure of this train, there arrive not only the republican omnibi and cabs, from the damp night crawler to the rattling Hansom, but carriages, with coronets and mitres emblazoned, guarded by the tallest and most obsequious of footmen, and driven by the fattest and most lordly of coachmen; also the neatest of broughams, adorned internally with pale pink and blue butterfly bonnets; dashing dogcarts, with neat grooms behind, mustached guardsmen driving; and stately cabriolets prance in, under the guidance of fresh primrose-coloured gloves.

But, although the passengers by the Express train are, in every respect, a contrast to those by the Parliamentary, the universal and levelling tendency of the railway system is not less plainly exhibited.

The earl or duke, whose dignity formerly compelled him to post in a coupe and four, at a cost of some five or six shillings a mile, and an immense consumption of horse-flesh, wax-lights, and landladies' curtsies on the road, now takes his place unnoticed in a first-class carriage next to a gentleman who travels for a great claret and champagne house, and opposite another going down express to report a railway meeting at Birmingham for a morning paper. If you see a lady carefully and courteously escorted to a carriage marked "engaged," on a blackboard, it is probably not a countess but the wife of one of the principal officers of the company. A bishop in a greatcoat creates no sensation; but a tremendous rush of porters and superintendents towards one carriage, announces that a director or well-known engineer is about to take his seat. In fact, civility to all, gentle and simple, is the rule introduced by the English railway system; every porter with a number on his coat is, for the time, the passenger's servant. Special attention is bestowed on those who are personally known, and no one can grumble at that. Some people, who have never visited the continent, or only visited it for pleasure, travelling at their leisure, make comparisons with the railways of France and Germany, unfavourable to the English system. Our railways are dearer than the foreign, so is our government, —we make both ourselves; but compare the military system of the continental railways; the quarter of an hour for admission before the starting of the train, during which, if too early or too late, you are locked out; the weighing of every piece of baggage; the lordly commanding airs of all the officials if any relaxation of rules be required; the insouciance with which the few porters move about, leaving ladies and gentlemen to drag their own luggage;—compare all this with the rapid manner in which the loads of half-a-dozen cabs, driving up from some other railway at the last moment, are transferred to the departing Express; compare the speed, the universal civility, attention, and honesty, that distinguish our railway travelling, and you cannot fail to come to the conclusion that for a commercial people to whom time is of value, ours is the best article, and if we had not been a lawyer-ridden people we might also have had the cheapest article.

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Before starting the Express train, we must not fail to note one new class of passengers, recruited by the speed of railways, viz., the number of gentlemen in breeches, boots, and spurs, with their pinks just peeping from under their rough jackets, who, during the season, get down to Aylesbury, Bletchley, and even Wolverton, to hunt, and back home again to dinner. But the signal sounds. The express train moves off; two gentlemen at the last moment are, in vain, crying out for Punch and the Times, while an unheeded hammering at the closed door of the booking-office announces that somebody is too late. There is always some one too late. On this occasion it was a young gentleman in a pair of light top-boots, and a mamma and papa with half-a-dozen children and two nursery-maids in a slow capacious fly.

We cannot bestow unqualified praise upon the station arrangements at Euston. Comfort has been sacrificed to magnificence. The platform arrangements for departing and arriving trains are good, simple, and comprehensive; but the waiting-rooms, refreshment stand, and other conveniences are as ill-contrived as possible; while a vast hall with magnificent roof and scagliola pillars, appears to have swallowed up all the money and all the light of the establishment.

The first-class waiting-room is dull to a fearful degree, and furnished in the dowdiest style of economy. The second-class room is a dark cavern, with nothing better than a borrowed light.

The refreshment counters are enclosed in a sort of circular glazed pew, open to all the drafts of a grand, cold, uncomfortable hall, into which few ladies will venture.

A refreshment-room should be the ante-room to the waiting-room, and the two should be so arranged with reference to the booking-office and cloak-rooms, that strangers find their way without asking a dozen questions from busy porters and musing policemen.

Euston Station reminds us of an architect's house, where a magnificent portico and hall leads to dungeon-like dining-room, and mean drawing-room. Why are our architects so inferior to our engineers?

On the platform is the door of the telegraph office, which also has offices for receiving and transmitting messages at all the principal stations.

THE MIXED TRAIN.

The Mixed train on this line holds an intermediate rank between the Parliamentary and the Express, consisting as it does of first and second-class carriages, at lower fares than the one and higher than the other, stopping at fewer stations than the Parliamentary, and at more than the Express; but worth notice on the present occasion, because it is by these trains only that horses and carriages are allowed to be conveyed.

Carriages require very careful packing on a truck. At the principal stations this may be very well left to the practised porters, but at road-side stations it is a point which should be looked to; for it has not unfrequently happened that the jogging, lateral motion of the railway has heated the axles of a carriage or truck, so that at the end of the journey the wheels have been found as fast as if they had been welded, and quite unfit to travel.

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Travelling in a carriage on a truck is by no means safe: some years since Lady Zetland and her maids were nearly burned to death, sparks from the engine having set fire to their luggage. The maid threw herself off the truck, and had an extraordinary escape.

The arrangements of the boxes for carrying horses are now very complete, and when once a horse, not of a naturally nervous disposition, has been accustomed to travel by rail, it will often be found better to take him on to hunt at a distance than to send him overnight to a strange place with all the disadvantages of change of food, and temptations to neglect in the way of the groom. It is, however, a class of traffic to which few of the railway companies have paid much attention; yet, in our opinion, capable of great development under a system of moderate fares, and day tickets. The rates are not always stated in the time tables, but on the London and North Western a day ticket for a horse costs fourteen shillings for thirty miles.

Besides horses, packs of hounds, and even red deer are occasionally sent by rail. But deer travel in their own private carriages. Hounds are generally accompanied by the huntsman, or whip, to keep them in order. And on the Great Western line a few years ago a huntsman was nearly stifled in this way. The van had been made too snug and close for travelling comfortably with twenty couple of warm fox-hounds.

If there is the slightest doubt about a horse entering the van quietly, the best way is to blindfold him before he becomes suspicious. Among other pursuits, horse racing has been completely revolutionised by the rail. The posting race-horse van was a luxury in which only the wealthiest could indulge to a limited extent, but now the owner of a string of thoroughbreds, or a single plater, can train in the South or the North, and in four and twenty hours reach any leading course in the kingdom; carrying with him, if deemed needful, hay, straw, and water.

As we move slowly off toward Camden Station, by the fourth of the eighteen passenger trains which daily depart from Euston, and emerging with light whirl along within sight of rows of capital houses, whose gardens descend to the edge of the cuttings, we are reminded that under the original act for taking up Euston, it was specially provided, at the instance of Lord Southampton, that no locomotive should be allowed to proceed further to the south than Camden Town, lest his building land should remain neglected garden land for ever. This promise was accepted with little reluctance by the company, because in 1833 it was popularly considered that the ascent to reach Camden Town could not be easily overcome by a heavily loaded locomotive. Consequently a pair of stationary engines were erected at Camden Town, and a pair of tall chimneys to carry off their smoke and steam.

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But the objections in taste, and difficulties in science, have vanished. On this line, as on all others, tenants are readily found for houses fringing a cutting; locomotives run up even such ascents as the Bromsgrove Lickey, between Worcester and Birmingham, with a load of 500 tons. So ten minutes have been saved in time, and much expense, by doing away with the rope traction system. The stationary engines have been sold, and are now doing duty in a flax mill in Russia, and the two tall columns, after slumbering for several years as monuments of prejudices and obstacles overcome, were swept away to make room for other improvements.

It is, however, very odd, and not very creditable to human nature, that whenever a railway is planned, the proprietors are assailed by unreasonable demands for compensation, in cases where past experience has proved that the works will be an advantageous, and often an ornamental addition.

In 1846 a Sheffield line was vehemently opposed by a Liverpool gentleman, on the ground that it would materially injure the prospect from a mansion, which had been the seat of his ancestors for centuries. The tale was well told, and seemed most pitiful; an impression was produced on the committee that the privacy of something like Hatfield, or Knebworth, was about to be infringed on by the “abominable railway.” A stiff cross-examination brought out the reluctant fact, however, that this “house of my ancestors,” this beautiful Elizabethan mansion had been for many years let as a Lunatic Asylum at 36 pound per annum.

In another instance a railway director sold a pretty country seat, because the grounds were about to be intersected by a railway embankment; two years after the completion of the railway he wished to buy it back again, for he found that his successor, by turfing and planting the slope, had very much increased the original beauty of the gardens.

CAMDEN STATION.

But thus gossiping, we have reached Camden Station, and must take advantage of an unusual halt to look into the arrangements for building waggons and trucks, and conveying coals, merchandise, goods, and all live stock included between pigs and bullocks.

Not without difficulty did Mr. Robert Stephenson succeed in inducing the directors to purchase thirty acres of land here; it was only by urging, that, if unused, the surplus could be sold at a profit, that he carried out his views. Genius can foresee results which, to ordinary capacities, are dark and incomprehensible. Since 1845 it has been found necessary to take in an additional plot of three more acres, all now fully occupied.

In no respect were the calculations of parties engaged in the construction of railways more at fault than with regard to the station accommodation needed for goods traffic,

which, on the principal lines, has added full twenty-five per cent. to the original estimates. George Stephenson calculated the cost of getting over Chat Moss at 40,000 pounds; his opponent proved that it would cost four hundred thousand: but it was executed at exactly the sum Stephenson set down, while the capital involved in providing Station Room for merchandise at Liverpool and at Manchester, has probably exceeded the original estimate for the whole line.

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On this railway the increase of the goods traffic has been of very recent date. At a very early period after the opening of the line, the merchandise department became the monopoly of the great carriers, who found it answer their purpose to divide the profits afforded by the discount allowed to carriers by the railway company, without seeking to develop an increase of occupation. Under this system, while carriers grew rich, the goods traffic remained stationary. But when the amalgamation with the Grand Junction, which had always been its own carrier, took place, a great reduction in rates was made, as well as arrangements for encouraging the conveyance of every kind of saleable article. The company became a common carrier, but employing Messrs. Pickford, and Chaplin and Horne to collect goods.

The result was a marvellous increase, which has been progressing ever since.

A regular trade is now carried on between London and the most remote parts of the kingdom in every conceivable thing that will bear moving. Sheep have been sent from Perth to London, and Covent Garden has supplied tons of the finer description of vegetables to the citizens of Glasgow; every Saturday five tons of the best fish in season are despatched from Billingsgate to Birmingham, and milk is conveyed in padlocked tins, from and beyond Harrow, at the rate of about one penny per gallon. In articles which are imported into both Liverpool and London, there is a constant interchange, according to the state of the market; thus a penny per pound difference may bring a hundred chests of congou up, or send as many of hyson down the line. All graziers within a day of the rail are able to compete in the London market, the probability of any extraordinary demand increases the number of beasts arriving weekly at Camden Station from the average of 500 to 2000, and the sheep from 2000 to 6000; and these animals can be brought from the furthest grazing grounds in the kingdom without any loss of weight, and in much better condition than the fat oxen were formerly driven to Smithfield from the rich pastures round Aylesbury, or the Valley of the Thames.

Camden station, under the alterations effected in 1848-9, has a double line, for goods waggons only, 2,500 feet in length, entirely clear of the main line. The length of single lines, exclusive of the main line, exceeds twelve miles.

To describe it in detail would be a very unsatisfactory task; because, in the first place, it can ill be understood without a map, and in the next, changes are constantly taking place, and still greater changes will be forced on the company by the increase of goods traffic, which, great as it is, is only in its infancy. Even now freights are paid to the London and North Western for all the way to China. But, as an agricultural implement of commerce, the locomotive has been comparatively as little used as the stationary engine, although hundreds of trades of a semi-rural character are drawing toward the railway lines, and away from the country towns, which were formerly the centre of rural commerce, because standing on the highways or near canals. But such a revolution can only be effected slowly.

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At Camden will be found a large yard for the reception of the Midland Counties' coal, the introduction of which has had a considerable effect in bringing down the price of sea-borne coal.

The cattle pens have lately been altered and enlarged. Just before Christmas this place is almost as amusing and exciting as a Spanish bull-fight; although, as a general rule, the silence of a place where, during every quarter of an hour, of day and night, so enormous a business is being carried on, is very surprising.

Twenty-four steam waggon horses, or engines, for heavy loads are kept in a circular engine-house, or stable, 160 feet in diameter, with an iron roof. This form renders every engine accessible at a moment's notice. The steam race-horses for the passenger work are kept in an oblong building opposite the carters. The demand being more regular, there is no need for the expensive circular arrangement of stables for this class of engines. In a large boiler-house, boiling water and red-hot coke are kept ready night and day, so that on the occasion of any sudden demand no time need be lost in getting up steam. There is besides a waggon-building department, a shop for executing such trifling repairs in the locomotives as need no reference to the great workshop at Wolverton. The passenger carriages are most of them built at Euston station, by Mr. Wright.

The carrying department is very conveniently situated close to the Regent's Canal, so as to have easy communication with inland as well as sea navigation. A series of sheds occupy an area of 135,000 superficial feet, and the platforms to receive goods from railway trucks on one side and from waggons on the other, occupy 30,000 feet. These platforms and sheds are provided with 110 cranes, for loading and unloading, with a power varying from one ton and a half to twenty tons. By these appliances, work of the most miscellaneous character goes on all day, and part of the night.

The railway trucks and waggons are moved about by horses: it is amusing to see the activity with which the heavy brutes often bring a waggon up at a trot, jump out of the way just at the right moment, and allow the waggon to roll up to the right spot by its own momentum.

The horses are lodged in stables in the underground vaults, which we cannot commend, as they are dark, damp, full of draughts, and yet ill ventilated; but it was necessary to use these vaults, and difficult to find stabling for such a number of horses close at hand.

The carrying department at Camden is very miscellaneous, and moves everything, from the contents of a nursery ground to a full grown locomotive, but they do not impress a stranger so much as the arrangements at Manchester and Liverpool. The annual consumption of gas at Camden exceeds six million cubic feet.

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Under the railway system the certainty and rapidity with which merchandise can be transmitted, changes and simplifies more and more every year the operations of trade. For instance, Southampton is the great port for that part of our Indian, South American, and Mediterranean trade which is conducted by steamers. When a junction has been effected between the London and North Western and the South Western, costly packages of silk, muslin, gold tissue, jewellery, may be sent under lock from the Glasgow manufacturers to the quay alongside at Southampton in a few hours, without sign of damage or pilferage, and at the last moment before the departure of the steamer. The communication between the docks on the Thames and Camden Town, will enable a grocer in Manchester to have a hogshead of sugar or tobacco sent in answer to a letter by return of post, at a saving in expense which may be imagined from the fact, that it costs more to cart a butt of sherry from the London Docks to Camden Town, than to send it by rail all the way to Manchester.

To provide for the enormous and annually increasing traffic in passengers and merchandise, there are:—

1 State carriage. 260 Horse boxes.
555 Locomotives and tenders. 132 Sheep vans.
494 First-class mails. 7385 Goods waggons.
420 Second-class carriages. 14 Trolleys.
342 Third-class. 1155 Cribb rails.
25 Post-offices. 5150 Sheets.
242 Carriages,—trucks for 162 Cart horses.
letters and newspapers. 41 Parcel carts.
201 Guards' brakes.
Making a grand total rolling stock of 10,663.

The passenger carriages afford eleven miles of seat room, and would accommodate 40,196 individuals, or the whole population of two such towns as Northampton.

The loading surface of the goods equals eleven acres, and would convey 40,000 tons.

If the tires of all the company's wheels were welded into one ring, they would form a circle of seventy-two miles.

To keep this rolling stock up in number and efficiency, there are two establishments, one at Camden Town, and one at Wolverton.

Camden Town is the great coach house of the line, where goods waggons are built and repaired in one division, where sound locomotives, carriages and trucks are kept ready for use in another.

The waggon building department of Camden is worth visiting, especially by railway shareholders.

Every one is interested in railways being worked economically, for economy gives low rates and increased profits, which both increase trade and multiply railways. Hitherto the details of carrying, especially as to the construction of waggons and trucks, have been much neglected.

On one line running north, it is said that the loss in cheese stolen by the railway servants, amounts to as much as the whole sum paid for carrying agricultural produce, and on the line on which we are travelling, breakages have sometimes amounted to 1,200 pounds a-month.

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The fact is, that railway carriers have been content to use rude square boxes on wheels, covered when loaded, if covered at all, with a tarpaulin, without any precautions for draining off the wet, to which it was constantly exposed when out of use,—without “buffers” or other protecting springs, so that the wear and tear of the waggon and its load, from inevitable shocks, was very great.

The imperfect protection of a tarpaulin was, and is, a great temptation to pilferage. These sources of expense, in wear and tear of conveyances, loss of tarpaulin coverings, each worth 6 pounds 6s., breakage, pilferage of goods, combine to sum up a formidable discount from the profits of railway carrying, and, in the case of certain goods, lead the owners to prefer the slower transit of a canal boat. Even iron suffers in market value from exposure to the weather; porcelain and glass are liable to perpetual smashes, on waggons without buffers, in spite of the most careful packing; while tea, sugar, cheese, and all untraceable eatables are pilfered to an enormous extent, besides more valuable goods.

It was hoped that railway transit would put an end to the dishonesty which was carried on wholesale on the canals; but, where open trucks are used, this expectation has been only partly realised, for the temptation of opportunity has been too strong, for even the superior class of men employed on railways.

In order to meet these evils, Mr. Henson, who has the charge of the waggon-building department at Camden, has built and patented a covered waggon with buffers, which unites with great strength, safety, capacity, and smoothness of motion. The scientific manner in which these waggons are framed, gives them strength in proportion to their weight. The buffers with which they are fitted, and the roof, protecting from the weather, render them altogether durable, and therefore economical; while the construction, as will be seen from our vignette, renders pilferage, unless by collusion with the respectable party who overlooks the unloading, almost impossible.

A diminution of the cost for repairs of rolling stock (on an average equal to 12 pounds per ann.), and of the cost for compensation to customers for breakage and pilferage, should be a leading object with every sensible railway director. Indeed these losses, with deadweight, and lawyer’s bills, are the deadly enemies of railway directors.

Further improvements in these waggons have been effected by the use of corrugated iron, which is light and strong at the same time; and the iron waggons have been again improved by employing iron covered with a thin coating of glass, under a new patent, which renders rust impossible and paint unnecessary. The simple contrivance by which the door and moveable roof is locked and unlocked by one motion, is worthy of the notice of practical men. 600 of these lock-up waggons, with springs and buffers, are in use on the London and North Western Railway.

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Mr. Henson has also succeeded in establishing a traffic in gunpowder, by inventing a carriage of sheet iron, lined with wood, in which four-and-a-half tons of gunpowder can be conveyed without fear of explosion either from concussion or external combustion.

The shops at Camden have room for building or repairing 100 waggons. They are to be seen in every stage of progress.

The great object is to combine strength with lightness. If the strength being the same, the saving of a ton can be effected in a waggon, it will amount to from thirty to ninety tons in an ordinary goods train. An important consideration, for deadweight is the great enemy of the railway, and ninety tons of useless weight is equivalent to a loss of 90 pounds in sending a goods train a journey to Birmingham. British oak is the favourite wood for the frames of railway waggons; teak, if of equal quality, is dearer, and the inferior is heavier, without being so strong. If in any of the many countries with which we trade a wood can be discovered as good and as cheap as English oak, the railways which are constantly extending their carrying stock, can afford a steady demand.

About the passenger carriages, which every one can see and examine for himself, there is not much to be said. On the Continent, where they cannot afford to use mahogany, they use sheet-iron and papier-machée for the panels; in England, mahogany chiefly in the first class. When we began, stage coaches were imitated; there are some of the old cramped style still to be seen on the Richmond line; then came enormous cages—pleasant in summer, fearfully cold in winter, without fires, which have not been introduced in England, although they are found in the north of Europe and America. A medium size has now come into favour, of which some fine specimens are to be seen in the Hyde Park Exhibition.

On the Great Northern line some second-class carriages have been introduced, varnished, without paint, and very well they look. Economy again, and the increase of branches, have led to the use of composite carriages for first and second-class passengers all on one body. These, which were in use years ago on the northern coal lines, are now revived and improved.

The Camden station has received an entirely new feature by the completion of the line to the docks and to Fenchurch Street, with stations at Islington, Hackney, and Bow. Already an immense omnibus traffic has been obtained—a sort of traffic which produces the same effect on engines as on horses. They are worn out rapidly by the continual stoppages. But horses show wear and tear directly, whereas iron and brass cannot speak except through increased expenses and diminished dividends.

Leaving Camden, at which trains stop only on arriving, we swiftly pass Kilburn, where an omnibus station is to be established for the benefit of the rising population of citizens, to Willesden, where the junction line through Acton to the South Western is to commence. Willesden has been rendered classic ground, for the Hero-worshippers

who take highwaymen within the circle of their miscellaneous sympathies, by Mr. Harrison Ainsworth's "Jack Sheppard,"—the "cage" where this ruffian was more than once confined still remains in its original insecurity.

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Sudbury affords nothing to detain us. The next station is within a mile of Harrow-on-the-Hill, with its beacon-like church spire. Rich pasture lies around, famous for finishing off bullocks fed in the north. Harrow school is almost as much one of the institutions of England as Oxford and Cambridge Universities. It is one of the great public schools, which, if they do not make the ripest scholars, make “men” of our aristocracy. This school was founded by one John Lyon, a farmer of the parish, who died in 1592.

[*Harrow-on-the-hill*: ill2.jpg]

Attached to it there are four exhibitions of 20 pounds each, and two scholarships of 50 pounds each.

The grand celebrity of the school rests upon the education of those who are not on the foundation. The sons of noblemen and wealthy gentlemen, who in this as in many other instances, have treated those for whose benefit the school was founded, as the young cuckoo treats the hedge sparrow. Among its illustrious scholars Harrow numbers Lord Byron and Sir Robert Peel.

An old saw runs: “Eton fops, Harrow gentlemen, Winchester scholars, and Westminster blackguards.”

Since the palmy days when Dr. Drury was master and Byron and Peel were pupils, Harrow has declined to insignificance, and been by the abilities of Dr. Wordsworth raised again. The term of Harrow gentlemen still deservedly survives, Harrow being still the gate through which the rich son of a parvenu family may most safely pass on his way to Oxford, if his father desires, as all fathers do in this country, that his son should amalgamate with the landed aristocracy.

At Pinner, the next station, we pass out of Middlesex into Hertfordshire.

Watford, a principal station, is within a mile of the town of that name, on the river Colne. Here Henry VI. encamped with his army before the battle of St. Albans. Cassiobury Park, a favourite spot for picnics, is close to the station. It was the opposition of the late proprietor, the Earl of Essex, that forced upon the engineer of the line the formidable tunnel, which was once considered an astonishing railway work,—now nothing is astonishing in engineering.

[*Viaduct over the river Colne*: ill3.jpg]

Near King's Langley we pass the Booksellers' Provident Retreat, erected on ground given by Mr. Dickenson, the great paper maker, who has seven mills on the neighbouring streams, and reach Boxmoor, only noticeable as the first station opened on the line.

[*Looking from the hill above box moor station towards Berkhamsted*: ill4.jpg]

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The next station is Berkhamsted. Cowper the poet was born here, his father was rector of the parish. Berkhamsted Castle is part of the hereditary property of the Prince of Wales and Duke of Cornwall. At this castle William the Conqueror, after the battle of Hastings, met the Abbot of St. Albans with a party of chiefs and prelates, who had prepared to oppose the Norman, and disarmed their hostility by swearing to rule according to the ancient laws and customs of the country. Having, of course, broken his oath, he bestowed the castle on his half-brother, Robert Moreton, Earl of Cornwall. King John strengthened the castle, which was afterwards besieged by the Dauphin of France. When Edward *iii.* created the Black Prince Duke of Cornwall, the castle and manor of Berkhamsted were bestowed upon him "to hold to him, and the heirs of him, and the eldest sons of the kings of England, and the dukes of the said place;" and under these words through civil wars and revolutions, and changes from Plantagenet to Tudor, from Tudor to Stuart, with the interregnum of a republic, an abdication, and the installation of the Brunswick dynasty. The castle is now vested in Albert Prince of Wales.

[*Berkhamsted station*: ill5.jpg]

The Chiltern Hills, including the Chiltern Hundreds, the only office under the crown always open to the acceptance of all without distinction of parties, lies within a short distance of Berkhamsted. Ashdridge Park, formerly the seat of the Duke of Bridgewater, the originator and author, with the aid of Brindley and Telford, of our great canal system, lies about a mile to the eastward. The scenery of the park and gardens are fine. The house is modern.

Tring station, a mile and a half from the town, may be reached from London, 31.5 miles, in less than an hour by the express train, and the traveller arrives in as wild a district as any in England. Three miles north of Tring lies the town of Ivinghoe, possessing a large cruciform church, worthy of a visit from the students of "Christian architecture," with an old sculptured timber roof, and containing a tomb with a Norman French inscription,—according to some the tomb of Henry de Blois, Bishop of Winchester, brother of King Stephen. At the Rose and Crown we are informed venison is to be had in perfection at moderate charges during the season. The station is the highest point on the line, being 420 feet above the sea, 300 above Camden Town, and 52 above Birmingham.

In the course of the Tring excavation in the gravel deposits above the chalk, the tusk and teeth of an elephant were found, and in crossing the Icknield or Roman Way, about thirty-three miles, were sixteen human skeletons, and several specimens of Roman pottery: two unique urns are now in the possession of the Antiquarian Society.

Two miles from Tring we pass from Hertfordshire into Buckinghamshire. It remains a disputed point whether the name of the county is derived from bucken or boccen, a deer, according to Spelman, or with Lysons, boc, a charter, or with Camden from bucken, beech trees, which, as in his time, still abound and flourish. Unfortunately the

state of agriculture does not allow the pastors of the country to take the ease and rest that was enjoyed by the celebrated Mr. Tityrus before the repeal of the Roman corn laws, an ease which has cost many an unfortunate schoolboy a flogging.

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Our next halt, Cheddington, is noticeable only because it stands on the fork, of which a short branch, nine miles in length, leads to Aylesbury.

AYLESBURY.

Aylesbury, standing on a hill, in the midst of one of the richest, if not the richest, tracts of pasture lands in England, is very ancient without being venerable. The right of returning two members to Parliament is found periodically profitable to the inhabitants, and these two MP's with a little lace, constitute its only manufactures. The loss of the coaching trade by the substitution of the railroad, was a great blow to its local prosperity.

Among other changes, the Aylesbury butchers often go to London to buy meat, which has passed in the shape of oxen through the town to ride to London.

The Berry field, said to be the best field in England, lies in the Vale of Aylesbury. The saying of "good land bad farmers," is not belied among the mass of those who meet in the markets of Aylesbury. With a few exceptions the farming is as bad as it can be, the farmers miserably poor, and the labourers ignorant to a degree which is a disgrace to the resident clergy and gentry. We had some experience of the peasantry during the railway surveys of 1846, 1847, and found them quite innocent of thinking and reading, with a timid hatred of their employers, and perfect readiness to do anything not likely to be found out, for a pot of beer. They get low wages, live low, and work accordingly. It was round Aylesbury, that for many years, the influence of the insolvent Duke of Buckingham was paramount.

To city sportsmen, Aylesbury has interest as the centre of Baron Rothschild's (stag) hunt; to politicians, because of great meetings of the country party held there.

We must not omit to notice the duck trade carried on by the poorer order of people round the town. They hatch the ducks under hens generally in their living rooms, often under their beds, and fatten them up early in spring on garbage, of which horse flesh not unfrequently forms a large part. The ducks taste none the worse if for the last fortnight they are permitted to have plenty of clean water and oats, or barleymeal. Most of the Aylesbury ducks never see water except in a drinking pan. The cheap rate at which the inferior grain can be bought has been a great advantage to these duck feeders.

The many means now open of reaching the best markets of the country will probably change the style and make the fortunes of a new race of Bucks farmers. Those of the present generation who have neither capital nor education can only be made useful by transplantation.



Returning from Aylesbury, and gliding out of the deep cuttings over a fine open country, we approach the Leighton Buzzard station, and see in the distance the lofty octagonal spire of the Leighton Buzzard church.

The town is half a mile from the station, and commands the attention of the church antiquary from its fine church and cross.

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The church, says a very competent authority on such matters, "is one of the most spacious, lightsome, and well-proportioned perpendicular churches, cruciform, with a handsome stone spire. The roof, stalls, and other wood-work very perfect. The windows, some ironwork, and other details, full of interest."

The cross stands in an open area in the centre of the market place, and is twenty-seven feet high above the basement, which is raised by rows of steps about five feet.

At Leighton Buzzard a branch line of seven miles communicates with *Dunstable*.

[*Leighton Buzzard*: ill6.jpg]

Dunstable is situated in the centre of the Dunstable Chalk Downs, where the celebrated Dunstable larks are caught which are made mention of in one of Miss Edgeworth's pretty stories. The manufactures are whiting and straw hats. Of an ancient priory, founded in 1131, by Henry I., and endowed with the town, and the privileges of jurisdiction extending to life and death, nothing remains but the parish church, of which the interior is richly ornamented. Over the altar-piece is a large painting representing the Lord's Supper, by Sir James Thornhill, the father-in-law of Hogarth. In a charity school founded in 1727, forty boys are clothed, educated, and apprenticed. In twelve almshouses twelve poor widows are lodged, and in six houses near the church, called the Maidens' Lodge, six unmarried gentlewomen live and enjoy an income of 120 pounds per ann. With this brief notice we may retrace our steps.

On leaving Leighton, within half a mile we enter a covered tunnel, and we strongly recommend some artist fond of "strong effects" in landscape to obtain a seat in a coupe forming the last carriage in an express train, if such are ever put on now, sitting with your back to the engine, with windows before and on each side, you are whirled out of sight into twilight and darkness, and again into twilight and light, in a manner most impressive, yet which cannot be described. Perhaps the effect is even greater in a slow than in an express train. But as this tunnel is curved the transition would be more complete.

At Bletchley the church (embowered in a grove of yews, planted perhaps when Henry VIII. issued his decrees for planting the archer's tree) contains an altar tomb of Lord Grey of Wilton, A.D. 1412. The station has now become important as from it diverge the Bedford line to the east, and the lines to Banbury and Oxford to the west.

A branch connects Bletchley with Bedford 16.25 miles in length, with the following stations:-

Fenny Stratford. LIDLINGTON.
Woburn sands. AMPHILL.
RIDGMOUNT. *Bedford*.

WOBURN AND BEDFORD.

Woburn is one of those dull places, neat, clean, and pretentious in public buildings, which are forced under the hot-house influence of a great political family.

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We pass it to visit Woburn Abbey, the residence of the Russell family, with its extensive and magnificent gardens, its model farms, its picture gallery, and other accessories of a great nobleman's country seat.

It was at Woburn that Francis, Duke of Bedford, held his sheep-shearing feasts, and by patronising, in conjunction with Coke of Norfolk and Mr. Western, improvements and improvers in agriculture and stock-breeding, did so much to promote agricultural improvement in this county, and to create that large class of wealthy educated agriculturists, which confers such great benefits on this country.

Now that every country gentleman has at least one neighbour who is, or professes to be, an agricultural improver, it is difficult to give an adequate idea of the benefit we have derived from the agricultural enthusiasm of the noblemen and gentlemen who first made the science of cultivating breeding fashionable, we must be excused the word, among a class which had previously been exclusively devoted to field sports or to town life. They founded that finest of all modern characters—the English country gentleman, educated, yet hearty, a scholar and a sportsman, a good farmer, and an intelligent, considerate landlord; happy to teach, and ready to learn, anything connected with a pursuit which he follows with the enthusiasm of a student and the skill of a practical man.

The other stations have nothing about them to induce a curious traveller to pause. Not so can we say of *Bedford*.

Bedford has been pauperised by the number and wealth of its charities. A mechanic, or small tradesman, can send his child if it be sick to a free hospital; when older to a free school, where even books are provided; when the boy is apprenticed a fee may be obtained from a charity; at half the time of apprenticeship, a second fee; on the expiration of the term, a third; on going to service, a fourth; if he marries he expects to obtain from a charity fund “a portion” with his wife, also educated at a charity; and if he has not sufficient industry or prudence to lay by for old age, and those are virtues which he is not likely to practise, he looks forward with confidence to being boarded and lodged at one of Bedford's fifty-nine almshouses.

The chief source of the charities of Bedford is derived from an estate of thirteen acres of land in the parish of St. Andrew, Holborn, London, bequeathed by Sir William Harpur, an alderman of that city, in the reign of Edward VI., for founding a free school for instructing the children of the town in grammar, and good manners. This land, now covered with valuable houses, produces some 16,000 pounds per annum.

On this fund there are supported, 1st. a Grammar School, with eighty boys on the foundation, and as many private boarders; a Commercial School, containing 100 to 150 boys; a National School, of 350 boys, where on the half holidays 170 girls are received, a regular Girls' School and an Infant School.

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Beside which, the girls in the hospital for poor children, another branch of the charity, are taught household duties, needlework, reading and writing. In these schools the children of all resident parishioners of Bedford's five parishes are entitled to receive gratuitous instruction. In the National School twenty-five boys are clothed from a fund left by Alderman Newton, of Leicester.

The Warden and Fellows of New College, Oxford, are visitors, and appoint the master and second master of the Grammar School. There are four masters, *viz.*, the head, with two assistant masters; a mathematical master, and a writing master. The scholars enjoy the advantage of eight exhibitions, of 80 pounds per annum each, six of which must be bestowed on town boys, the remaining two may go to boarders.

The cheap and good education attainable as a matter of right in this borough, have rendered it a favourite resort of half-pay officers and unbeneficed clergymen, blessed with large families.

The church of St. Paul is large, with a nave and a south aisle, divided by early English piers and arches. A stone pulpit, ornamented with gilt tracery, on a blue ground, has been removed in favour of an oak one, with the chancel. The church of St. Peter has an old Norman door, a fine antique front, and some curious stained glass in the windows.

John Bunyan, author of the "Pilgrim's Progress," was co-pastor in a Baptist Meeting House, in Mill-lane, from 1671 until his death in 1688. The chair in which he used to sit is still preserved in the vestry as a relic.

A few miles from Bletchley, is a forgotten, but once celebrated spot, Denbigh Hall, over which the traveller whirls without notice, yet worthy of remembrance, because it affords a name and date for tracing the march of railway enterprise.

In 1838, a gap in the intended railway from London to Birmingham extended from an obscure public-house, called Denbigh Hall, to Rugby. At either point travellers had to exchange the rail for the coach or chaise.

On June 28, 1838, when Queen Victoria was crowned, for days before the coronation, the coaches for the intermediate space were crammed; the chaises and post horses were monopolised, and at length, to cover thirty odd miles, every gig, standing waggon, cart, and donkey cart that could be obtained in the district, was engaged, and yet many were disappointed of their journey to London.

On this London and Birmingham line, in addition to, and without disturbing the ordinary traffic, 2,000 souls have been conveyed in one train, at the rate of thirty miles an hour.

Truly Queen Victoria can set the railway conquests of her reign against the glories of the war victories of Queen Anne and her grandfather, King George.

[*Denbigh hall bridge:* ill7.jpg]

THE BUCKS RAILWAY.

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A recent extension from Bletchley traverses Buckinghamshire, and by a fork which commences at Winslow, passes through Buckingham and Brackley to Banbury by one line, and by Bicester to Oxford by the other. We need not pause at Brackley or Winslow. Buckingham is notable chiefly as being on the road to Princely Palatial Stowe, the seat of the Buckingham family, now shorn of its internal glories in pictures, sculptures, carvings, tapestry, books, and manuscripts. Its grounds and gardens, executed on a great scale in the French style, only remain to delight the traveller; these would require, and have been often described in, illustrated volumes. Here we shall not dwell upon the melancholy scene of grandeur, power, and wealth frittered away in ignoble follies.

BANBURY.

Banbury is more celebrated than worth seeing. Commercial travellers consider it one of the best towns in England, as it is a sort of metropolis to a great number of thriving villages. Banbury cakes are known wherever English children are bred, and to them, where not educated in too sensible a manner, the Homeric ballad of—

“Ride a cock horse
To Banbury Cross,”

is sung. Unfortunately, the Puritans, in the time of Edward VI., pulled this famous cross down.

They were in great force there; for as Drunken Barnaby, in his tour, tells us:—

“There I found a Puritan one,
Hanging of his cat on Monday
For killing of a rat on Sunday.”

At Banbury was fought, after the English fashion, one of the great fights that preceded the carrying of the Reform Bill. Previous to that change, sixteen electors had the privilege of sending a member to Parliament.

During the Reform excitement six of these privileged gentlemen seceded from their usual compact, and determined to set up on their own account. For want of a better man, they pitched upon Mr. Easthope, of the Morning Chronicle, since that period, much to his own astonishment no doubt, pitchforked into a baronetcy. The old original M.P. was Colonel Hutchinson, the companion of Sir Robert Wilson in carrying off Lavalette. On entering the town, ten thousand Reformers set up such a howling, that Colonel Hutchinson, thinking his last hour at hand, drew a dagger. Upon which more groans and shrieks followed, with such threats as made it prudent for the friends of the Colonel to compel him to retreat. Under these circumstances, the streets of the town were



crammed full with an excited mob; the poll was opened; the six, amid tremendous plaudits, voted for Easthope, and Reform; the ten very discreetly staid at home, and thus, by six votes, a baronetcy was secured to the unopposed candidate.

It is droll to look back upon the movement which led public opinion to prefer a stockjobber to a gallant soldier.

Banbury manufactures horse girths and other kinds of webbing, as well as excellent ale. There are two inns, both good.

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The Buckinghamshire Railway has reduced the price of coal to the inhabitants from 22s. to 15s. per ton, on 150,000 tons per annum.

Bicester, commonly pronounced Bister, is thirteen miles by the road from Oxford, a town as ancient as the Heptarchy; famous for a well once sacred and dedicated to St. Edburgh, for its well attended markets and cattle fairs, and especially for its excellent ale. It is in the centre of a capital hunting country. The women make a little bone lace.

OXFORD.

Oxford is one of the great gates through which our rich middle classes send their sons to be amalgamated with the landed and titled aristocracy, who are all educated either there or at Cambridge.

To say of any one that he is an "Oxford man," at once implies that he is a gentleman, and when a well-looking, well-mannered, and even moderately endowed young gentleman has passed respectably through his curriculum at Christchurch or Magdalen, Balliol, Oriel, University, or any other of the correct colleges, it rests with himself whether he runs the race of public life in England on equal terms with the sons of the oldest of the titled and untitled aristocracy, even though his father were an eminent retired dust contractor, and his mother laundry maid or factory girl. But money alone won't do it, and the pretension, the display, the coxcombry permitted in a peer, must be carefully avoided by a parvenu. Thus Oxford interests classes who care very little for its educational, antiquarian, or architectural resources, as one of the institutions of the country by which any capable man may cut off his plebeian entail, and start according to the continental term "noble."

The material beauty of Oxford is great—the situation, in a rich valley bounded by softly flowing rivers, fine—the domes, and spires, and old grey towers rising in clusters, prepare the mind of the approaching traveller for the city where the old colleges and churches, planting out and almost composing it, afford at every bend of the long streets, at every turn of the narrow thoroughfares, some grand picture, or charming architectural effect; even our Quakers are proud of Oxford in England when they travel in America. Then Oxford is so decorously clean, so spotlessly free from the smoke of engines and the roar of machinery; the groves and gardens, and trim green turf seen through richly-carved and corbeled archways, give such a feeling of calm study, and pleasant leisure, that we will defy the bitterest radical and the sourest dissenter not to be softened and charmed by his first impressions.

To those who arrive prepared to be pleased, stored with associations of the past, fortunate enough to have leisure and introductions to some affable don long resident, and proud to display the treasures and glories of his beloved Alma Mater, Oxford affords for many days a treat such as no other city in the world can supply to an Englishman.

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The best known route from London is by the Great Western Railway, which, according to the original plan, would have passed close to the city. But all the University and ecclesiastical dignitaries were up in arms; they saw, in their mind's eye, the tender, innocent undergraduates flying from the proctor-guarded precincts, where modesty, virtue, and sobriety ever reign, to the vice-haunted purlieus of London, at all hours of the night and day. The proctors and professors triumphed; the railway was obliged to leave a gap of ten miles of common road between its invading, unhallowed course, and the sacred city; and great was the rejoicing in the Convocation Chamber, and many the toasts in the Senior Common Rooms to the health of the faithful sons of Oxon, who in Parliament had saved the city from this commercial desecration.

But as even Grosvenor-square was at length glad to admit gas after abiding longest of all in the genteel gloom of oil lamps, so was Oxford in the end glad to be put on a branch, as it could not be put on a main line; and now, beside the rail on which we are travelling, Worcester, Banbury, and Wolverhampton, and two roads to London and Birmingham are open to the wandering tastes of the callow youth of the University; as may be ascertained by a statistical return from the railway stations whenever a steeple-chase or Jenny Lind concert takes place in or near any of the towns enumerated.

The entrance from Bletchley is, perhaps, the finer, as rolling round a semicircle, we sweep into sight of the dome of Radcliffe Library and the spire of St. Mary's Church, descend, enter the city by the Cheltenham-road, and passing through an inferior suburb, reach the head of High-street, of which a great German art critic declared, "that it had not its equal in the whole world." Wide, long, and gently curving, approached from either end, it presents in succession the colleges of Lincoln, Brasenose, University, All Souls, Queen's, St. Mary's Church, with peeps of gardens with private houses, and with shops, which do not detract, but rather add, to the dignity and weight of the grand old buildings.

Having slowly sauntered up and down, and scanned the various characters peculiar to the City of Universities—as, for instance, an autocrat in the person of a Dean of Christchurch, a Principal of Balliol, or a Master of Jesus, a Proctor newly made, but already endowed with something of the detective police expression; several senior fellows, plump, shy, proud, and lazy—walking for an appetite, and looking into the fishmongers on their way to the parks; a "cocky" Master of Arts, just made, and hastening to call on all his friends and tradesmen to show off his new dignity, and rustle the sleeves of his new gown; three lads, just entered from a public school (last month they laid out tip in Mother Brown's tarts), on their way to order three courses and dessert at the Mitre, where very indifferent fare is provided for fashionable credit prices; a pale student, after Dr. Pusey's own heart, in cap and gown, pacing monk-like along, secretly telling his beads; a tuft (nobleman) lounging out of the shop of a tailor, who, as he follows his lordship to the door, presents the very picture of a Dean bowing to a Prime Minister, when a bishop is very sick.

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A few ladies are seen, in care of papas in caps and gowns, or mammas, who look as if they were Doctors of Divinity, or deserved to be. The Oxford female is only of two kinds—prim and brazen. The latter we will not describe; the former seem to live in perpetual fear of being winked at, and are indescribable.

From these street scenes, where the ridiculous only is salient, for the quiet and gentlemanly pass by unnoticed, while pompous dons and coxcombical undergraduates are as certain of attention as turkeycocks and bantams, we will turn into the solemn precincts of a few of the colleges.

At the head stands Christchurch in dignity and size, founded by Cardinal Wolsey, Pope Clement VII. consenting, in 1525, on the revenues of some dozen minor monasteries, under the title of Cardinal College. The fall of Wolsey—England's last Cardinal, until by the invitation of modern mediaeval Oxford, Pius IX. sent us a Wiseman—stopped the works. One of Wolsey's latest petitions to Henry was, "That his college at Oxford might go on." And by the King, after some intermediate changes, it was finally established as Christchurch.

The foundation now consists of a dean, eight canons, eight chaplains, a schoolmaster, an organist, eight choristers, and 101 students, of whom a considerable number are exhibitioners from Westminster School. It is in symbolism of these students that the celebrated Great Tom of Christchurch clangs each evening 101 times. Besides these students, there are generally nearly 1000 independent members, consisting of noblemen, gentlemen commoners, and commoners. To be a gentleman commoner of Christchurch, all other advantages being equal, is the most "correct thing" in the University; none can compete with them, unless it be the gentlemen commoners of Magdalen. The Christchurch noblemen, or tufts, are considered the leaders of fashion, whether it be in mediaeval furniture, or rat hunting, boating, or steeple-chase riding, old politics or new religions.

Among the illustrious men it claims as pupils are, Sir Philip Sydney and Ben Jonson, Camden and South, Bolingbroke and Locke, Canning and Sir Robert Peel, whom Oxford rejected. The front is in Aldate's-street, for which consult Mr. Spier's pretty guide card, the entrance under the lofty clock tower, whence, at ten minutes past nine every evening, the mighty tom peals forth his sonorous summons. The "Tom Gateway" leads into the quadrangle familiarly termed "quad," 264 feet by 261, the dimensions originally planned by Wolsey; but the buildings which bound it on three sides were executed after the destruction of the old edifice in the great civil wars from designs by Sir Christopher Wren in 1688.

The Hall on the south side is ancient; we ascend to it by a flight of steps under a handsome groined roof supported by a single pillar. The Hall is 115 feet long, 40 wide, and 50 high. The open roof of oak richly carved, decorated with the arms of Wolsey and Henry VIII. Other carvings adorn the fire-place and a fine bay window.

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On the sides of the rooms are hung a series of 120 portraits of ecclesiastics, poets, philosophers (these are few), statesmen, and noblemen, representing distinguished students of the College.

The dinner hour, when the dean and chief officers sit in state on the dais, masters and bachelors at the side tables, and undergraduates at the lower end, is an impressive sight, recalling feudal times. The feeding is the worst of any in Oxford, much to the advantage of the taverns and pastrycooks.

When in 1566 Queen Elizabeth visited Oxford, a play was performed before her in this hall by the students, in the course of which, "a cry of hounds belonging to themselves" having been counterfeited in the quadrangle, the students were seized with a sudden transport; whereat her Majesty cried out, "O excellent! these boys in very truth are ready to leap out of the window to follow the hounds."

Amid the many changes of taste and opinion since the days of Queen Bess, the love of hunting still prevails in Christchurch, not one of the least healthy tastes, in an age of perpetual competing work; and the Christchurch drag is one of the stock amusements anathematized toward the end and permitted at the beginning of every hunting term, for the glory of the chief tuft and the benefit of hard-reading men, who cannot waste their time in trotting from cover to cover dependent on the vagaries of such an uncertain animal as a fox, and are therefore content to hunt a "cad" armed with a red herring over the stiffest country he can pick.

After the Hall, the Kitchen should be visited. It is the most ancient part of the building, for Wolsey, with a truly ecclesiastical appreciation of the foundation of all sound learning, began with the kitchen, and it survived him. Agriculture, gardening, cooking, and confectionery, were among the civilizing arts brought to great perfection by religious houses and lost for a long period after the Reformation, which, like other strong medicines, cleared our heads at the expense of our stomachs.

In Wolsey's kitchen may be seen the huge gridiron on which our ancestors roasted sheep whole and prepared other barbarous disgusting dishes.

In the Peckwater Quadrangle are to be found the Library and the Guise collection of pictures, which contains curious specimens of that early school which the mad mediaevalists are now fond of imitating, and a few examples of the famous Italian masters who rose on the force of genius, which did not disdain study but did disdain imitation.

Wickliff was a warden, and Sir Thomas More a student, in Canterbury Hall, which was amalgamated in Wolsey's College.

The Chapel of Christchurch is the Cathedral of Oxford. The oldest parts belonged to the church of St. Frideswide's Priory, consecrated A.D. 1180. Wolsey pulled down fifty feet of the nave and adapted it to the use of his college. The stained glass windows, without which every Gothic cathedral has a bare, naked, cold appearance, and which were peculiarly fine, nearly all fell a sacrifice to puritanical bigotry.

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For the many curious and beautiful architectural features we must refer in this instance, as in all others, to the architectural guides, such as Parker's, with which every one who feels any interest in the subject will provide himself.

Leaving Christchurch by the Canterbury Gate up Merton-lane, we pass on one hand Corpus Christi, founded in the reign of Henry VIII., where Bishop Sewel, author of "The Laws of Ecclesiastical Polity," and Richard Hooker, a Protestant whom even a Pope praised, were bred; on the other, Oriel, where studied Walter Raleigh, one of England's greatest men, a poet and philosopher, soldier and statesman, mariner and historian; not guiltless, yet worthy of pity in his fall and long imprisonment, and of honour in his brave and Christian death,—the victim of the ever feeble treacherous Stuarts. What other line of kings has had the fate to sign away the lives of two such men as Raleigh and Strafford? Oriel also claims as students Prynne, who, with his libels and his ears, laid the foundation of our liberty of the press; Bishop Butler, whose "Analogy" showed how logic and philosophy could be applied to support the cause of Christian truth; Dr. Arnold, the reformer of our modern school system, whom Oxford persecuted during life and honoured in death; and lastly, the clever crotchety Archbishop Whateley, who has not only proved that Napoleon Bonaparte never existed, but that Mr. Gibbon Wakefield's bankrupt schemes of colonization were triumphant successes. Next we come to Merton, the most ancient of all the colleges, founded 7th January 1264. The oldest of its buildings now standing is the library, the oldest in England, erected 1377. Wickliff was a student of Merton. University College, which next falls in our way, claims to date from King Alfred, but has no charters so ancient as those of Merton. The buildings are not more early than Charles I., but the chapel contains some of Grinling Gibbons's best carvings, and a monument by Flaxman of Sir William Jones, who was a fellow of this University. The modern part, fronting High-street, is from the designs of Barry, the architect of the Palace of Westminster.

University College has one of the old customs, of which several are retained in Oxford, called "chopping at the tree." On Easter Sunday a bough is dressed up with flowers and evergreens, and laid on a turf by the buttery. After dinner each member, as he leaves the hall, takes up a cleaver and chops at the tree, and then hands over "largess" to the cook, who stands by with a plate. The contribution is, for the master half a guinea, the fellows five shillings, and other members half a crown each. In like manner, at Queen's College, which stands opposite University, on Christmas day a boar's head is brought into the hall in procession, while the old carol is sung—

The boar's head in hand bear I
Bedecked with bays and rosemary,
And I pray you, my masters, be merry.
Qui estis in convivio,
Caput apri deferō,
Reddens laudes Domino.

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While on New Year's day the bursar presents to every member a needle and thread with the words, "Take this and be thrifty." We have not been able to obtain a statistical return of the standing of the Queen's men in the books of the tradesmen of Oxford as compared with members of other colleges, but we recommend the question to Mr. Newdegate or some other Oxonian figure monger.

This college was founded by Philippa, queen of Edward *iii*. It was directed by the statutes that there should be twelve fellows and seventy poor scholars, who were to be summoned to dinner by the sound of a trumpet; when the fellows, clothed in scarlet robes, were to sit and eat, while the poor scholars, kneeling in token of humility, were to dispute in philosophy. The kneeling, disputing, and scarlet robes have been discontinued, but the trumpet still sounds to dinner. There are usually about 300 members on the books of this college.

Lower down the High-street is All-Souls, whose two towers are picturesque centres of most views of Oxford. The buildings are various in character and merit, and well worth examination. The grand court was designed by Hawksmoor rather on the principles of a painter than an architect; he wished it to make a good picture with the existing buildings, and he succeeded. All-Souls is composed entirely of fellows, who elect from other colleges gentlemen whose qualification consists in being "bene nati, bene vestiti, et moderater docti in arte musica."

With so easy a qualification as that of being well born, well dressed, and able to sing the Old Hundredth Psalm, Old King Cole, or Kilruddery, it may be imagined that All-Souls has never done anything to disturb the minds of kings, cabinets, or reviewers, or even of the musical critics. Pleasant gentlemanly fellows, when they do get into parliament it is usually as the advocates of deceased opinions. Had Joanna Southcote been genteel, the fellows of All-Souls and some other colleges would have continued Joanna Southcotians fifty years after her decease.

All-Souls, too, has its legend and its commemorative ceremony. The diggers of the foundations found in an old drain a monstrous mallard, a sort of alderman among wild ducks, thriving and growing fat amid filth. On being cooked he was found first-rate, and, in memory of this treasure-trove and of the foundation-day, annually on the 14th January the best mallard that can be found is brought in in state, all the mallardians chanting—

O the swapping swapping mallard, etc.

From Queen's we proceed to New College, built in the palmiest days of Gothic architecture by William of Wykeham, also architect of Windsor Castle and of Winchester Cathedral, of which he was bishop, as well as Chancellor of England under Edward *iii*. He was indeed a learned, pious, earnest man. "A worker-out of the glorious dreams he dreamed." According to his plan, a certain number of poor boys,

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of origin as humble as his own, were to receive a training in the best learning of the age; from these, the ablest were to be selected annually and sent to New College, with the enjoyment of such an income as would support them while studying philosophy and theology. At present, after a year's probation, youths at eighteen or nineteen become actual fellows, in enjoyment of an income varying from 190 to 250 pounds per annum, until such time as they marry or are provided with a college living.

"Wykeham laid the first stone of his new college on the 5th March 1380. Being finished, the first warden and fellows took possession of it April 14, 1386, at three o'clock in the morning." The original buildings consist of the principal quadrangle, containing the hall, chapel, and library, the cloisters, and the tower. Additions, quite out of keeping with the rich simplicity of the original design, were made by Sir Christopher Wren. The chapel, first shorn of its ancient splendour by puritan zeal, and since restored in mistaken taste, is still one of the most beautiful edifices of the kind in England,—perhaps in Europe. Weeks of study will not satisfy or exhaust the true student of Gothic architecture here. We trust that, sooner or later, some of the funds now spent on guttling and guzzling will be devoted to substituting facsimiles of ancient coloured glass for the painted mistakes of Sir Joshua Reynolds, and restoring the ancient glories of gilt and colour to the carved work.

If possible, the stranger should attend the service, when he will hear grand singing and accompanied by a magnificent organ. The silver gilt crozier of Wykeham, formerly studded with rich gems, is one of the few relics of value preserved by New College. Charles I. received the greater part of a rich collection of plate as a contribution to his military chest in the great civil war. This crozier interests, for, gazing on it, we are carried back five centuries, when it was not a bauble made in Birmingham, but a symbol of actual power and superior intelligence. The sceptre of a prince of a church which then absorbed almost all the intellect and all the learning of the age. The garden with its archery-ground, and the "Slupe," with its stables and kennels, complete what was meant to be a temple of sacred learning and active piety, but which has become a very Castle of Indolence, a sort of Happy Valley, for single men. Winchester School still retains its ancient character for scholarship. (It is said to be almost impossible to "pluck" a Wykehamist); but the foundation has been grossly abused, the elected being not poor boys but the sons of wealthy clergymen and gentlemen, as indeed they had need be, for, by another abuse, the parents of boys on the foundation have to pay about 40 pounds a-year for their board. But, when a boy, distinguished for diligence and ability among his fellows, has been, at eighteen or nineteen years, elected to a Fellowship of New College, his

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work for life is done,—no more need for exertion,—every incentive to epicurean rest. Fine rooms, a fine garden, a dinner daily the best in Oxford, served in a style of profusion and elegance that leaves nothing to be desired, wine the choicest, New College ale most famous, a retiring-room, where, in obsequious dignity, a butler waits on his commands, with fresh bottles of the strong New College port, or ready to compound a variety of delicious drinks, amid which the New College cyder cup and mint julep can be specially recommended. Newspapers, magazines, and novels, on the tables of both the junior and senior common rooms, and a stable for his horse and a kennel for his dog, form part of this grand club of learned ignorance. And so, in idle uselessness, he spends life, unless by good fortune he falls in love and marries; even then, we pity his wife and his cook for the first twelve months,—or, by reaction, flies into asceticism and becomes a father of St. Philip Neri or a follower of Saint Pusseycat.

But, after all this virtuous remonstrance on the misdirection of William of Wykeham's noble endowment, we must own that, of our Oxford acquaintance, none are more agreeable than those New College fellows of the old school, “who wore shocking bad hats and asked you to dinner.” Much better than the cold-blooded “monks without mass” who are fast superseding them, just as idle and more ill-natured.

From New College we will go on to Magdalen, the finest—the wealthiest of all: it cannot be described, it must be seen; with its buildings occupying eleven acres and pleasure-grounds a hundred acres, its tower whereon every May morning at daybreak a mass used to be and a carol is still sung, and its deer-park. Here we may say, as of New College, is too much luxury for learning.

The sons of dukes have become mathematicians; we have known an attorney's clerk, the son of a low publican, become an accomplished linguist in his leisure hours,—but such men are mental miracles, almost monsters: a fellow of Magdalen or New College who works as hard as other men deserves to be canonized.

We have not space to say anything of the other Colleges. St. John's is noted for its gardens, Pembroke because Samuel Johnson lodged there for as long a space as his poverty would permit.

The Colleges visited, we proceed to “The Schools,” which contain the Bodleian Library, founded by Sir Thomas Bodley in 1573, and by bequests, gifts from private individuals, by the expenditure of a sum for the last seventy years out of the University chest, and the privilege of a copy of every new British publication, has become one of the finest collections in Europe; especially rich in Oriental literature. The books are freely open to the use of all literary men properly introduced, and the public are permitted to view the rooms three times a week.

The Picture Gallery contains a collection of portraits of illustrious individuals connected with the University, by Holbein, Vandyke, Kneller, Reynolds, Wilkie, and others. Among these are Henry VIII., the Earl of Surrey, and Sir Thomas More, by Holbein. Among the sculptures are a bust of the Duke of Wellington by Chantrey, and a brass statue of the Earl of Pembroke, Chancellor of the University from 1616 to 1630, which is said to have been executed from a design by Rubens.

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There is also a chair made from timber of the ship in which Drake sailed round the world, and the lantern of Guy Fawkes.

On the ground floor are the Arundel marbles, brought from Smyrna in the seventeenth century by the earl of that name.

The Theatre, close at hand, built by Sir Christopher Wren, will contain three thousand persons, and should be seen to be appreciated when crowded by the elite of the University and of England, on the occasion of some of the great Oxford festivals, when the rich costumes of the University, scarlet, purple, and gold, are set off by the addition of England's beauty not unadorned; as, for instance, on the last visit of the Queen and Prince Albert.

The Clarendon Press, built from designs of Vanbrugh out of the profits of the University (garbled) edition of "Clarendon's History of the Great Rebellion," and the Ashmolean Museum, where may be seen the head of the dodo, that extinct and deeply to be regretted bird, are close at hand, as also the Radcliffe Library, from the dome of which an excellent view of the city may be obtained.

The University Galleries, which present an imposing front to St. Giles-street, contain, beside antique sculpture, the original models of all Chantrey's busts, and a collection of original drawings of Michael Angelo and Raffaele, made by Sir Thomas Lawrence, and purchased after his death by the University, the present Earl of Eldon contributing two-thirds of the purchase-money.

CONSTITUTION AND COSTUME OF THE UNIVERSITY OF OXFORD.

The University is a corporate body, under the style of "The Chancellor, Masters, and Scholars of the University of Oxford." It includes nineteen Colleges and five Halls, each of which is a corporate body, governed by its own head and statutes respectively.

The business of the University, as such, is carried on in the two Houses of Convocation and of Congregation; the first being the House of Lords, and the other, which includes all of and above the rank of Masters of Arts, the House of Commons.

The Chancellor—elected by Convocation, for life—never, according to etiquette, sets his foot in the University, excepting on occasions of his installation, or when accompanying Royal visitors. He nominates as his representative a Vice Chancellor from the heads of colleges, annually, in turn, each of whom holds his office for four years.

The Vice Chancellor is the individual who may occasionally be seen walking about in state, preceded by a number of beadles carrying maces, or, as they are profanely called, “pokers.”

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The two proctors are next in authority to the Vice Chancellor. Their costume is a full dress gown, with velvet sleeves, and band-encircled neck. They are assisted by two deputies, or pro-proctors, who have a strip of velvet on each side of the gown front, and wear bands. The proctors have certain legislative powers; but are most conspicuous as a detective police force, supported by “bulldogs,” *i.e.*, constables. A proctor is regarded by an undergraduate, especially by a fast man, with the same affection that a costermonger looks on a policeman. In the evenings, it is their duty to prowl round, and search, if necessary, any house within three miles, for so far does their authority extend. The dread of the proctor compels tandem drivers to send their leaders a distance out of town; and many an excited youth, on the day of a neighbouring steeplechase, is stopped, when driving out of the city, with—“Your name, sir, and of what college?”

“Lord R. Christchurch.”

“Go back to your rooms, my lord, and call on me in an hour at Worcester.”

The members of the University are divided into those who are on the foundation and those who are not. Those on the foundation are the dean, president, master, warden, according to the charter of the College; the fellows, scholars, called demies at Magdalene, and post-masters at Merton; chaplains, bible-clerks, servitors, at Christchurch and Jesus. The qualifications for these advantages vary; but leading colleges—Oriel and Balliol—have set an example likely to be followed of throwing fellowships and scholarships open to the competition of the whole university, so that the best man may win. The disadvantage of the system lies in the fact, that having won, the incentives are all in the direction of idleness.

The degree was formerly obtained by passing first through a preliminary examination termed a “little go,” and afterwards through the “great go.” The latter, successfully performed, entitles, at choice, to the title of B.A. (Bachelor of Arts), or S.C.L. (Student of Civil Law). With time and money, the degrees of M.A. or B.C.L., and eventually D.C.L., may be obtained, without farther examination. But very recently an intermediate examination has been imposed.

A candidate for a degree in music has only to perform an exercise previously approved by the professor of music in the music schools.

Doctors of Divinity and Masters of Arts wear a stuff gown, with two long sleeves, terminating in a semicircle. The full dress of Doctors of Divinity is scarlet, with sleeves of black velvet—pink silk for Doctors of Law and Medicine.

Bachelors wear a black stuff gown, with long sleeves tapering to a point, and buttoned at the elbow; noblemen undergraduates a black silk gown, with full sleeves, “couped” at the elbows, and a velvet cap with gold tassel; scholars the same shaped gown, of a



common stuff, with ordinary cloth cap; gentlemen commoners a silk gown with plaited sleeves, and velvet cap; if commoners, a plain black gown without sleeves, which is so hideous that they generally carry it on their arm.

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The expense of maintaining a son at the University may be fixed at from 200 pounds, as a minimum, to 300 pounds a-year; the latter being the utmost needful. But a fool may spend any amount, and get nothing for it. The fashion of drinking has gone out to a great extent; and the present race of undergraduates are not more random and extravagant than any set of young men of the same age and number would be if thrown together for two or three years.

At the same time, it is not the place to which a father to whom economy is an object should send a son, least of all one previously educated on the milk and water stay-at-home principle.

As a general rule, it is not among the nobility, and sons of the wealthy gentry, that much excess is found to prevail; but among those who at the University find themselves for the first time without control, with money and with credit at command.

In a summer or autumnal visit, Christchurch Meadow, and some of the many beautiful walks round Oxford, should be sought out and visited alone; on such occasions, on no account be tormented with one of the abominable parrot-like guides. These horrid fellows consider it their duty to chatter. We have often thought that a dumb guide, with a book for answering questions, would make a great success.

In winter, when the flooded meadows are frozen over, those who love to see an army of first-class skaters will find an Oxford day ticket well worth the money—youth, health, strength, grace, and manly beauty, in hundreds, cutting round and round, with less of drawback from the admixture of a squalid mob than in any other locality.

And then again in the hunting season, take the ugliest road out of Oxford, by the seven bridges, because there you may see farthest along the straight highway from the crown of the bridges, and number the ingenuous youth as on hunters they pace, or in hack or in dogcart or tandem they dash along to the “Meet.” Arrived there, if the fox does get away—if no ambitious youngster heads him back—if no steeplechasing lot ride over the scent and before the hounds, to the destruction of sport and the master’s temper—why then you will see a fiery charge at fences that will do your heart good. There is not such raw material for cavalry in any other city in Europe, and there is no part of our social life so entirely novel, and so well worth exhibiting to a foreigner, as a “Meet” near Oxford, where in scarlet and in black, in hats and in velvet caps, in top-boots and black-jacks, on twenty pound hacks and two hundred guinea hunters, finest specimens of Young England are to be seen.

On returning, if the sport has been good, you may venture to open a chat with a well-splashed fellow traveller on a beaten horse, but in going not—for an Oxford man in his normal state never speaks unless he has been introduced.

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The only local manufactures of Oxford, except gentlemen, are boots, leather-breeches, and boats; these last in great perfection. The regattas and rowing-matches on the Isis are very exciting affairs. From the narrowness of the stream, they are rather chases than races; the winners cannot pass, but must pursue and bump their competitors. The many silent, solitary wherries, urged by vigorous skilful arms, give, on a summer evening, a pleasing life to river-side walks, although that graceful flower, the pretty pink bonnet and parasol, peculiar to the waters of Richmond and Hampton, is not often found growing in the Oxford wherry. Comedies, in the shape of slanging matches with the barges, are less frequent than formerly, and melodramatic fistic combats still less frequent.

But old boatmen still love to relate to their peaceable and admiring pupils how that pocket Hercules, the Honourable S—— C——, now a pious clergyman, had a single combat with a saucy six foot bargee, “all alone by they two selves,” bunged up both his eyes, and left him all but dead to time, ignorant then, and for months after, of the name of his victor.

Oxford sometimes contends with Cambridge on neutral waters in an eight-oared cutter match, but is generally defeated, for a very characteristic reason—Cambridge picks a crew of the best men from the whole University; Oxford, more exclusive, gives a preference to certain colleges over men. Christchurch, Magdalene, and a few others, will take the lead in all arrangements, and will not, if they can help it, admit oarsmen from the unfashionable colleges of Jesus, Lincoln, or Worcester!

It is worth knowing that in the long vacation, commencing on July 6, there is no place like Oxford for purchasing good dogs and useful horses. Oxford hacks have long been famous, and not without reason. Nothing slow would be of any use, whether for saddle or harness; and although the proportion of high-priced sound unblemished animals may be small, the number of quick runners is large. There is an establishment in Holywell Street which is quite one of the Oxford sights. There, early in winter mornings, more than a hundred stalls are to be found, full of blood cattle, in tip-top condition, and on summer afternoons no barracks of a cavalry regiment changing quarters are more busy.

We must not leave Oxford without visiting Blenheim, the monument of one of our greatest captains and statesmen, with whom, perhaps, in genius and fortune, none can rank except Clive and Wellington. Blenheim should be seen when the leaves are on the trees. The House is only open between eleven o'clock and one. The better plan is to hire a conveyance, of which there are plenty and excellent to be had in the city, at reasonable charges. When we remember this splendid pile—voted by acclamation, but paid for by grudging and insufficient instalments by the English Parliament—was finished under the superintendence of that beautiful fiery termagant,

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Sarah Duchess of Marlborough, who was at once the plague and the delight of the great Duke's life, every stone and every tree must be viewed with interest. We should advise you, before passing a day at Blenheim, to refresh your memory with the correspondence of the age of Queen Anne and her successors, including Swift, Bolingbroke, Pope, and Walpole; not forgetting the letters of Duchess Sarah herself, and Disraeli's "Curiosities of Literature," for the history of the building of Blenheim, and how the Duchess worried the unfortunate architect, Vanbrugh.

Blenheim contains a large number of first class paintings, including an altar-piece by Raffaele, several good Titians, a very fine collection of Rubens, choice specimens of Vandyke and Sir Joshua Reynolds. After returning to Bletchley our next halt is at Wolverton station.

WOLVERTON STATION.

Wolverton, the first specimen of a railway town built on a plan to order, is the central manufacturing and repairing shop for the locomotives north of Birmingham.

The population entirely consists of men employed in the Company's service, as mechanics, guards, enginemen, stokers, porters, labourers, their wives and children, their superintendents, a clergyman, schoolmasters and schoolmistresses, the ladies engaged on the refreshment establishment, and the tradesmen attracted to Wolverton by the demand of the population.

This railway colony is well worth the attention of those who devote themselves to an investigation of the social condition of the labouring classes.

We have here a body of mechanics of intelligence above average, regularly employed for ten and a-half hours during five days, and for eight hours during the sixth day of the week, well paid, well housed, with schools for their children, a reading-room and mechanics' institution at their disposal, gardens for their leisure hours, and a church and clergyman exclusively devoted to them. When work is ended, Wolverton is a pure republic—equality reigns. There are no rich men or men of station: all are gentlemen. In theory it is the paradise of Louis Blanc, only that, instead of the State, it is a Company which pays and employs the army of workmen. It is true, that during work hours a despotism rules, but it is a mild rule, tempered by customs and privileges. And what are the results of this colony, in which there are none idle, none poor, and few uneducated? Why, in many respects gratifying, in some respects disappointing. The practical reformer will learn more than one useful lesson from a patient investigation of the social state of this great village.

[*The Wolverton viaduct*: ill8.jpg]

Those who have not been in the habit of mixing with the superior class of English skilled mechanics will be agreeably surprised by the intelligence, information, and educational acquirements of a great number of the workmen here. They will find men labouring for daily wages capable of taking a creditable part in political, literary, and scientific discussion; but at the same time the followers of George Sand, and French preachers of proletarian perfection will not find their notions of the ennobling effects of manual labour realised.

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There are exceptions, but as a general rule, after a hard day's work, a man is not inclined for study of any kind, least of all for the investigation of abstract sciences; and thus it is that at Wolverton library, novels are much more in demand than scientific treatises.

In Summer, when walks in the fields are pleasant, and men can work in their gardens, the demand for books of any kind falls off.

Turning from the library to the mechanics' institution, pure science is not found to have many charms for the mechanics of Wolverton. Geological and astronomical lectures are ill attended, while musical entertainments, dissolving views, and dramatic recitations are popular.

It must be confessed that dulness and monotony exercise a very unfavourable influence on this comfortable colony. The people, not being Quakers, are not content without amusement. They receive their appointed wages regularly, so that they have not even the amusement of making and losing money. It would be an excellent thing for the world if the kind, charitable, cold-blooded people of middle age, or with middle-aged heads and hearts, who think that a population may be ruled into an every-day life of alternate work, study, and constitutional walks, without anything warmer than a weak simper from year's end to year's end, would consult the residents of Wolverton and Crewe before planning their next parallelogram.

We commend to amateur actors, who often need an audience, the idea of an occasional trip to Wolverton. The audience would be found indulgent of very indifferent performances.

But to turn from generalities to the specialities for which Wolverton is distinguished, we will walk round the workshops by which a rural parish has been colonised and reduced to a town shape.

* * * * *

Wolverton workshops.—To attempt a description of the workshops of Wolverton without the aid of diagrams and woodcuts would be a very unsatisfactory task. It is enough to say that they should be visited not only by those who are specially interested in machinery, but by all who would know what mechanical genius, stimulated as it has been to the utmost during the last half century, by the execution of profitable inventions, has been able to effect.

At Wolverton may be seen collected together in companies, each under command of its captains or foremen, in separate workshops, some hundreds of the best handicraftsmen that Europe can produce, all steadily at work, not without noise, yet without confusion. Among them are a few men advanced in life of the old generation; there are men of



middle age; young men trained with all the manual advantages of the old generation, and all the book and lecture privileges of the present time; and then there are the rising generation of apprentices—the sons of steam and of railroads. Among all it would be difficult to find a bad-shaped head, or a stupid face—as for a drunkard

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not one. It was once remarked to us by a gentleman at the head of a great establishment of this kind, that there was something about the labour of skilled workmen in iron that impressed itself upon their countenances, and showed itself in their characters. Something of solidity, of determination, of careful forethought; and really after going over many shops of ironworkers, we are inclined to come to the same opinion. Machinery, while superseding, has created manual labour. In a steam-engine factory, machinery is called upon to do what no amount of manual labour could effect.

To appreciate the extraordinary amount of intellect and mental and manual dexterity daily called into exercise, it would be necessary to have the origin, progress to construction, trial, and amendment of a locomotive engine from the period that the report of the head of the locomotive department in favour of an increase of stock receives the authorization of the board of directors. But such a history would be a book itself. After passing through the drawing-office, where the rough designs of the locomotive engineer are worked out in detail by a staff of draughtsmen, and the carpenters' shop and wood-turners, where the models and cores for castings are prepared, we reach, but do not dwell on the dark lofty hall, where the castings in iron and in brass are made. The casting of a mass of metal of from five to twenty tons on a dark night is a fine sight. The tap being withdrawn the molten liquor spouts forth in an arched fiery continuous stream, casting a red glow on the half-dressed muscular figures busy around, which would afford a subject for an artist great in Turner or Danby-like effects.

But we hasten to the steam-hammer to see scraps of tough iron, the size of a crown-piece, welded into a huge piston, or other instrument requiring the utmost strength. At Wolverton the work is conducted under the supreme command of the Chief Hammerman, a huge-limbed, jolly, good-tempered Vulcan, with half a dozen boy assistants.

The steam-hammer, be it known, is the application of steam to a piston under complete regulation, so that the piston, armed with a hammer, regularly, steadily, perpendicularly descends as desired, either with the force of a hundred tons or with a gentle tap, just sufficient to drive home a tin tack and no more. At a word it stops midway in stroke, and at a word again it descends with a deadly thump. On our visit, an attempt was being made to execute in wrought, what had hitherto always been made in cast iron. Success would effect a great saving in weight. The doors of the furnace were drawn back, and a white glow, unbearable as the noon-day sun, was made visible, long hooked iron poles were thrust in to fish for the prize, and presently a great round mass of metal was poked out to the door of the fiery furnace—a huge roll of glowing iron, larger than it was possible for any one or two men to lift, even had it been cold. By ingenious contrivances it was slipped out upon a small iron truck, dragged to the anvil of the

steam-hammer, and under the direction of Vulcan, not without his main strength, lodged upon the block.

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During the difficult operation of moving the white-red round ball, it was beautiful to see the rapid disciplined intelligence by which the hammerman, with word or sign, regulated the movements of his young assistants, each armed with an iron lever.

At length the word was given, and thump, thump, like an earthquake the steam-hammer descended, rapidly reducing the red-hot Dutch cheese shape to the flatter proportions of a mighty Double Gloucester, all the while the great smith was turning and twisting it about so that each part should receive its due share of hammering, and that the desired shape should be rapidly attained, sometimes with one hand, sometimes with the other, he interposed a flat poker between the red mass and the hammer, sharing a vibration that was powerful enough to dislocate the shoulder of any lesser man. "Hold," he cried: the elephant-like machine stopped. He took and hauled the great ball into a new position. "Go on," he shouted: the elephant machine went on, and again the red sparks flew as though a thousand Homeric blacksmiths had been striking in unison, until it was time again to thrust the half-welded cheese into the fiery furnace, and again it was dragged forth, and the jolly giant bent, and tugged, and sweated, and commanded,—he did not swear over his task. At length having succeeded in making the unwieldy lump assume an approach to the desired shape, he observed, in a deep, bass, chuckling, triumphant aside, to the engineer who was looking on, "I'm not a very little one, but I think if I was as big again you'd try what I was made of."

Since that day we have learned that the experiment has been completely successful, with a great diminution in the weight and an increase of the strength of an important part of a locomotive.

We have dwelt upon the picture because it combined mechanical with manual dexterity. A hammerman who might sit for one of Homer's blacksmith heroes, and machinery which effects in a few minutes what an army of such hammermen could not do.

If our painters of mythological Vulcans and sprawling Satyrs want to display their powers over flesh and muscle, they may find something real and not vulgar among our iron factories.

After seeing the operations of forging or of casting, we may take a walk round the shops of the turners and smiths. In some, Whitworth's beautiful self-acting machines are planing or polishing or boring holes, under charge of an intelligent boy; in others lathes are ranged round the walls, and a double row of vices down the centre of the long rooms. Solid masses of cast or forged metal are carved by the keen powerful lathe tools like so much box-wood, and long shavings of iron and steel sweep off as easily as deal shavings from a carpenter's plane. At the long row of vices the smiths are hammering and filing away with careful dexterity. No mean amount of judgment in addition to the long training needed for acquiring manual skill, is requisite before a man can be admitted into this army of skilled mechanics; for every locomotive contains many hundred pieces, each of which must be fitted as carefully as a watch.

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If we fairly contemplate the result of these labours, created by the inventive genius of a line of ingenious men, headed by Watt and Stephenson, these workshops are a more imposing sight than the most brilliant review of disciplined troops. It is not mere strength, dexterity, and obedience, upon which the locomotive builder calculates for the success of his design, but also upon the separate and combined intelligence of his army of mechanics.

Considering that in annually increasing numbers, factories for the building of locomotive, of marine steam-engines, of iron ships, and of various kinds of machinery, are established in different parts of the kingdom, and that hence every year education becomes more needed, more valued, and more extended among this class of mechanics, it is impossible to doubt that the training, mental and moral, obtained in factories like those of Wolverton, Crewe, Derby, Swindon, and other railway shops, and in great private establishments like Whitworth's and Roberts' of Manchester, Maudslay and Field's of London, Ransome and May of Ipswich, Wilson of Leeds, and Stephenson of Newcastle, must produce by imitative inoculation a powerful effect on the national character. The time has passed when the best workmen were the most notorious drunkards; in all skilled trades self-respect has made progress.

A few passenger carriages are occasionally built at Wolverton as experiments. One, the invention of Mr. J. M'Connel, the head of the locomotive department, effects several important improvements. It is a composite carriage of corrugated iron, lined with wood to prevent unpleasant vibration, on six wheels, the centre wheels following the leading wheels round curves by a very ingenious arrangement. This carriage holds sixty second-class passengers and fifteen first-class, beside a guard's brake, which will hold five more; all in one body. The saving in weight amounts to thirty-five per cent. A number of locomotives have lately been built from the designs of the same eminent engineer, to meet the demands of the passenger traffic in excursion trains for July and August, 1851.

It must be understood that although locomotives are built at Wolverton, only a small proportion of the engines used on the line are built by the company, and the chief importance of the factory at Wolverton is as a repairing shop, and school for engine-drivers.

Every engine has a number. When an engine on any part of the lines in connection with Wolverton needs repair, it is forwarded with a printed form, filled up and signed by the superintendent of the station near which the engine has been working. As thus—"Engine 60, axle of driving-wheel out of gauge, fire-box burned out," etc.

This invoice or bill of particulars is copied into a sort of day-book, to be eventually transferred into the account in the ledger, in which No. 60 has a place.

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The superintendent next in command under the locomotive engineer-in-chief, places the lame engine in the hands of the foreman who happens to be first disengaged. The foreman sets the workmen he can spare at the needful repairs. When completed, the foreman makes a report, which is entered in the ledger, opposite the number of the engine, stating the repairs done, the men's names who did it, and how many days, hours, and quarters of an hour each man was employed. The engine reported sound is then returned to its station, with a report of the repairs which have been effected. The whole work is completed on the principle of a series of links of responsibility. The engineer-in-chief is answerable to the directors for the efficiency of the locomotives; he examines the book, and depends on his superintendent. The superintendent depends on the foreman to whom the work was entrusted; and, should the work be slurred, must bear the shame, but can turn upon the workmen he selected for the job.

In fact, the whole work of this vast establishment is carried on by dividing the workmen into small companies, under the superintendence of an officer responsible for the quantity and quality of the work of his men.

The history of each engine, from the day of launching, is so kept, that, so long as it remains in use, every separate repair, with its date and the names of the men employed on it, can be traced. Allowing, therefore, for the disadvantage as regards economy of a company, as compared with private individuals, the system at Wolverton is as effective as anything that could well be imagined.

The men employed at Wolverton station in March, 1851, numbered 775, of whom 4 were overlookers, 9 were foremen, 4 draughtsmen, 15 clerks, 32 engine-drivers, 21 firemen, and 119 labourers; the rest were mechanics and apprentices. The weekly wages amounted to 929 pounds 11s. 10d.

Of course these men have, for the most part, wives and families, and so with shopkeepers, raise the population of the railway town of Wolverton to about 2,000, inhabiting a series of uniform brick houses, in rectangular streets, about a mile distant from the ancient parish church of Wolverton, and the half-dozen houses constituting the original parish.

For the benefit of this population, the directors have built a church, schools for boys, for girls, and for infants, which are not the least remarkable or interesting parts of this curious town.

The clergyman of the railway church, the Rev. George Waight, M.A., has been resident at Wolverton from the commencement of the railway buildings. His difficulties are great; but he is well satisfied with his success. In railway towns there is only one class, and that so thoroughly independent, that the influence of the clergyman can only rest with his character and talents.

The church is thinly attended in the morning, for hard-working men like to indulge in rest one day in the week; in the evening it is crowded, and the singing far above average.

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To the schools we should like to have devoted a whole chapter now, but must reserve an account of one of the most interesting results of railway enterprise.

There is a literary and scientific institution, with a library attached. Scientific lectures and scientific books are very little patronized at Wolverton; astronomy and geology have few students; but there is a steady demand for a great number of novels, voyages, and travels; and musical entertainments are well supported.

The lecture-room is extremely miserable, quite unfit for a good concert, as there is not even a retiring room, but the directors are about to build a better one, and while they are about it, they might as well build a small theatre. Some such amusement is much needed; for want of relaxation in the monotony of a town composed of one class, without any public amusements, the men are driven too often to the pipe and pot, and the women to gossip.

In the summer, the gardens which form a suburb are much resorted to, and the young men go to cricket and football; but still some amusements, in which all the members of every family could join, would improve the moral tone of Wolverton.

Work, wages, churches, schools, libraries, and scientific lectures are not alone enough to satisfy a large population of any kind, certainly not a population of hard-handed workers.

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Wolverton embankment was one of the difficulties in railway making, which at one period interested the public; at present it is not admitted among engineers that there are any difficulties. The ground was a bog, and as fast as earth was tipped in at the top it bulged out at the bottom. When, after great labour, this difficulty had been overcome, part of the embankment, fifty feet in height, which contained alum shale, decomposed, and spontaneous combustion ensued. The amazement of the villagers was great, but finally they came to the conclusion expressed by one of them, in "Dang it, they can't make this here railway arter all, and they've set it o' fire to cheat their creditors."

On leaving Wolverton, before arriving at Roade, a second-class station, after clearing a short cutting, looking westerly, we catch a glimpse of the tower of the church of Grafton, where, according to tradition, Edward IV. married Lady Gray of Groby. The last interview between Henry VIII. and Cardinal Campeggio, relative to his divorce from Catherine of Aragon, took place at the Mansion House of this parish, which was demolished in 1643.

About this spot we enter Northamptonshire, and passing Roade, pause at Blisworth station, where there is a neat little inn.

BLISWORTH, NORTHAMPTON.

Miles. Miles.

Blisworth. 34.5 Oundle.

4.75 Northampton. 40.75 Wansford.

15.75 Wellingborough. Stamford by Coach.

20 Higham Ferrers. 47.25 Peterborough.

26 Thrapston.

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From Blisworth branches out the line to Peterborough, with sixteen stations, of which we name above the more important.

The route presents a constant succession of beautiful and truly English rural scenery, of rich lowland pastures, watered by the winding rivers, and bounded by hills, on which, like sentinels, a row of ancient church towers stand.

The first station is Northampton.

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Northampton, on a hill on the banks of the river Nene, is a remarkably pleasant town, with several fine old buildings, an ancient church, an open market square, neat clean streets, and suburbs of pretty villas, overlooking, from the hill top, fat green meadows, flooded in winter. Shoemaking on a wholesale scale, is the principal occupation of the inhabitants. For strong shoes Northampton can compete in any foreign market, and a good many light articles, cut after French patterns, have been successfully made since the trade was thrown open by Peel's tariff. There are several factories, in which large numbers of young persons are employed, but the majority work by the piece at home for the master manufacturers.

Northampton is also great in the fairs and markets of a rich agricultural district, and rejoices over races twice a year, in which the facilities of the railroad have rendered some compensation to the inn-keepers for the loss of the coaching trade. Northampton was originally intended to be a main station of the railway between London and Birmingham. The inhabitants were silly enough to resist the bestowal of this benefit upon them, and unfortunate enough to be successful in their resistance. In after years, when experience had rendered fools wise, they were glad to obtain the present branch through to Peterborough; but the injury of the ill-judged opposition can never be cured.

The church of All Saints, in the centre of the town, has an ancient embattled tower which escaped the great fire of 1675. St. Peter's, near the West Bridge, a remarkably curious specimen of enriched Norman; St. Sepulchre's, a round church of the twelfth century, all deserve enumeration. There are also two hospitals, the only remains of many religious houses which existed before the Reformation. St. John's consists of a chapel and a large hall, with apartments for inferior poor persons; St. Thomas's is for twenty poor alms-women. No vestiges, beyond the earthworks, remain of the castle built by Simon de St. Liz, who was created Earl of Northampton by William the Conqueror. Northampton was a royal residence during the reigns of Richard I., John, and Henry *iii.*; a battlefield during the wars of the Barons and the wars of the Roses; but the ancient character of the town was almost entirely destroyed by the great fire of 1675,—not without benefit to the health, though at the expense of the picturesqueness of this ancient borough.

Northampton is important as the capital town of one of our finest grazing and hunting counties, where soil and climate are both favourable to the farmer.

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Large numbers of the Scotch, Welch, and Herefords sold in Smithfield, are fed in the yards and finished in the pastures of Northamptonshire.

The present Earl of Spencer keeps up, on a limited scale, the herd of short-horns which were so celebrated during the lifetime of his brother, better known as Lord Althorpe,—at his seat of Althorpe, six miles from the town, and also carries on a little fancy farming. The late Earl of Spencer was much more successful as a breeder than as a farmer; indeed, it may be questioned whether the prejudices of that amiable and excellent man in favour of pasture land, did not exercise an injurious influence over the proceedings of the Royal Agricultural Association.

Northampton returns two members to Parliament, and has a mayor and corporation.

The railway route from Northampton to Peterborough presents a series of pleasant views on either side,—so pleasant that he who has leisure should walk, or ride on horseback, along the line of Saxon villages, visit the series of curious churches at Wellingborough, Higham Ferrers, with its collegiate church and almshouse, Thrapston and Oundle, and other stations. Within two miles of Thrapston is Drayton House, Lowick, the seat of the Sackville family, which retains many of the features of an ancient castle, and has a gallery of paintings by the old masters. The church of Lowick contains several monuments, brasses, and windows of stained glass. Near Oundle is to be found the earthwork of Fotheringay Castle, where Mary Queen of Scots was confined, tried, and executed. The castle itself was levelled to the ground by order of her son, James I. On leaving Oundle we pass a station appurtenant to Wansford in England, of which we shall say a word presently.

Here we may take coach across to Stamford in Lincolnshire (see Stamford), unless we prefer the rail from Peterborough. There is a point somewhere hereabouts where the three counties of Northampton, Lincoln, and Huntingdon all meet.

* * * * *

Wansford in England.—If about to investigate the antiquities of Stamford or Peterborough, the traveller will do well to stop at Wansford for the sake of one of the best inns in Europe, well known under the sign of “The Haycock at Wansford in England.” This sign represents a man stretched floating on a haycock, apparently in conversation with parties on a bridge. It is intended to illustrate the legend of Drunken Barnaby, who, travelling during the time of the plague from London northward, tasting and criticising the ale on the road, drank so much of the Northamptonshire brewst that he fell asleep on a haycock, in one of the flat meadows. In the night time, as is often the case in this part of the country, a sudden flood arose, and our toper awaked to find himself floating on a great tide of water, which at length brought him to a bridge, upon which, hailing the passengers, he asked,

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“Where am I?” in full expectation of having floated to France or Spain; whereupon they answered, “at Wansford.” “What!” he exclaimed in ecstasy, “Wansford in England!” and landing, drank the ale and gave a new name to the inn of this village between three counties. The inn (which belongs to the Duke of Bedford) affords a sort of accommodation which the rapid travelling and short halts of railways have almost abolished. But an easy rent, a large farm, and a trade in selling and hiring hunters, enables the landlord to provide as comfortably for his guests, as when, in old posting days, five dukes made the Haycock their night halt at one time. On entering the well carpeted coffee-room, with its ample screen, blazing fire, and plentiful allowance of easy chairs, while a well appointed tempting dinner is rapidly and silently laid on the spotless table-cloth,—the tired sportsman or traveller will be inclined to fancy that he is visitor to some wealthy squire rather than the guest of an innkeeper. When we add that the bedrooms match the sitting-rooms, that the charges are moderate, that the Pytchley, Earl Fitzwilliam’s, and the Duke of Rutland’s hounds (the Beavor), meet within an easy distance; that the county abounds in antiquities, show-houses like Burleigh, that pleasant woodland rides are within a circle of ten miles, that good pike-fishing is to be had nearly all the year round, while in retirement Wansford is complete; we have said enough to show that it is well worth the notice of a large class of travellers,—from young couples on their first day’s journey, to old gentlemen travelling north and needing quiet and a bottle of old port.

The last station, Peterborough, presents an instance of a city without population, without manufactures, without trade, without a good inn, or even a copy of the Times, except at the railway station; a city which would have gone on slumbering to the present hour without a go-a-head principle of any kind, and which has nevertheless, by the accident of situation, had railway greatness thrust upon it in a most extraordinary manner.

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Peterborough is one of the centres from which radiate three lines to London, viz., by the Northampton route, on which we have travelled; by the direct line, through Herts, of the Great Northern; and by the Eastern Counties, with all its Norfolk communications. From Peterborough also proceeds an arm of the Midland Counties, through Stamford, Oldham, and Melton Mowbray, and the best Leicestershire grass country, to Leicester or to Nottingham,—while the Great Northern, dividing, embraces the whole of Lincolnshire and makes way to Hull, by the Humber ferries, on the one hand, and to York on the other. There is, therefore, the best of consolation on being landed in this dull inhospitable city, that it is the easiest possible thing to leave it.

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Peterborough dates from the revival of Christianity among the Saxons; destroyed by the Danes A.D. 870, rebuilt by Edgar in 970, it was attacked and plundered by Saxon insurgents from the fens under Hereward the Wake, in the time of William the Conqueror. At the dissolution of religious houses under Henry VIII., Peterborough was one of the most magnificent abbeys, and, having been selected as the seat of one of the new bishoprics, the buildings were preserved entire. In the civil wars, the Lady Chapel and several conventual buildings were pulled down and the materials sold. At present the cathedral is a regular cruciform structure of Norman character, remarkable for the solidity of its construction.

It was commenced 1117, by John de Saiz, a Norman. The chancel was finished, A.D. 1140, by Abbot Martin de Vecti. The great transept and a portion of the central tower were built by Abbot William de Vaudeville, A.D. 1160 to 1175, and the nave by Abbot Benedict 1177-1193. The fitting up of the choir is of woodwork richly carved. The greater number of the monuments, shrines, and chantry chapels, were destroyed by the Parliamentary troops. Two queens lie buried here, Catherine of Aragon and Mary of Scotland, without elegy or epitaph, monument or tombstone.

The Cathedral viewed, nothing remains to detain the traveller in this peculiarly stupid city. Within a pleasant ride of five miles lies Milton House, the seat of Earl Fitzwilliam.

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Stamford.—Although Stamford is not upon this line of railway, travellers passing near should not fail to visit so ancient and interesting a town. Few English boroughs can trace back more distinctly their antiquity. Six churches still remain of the fifteen which, beside many conventual buildings, formerly adorned it. For Stamford was one of the towns which, had not the Reformation intervened, would have been swallowed up by the ever hungry ecclesiastical maw. Stamford awakens many historic recollections. It has a place in Domesday Book, being there styled Stanford: King Stephen had an interview there with Ranulph, Earl of Chester. In 1190, the Jews of Stamford were plundered and slain by the recruits proceeding to the crusades; and, ten years afterwards, when Edward I. expelled the Jews from England, “their synagogue and noble library at Stamford were profaned and sold.” Many of the books were purchased by Gregory of Huntingdon, a monk of Ramsey Abbey, a diligent student of ancient languages; and thus the result of much learning, collected in Spain and Italy, and handed down from the times when the Jews and Arabs almost alone cultivated literature as well as commerce, was sown in England, the last of European kingdoms to become distinguished in letters. Stamford was the refuge of Oxford students on the occasion of disturbances in 1333. It was taken by the Lancastrian army of the North under Queen Margaret in 1461, and given up to plunder; and, in 1462, when thirty thousand Lincolnshire men marched, under the command of Sir Robert Wells, against Edward IV., under the walls of Stamford they were defeated, and, flying, left their coats behind. But

the latest battles of Stamford have been between Whig and Tory, and even these have ceased.

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The houses and public buildings are all built of a rich cream-coloured stone, which gives an air of cleanliness and even distinction, which is an immense advantage. There are two fine hotels. The borough returns two members, both nominated by the Marquis of Exeter, who owns a large proportion of the vote-giving houses. The bull-running has been abolished here, as also at Tutbury, in Staffordshire; but those who are curious to see the ceremony may have occasional opportunities in the neighbourhood of Smithfield market, where it is performed under the especial patronage of the aldermen of the city of London.

WEEDON.

The next station after Blisworth is Weedon, properly, Weedon Bec, so called because formerly there was established here a religious house, or cell, to the Abbey of Bec in Normandy. The Church, a very ancient building, contains portions of Norman, and various styles of English, architecture.

[*Bridge in the Blisworth embankment:* ill9.jpg]

The importance of Weedon rests in its being the site of a strongly fortified central depot for artillery, small arms, and ammunition, with extensive barracks, well worth seeing, but not to be seen without an order from the Board of Ordnance. In passing, a few mild soldiers may be seen fishing for roach in the canal, and a few active ones playing cricket in summer. The Weedon system of fortification eschews lofty towers and threatening battlemented walls, and all that constitutes the picturesque; so that Weedon Barracks look scarcely more warlike than a royal rope manufactory.

After Weedon we pass through Kilsby Tunnel, 2,423 yards long, which was once one of the wonders of the world; but has been, by the progress of railway works, reduced to the level of any other long dark hole.

[*View from the top of Kilsby tunnel:* ill10.jpg]

RUGBY AND ITS RAILWAYS.

Rugby, 83 miles from London, the centre of a vast network of railways, is our next halting place.

That is to say, First, an arm of the Midland to Leicester, to Burton, to Derby, to Nottingham, and through Melton Mowbray to Stamford and Peterborough; thus intersecting a great agricultural and a great manufacturing district.

Second, the Trent Valley Line, through Atherstone, Tamworth and Lichfield, to Stafford, and by cutting off the Birmingham curve, forming part of the direct line to Manchester.

Third, A line to Leamington, which may be reached from this point in three-quarters of an hour; and fourth, a direct line to Stamford, by way of Market Harborough; which, with the Leamington line, affords the most direct conveyance from Norfolk, and Lincolnshire, through Peterborough to Birmingham, Gloucester, and all that midland district.

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The Oxford and Rugby Line, which was one of the subjects of the celebrated Battles of the Gauges, has not been constructed; and it may be doubted whether it ever will.

The town lies about a mile from the station on the banks of the Avon, and owes all its importance to Laurence Sheriff, a London shopkeeper in the time of Queen Elizabeth, who, in 1567, endowed a school in his native village with eight acres of land, situated where Lamb's Conduit-street, in London, now stands, whence at present upwards of 5000 pounds a year is derived.

Rugby was long considered the most snobbish of English public schools, a sad character in a country where style and name go so far. Some twenty years ago, when the Rugbaeans had the "presumption" to challenge the Wykehamists to play at football, the latter proudly answered, that the Rugbaeans might put on worsted stockings and clouted soles, and the Wykehamists in silk stockings and pumps would meet them in any lane in England. But, since that time, the Harrow gentlemen, the Eton fops, the Winchester scholars, and the Westminster blackguards, have had reason to admit that Arnold, a Wykehamist, long considered by the fellows of that venerable institution an unworthy son, succeeded in making Rugby the great nursery of sound scholars and Christian gentlemen, and in revolutionizing and reforming the educational system of all our public schools.

The following, by one of Arnold's pupils, himself an eminent example of cultivated intellect and varied information, combined with great energy in the practical affairs of life and active untiring benevolence, is a sketch of

"Arnold and his school."

In the year 1827, the head mastership became vacant of the Grammar School at Rugby, and the trustees, a body of twelve country gentlemen and noblemen, selected, to the dismay of all the orthodox, the Rev. Thomas Arnold, late fellow of Oriel College, Oxford, and then taking private pupils at Laleham, Middlesex. Transplanted from Oriel, the hotbed of strange and unsound opinions, out of which the conflicting views of Whateley, Hampden, Keble, and Newman, were struggling into day; himself a disciple of the suspected school of German criticism; known to entertain views at variance with the majority of his church brethren on all the semipolitical questions of the day; an advocate for the admission of Roman Catholics to Parliament, for the reform of the Liturgy and enlargement of the Church, so as to embrace dissenters; the distrust with which he was regarded by all who did not know him may be imagined.

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It was a critical time, the year 1827; the mind of the country was then undergoing that process of change which shortly afterwards showed itself in the emancipation of the Roman Catholics, the passing of the Reform Bill, the foundation of the London University, and the publications of the Useful Knowledge Society. Old opinions were on all sides the objects of attack. At such a period, public schools, with their exclusively classical teaching and their “fagging” systems, were naturally regarded as institutions of the past not adapted to the present. It seemed probable that a remodelling, or, according to the phrase of the day, a “reform” of them, would be attempted by the new intellectual school of which Lord Brougham was regarded as the type. It was the views of this party which, it was anticipated, Dr. Arnold would hasten to introduce into Rugby.

We now know that he did not do this, although he did reform not only the school of Rugby, but gave a bias to the education of the sons of what is still the most influential class in this country, which has lasted to the present day, and that in a direction and in a manner which surprised his opponents, and at one time provoked even his friends.

It may not be uninteresting to such of our readers as love to trace the origin of those changes of opinion, which are at times seen to diffuse themselves over portions of society from an unseen source, to learn how this original man commenced his task of training the minds committed to him in those peculiar tendencies, both as to feeling and thinking, which enter appreciably into the tone of the upper classes of the present generation.

Dr. Arnold, from the day on which he first took charge of the school, adopted the course which he ever after adhered to, of treating the boys like gentlemen and reasonable beings. Thus, on receiving from an offender an answer to any question he would say, “If you say so, of course I believe you,” and on this he would act. The effect of this was immediate and remarkable; the better feeling of the school was at once touched; boys declared, “It is a shame to tell Arnold a lie, because he always believes you;” and thus, at one bold step, the axe was put to the root of the inveterate practice of lying to the master, one of the curses of schools. In pursuance of the same views, when reprimanding a boy, he generally took him apart and spoke to him in such a manner as to make him feel that his master was grieved and troubled at his wrong-doing; a quakerlike simplicity of mien and language, a sternness of manner not unmingled with tenderness, and a total absence of all “don-ish” airs, combined to produce this effect. Nor were his personal habits without their effect. The boys saw in him no outward appearance of a solemn pedagogue or dignified ecclesiastic whom it was a temptation to dupe, or into whose ample wig javelins of paper might with impunity be darted; but a spare active determined man, six feet high, in duck trousers,

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a narrow-brimmed hat, a black sailor's handkerchief knotted round his neck, a heavy walking-stick in his hand,—a strong swimmer, a noted runner; the first of all the masters in the school-room on the winter mornings, teaching the lowest class when it was his turn with the same energy which he would have thrown into a lecture to a critical audience, listening with interest to an intelligent answer from the smallest boy, and speaking to them more like an elder brother than the head master. {67} They soon perceived that they had to deal with a man thoroughly in earnest, acute, active, and not easily deceived; that he was not only a scholar but a gentleman, who expected them to behave as the sons of gentlemen themselves. Their attention was awakened, and, although their fears were somewhat excited, their sympathies and interest were at the same time aroused. This was a good commencement; but Arnold was ready with other means no less effectual for engaging their thoughts. He opened out to them at once “fresh fields and pastures new,” in the domain of knowledge; he established periodical examinations, at which (if a tolerable proficiency in the regular studies was displayed) a boy might offer to be examined in books on any subject he might prefer, and prizes were awarded accordingly. The offer was eagerly seized; modern history, biography, travels, fiction, poetry, were sought after; the habit of general reading was created, and a new intellectual activity pervaded the school. The writer well remembers the effect produced on him when he heard that Arnold had lent one of the boys Humphrey Clinker, to illustrate a passage in his theme. He felt from that time forth that the keys of knowledge were confided to him, and, in proof of this, his own little library, and those in the “studies” of many of his neighbours, shortly doubled their numbers. French, German, and mathematics, were encouraged by forming distinct classes on these subjects, and by conferring for high standing in them some of the privileges as to exemption from fagging, which previously had only attached to a similar standing in classics. Modern history was also introduced as a recognised branch of school study. The advantage of this was, that many of the boys, who, from deficient early training or peculiar turn of mind, were unable to bring themselves to proficiency in the regular Latin and Greek course of the school, and consequently were idle and listless, found other and more congenial paths in which intelligence and application would still meet with their reward.

By these simple means, now generally adopted in classical schools, but up to that time supposed to be incompatible with high accomplishments in classical learning, the standard of intelligence and information was incalculably raised, and the school, as a place of education in its wider sense, became infinitely more efficient.

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We should have stated that Dr. Arnold's skill as a teacher was unrivalled; he imparted a living interest to all he touched, to be attributed mainly to his habit of illustrating ancient events by "modern instances." Thus, Thucydides and Napier were compared almost page by page; thus the "High Church party" of the Jews was pointed to as a type of "the Tories." By means of his favourite topic, physical geography, he sought to bring the actual theatre of events before his pupils. Thus he would describe (when living at Laleham), the Vatican and Janiculum hills of Rome, as being "like the hills on the right bank of the Thames behind Chertsey;" the Monte Marie as being "about the height and steepness of Cooper's Hill," and "having the Tiber at the foot of it like the Thames at Anchorwick."

To philology even, the deadly science of dead languages, and the great business of public schools, he contrived to impart life by continually pointing out its bearing on the history of the races of mankind. The interest thus given to study was something before unknown in schools.

So far we have confined ourselves to the effect of Arnold's system on the mind, but the source of his most anxious thoughts and constant solicitude lay deeper than this; it related to the spiritual condition, or, according to the German phrase, "the inner life," of the boys. With his usual indifference to personal labour he assumed the preachingship of the chapel, declining however, also, with characteristic disinterestedness, the salary attached, hitherto given to increase the stipend of a junior master, and his famous "quarter of an hour" sermons, into which he threw all the power of his character and his intellect, no doubt gave him an opportunity of confirming, on certain minds, that influence which was primarily due to his earnest acts of heart and head.

We here approach a portion of his career on which difference of opinion must always exist. Impressed with an abiding conviction that all earthly things were subordinate to the relation between man and his Maker; keenly appreciating all that was "of good report," and impatient of evil, or what seemed to him to be of evil tendency, even to intolerance, it must be admitted that in Arnold there was something of the zealot. With his acute sense of responsibility as to the spiritual state of the boys, it was natural that he should seek to impress those with whom he was brought in contact, and he did so. The personal notice he bestowed on boys of serious tendencies, asking them to his house and conversing with them on solemn subjects had this effect, and soon engendered "a sect" in the school. Now, the boys who were thus susceptible and formed this sect, were generally of the milder order of character, and not of that precocious virility which always gives influence in a great school; hence arose among the natural leaders of the school, the strong in character and the stout in heart and hand, a reaction against

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Arnold and against Arnold's views, as being opposed to the traditional notions of the school. This reaction was strengthened by the peculiar nature of some of these views, such, for instance as those on the subject of the code of honour. Arnold, although himself a man actuated by a nice sense of honour, felt it his duty to set himself strongly in words against the code of honour; it was the constant object of vituperation on his part, even from the pulpit. His notions on this point, however, never gained ground with his hearers, who could not be brought to believe that their master (himself as true a knight errant as ever drew sword or pen,) was serious when he told them that the spirit of chivalry was "the true Antichrist."

The attempt to introduce a more highly-wrought tone of religious feeling than was perhaps of wholesome growth in very young minds was, therefore, not without its drawbacks; the antagonism to some of his own views which it called forth, combined with the utter disregard to established views which characterized his own teaching, and which the school caught from him, told upon the boys' minds. The direct and indirect effect of Arnold's school of thought may indeed, now, we think, be traced in the general distrust of hitherto received opinions, which, but little tinged in England it is true with either licentiousness or irreverence, is nevertheless characteristic of the present generation.

These effects are also more manifest now that Arnold's personal influence can no longer be exercised. So long as he was at his post, his earnest simplicity of character, his purity of life, his intellectual vigour, his fearless seeking after truth, carried away the sympathies of all who were brought in contact with him; not one of whom but will say, on looking back to the impression he left on them, "Behold an Israelite indeed in whom there was no guile!"

Thus the reform introduced into Rugby by Arnold, and indirectly into other public schools through him, was then very different from that which was anticipated from him. He did, it will be seen, none of the things he was expected by his party to do. He strenuously inculcated the views of Christian doctrine most opposed to those of the Latitudinarian party. {71} He stoutly adhered to the system of "fagging," as being the best mode of responsible government for the school "out of school," founding his opinion on his own experience at Winchester, on which he often dwelt. He raised and improved the standard of classical learning in its wider sense, so that the scholars of Rugby gained a high standing at the universities; and by showing that this was attainable consistently with acquirements in other branches of learning, and with the utmost amount of intelligent interest in the knowledge of the day, he confirmed that opinion in favour of the advantage of classical learning, as a sound philosophical means of training the faculties for worldly affairs, which we have seen lately advocated and applauded even in the heart of Manchester itself, at the opening of Owen's College.

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The change he introduced was thus more thorough, more deep and comprehensive, than any which the suggestions of his partisan supporters would have accomplished. It was a change in the very spirit of education, reaching beyond the years of boyhood or the limits of school walls.

COVENTRY TO BIRMINGHAM,

Instead of turning off from Rugby by the new route to Leamington, we will keep the old road, and so push on straight to the great Warwickshire manufactory and mart of ribands and watches. First appears the graceful spire of St. Michael's Church; then the green pastures of the Lammas, on which, for centuries, the freemen of Coventry have fed their cattle, sweep into sight, and with a whiz, a whirl, and a whistle, we are in the city and county of Coventry—the seat of the joint diocese of Lichfield and Coventry—which return two members to Parliament, at the hands of one of the most stubbornly independent constituencies in England; a constituency which may be soft-sawdered, but cannot be bullied or bribed.

A railroad here branches off to Nuneaton, distant ten miles, a sort of manufacturing dependency of the great city; and on the other, at the same distance, to Leamington, with a station at Kenilworth.

In addition to its manufacturing importance, an importance which has survived and increased in the face of the changes in the silk trade and watch trade, commenced by Huskisson, and completed by Peel, Coventry affords rich food for the antiquarian, scenes of deep interest to the historical student, a legend for poets, a pageant for melodramatists, and a tableau for amateurs of poses plastiques.

Once upon a time Kings held their Courts and summoned Parliaments at Coventry; four hundred years ago the Guilds of Coventry recruited, armed, clothed, and sent forth six hundred stout fellows to take part in the Wars of the Roses; at Coventry the lists were pitched for Mary of Lancaster, and Phillip Mowbray, Duke of Norfolk, to decide in single combat their counter-charges before the soon-to-be-dethroned Richard II.

At Coventry you will find the effigy of vile Peeping Tom, and can follow the course through which the fair Godiva rode naked, veiled by her modesty and flowing tresses, to save her townsmen from a grievous tax. To be sure, some English Niebuhrs have undertaken to prove the whole story a legend; but, for our parts, we are determined to believe in tradition and Alfred Tennyson's sonnet.

There are three ancient churches in Coventry, of which St. Michael's, built in the reign of Henry I., is the first; the spire rising 303 feet from the ground, the lofty interior ornamented with a roof of oak, curiously carved, and several windows of stained glass.

[Coventry: ill11.jpg]

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St. Mary's Hall, a large building, now used for corporation council meetings, and festivities, erected in the reign of Henry VI., is one of the richest and most interesting vestiges of the ornamental architecture of England. The principal room has a grotesquely-carved roof of oak, a gallery for minstrels, an armoury, a chair of state, and a great painted window, which need only the filling up of royal and noble personages, their attendants, and the rich burgesses of Coventry, to recall the time when Richard II. held his Court in this ancient city, and, with "old John of Gaunt," settled the sentence on Harry of Hereford, and Philip of Norfolk.

In this chamber is to be seen a beautiful piece of tapestry, executed in 1450, measuring thirty feet by ten, and containing eighty figures.

In the free school, founded by John Moles, in the reign of Henry VIII., Sir William Dugdale, the antiquarian and historian of Warwickshire, was educated. The income is about 900 pounds a-year, and the scholars have open to competition two fellowships of St. John's College, Oxon, one at Catherine's Hall, Cambridge, and six exhibitions at either University. Previous to the investigations of the Charity Commissioners, the fine school-room was locked up, and the books of the library torn for waste paper to light fires. At present, under the reformed system, the school is attended by a large number of scholars.

There are more than a dozen educational and other charities for the benefit of the poor, enjoying a revenue of many thousands a-year.

There are also several curious specimens of domestic architecture of the fourteenth and fifteenth centuries to be found in Coventry. It is, however, on the whole, a dark, dirty, inconvenient city. The surrounding belt of Lammas lands on which the freemen have the right of pasturing their horses and cows, has prevented any increase in the limits of the city.

In the middle ages Coventry was celebrated for its "mysteries and pageants," of which an account has been published by Mr. Reader, a local bookseller.

The chief manufactures are of ribands and of watches, both transplantations from the Continent. The electors of Coventry distinguished themselves by their consistency during the Free-trade agitation. They exacted a pledge from their members in favour of Free-trade, except in watches and ribands. More recently these same Coventry men have had the good sense to prefer a successful man of business, the architect of his own fortunes, to a Right Honourable Barrister and ex-Railway Commissioner.

[*The SHERBORNE viaduct, near Coventry*: ill12.jpg]

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One thing needful to preserve the manufacturing position of Coventry is, a first-rate School of Design—labour, and coal, and ample means of conveyance they have, east and west, and north and south; and now the manufacturers only need the cultivation of true principles of taste among the whole riband-weaving population. For taste is a rare article, and many draughts of small fry must be made before one leviathan salmon can be caught. Great advances have been made recently in the production of the best kinds of ribands. A specimen produced by subscription for the Hyde Park Exhibition of 1851, proved that Coventry was quite able to rival the choicest work of France in the class of machine-made ribands. The application of steam power to this class of manufactures is of but recent date. Coventry surveyed, and this may be done in a few hours, unless the traveller is able and willing to examine its rich manufactories, it is difficult to resist the invitation of the railway porter, bawling, to Kenilworth, Leamington, and Warwick, names calling up a crowd of romantic associations, from Shakspeare to Scott and Bulwer; but for the present we must keep steadily on to Birmingham, where steam finds the chief raw materials of poetry and fashioner of beauty.

BIRMINGHAM.

A run of nineteen miles brings us to what the inhabitants call the Hardware Village, a healthy, ugly town, standing upon several hills, crowned with smoke, but free from fog.

The old railway station stands at the foot of one of these hills, leaving a drive of a quarter of a mile through a squalid region, almost as bad as the railway entrance into Bristol, before entering into the decent part of the town; but the new station, now in course of rapid completion, will land passengers behind the Grammar School, in New Street, the principal, and, indeed, only handsome street of any length in Birmingham.

At the old station there is an excellent hotel, kept by Mr. Robert Bacon, who was so many years house steward to the Athenaeum Club, in Pall Mall; and at the refreshment-rooms a capital table d'hôte is provided four times a-day, at two shillings a-head, servants included, an arrangement extremely acceptable after a ride of 118 miles.

[*Newton road station, near Birmingham:* ill16.jpg]

At the new station similar refreshment-rooms are to be provided, and it is to be hoped that the architect will plan the interior first, and the exterior afterwards, so that comfort may not be sacrificed, as it usually is in English public buildings, to the cost of an imposing portico and vestibule.

As a railway starting point, Birmingham has become a wonderful place. In addition to those main lines and branches passed and noted on our journey down, it is also the centre at which meet the railroads to Derby and Sheffield; to Worcester, Cheltenham, Gloucester, and Bristol; to London through Oxford, by the Broad Gauge Great Western,

to Shrewsbury and Chester through Wolverhampton, beside the little South Staffordshire lines, which form an omnibus route between Birmingham, Walsall, Dudley, and Lichfield, and other iron nets “too tedious to describe.”

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To a stranger not interested in manufactures, and in mechanic men, this is a very dull, dark, dreary town, and the sooner he gets out of it the better. There are only two fine buildings. The Town Hall, an exact copy externally of the Temple of Jupiter Stator at Rome, built of a beautiful grey Anglesey marble, from the designs of Messrs. Hansom and Welch, who also undertook to execute it for 24,000 pounds. It cost 30,000 pounds, and the contractors were consequently ruined. A railway company would probably have paid the difference; but, in such cases, communities have no conscience, so the people of Brummagem got the Hall of which they are justly proud "a bargain."

The interior is disappointing, and wants the expenditure of some more thousand pounds in sculptures and decorative details, to bring it into harmony with its noble external effect. The great room, 145 feet in length, by 65 feet in width and height, will contain upwards of 8,000 persons.

Musical meetings are held here periodically, for the benefit of certain charities; but the sight best worth seeing, is the Hall at the period of an election, or of political excitement, crowded with a feverish army of workmen, cheering, groaning, swaying to and fro, under the speeches of their favourite orators. Then in this Pagan temple may be seen a living specimen of a Brummagem Jupiter, with a cross of Vulcan, lion-faced, hairy, bearded, deep-mouthed swaggering, fluent in frank nonsense and bullying clap-trap, loved by the mob for his strength, and by the middle classes for his money. The lofty roof re-echoes with applause.

The temple, the man, and the multitude, all together, are well worth a journey to Birmingham to see.

There is also the Free School of King Edward VI., in New Street, a stately pile, built by Barry, before he had become so famous as he is now; which supplies first-rate instruction in classics, mathematics, modern languages, and all branches of a useful English education, after the plan introduced into our public schools by Dr. Arnold, to the sons of all residents, at an extremely cheap, almost a nominal rate. Ten exhibitions of 50 pounds each for four years at Oxford or Cambridge are open to the competition of the scholars.

The salary of the Head Master is 400 pounds a-year, with a residence, and the privilege of boarding eighteen pupils. Of the Second Master, 300 pounds. Beside Under Masters.

These liberal appointments have secured a succession of competent masters, and cannot fail to produce a permanent and favourable change in the character of young Birmingham. The diffusion of sound classical learning was much needed to mitigate the coxcombical pretensions of the half-educated, and the vulgar coarseness of the uneducated. The inhabitants of manufacturing towns are apt to grow petty Plutocracies, in which after wealth, ignorance and assumption are the principal qualifications. Brass

turns up its nose at iron, and both look down upon tin, although half an hour in the world's fire make all so black as to be undistinguishable.

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Besides this, which we may term the High School, there are four schools supported out of King Edward VI.'s foundation, where reading, writing, and arithmetic, are taught.

The funds on which these magnificent ecclesiastical establishments are supported, arise from lands in the neighbourhood which originally produced only 21 pounds a year, and were part of the estates of the Guild of the "Holy Cross." After being occupied first as fields and then as gardens, the rise of manufactures and extension of the town of Birmingham, converted a great portion into building land. The present revenue amounts to about 11,000 pounds per annum, and are likely to be still further increased.

Twenty years ago, school lands which are now leased for terms of years, and covered with buildings, were occupied as suburban gardens at trifling rents. Eventually the Birmingham Free School will enjoy an income equal to the wants of a university as well as a school. Meagre accounts of the income and expenditure of this noble foundation are published annually, under the regulations of an Act of Parliament passed in 1828; but no report of the number of scholars, or the sort of education communicated, is attached to this balance sheet. It would be very useful; and we hope that the self-elected corporation, who have the management, will see the propriety of supplying it.

Birmingham also possesses a chartered college, "Queen's College," similar to that at Durham; first established as a medical school by the exertions of the present dean, Mr. Sands Cox, since liberally endowed by the Rev. Dr. Warneford to the extent of many thousand pounds, and placed in a position to afford the courses in law, physic, and divinity, required for taking a degree at the University of London. Also a Blue Coat School, and School for the Blind.

In a picturesque point of view there are few towns more uninviting than Birmingham; for the houses are built of brick toned down to a grimy red by smoke, in long streets crossing each other at right angles,—and the few modern stone buildings and blocks of houses seem as pert and as much out of place as the few idle dandies who are occasionally met among the crowds of busy mechanics and anxious manufacturers. What neatness—cleanliness—can do for the streets, bell-pulls, and door-knockers, has been done; the foot-pavements are, for the most part flagged, although some of the round pebble corn-creating footways still remain in the back streets. One suburb, Edgbaston, is the property of Lord Calthorpe, and has been let out on building leases which entirely exclude all manufactories and inferior classes of houses. The result has been a crop of snug villas, either stucco or polished red brick; many of them surrounded by gardens and shrubberies, and a few of considerable pretension. Of this suburb the Birmingham people think a great deal; but, as it is built upon a dead flat in long straight lines, its effect is more pleasing to the citizen after a hard day's work, than to the artist, architect, landscape gardener, or lover of the picturesque.

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Birmingham is, in fact, notable for its utility more than its beauty,—for what is done in its workshops, rather than for what is to be seen in its streets and suburbs. Nowhere are there to be found so numerous a body of intelligent, ingenious, well educated workmen. The changes of fashion and the discoveries of science always find Birmingham prepared to march in the van, and skilfully execute the work needed in iron, in brass, in gold and silver, in all the mixed metals and in glass. When guns are no longer required at the rate of a gun a minute, Birmingham steel pens become famous all over the world. When steel buckles and gilt buttons have had their day, Britannia teapots and brass bedsteads still hold their own. No sooner is electrotype invented, than the principal seat of the manufacture is established at Birmingham. No sooner are the glass duties repealed than the same industrious town becomes renowned for plate glass, cut glass, and stained glass; and, when England demands a Palace to hold the united contributions of “The Industry of the World,” a Birmingham banker finds the contractor and the credit, and Birmingham manufacturers find the iron, the glass, and the skill needful for the most rapid and gigantic piece of building ever executed in one year.

In order to appreciate the independent character and quick inventive intelligence of the Birmingham mechanic, he should be visited at his own home. A system of small independent houses, instead of lodgings, prevails in this town, to the great advantage of the workmen.

It is only within a very few years that the working classes have had, in a local School of Design, means of instruction in the principles of taste, and arts of drawing and modelling; while, until the patent laws are put upon a just foundation, their inventive faculties can never be fully developed. When the artizans of Birmingham have legislative recognition of their rights as inventors, and free access to a first-rate school of design, their “cunning” hands will excel in beauty as well as ingenuity all previous triumphs.

The wealthier classes have, from various causes, deteriorated within the last sixty years, while the workmen have improved within that time. Men who have realized fortunes no longer settle down in the neighbourhood of their labours. They depart as far as possible from the smoke of manufactures and the bickerings of middle class cliques, purchase estates, send their sons to the universities, and in a few years subside into country squires. Professional men, as soon as they have displayed eminent talent, emigrate to London; and the habit, now so prevalent in all manufacturing towns, of living in the suburbs, has sapped the prosperity of those literary and philosophical institutions and private reunions, which so much contributed to raise the tone of society during the latter half of the last century. The meetings of an old Literary and Philosophical Society have been discontinued, and

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the News Room was lately on the brink of dissolution. Instead of meeting to discuss points of art, science, and literature, the middle classes read the Times and Punch, and consult the Penny Cyclopaedia. The literary and scientific character which Birmingham acquired in the days when Boulton, Watt, Priestly, Darwin, Murdoch, and their friends, met at the Birmingham Lunarian Society, to discuss, to experiment, and to announce important discoveries, have passed away never to return; and we are not likely to see again any provincial town occupying so distinguished a position in the scientific world. The only sign of Birmingham's ancient literary pre-eminence is to be found in several weekly newspapers, conducted with talent and spirit far beyond average. It is an amusing fact, that the sect to which Priestly belonged still trade on his reputation, and claim an intellectual superiority over the members of other persuasions, which they may once have possessed, but which has long been levelled up by the universal march of education. The richer members publish little dull books in bad English on abstruse subjects, and, like Consuelo's prebendary, have quartos in preparation which never reach the press.

In fact, the suburban system of residence and the excessive pretension of superiority by the "pots over the kettles" have almost destroyed society in Birmingham, although people meet occasionally at formal expensive parties, and are drawn together by sympathy in religion and politics.

Nothing would induce an educated gentleman to live in Birmingham except to make a living, yet there are residing there, seldom seen out of their factories, men of the highest scientific and no mean literary attainments.

There are a number of manufactories, which, in addition to their commercial importance, present either in finished articles, or in the process of manufacture, much that will interest an intelligent traveller.

Glass.—Messrs. F. & C. Oslers, of Broad Street, have attained a very high reputation for their cut and ornamental, as well as the ordinary, articles of flint glass. They have been especially successful in producing fine effects from prismatic arrangements. Their gigantic chandeliers of great size, made for Ibrahim Pacha, and the Nepalese Prince, were the steps by which they achieved the lofty crystal fountain, of an entirely original design, which forms one of the most novel and effective ornaments of the Crystal Palace. The manufactory as well as the show-room is open to the inspection of respectable strangers.

Messrs. Rice and Harris are also extensive manufacturers of cut and coloured glass; and Messrs. Bacchus and Sons have been very successful in their imitations of Bohemian glass, both in form and colour. Messrs. Chance have acquired a world-wide

reputation by supplying the largest quantity of crown glass in the shortest space of time for Paxton's Palace. These works, in which plate and every kind of crown glass

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is made, are situated at West Bromwich. The proprietors have benevolently and wisely made arrangements for the education of their workmen and their families, which are worthy of imitation in all those great factories where the plan, which originated in Lancashire, has not been already adopted. A letter of introduction will be required in order to view Messrs. Chance's establishment, of which we shall say more when noting the social state of the Birmingham operatives.

Papier mache.—Messrs. Jennens and Bettridge's works are so well known that it is only necessary to refer to them for the purpose of saying that in their show-rooms some new application of the art which they have carried to such perfection is constantly to be found. Pianos, cradles, arm-chairs, indeed complete drawing-room suites, cornices, door-plates, and a variety of ornaments are displayed, in addition to the tea-trays and tea-chests in which the art of japanning first became known to us.

Although Messrs. Jennens and Co. have the largest establishment in Birmingham, there are several others who produce capital work; among them may be named Mr. Thomas Lane and Messrs. M'Callum and Hodgson, who both exhibited specimens of great merit at the last Birmingham Exhibition of manufactures.

But metals afford the great staple of employment in Birmingham, and we shall avail ourselves, in describing the leading trades, and touching on the social position of the workmen, of the admirable letters on Labour and the Poor in Birmingham which appeared in the Morning Chronicle in the course of 1850. {81}

* * * * *

Birmingham buttons.—"A Brummagem Button" is the old-fashioned nickname for a Birmingham workman. The changes of fashion, and the advances of other manufactures, have deprived that trade of its ancient pre-eminence over all other local pursuits; but the "button trade," although not the same trade which made great fortunes in a previous generation, still employs five or six thousand hands, of which one-half are women and children.

In the middle of the eighteenth century a plain white metal button was made, which may occasionally be seen in remote rural districts, on the green coats of old yeomen, wearing hereditary leather breeches. At that period the poorer classes wore coarse horn or wooden buttons, chiefly home made, and the tailor made, as well as the clothes, buttons covered with cloth. By degrees very handsome gilt buttons came into wear, and continued to employ many hands, while the blue coat which figures in the portraits of our grandfathers remained in fashion.

In 1826, the Florentine, or covered button, now in almost universal use, which is manufactured by machinery with the aid of women and children, was introduced, and by 1829 the gilt button trade had been almost destroyed.

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The change produced great distress, vast numbers of persons were thrown out of work, who could not at once turn to any other employment. In 1830 a deputation from the gilt button trade waited upon George IV. and the principal nobility, to solicit their patronage. The application succeeded, coloured coats with metal buttons came into fashion, and dandies of the first water appeared in bright snuff-coloured, pale green, and blue coats, such as are now only worn by Paul Bedford or Keeley, in broad farce. In 1836 a cheap mode of gilding, smart for a day, dull and shabby in a week, completely destroyed the character of gilt buttons, and brought up the Florentine again. This change was, no doubt, materially assisted and maintained by Bulwer's novel of "Pelham," which set all young men dressing themselves up like crows with white shirts.

In 1840 a deputation to Prince Albert attempted another revival of the gilt button trade, and at the same time the silk stocking weavers waited on the Prince to endeavour to drive out the patent leather boots, and bring in the low shoe. Both attempts failed. At present there are symptoms of a turn of fashion toward coloured coats and bright buttons, which may be successful, because the fashionable world abhors monotony. The flame coloured coats, long curls, and pink under waistcoats of George IV., were succeeded by the solemn sables of an undertaker; the high tight stock made way for a sailor's neckcloth. For a time shawl waistcoats, of gay colours, had their hour. Then correct tight black yielded to the loosest and shaggiest garments that could be invented. Perhaps the year 1852 may see our youth arrayed in blue, purple and pale brown.

But a very little consideration will prove that these artificial changes, although they may benefit a class, are of little advantage to the community. If a man gives 10s. more for a coat with gilt buttons than for one with plain buttons, he has 10s. less to expend with some other tradesman.

The Florentine Button, first invented in 1820, and since much improved, is a very curious manufacture. It is made—as any one may see by cutting up a button—of five pieces; first, the covering of Florentine, or silk; second, a cover of metal, which gives the shape to the button; third, a smaller circle of mill-board; fourth, a circle of coarse cloth, or calico; fifth, a circle of metal, with a hole punched in the centre, through which the calico or cloth is made to protrude, to form the shank, to be sewed on to the garment.

"Ranged in rows on either side of a long room of the button factory, (says the correspondent of the Morning Chronicle) are from 50 to 100 girls and young women, from the age of fourteen to four or five and twenty, all busily engaged, either at hand or steam presses, in punching out metal circles slightly larger than the size of the button which is to be produced. Before each press the forewoman is seated, holding

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in her hand a sheet of zinc or iron, about two feet long, and four inches broad. This she passes rapidly under the press if worked by hand, and still more rapidly if worked by steam, punching and cutting at the rate of from fifty to sixty disks in a minute. As they are cut they fall into a receptacle prepared to receive them. The perforated sheets are sold to the founder to be melted up, and made into other sheets. In other rooms younger women are engaged in cutting up Florentine cloth, or other outside covering material, paste board and calico. Of these a young woman can punch 57,000 a-day, and of metal, 28,000 a-day. The upper discs are submitted by another set of girls to presses from which each receives a blow that turns up an edge all round, and reduces it to the exact size of the button. The lower disk is punched for the shank to come through, stamped with the maker's name, or the name of the tailor for whom the buttons are made, and coated with varnish, either light or black.

"The five pieces then pass into a department where a woman superintends the labours of a number of children from seven to ten years of age.

"These little creatures place all five pieces, one after another, in regular order, in a small machine like a dice-box, constructed to hold them, which is placed under a press, when a firm touch compresses the whole together in the neat form, which any one may examine on a black dress coat, without stitch or adhesive matter."

This patent was the subject of long litigation between rival inventors, to the great benefit of the lawyers, and loss of the industrious and ingenious.

Within the last twelve months Messrs. Chadbourne, button-makers, of Great Charles Street, have adapted this Florentine button to nails for furniture and carriages.

The Patent Linen sewn-through Button is another recent invention, which has superseded the old wire button for under garments, than which it is cheaper, neater, and more durable. It is composed of linen and circles of zinc.

Horn Buttons, with shanks, which are extensively used for cloth boots and sporting jackets, are made from the hoofs of horned cattle, which are boiled, cut, punched, dyed, stamped when soft, and polished by brushes moved by steam power; the chief part of the work being done by women and children.

Pearl Buttons have become an important part of the Birmingham manufactures, partly on the decline of metal buttons. They are extensively used on coats and waistcoats, where gilt buttons were formerly employed.

The shell used in the manufacture of buttons, studs, card counters, *etc.*, is the mother of pearl, the *Concha margaritifera* of naturalists. Five kinds of shell are employed:—First.

The Buffalo Shell, so named because it arrived packed in buffalo skins; it comes chiefly from Panama, is the smallest and commonest, and sells to the trade at about 15 pounds a ton.—Second.

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The Black Scotch, from the Sandwich Islands, whence it is sent to Valparaiso and to Sydney, New South Wales, worth from 15 to 30 pounds a ton. The large outer rim is of a blackish, or rather greenish, tint, the centre only being white. The outer rim was formerly considered worthless, and large quantities were thrown away as rubbish. Change of fashion has brought the prismatic hues of the dark pearl into fashion for shooting-coats, waistcoats, and even studs. It used to be a standing story with a Bristol barber that a square in that city had been built on thousands of pounds worth of tobacco stalks, thrown away as useless, until it was discovered that that part of the plant was capable of making a most saleable snuff. And so in Birmingham; the Irvingite Church, on New Hall Hill, is said to be built on hundreds of tons of refuse shell, which would now be worth from 15 to 20 pounds per ton. The third shell is the Bombay, or White Scotch, worth from 20 to 50 pounds per ton. The fourth comes from Singapore, and is brought there to exchange for British manufactures by the native craft which frequent that free port. It is a first-rate article, white to the edge, worth from 80 to 90 pounds per ton. The fifth is the Mother of Pearl Shell, from Manilla, of equal value and size, but with a slight yellow tinge round the edge.

Pearl buttons are cut out and shaped by men with the lathe, polished by women with a grinding-stone, and sorted and arranged on cards by girls.

Glass Buttons were formerly in use among canal boatmen, miners, and agricultural labourers, in certain districts. They are now chiefly made for the African market. The process of making them and studs is well worth seeing.

Beside the buttons already enumerated, they make in Birmingham the flat iron and brass buttons, for trowsers; steel buttons, for ladies' dresses; wooden buttons, for overcoats; agate buttons, for which material is imported from Bohemia; and, in fact, every kind of button and stud, including papier mache.

The manufacture of brass shanks is a separate trade, and the writer of the letters already quoted, states the annual production at, or upwards of, three millions per working day. Of these, part are made by hand, but the greater number by a shank-making machine, wrought by steam power, and only requiring the attendance of one tool-maker.

"The machine feeds itself from a coil of brass or iron wire suspended from the roof, and cuts and twists into shanks, by one process, at the rate of 360 per minute, or nearly 75,000,000 per annum. Some button manufacturers employ one of these machines; the majority buy the shanks."

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Guns and swords.—According to Hutton, the historian of Birmingham, the town was indebted for its occupation in supplying our army with fire-arms, to an ancestor of a gentleman who now represents a division of Warwickshire, a Sir Roger Newdigate, in the time of William *iii*.

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The story, however, seems only half-true. Hutton would imply that the first muskets manufactured in England were made in Birmingham. It seems more likely, that the connexion with William *iii.* arose from the desire of that monarch to have the flint-lock, which was superseding the match-lock on the Continent, made in his own dominions.

At any rate, the revolution of 1688, which the romantic anti-commercial party of Young England so deeply regret, gave Birmingham its gun trade, as well as Hampton Court its asparagus beds.

When Walpole gave us peace, the attention of the manufacturers was directed to fowling-pieces, and from that time forward Birmingham has contained the greatest fire-arm factory in the world, although, of course, subject to many fluctuations. Twenty years ago, "A long war soon," was as regular a toast at convivial meetings of Birmingham manufacturers, as at any mess-room or in any cock-pit in her majesty's service.

The government has made several attempts, by establishing manufactories with public money and under official control, to become independent of Birmingham, but the end has invariably been great loss and pitiful results in the number of arms produced.

We hope to live to see the time when our navy will be built as economically as our guns are made—by private contract—and our public ship-yards confined to the repairing department.

During the war which ended at the battle of Waterloo, the importance and prosperity of the gun-makers were great. It was calculated that a gun a minute was made in Birmingham on the average of a year, but the Peace threw numbers out of work and reduced wages very considerably.

Time has brought the trade to a level; indeed, it is one of the great advantages of Birmingham, that the prosperity of the town does not rest on any one trade; so that if some are blighted others are flourishing, and when one fails the workmen are absorbed into other parallel employments.

The gun trade now depends for support on the demand for—first, cheap muskets for African and other aboriginal tribes; secondly, on cheap fowling-pieces, rifles, pistols, blunderbusses, *etc.*, for exportation to America, Australia, and other countries where something effective is required at a moderate price; thirdly, on the home demand for fowling-pieces of all qualities, from the commonest to those sold at the West End of London, at fancy prices; fourthly, on that for fire-arms required by our army and navy; and, lastly, on occasional uncertain orders created by wars and revolutions on the Continent.

There are a vast number of guns, or parts of guns, made in Birmingham, which bear the names of retailers in different parts of the kingdom. Even very fashionable gun-makers find it worth their while to purchase goods in the rough state from Birmingham manufacturers on whom they can depend, and finish them themselves.

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This is rendered easy by the system. No one in Birmingham makes the whole of a gun. The division of labour is very great; the makers of the lock, the barrel, and the stock, are completely distinct, and the mechanics confine themselves to one branch of a department. The man who makes the springs for a lock has nothing to do with the man who makes the nipple or the hammer; while the barrel-forgers has no connexion with the stock-maker or lock-maker.

The visitor who has the necessary introductions, should by no means omit to visit a gun-barrel factory, as there are a good many picturesque effects in the various processes, beside the mechanical instruction it affords.

The following is the order of the fabrication of a common gun:—

The sheets for barrels are made from scraps of steel and iron, such as old coach-springs, knives, steel chains, horse shoes and horseshoe nails, and sheets of waste steel from steel pen manufactories.

These, having been sorted, are bound together, and submitted first to such a furnace, and then to such a steam hammer as we described in our visit to Wolverton, until it is shaped into a bar of tough iron, which is afterwards rolled into sheets of the requisite thickness.

From one of these sheets a length sufficient to make a gun barrel is cut off by a pair of steam-moved shears, of which the lower jaw is stationary and the upper weighs a ton, of which plenty of examples may be seen in every steam engine factory.

The slip of iron is made red hot, placed between a pair of rollers, one of which is convex and the other concave, and comes out in a semicircular trough shape; again heated, and again pressed by smaller rollers, by which the cylinder is nearly completed. A long bar of iron is passed through the cylinder, it is thrust into the fire again, and, when red hot, it is submitted to the welder, who hammers it and heats it and hammers it again, until it assumes the form of a perfect tube.

Damascus barrels are made by incorporating alternate layers of red hot steel and iron, which are then twisted into the shape of a screw while at white heat. The bar thus made is twisted in a cold state by steam power round a bar into a barrel shape, then heated and welded together.

These are the barrels which present the beautiful variegated appearance which gives them the name of Damascus.

The barrels, whether common or twisted, are then bored by a steel rod, kept wet with water or oil, and turned by steam. The process occupies from two to three hours for each barrel.

The next operation is that of grinding the outside of the barrel with sandstone wheels, from five to six feet in diameter when new, driven by steam. These stones chiefly come from the neighbouring district of Bilston; in four months' work, a stone of this size will be reduced to two feet.

The employment is hard, dangerous from the stones often breaking while in motion, in which case pieces of stone weighing a ton have been known to fly through the roof of the shop; unwholesome, because the sand and steel dust fill eyes, mouth, and lungs, unless a certain simple precaution is taken which grinders never take.

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After grinding, a nut is screwed into the breech, and the barrel is taken to the proof house to be proved.

The proof house is a detached building, the interior of which is lined with plates of cast iron.

The barrels are set in two iron stocks, the upper surface of one of which has a small gutter, to contain a train of powder; in this train the barrels rest with their touchholes downwards, and in the rear of the breeches of the barrels is a mass of sand. When the guns, loaded with five times the quantity of powder used in actual service, have been arranged, the iron-lined doors and windows are closed, and a train extending to the outside through a hole is fired.

Some barrels burst and twist into all manner of shapes; those which pass the ordeal are again examined after the lapse of twenty-four hours, and, if approved, marked with two separate marks, one for viewing and one for proving. The mark for proving consists of two sceptres crossed with a crown in the upper angle; the letters B and C in the left and right, and the letter P in the lower angle. For viewing only, V stands instead of P underneath the crown, the other letters omitted.

After proving, the jiggerer fastens the pin, which closes up the breech.

In the mean time the construction of the lock, which is an entirely different business, and carried on in the neighbouring towns of Wednesbury, Darlestone, and Wolverhampton, as well as in Birmingham, has been going on.

The gun lock makers are ranged into two great divisions of forgers and filers, beside many subdivisions.

The forgers manufacture the pieces in the rough, the filers polish them and put them together. In the percussion lock, there are fifteen pieces; in the common flint lock, eight.

By a process patented about eleven years ago, parts of a gun lock formerly forged by hand are now stamped with a die. The use of this invention was opposed by the men, but without success.

The barrel and lock next pass into the hands of the stocker.

The stocks, of beechwood for common guns, of walnut for superior, of which much is imported from France and Italy, arrive in Birmingham in a rough state. The stocker cuts away enough of the stock to receive the barrel, the lock, the ramrod, and shapes it a little.

The next workman employed is the screw-together. He screws on the heel plate, the guard that protects the trigger, puts in the trigger plate, lets in the pipes to hold the ramrod, puts on the nozzle cap, and all other mountings.

After all this, a finisher takes the gun to pieces, and polishes, fits all the mountings, or sends them to be polished by women; the lock is sent to the engraver to have an elephant and the word "warranted," if for the African market, put on it; a crown and the words "tower proof," if for our own military service; while the stock is in the hands of the maker off and cleanser, it is carved, polished, and, if needful, stained.

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Common gun barrels are polished or browned to prevent them from rusting, real Damascus barrels are subjected to a chemical process, which brings out the fine wavy lines and prevents them from rusting.

All these operations having been performed, the barrel, the lock, and the stock, are brought back by the respective workmen who have given them the final touch, and put together by the finisher or gun maker, and this putting together is as much as many eminent gunmakers ever do. But, by care and good judgment, they acquire a reputation for which they can charge a handsome percentage.

For these reasons, with local knowledge, it is possible to obtain from a Birmingham finisher who keeps no shop, a first-rate double gun at a very low figure compared with retail prices.

Belgium and Germany compete with Birmingham for cheap African guns, and even forge the proof marks. Neither in quality nor in price for first-rate articles can any country compete with us.

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Swords and Matchetts.—The sword trade of Birmingham is trifling compared with that in guns. The foreign demand has dwindled away until it has become quite insignificant, and the chief employment is afforded by our own army and navy. Nevertheless, good swords are made in Birmingham, which is the only town in England where any manufacture of the kind exists, although the blades often bear the names of more fashionable localities.

It is among the traditions of the Birmingham trade, that in 1817, when our Government was about to transfer its orders for swords to Germany, in consequence of the inferiority of English swords, a Mr. Gill claimed to compete for the contract; and that in order to show what he could do, he appeared before the Board of Ordnance with a sword, which he tied round his thigh, and then untied, when it immediately became straight. In the end Mr. Gill was the means of retaining the sword trade in Birmingham.

Sword-grinding is worth seeing. Sword-makers find their principal employment in producing Matchetts, a tool or weapon very much like the modern regulation cutlass, but stronger and heavier, with a plain beech-wood handle, worth wholesale from 6d. to 9d. each. They are used in the East and West Indies, Ceylon, and South America, for cutting down sugar-canes and similar uses. We take the name to be Spanish; it is used by Defoe and Dampier. We only mention the article as one of the many odd manufactures made, but never sold retail, in England.

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Steel pens.—All the steel pens made in England, and a great many sold in France, Germany, and America, whatever names or devices they may bear, are manufactured in Birmingham. In this respect, as in many others of the same nature, the Birmingham manufacturers are very accommodating, and quite prepared to stamp on their productions the American Eagle, the Cap of Liberty, the effigy of Pio Nono, or of the Comte de Chambord, if they get the order, the cash, or a good credit. And they are very right; their business is to supply the article, the sentiment is merely a matter of taste.

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There are eighteen steel pen manufacturers in the Birmingham Directory, and eight penholder makers. Two manufacturers employ about 1,000 hands, and the other seventeen about as many more.

We can most of us remember when a long hard steel pen, which required the nicest management to make it write, cost a shilling, and was used more as a curiosity than as a useful comfortable instrument. About 1820, or 1821, the first gross of three slit pens was sold wholesale at 7 pounds 4s. the gross of twelve dozen. A better article is now sold at 6d. a gross.

The cheapest pens are now sold wholesale at 2d. a gross, the best at from 3s.6d. to 5s.; and it has been calculated that Birmingham produces not less than a thousand million steel pens every year. America is the best foreign customer, in spite of a duty of twenty-four per cent; France ranks next, for the French pens are bad and dear.

Mr. Gillott, who is one of the very first in the steel-pen trade, rose by his own mechanical talents and prudent industry from a very humble station. He was, we believe, a working mechanic, and invented the first machine for making steel pens, which for a long period he worked with his own hands; he makes a noble use of the wealth he has acquired; his manufactory is in every respect a model for the imitation of his townsmen, as we shall show when we say a few words about the condition of the working population; a liberal patron of our best modern artists, he has made a collection of their works, which is open to the inspection of any respectable stranger.

The following description of his manufactory, which is not open to strangers without special cause shown, will be found interesting in a social as well as a commercial and mechanical point of view.

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GILLOTT'S *steel-pen factory*.—In the first department, sheets of steel received from Sheffield are passed through rolling mills driven by steam, under charge of men and boys, until they are reduced to the thinness of a steel pen, to the length of about thirty inches, and the breadth of about three inches. These steel slips are conveyed to a large roomy workshop, with windows at both sides, scrupulously clean, where are seated in double rows an army of women and girls, from fourteen to forty years of age, who, unlike most of the women employed in Birmingham manufactories, are extremely neat in person and in dress. A hand press is opposite each; the only sound to be heard is the bump of the press, and the clinking of the small pieces of metal as they fall from the block into the receptacle prepared for them. One girl of average dexterity is able to punch out one hundred gross per day. Each division is superintended by a toolmaker, whose business it is to keep the punches and presses in good working condition, to superintend the work generally, and to keep order among the workpeople.

The next operation is to place the blank in a concave die, on which a slight touch from a concave punch produces the shape of a semitube. The slits and apertures which increase the elasticity of the pen, and the maker's or vendor's name, are produced by a similar tool.

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When complete all but the slit, the pens are soft and pliable, and may be bent or twisted in the hand like a piece of thin lead. They are collected in grosses, or great grosses, into small square iron boxes, and placed by men who are exclusively employed in this department in a furnace, where they remain until box and pens are of a white heat. They are then taken out and immediately thrown hissing into oil, which cures them of their softness, by making them as brittle as wafers. On being taken out they are put in a sieve to drain, and then into a cylinder full of holes, invented by Mr. Gillott, which, rapidly revolving, extracts the last drop of moisture from the pens, on a principle that has been successfully applied to drying sugar, salt, and a vast number of other articles of the same nature. By this invention Mr. Gillott saves in oil from 200 to 300 pounds a-year.

The pens having been dried are placed in other cylinders, and polished by mutual friction, produced by reverberatory motion. They are then roasted or annealed, so as to procure the requisite temper and colour, whether bronze or blue. The last process is that of slitting, which is done by women, with a sharp cutting tool. One girl, with a quick practised finger, can slit as many as 28,800 pens in a day. They are now ready for the young girls whose duty it is to count and pack them in boxes or grosses for the wholesale market.

It has lately been stated by one of a deputation to the Chancellor of the Exchequer, on the subject of the paper duties, that steel pens for the French market are sent in bags instead of arranged on cards to the loss of paper makers and female labour, in consequence of the heavy excise duty on card board.

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BRASSWORK.—Birmingham is by far the greatest producer of ornamental and useful brasswork. In the directory will be found a list which affords some idea of the number and varieties of the brass trade, as all these employ a certain number of working hands, varying from two or three apprentices to many hundred skilled workmen. It includes bell-founders, bottle-jack makers, brass founders, bronze powder makers, brass casters, clasp makers, coach lamp furniture, ornament makers, cock founders, compass makers, copper-smiths, cornice pole makers, curtain ring, bronze wire fender, gas-fitting, lamps, chandeliers (partly brass, partly glass), ecclesiastical ornament, lantern, letter-clip, mathematical instrument, brass and metallic bedstead, military ornament, brass nail, saddlers' ironmonger, (chiefly brass), scale, beam, and weighing machines, stair rod, moulding and astrigal, brass thimble makers, tube, brass and copper-wire drawers, wire workers and weavers, and many other trades less directly connected with brass.

New articles are made in this metal every day. One manufacturer, who first hit upon the hand-clip for papers, made a very handsome sum by it. The Registration of Designs Act has been a great stimulus to certain branches of this trade. Lucifer boxes are quite a new article, unknown the other day, now manufactured in thousands for all quarters of

the globe, Germany, Russia, Holland, India, Australia, California. Then there are ornaments for South American and Cuban saddles and harness; rings for lassos, and bells for sheep, cattle, and sledges, brass rings, as coins for Africa; and weights for weighing gold in California.

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Among the branches of the brass trade which have become important, since the increase of emigration about 5000 ship lamps have been made in one year, at a cheap rate; and within the last five years brass egg cups have been sent in enormous numbers to Turkey, where they are used to hand round coffee. South America is a great mart for cheap brass ware.

Of this trade, it may be said, in the words of a vulgar proverb, "as one door shuts another opens."

The use of china and glass, in conjunction with brass for house furniture and chandeliers, has also created a variety, and afforded an advantageous impetus to the trade.

Mr. Winfield is one of the manufacturers in brass whose showrooms are open to the public. He also has claims on our attention for the wise and philanthropic manner in which he has endeavoured to supply the lamentable deficiency of education among the working classes.

He holds a very leading position as a manufacturer of balustrades, tables, window-cornices, candelabra chandeliers, brackets, curtain-bands, and above all of metal bedsteads, which last he has supplied to some of the chief royal and princely families of Europe, besides Spain, Algeria, and the United States. In all these works great attention has been paid to design as well as workmanship, as was amply proved both at the local exhibition in 1849, where a large gas bracket, in the Italian style, of brass, with Parisian ornaments, excited much admiration; and in 1851, in Hyde Park, where we especially noted an ormolu cradle and French bedstead in gilt and bronze, amid a number of capital works of his production.

Mr. Winfield is patentee of a curious process for drawing out the cylinders used in making bedsteads.

Messrs. Messengers and Sons have one of the finest manufactories in ornamental iron, brass, and bronze, for lamps, chandeliers, and table ornaments. For a long series of years they have spared no expense in obtaining the best models and educating their workmen in drawing and modelling. In their show-rooms will be found many very pleasing statues in gold-colour, in bronze, and copies from antique types of vases, lamps, candelabra, *etc.*

Messrs. Salt and Lloyd are also eminent lamp makers, and generally exhibit, beside table-lamps, the last and best carriage-lamps.

Messrs. Ratcliffes are another enterprising firm.

All such of these manufactories as have show-rooms open to strangers, will be found by an inquiry at any hotel; for although Birmingham is a large town, everybody knows everybody, and the cab drivers will usually be found competent to guide through the voyage of investigation.

Next, after brass, we will take steel, divided into heavy and light steel toys.

* * * * *

Heavy steel toys.—Heavy steel toys are the name by which, by a sort of Brummagem Bull, a variety of articles which are the very reverse of toys, and which are often not made of steel at all, are designated. Heavy steel toys are tools or articles of an implement nature, used in domestic economy.

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The list includes nearly 600 articles. Among these are included the tools of carpenters, coopers, gardeners, butchers, glaziers, farriers, saddlers, tinmen, shoemakers, weavers, wheelwrights, as well as corkscrews, sugar-tongs, sugar-nippers, boot-hooks, button-hooks, door-scrapers, calipers, printing-irons, dog-collars, chains, whistles, tinderboxes, and tobacco-stoppers.

Hammers occupy a leading place, of which there are two or three hundred varieties, belonging to different trades, each of which is divided into eight or ten different weights. Birmingham has the largest share of the heavy toy trade, although there are extensive manufacturers in Sheffield and Wolverhampton. Fine edge tools are chiefly and best made at Sheffield.

This trade increases annually in importance, as it consists of articles which are greatly in demand in new countries; and new markets are opened by every new colonising enterprise of the Anglo-Saxon race. The manufacture includes a great deal of wood-work for handles, as well as iron and steel. For although many axes are made for the American market, after special patterns, and with national mottoes, no handles are ever sent, as the backwoodsmen have better wood for their purpose at command. Our axe handles are stiff; a backwoodsman must have a flexible handle or haft.

The Germans once tried to compete with us in the home market, but the attempt was a failure.

As an instance of the odd accidents that affect the Birmingham trade, about three years ago, when flounces were in fashion, a great demand sprang up for pinking irons, previously only used for ornamenting the hems of shrouds. A workman informed the correspondent of the Morning Chronicle that he had earned about 3 pounds a week for two years at making them.

The scientific tools of housebreakers are known to be made by certain journeymen in the steel toy trade. On the other hand, hand-cuffs, leg-irons, and similar restraining instruments are manufactured for home use and exportation.

Occasionally, London and Liverpool houses in the Brazilian or Cuban trade have ordered suits of chains, intended for the use of slave-ships. These are cheap, coarse, painted black, and horrid looking. Among the orders on the books of a manufacturer, were several dozen pair of hand-cuffs for ladies.

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The edge tool manufacture, which is increasing in Birmingham, probably in consequence of the repeated strikes at Sheffield, added to the superior position of Birmingham as regards coal, and the markets of London, Liverpool, and Bristol, is often carried on in conjunction with that of steel toys. There are forty-five different kinds of

axes; fourteen for the American market, twelve adzes, twenty-six bills and bill-hooks, and upwards of seventy hoes for different foreign countries—Spain, Portugal, South America, the United States, and Australia, which will soon consume as much hardware as America did fifty years ago.

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Light steel toys.—These include chatelains, watch chains, keys, seals, purses, slides, beads, waist buckles, dress swords, steel buttons for court dresses, bodkins, spectacle frames, knitting and netting implements, and steel snuffers. Shoe and knee buckles, which were once universally worn, alone employed five thousand persons in their manufacture, when it was the staple trade of the town. The expense and inconvenience of shoe buckles sent them out of fashion. Dragoons hung in the stirrup, and cricketers tore the nails of their fingers in picking up cricket balls, from the inconvenient buckle.

The trade is extremely fluctuating, and depends very much on inventive taste in which we are manifestly inferior to the French. Some articles we can make better than they can, but they are always bringing out something new and pretty. In small beads they undersell us enormously, while in beads of 1/6th of an inch in diameter, and upwards, we can undersell them.

A visit to a manufactory of light steel toys will afford a great deal of amusement and instruction.

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Medalling.—*Die sinking.*—Here again are trades by which Birmingham keeps up its communication with all the civilised, and part of the uncivilised world. The first great improvements in coining the current money of the realm originated at Soho, near Birmingham, at the manufactories of two men whose memory Englishmen can never hold in sufficient respect—Matthew Boulton and James Watt. They were the inventors of the machinery now in use in the Royal Mint; for a long period they coined the copper money, as also some silver money for the United Kingdom, as well as money of all denominations for many foreign countries, tokens, and medals innumerable. They made coins for the French Convention.

During the war, when money was scarce and small notes were in circulation, many tradesmen, and several public establishments issued “tokens,” which were, in fact, metal promissory notes, as they were seldom of the intrinsic value stamped on them. By this expedient retailers advertised themselves, and temporarily increased their capital. Some successful speculators made fortunes, others were ruined by the presentation of all their metal notes of hand at periods of panic.

At any rate, the manufacture of these articles had a great deal to do with the education of workmen for the medal manufacture which is now so extensively carried on.

The dies from which coins and medals are struck, are, of course, all executed by hand, and the excellence of each coin or medal depends on the skill of each individual workman; therefore there has been no great improvement in execution—indeed, some

medals and coins struck two thousand years ago, rival, if they do not excel, the best works of the present day. The improvements of modern mechanical science are all in the die presses, and in producing cheap metal. These improvements have enabled Birmingham to establish a large trade in cheap medals, which are issued in tens of thousands on every occasion that excites the public mind. Jenny Lind and Father Mathew were both excellent customers of the medallists in their day.

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The medallists are not confined to the home market; France has been supplied with effigies of her rival Presidents, Louis Napoleon and Cavaignac, and we should not be surprised to find that some day a contract has been taken for the medals which the Pope blesses and distributes. Schools and Temperance Societies are good customers, and occasionally a good order comes in from a foreign state or colony, for coins. In 1850 Mr. Ralph Heaton made ten tons of copper coin for Bombay, called cock money, so called because bearing a cock on the obverse, from dies purchased at the sale at Soho.

The late Sir Richard Thomason was a considerable manufacturer of medals, and a very curious collection may be seen at the showrooms of his successor, Mr. G. R. Collis, who carries on the same trade, and is consul for a number of countries between Turkey and Timbuctoo.

The most important part of the die-sinking trade, is that for making patterns in brass, mixed metal, and iron in curtain bands, pins, lamp pillars, cornices, coffin furniture, and all articles in which stamping has superseded the more expensive process of hammering out.

Within the last twenty years, and notably within the last ten years, public taste has required an increased amount of ornament in all domestic manufactures; stimulated by this demand, great improvements have been made in stamping, and excellence in the art of die-sinking has become more widely diffused. The Birmingham die-sinkers admit that they are inferior to the French in design, while in the execution of cutting heavy steel dies, they are decidedly superior. Die-sinking is an art, like painting or sculpture, which requires personal aptitude to enable an apprentice to acquire excellence.

It is carried on in Birmingham by men who work themselves, employing two or three journeymen. The names of these artists seldom appear. A London or Parisian tradesman undertakes an order which is passed to some noted Birmingham House, which transmits it to a hard-handed man in a back street.

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Coffin ornaments.—The manufacture of ornaments for coffins is a very important part of the trade, and it is curious to find, that even in this last concession to human vanity, there is a constant demand for new designs.

Who is it that examines and compares the ornaments of one coffin with that of another? We never heard of the survivors of a deceased examining an undertaker's patterns. And yet, a house which consumes forty tons of cast iron per annum for coffin handles, stated to the gentleman to whose letters we are indebted for this information, "Our travellers find it useless to show themselves with their pattern books at an undertaker's, unless they have something tasteful, new, and uncommon. The orders for Ireland are

chiefly for gilt furniture for coffins. The Scotch, also, are fond of gilt, and so are the people in the west of England. But the taste of the English is decidedly for black. The Welsh like a mixture of black and white. Coffin lace is formed of very light stamped metal, and is made of almost as many patterns as the ribbons of Coventry. All our designs are registered, as there is a constant piracy going on, which it is necessary to check."

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Dies are cut in soft metal and then hardened.

Die-sinking is one of the arts so interesting in all its branches, from the first design to the finished coin or ornament, that every intelligent traveller should endeavour to see it.

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Platers, GILDERS, and electro-platers.—Large fortunes have been made in Birmingham by plating copper, “in the good old times;” but Sheffield was, until within the last ten years, the principal seat of the manufacture. Sheffield plate was a very superior article, and for years would look and stand wear like silver. Plating was effected by laying a thin film of silver on a sheet of copper, which was afterwards shaped into tea or coffee services, forks, spoons, candlesticks, trays, tea urns, and other articles for house use. It was also applied to harness, saddlery, and every thing formerly made of silver alone. A great impetus was given to this trade by our intercourse with the continent at the close of the war, which sent steel pronged forks out of fashion. The first inroad upon the plates on copper was made by the invention of white metal, called German silver. The next was the discovery of the art of plating by galvanic instead of mechanical agency, now known as electro-plating. The result of the application of electric power to plating, however, has been to transfer a large share of the Sheffield plate business to Birmingham. It is a curious fact that a veterinary surgeon (of the name of Askew) invented the first German silver manufactured in England, and that a Dr. Wright, of the same town, discovered the practicability of electro-plating about the same time that several other persons had discovered that metal could be deposited by a galvanic current, but had not thought of applying it practically to manufactures.

The old system of plating is still carried on both in Sheffield and in Birmingham; improvements have been introduced by the employment of a white metal instead of copper as the foundation, and by grafting on, as it were, silver tips to forks and silver edges to prominent ornaments; but the balance of advantage in economy and facility are so greatly in favour of the electro-plating process, that, no doubt, when the patents under which it is now worked expire, its use will become universal.

Since the first patent was published, important improvements have been made in France, Germany, and America, which the original patentees have incorporated. Copperplates cast from wood cuts and stereotypes can be reproduced with great facility and economy, and the exact touches of an artist in clay or wax can be reproduced in metal without the translation of casting. Nothing is too small or too large,—the colossal statue of an Amazon on horseback spearing a lioness, by Kiss, the Berlin sculptor, exhibiting in the Hyde Park Exhibition of 1851, was copied in zinc and bronzed by this process; and, by the same means, flowers, feathers, and even spiders’ webs have been covered with a metal film.

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At present, a handsome electro-plated teapot, exactly resembling silver, may be purchased at what a Britannia metal one cost fifteen years ago.

Messrs. Elkington and Mason, the purchasers of the secret from the original discoverer and authors of valuable improvements, are at the head of one of the finest and most interesting silver and electroplating establishments in the kingdom.

In commencing this new manufacture, the commercial difficulties they had to overcome, in addition to those of a practical and mechanical nature, were very formidable.

The Messrs. Elkingtons originally intended to confine themselves to plating for the trade. But the prejudice against the new process was so great, that the manufacturers of the needful articles could not be induced to try it. Messrs. Elkington were, therefore, very unwillingly, compelled to invest a capital in becoming manufacturers of plated forks, spoons, cruets, candlesticks, tea services, and all the *et ceteras* of imitation silver. The additional venture did not serve their purpose. The retail dealers, equally prejudiced, refused or neglected to push off the new plate. More anxiety and more expenditure of capital followed, for the patentees were obliged to establish retail establishments in several cities in this country, America, and our Colonies. The struggle ended in complete success; the use of electro plate has become universal, and the manufacture is not confined to Messrs. Elkington, but is carried on, under licence from the Patentees, by a vast number of firms. The result, however, has been, as already stated, to transfer a good deal of the plated trade of Sheffield to Birmingham, for the former town has slowly and unwillingly adopted the new method, which has deprived its manufacturers of their ancient pre-eminence. Electro-plating has not, as was imagined on its first discovery, lessened the demand for manual labour in the plate trade; on the contrary, it has largely increased it, while extending the sale of a superior, and superseding an inferior, class of goods.

Although for all ordinary articles, such as forks, spoons, teapots, *etc.*, there are, no doubt, many manufacturers in Birmingham quite equal to Messrs. Elkingtons, their manufactory is especially worth visiting; because, in the first place, the whole manufactory is open, and conveniently arranged for the inspection of visitors; and, in the next place, the firm pay great attention to the artistic merit of their more expensive work. They spare no expense to obtain copies from the best antique models, and original designs from living artists, beside keeping up a staff of draughtsmen and modellers.

In the manufactory may be seen the whole history of a plated dinner service, from the pickle fork to the epergne, or vase, which crowns the centre of the table at a grand banquet.

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In one room men are at work in cutting out forks and spoons from flat sheets of white metal, which is afterwards shaped, ornamented, engraved, and then, if to be covered with silver, subjected to the action of a current of electricity, produced by an immense pair of magnets—if to be coated with gold, to the action of galvanic batteries; this process requires explanation which must be sought in works, like Mr. Alfred Smee's, especially devoted to the subject. Then comes the burnishing, by the action of leather-covered wheels and wire brushes, in steam-driven motion, and then the burnishing by hand, which is chiefly performed by young girls and women. And an agreeable and profitable occupation it seems to be.

The manufacture of such articles as teapots is equally interesting. In the process of joining such parts as the handle and spout by hard solder, that is to say, solder as difficult to melt as the main body of the object, one of the most valuable inventions for chemical processes, the blow-pipe, is employed with the aid of two other great scientific aids of modern times. The flame of the blow-pipe is made by a stream of gas, and driven, instead of by a man's breath, by a steam blast, so that the mechanic has a power and a facility of manipulation which would be unattainable under the old system of working with a lamp and puffed out cheeks. There is great matter for reflection in the sight of the hundreds of ingenious industrious workmen and workwomen under one roof, employed mainly through the agency of three powers, which, if not discovered, were utilised in the last years of the eighteenth, and early years of the nineteenth century—Steam, Gas and Electricity.

In one series of the workshops of this same establishment, a considerable manufacture of genuine silver plate is carried on, and it is curious to find mechanics engaged in hammering out or chasing plate, using exactly the same tool that was employed in the fifteenth century, or perhaps in Roman times. No improvement has, or, as it would appear, can be, effected; all superiority now, as then, depending on the workmen.

A great deal of ornamental work, of a stereotype character, is done by stamping instead of chasing. The steel dies for this purpose form a very costly stock in trade. A single pair of dies for a sacramental cup will sometimes cost 150 pounds.

Among the modern improvements, we must not fail to note the patent seamless teapots of Britannia metal, and white metal, electrotyped—capital things for bachelors, the spouts are not likely to melt off on the hob.

The show rooms of this establishment contain, in addition to the ordinary contents of a silversmith's shop, a number of exquisite copies in gold, silver, and bronze electro-plate of cups and vases of Greek and Etruscan execution, and of chased work by Benvenuto Cellini, and other master goldsmiths of the fifteenth century.

The Messrs. Elkington have doubled their trade since the Birmingham Exhibition in 1848, and there is reason to believe that, instead of displacing labour as was

anticipated, this invention has increased the number and the wages of the parties employed.

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The Britannia Metal manufacture is closely allied to the plate trade; an ingenious improvement, well worth examination, has recently been introduced by Messrs. Sturgis of Broad Street, by which teapots are cast whole, instead of having the spouts and handles soldered on.

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The Gilt Toy and Mock Jewellery Trade, once one of the staple employments of Birmingham artizans, has dwindled away until it now occupies a very insignificant place in the Directory. Bad cheap articles, with neglect of novelty and taste in design, ruined it. In cheap rubbish foreigners can always beat us, but the Birmingham gilt toy men made things "to sell" until no one would buy.

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Fox and HENDERSON'S manufactory.—The London works conducted by Messrs. Fox, Henderson, and Co., who have become known to all the world by their rapid and successful erection of the Crystal Palace, are situated at Smethwick, about four miles from Birmingham on the Dudley Road. They were established after the commencement of the London and Birmingham Railway, for the manufacture of iron and machinery required in the construction of railways.

The shops, which are of large dimensions, are built in a quadrangle, enclosing a large area or open space, which is employed as a yard for material or finished goods as may be accidentally required. The first place into which the stranger is shown is called the Truck shop, and will accommodate three hundred carriage builders and carpenters. Adjoining it is the Boiler Makers' shop, or, more properly, a shop for workers in plate-iron, for boilers are not made in the establishment, but iron doors, navy casks, and wrought iron railway carriages are produced in this department. These shops form one side of the quadrangle.

The forges, which are very numerous, occupy the first department of another side of the range of buildings. The forges, as is now usual, are supplied with air by the motion of a fan worked by the engine, and by the side of them many strong and stalwart arms are wielded with as much skill and ingenuity as distinguished some of the smiths of the middle ages. The Mechanical Engineering shops join the forges, and in them will be found many of those beautiful self-acting tools for which this age is so remarkable. There are drilling, planing, screwing, and slotting machines of various designs and adapted to different purposes, as well as numerous expensive and very perfect lathes. Here the switches used for conducting trains from one line to another are made, as well as all kinds of machine work. Connected with this is the Turntable shop, which is, to a stranger, as interesting as any part of the establishment, from the magnitude of the

machinery and the ease with which gigantic masses of iron are carried about by the traveller to and from the planing and other machines. The Wheel shop, which is next visited, is chiefly used for the manufacture of railway carriage wheels, of which, as must be well known, there are many varieties. The Foundry and Anchor manufactory must not be omitted in an enumeration of the departments.

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The other two sides of the quadrangle are occupied by saw-pits, painters' shops, stores, offices, and all the conveniences required for carrying on a business which frequently gives employment to eleven or twelve hundred men.

The reputation of Messrs. Fox, Henderson, and Co., has been long established among engineers for the construction of railway bridges, iron roofs, and works of a similar kind; but it has been made European, if not universal, by the rapidity and skill with which they have constructed the Industrial Exhibition.

Strangers, if introduced, are permitted to see the works.

Besides the manufactures we have enumerated and described, there are many others of more or less importance; and new inventions and the spur of enterprise are creating new manufactures in Birmingham every day.

There are manufacturers of steam-engines and other machinery, of stoves, grates, and other iron foundry. One firm (Messrs. Hardman Iliffe) employs a great number of workmen in making every kind of church furniture, from the most approved mediaeval models and the designs of Mr. Pugin. Another executes stained-glass windows. Saddlery and harness, or parts of saddles and whips, employ a certain number of hands; and not only imitation but a good deal of real jewellery is made. There is one large and curious manufactory of gold chains.

In a word, there is no town in the world in which the execution of work, however new or complex, in metal, wood, horn, or ivory, can be so certainly effected as in Birmingham.

There are not many merchants in Birmingham, in the large sense of the term. The chief mercantile business is done by parties termed factors, who in effect are, if not actually, the agents of great merchants. These "factors" purchase what they need for their wholesale customers from the manufacturers. About 2,000 of the Birmingham manufacturers are what are termed garret-masters; they work themselves, and employ a few hands. The "factor" buys as few as half-a-dozen tea-pots, or a hundred gross of pearl buttons, from these little men, until he makes up his number. His business partakes more of the character of retail than wholesale, and the grinding—technically slaughtering—system of the factors of Birmingham has an unfavourable Yankeeifying effect on their character.

The principal mercantile houses are in direct communication with American houses, if not actual partners or agents. A panic in New York finds an immediate echo in Warwickshire and Staffordshire, just as a fall or rise of cotton in New Orleans is immediately felt in Lancashire.

It is worth observing, that in some instances great transactions are carried on with wonderfully little show in Birmingham, and no state. We could not give a better instance of the difficulty of “judging by appearances” than in the following sketch from nature.

There is a broad street of tall mean houses, which, except at the workmen’s dinner hour, seems always empty.

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In this street is a large house of a dirty, faded appearance; the cobwebbed windows blocked up; the door with a broken knocker and a sad want of paint. It is evidently the ci-devant residence of a Birmingham manufacturer of the old school, before the suburbs of Edgbaston and Handsworth sprang up, now turned into a warehouse or receptacle for lumber. As to apply to the front door would be useless, you turn up a dark passage at the side, and reach another dingy door, which gives way with a rattle at your touch, and closes with a rattle and a bang; passing through you ascend a flight of creaking deal stairs, and reach a suite of low rooms, about as imposing in appearance as a deserted printing-office. A few juvenile clerks—the very converse of the snug merchants' clerks of the City of London—are distributed about. A stranger would not give 50 pounds for the furniture, capital, and credit, of the whole concern.

And yet, in this strange place, is conducted a trade of many tens of thousands per annum, with branches in all the principal towns of Germany, Spain, Portugal, South America, and British India!

A rapid idea of the Birmingham hardware trade may be obtained from the extensive show-rooms of Messrs. Herbert, in the Bull-ring.

If we have failed to do justice to any branch of manufacture, we have a very sufficient excuse in the difficulty we experienced in obtaining access to manufactories, or even information as to what was worth examination.

HEALTH AND EDUCATION.

After detailing at such length the material advantages of this interesting and important community, we should not be doing right if we did not present the reverse of the medal in certain drawbacks and deficiencies which seriously interfere with the prosperity and progress of "the hardware village."

The Birmingham public are so often in the habit of hearing from their favourite orators that they are the most intelligent, moral, and intellectual people in the world,—that their town is the healthiest, and their opinions the soundest, of any community in England, that it is not extraordinary if they overlook blots which are plain enough to a stranger. Perhaps they are quite right; perhaps they are more honest, more sensible, more sound politicians, than any other British community. Perhaps, too, they are cleaner, more sober, and better educated than the towns of A, B, and C; but, without entering into comparisons, which, in such cases, are of no practical benefit, we shall proceed to show that, with all their excellent industrious, intelligent, and ingenious qualities, the people of Birmingham are much more dirty, drunken, and uneducated than they ought to be, considering that the town is in a very healthy situation; that the mass of the population is engaged in skilled employments, and that patriots, bearded and unbearded, are plentiful, who seem to have a great deal of influence, for good or evil.

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First, then, as to drunkenness, the great parent of British poverty and crime—drunkenness, which is a greater tax upon us than the National Debt; let us see what share that has in the grievances of Birmingham.

It appears that in 1850 there were, including hotels, taverns, gin-shops, and beer-shops, altogether 1293 establishments for the supply of intoxicating liquors. The total number of houses in the borough being 43,000, it results that in every 33 houses one is a wine, beer, or spirit shop. That as the number of bakers' and chandlers' shops is only 871, there are 422 more shops engaged in selling drink than in selling bread, and if only four persons be supposed to be supported by selling liquors, that will be more than twice as many as are engaged in the gun trade, viz., 2400. Or to put the calculation in another form, if we allow the sum of 50 pounds per annum as the wages of the five thousand persons who live by the sale of intoxicating drinks, it will be found that the people of Birmingham must expend at least a quarter of a million on wine, beer, and spirits.

That too much is so expended is proved by the police returns, which show that out of 3400 persons taken into custody in 1849, nearly half the offences arose from intoxication.

In other respects, considering the population, the crime of Birmingham is rather below than above average. It cannot be said that it is either a brutal or dishonest, but it is essentially a drunken town. The causes of the prevalence of this degrading vice are several, and may be traced out very clearly.

Metal work is hard and thirsty work, but it may be doubted whether what is really drunk while at work, or immediately after work, does harm. But it has long been, and still is, the habit of the mechanics in a number of trades, to make a holiday of Monday; it has even a local name—it is called Shackling day, "Shackling" being a term which can be perfectly translated by the French verb, *flaner*. A Shackler must drink, if not smoke.

The more plentiful and pressing the work is, the more determined are the men engaged to make Saint Monday, and very often Tuesday and Wednesday also.

The time so lost when trade is at high water, and the losses imposed on the manufacturer by the consequent non-fulfilment of contracts, eventually form a second drawback on the earnings of the workman, in addition to the day's wages lost, and the days' wages spent on "shackling days."

Secondly, it has been proved that a large percentage of the married women engaged in work factories are compelled so to work to support their families in consequence of the improvidence of their husbands.

Thirdly, in the same way children, from a very early age,—seven years, and even younger,—work in order to support their improvident parents.

Women engaged in work all day cannot keep comfortable houses for their husbands. An uncomfortable home drives a husband, no matter of what rank, to the tavern or the club.

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The custom of sending children to work from the time they can earn sixpence a-week, renders education impossible. In the evenings they are only fit to sleep: on Sundays, in fine weather, the majority very naturally prefer walking in the fields to the dry task of acquiring knowledge, the value of which they are not sufficiently educated to appreciate.

The effect of the want of education and the habit of idle Mondays on the male population is sufficiently lamentable. A man who can neither read nor write, in addition to the abstract pleasure Saxons have in drinking, finds an occupation and a substitute for ideas in a pot and pipe. The effect on the female population is even more baneful. They are so fully occupied that they have neither time to write, nor to cook, to read nor to sew, and they become wives and mothers with no better qualification for their important duties than girls educated in a fashionable school, without being able to obtain the assistance of servants and governesses.

Wives engaged in factories are obliged to leave their children to the care of strangers or elder children, themselves scarcely above the age of children.

One consequence is, that according to the report of a committee of physicians and surgeons in 1840: "The ratio of infant mortality in Birmingham is very considerable, greatly exceeding that of the metropolis, and of the agricultural districts, though not as high as in some provincial towns." "Severe burns and scalds, particularly the former, are so numerous, that in the general hospital two rooms are devoted for their reception."

We have not been able to obtain any precise statistics of education among the operative classes; but we find that among criminals upwards of ninety per cent. are either totally or very imperfectly educated, and that of 15,000 young persons between the age of ten and fifteen engaged in manufacture, not more than 1,000 have an opportunity of education, except from Sunday schools.

In Sunday schools the instruction is confined to reading the scriptures and religious books, except in the schools attached to the meeting-houses of the Society of Friends and the Unitarians, the conductors of which have had the good sense to accommodate their plans to the peculiar wants of a manufacturing district.

No general movement seems to have been attempted to correct this crying evil of infant employment and neglected education, none of the patriots, bearded or shaven, have ventured to exert their strong lungs in so unpopular a cause: it is so much easier to stand on your own dunghill and abuse the lord of the manor than to put on an apron and a cap, mix up the lime and water, and whitewash your own cottage. But several manufacturers have honourably distinguished themselves by beginning the work of reformation at home.

Mr. Gillet, the pen manufacturer, whose work is principally done by females, admits no girls into his shops under thirteen; he makes ability to read indispensable, and gives a

preference in obtaining employment to those who can write; and requires a certificate of regular attendance from a Sunday school teacher.

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Mr. Winfield, who employs nearly five hundred hands, of whom few are women, established an evening school in 1844, at a charge of a penny a week, for his own work people, in which reading, writing, arithmetic, English grammar, geography, and drawing, are taught, with occasional lectures on the principles of mechanics, natural philosophy, and history. A small library is attached to the school.

“When the school was first established, it was remarked that scarcely a boy knew his companion except by a nickname, and that fights on entering and leaving school were of common occurrence. At present the practice of nicknames has disappeared, and a fight does not take place once in three months.

“The proceedings of the evening commenced with a hymn. An orphan boy, fourteen years of age, a self-taught musician, placed himself before a small organ, provided by Mr. Winfield, and played the evening hymn. All the boys accompanied him with their voices, and sang very creditably; after this they were formed into their usual classes.

“The school labours under great disadvantages; the hours of attendance are not sufficiently long; even these few hours are infringed on when trade is brisk, and the men, working over-hours, require the boys to assist them; and from physical exhaustion of the boys after the labour of the day, they sometimes fall asleep over their books.

“A hymn is sung, a prayer said, and the bible read without comment, no catechism or doctrinal point is introduced. The school includes the sons of people of the Church of England, Roman Catholics, Wesleyans, Presbyterians, and Unitarians.”

Messrs. Peyton & Barlow, metal-bedstead makers, Mr. Bacchus, glass-maker, Mr. Middlemore, currier, and Messrs. Chance, glassmakers, have also established schools for the parties in their employ.

Mr. William Chance is an earnest philanthropist; he has established a ragged school, at his own expense, in Birmingham, open to all, and at his works in Spon Lane, West Bromwich, one school for his workmen alone, and another open to the neighbourhood.

The first school, in Spon Lane, is divided into three departments, for infants, for girls, and for boys. A weekly charge of 3d. is made, for which books and stationery are provided; punctual attendance and cleanliness are conditions insisted upon. The number of scholars, of whom one-third are from Messrs. Chance's works, has steadily increased from the time of opening. The boys are instructed in reading, writing, arithmetic, grammar, geography, and the elements of drawing. The girls are taught plain needlework instead of drawing. No catechism is taught, but the bible is read without comment. One-half are the children of parents in communion with the Church of England, and the other half of Dissenters. In 1850 it contained 190 boys, 80 girls, and 150 infants.

It is difficult to rate too highly the advantage the operative classes obtain from the preliminary training afforded by infant schools. But infant schools are useless, if the education is to cease at seven years old.

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The other school is strictly confined to the boys and men employed in the glass works. It opened July, 1850, with 110 scholars, all boys from twelve years of age, before which none are admitted into the manufactory. By degrees the men, at first deterred by shame, began to attend, and at present a considerable number avail themselves of the advantage for commencing or extending the imperfect education they had obtained at Sunday Schools.

These schools are not self-supporting, but are found, even in a commercial point of view, to repay the philanthropic firm by whom they have been founded and supported.

The Birmingham Free and Industrial School, founded in 1847 by the energetic exertions of the Hon. and Rev. Grantham Yorke, Rector of St. Philip, includes a day school for boys and girls above seven years of age; two industrial classes; and an asylum for deserted and orphans. The scholars are not of the class to which we are specially calling attention. We shall, therefore, content ourselves with mentioning the existence of such a School for the refuse population of this large town.

The deficient education of the working classes, consequent on unregulated infant labour, would alone be sufficient to account for the prevalence of the idle custom of losing at least one day every week in busy times, and the drinking habits, which are a blot upon a population of superior intelligence. But a still more demoralizing influence exists in the state of the dwellings of the working classes in Birmingham, which, although at first sight very attractive in appearance, forming neat courts of cottages, compared with the crowded lodging-houses of many manufacturing towns, are, nevertheless, lamentably deficient in two essentials for health and decency, *viz.*, efficient drainage, and a sufficient supply of wholesome water.

In two thousand courts, inhabited by fifty thousand people, the supply of water is either obtained at great loss of time from wells, often dirty, sometimes fetid, or purchased at an extravagant rate from itinerant water-carriers.

A Private Water Company exists, but has scarcely been called upon at all to supply the houses of the working classes. Under these circumstances, with a clean external appearance, the filth in which fifty thousand people live seems to be only understood by the local Medical Inspectors, whose reports have hitherto produced so little effect, it is not extraordinary that after long hours of toil, the inhabitants fly to the bright saloons of gin shops, and the snug tap-rooms of beer shops.

We have dwelt thus at length upon the moral, and educational, and sanitary shortcomings of a town which can, no doubt, draw comparisons, very much to its own advantage, with other manufacturing district towns, because Birmingham is in a position to set an example, to lead the way in an all-important reform without consulting the opinions of the Ministers or the Parliament of the day. Birmingham may, if it pleases, go far toward affording every working man the means of drinking and washing in an ample

supply of clean water, of living in a well-drained cottage, and of sending his children to school for two hours every day, without waiting for the decision of Parliament upon all the crotchets of the Chartists, or plans of the Financial Reform Association.

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Pity it is that none of the well-applauded Brummagem patriots have pluck enough to battle a little unpopularity in so honest a cause. But clap-trap costs less trouble than work, and gets more cheers.

It is the misfortune of Birmingham to be sacrificed to the disagreements of two rival factions, one calling itself Conservative, and the other Radical, both filling the pockets and doing the work of lawyers at the expense of the ratepayers.

Nothing can be done until the municipal Corporation obtains the powers now vested in several sets of virtually irresponsible Commissioners. When these wars of the Pots and Kettles are ended, the ratepayers will be able to turn their undivided attention to local reforms without having their minds distracted by those little legal squabbles, under cover of which business is neglected, and pockets are picked. It is to be hoped that the session of 1851 will settle this point.

The whole kingdom is interested in the good government and prosperity of its greatest inland town. {113}

WARWICK, LEAMINGTON, KENILWORTH, STRATFORD ON AVON.

Before leaving Birmingham, it will be convenient to say something about Warwick, Leamington, Kenilworth, and Stratford on Avon, of which the one is the assize town, another the watering place, and the third and fourth the antiquarian or rather romantic lions of the county in which Birmingham stands first, for wealth, population, manufacturing, and political importance. Warwick, in spite of its parliamentary, municipal, and assize honours, would soon be as much forgotten as a hundred other dull little country towns, without local trade or local attractions, if it were not for the castle, the church, and the river, which, in connection with striking epochs in England's history, will ever render it a favourite pilgrimage.

After being destroyed by the Danes, Warwick was restored by Ethelfreda, the daughter of Alfred the Great, who built a fort there, A.D. 913. At Domesday Survey it was a borough, and contained 261 houses, of which 126 belonged to the king. Members were sent to Parliament in the time of Edward I., when also the paving of the town and the erection of a wall round it were commenced. In the time of Philip and Mary, the first charter of incorporation was granted.

The town stands on the west side of the river Avon,—Shakspeare's Avon, from which it is separated by Warwick Castle and grounds. It was formerly a little county metropolis, many of the families of rank and fortune had winter residences there; the Warwick balls were frequented by a select and exclusive set; a small theatre was well supported, and few races assembled more distinguished company than used to throng the Warwick

course once a year, in family coaches and four-in-hands. All this grandeur has departed, Leamington has absorbed the wealth and fashion of Warwick, the town mansions have fallen into plebeian

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hands, the theatre has ceased to be a training school for the London boards, the streets are silent except when a little temporary bustle is produced by an influx of Birmingham attorneys, their clients, and witnesses, at the assizes, of stout agriculturists and holiday labourers on "fair days," or the annual "mop," when an ox is roasted whole, and lads and lasses of rosy rural breed range themselves along the pavement to be hired, or at the races twice a year, when, although the four horses with postilions and outriders are seldom seen, railroads from a distance, and Leamington from close at hand, pour a variegated stream of sightseers and gamblers on one of the prettiest pieces of ground in England.

Warwick has no manufactures, but, being a borough very evenly balanced between the two contending political parties, its inhabitants have enjoyed a fuller share of the favours of Government than has fallen to the lot of towns of more commercial importance.

Warwick stands on solid rock, in which the cellars are excavated; and this circumstance, added to its position on the top of a hill, renders it particularly dry and clean.

There are several excellent inns, supported by the surrounding' farmers, which are much to be preferred to more fashionable hotels. The roast geese to be found at the farmers' ordinaries on market days about Michaelmas time, are worthy of commendation; and the farmers themselves, being of a jovial and hospitable turn of mind, render these dinners pleasanter to a stranger who can dine at an unfashionable hour, than the eternal "anything you please, sir; steak or chop, sir," in a solitary box, which haunts us for our sins in the coffee-rooms of English hotels.

Warwick deserves a long journey, if it were only for the sake of the fine woodland scenery which surrounds it for ten miles, but the castle is the especial object of attraction,—a castle which realizes almost more than any other those romantic ideas of a feudal abode which were first put into circulation by the "Castle of Otranto," and became part of the education of our youth under the influence of the genius of Sir Walter Scott.

The castle rises upon the brink of the river, which foams past over the weir of an ancient mill, where once the inhabitants of the borough were bound by feudal service to grind all their corn. The best approach is from the Leamington Lower Road, over a bridge of one arch, built by a late Earl of Warwick. Caesar's and Guy's towers rise into sight from a surrounding grove. The entrance is through an arched gateway, past a lodge, where the relics of Earl Guy, the dun cow slayer, are preserved; and a winding avenue cut in solid rock effects a sort of surprise, which, as the castle comes again suddenly into view, is very pleasing. The exterior realizes a baronial abode of the fourteenth or fifteenth century; the interior has been modernized sufficiently to be made comfortable,

still retaining many striking features of its ancient state. A closely cropped green sward covers the quadrangle, which was formerly the tilting ground.

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The date of Caesar's tower, the oldest part of the building, is uncertain. Guy's tower, of the latter part of the fourteenth century, is in fine preservation.

The great entrance hall, a grand old room sixty-two feet by thirty-seven, is adorned with armour and other appurtenances to feudal state. At a great fire-place with fire dogs, room might be found for a cartload of faggots. A suite of rooms, commanding views of delightful scenery, are adorned with ancient tapestry, armour, and pictures by Rubens, Vandyke, Velasquez, and other eminent painters. Among the portraits are Ignatius Loyola, the founder of the Jesuits, Prince Rupert, and Charles I. on horseback, by Vandyke.

Hours may be profitably and agreeably spent in investigating the treasures of Warwick Castle. The grounds, although not extensive, are picturesquely arranged; in one of the greenhouses, the Warwick vase, an antique celebrated for its size and beauty, will be found. The numerous copies in various materials, but especially in metals, cast in Birmingham, have rendered the form of this relic of classic art well known.

After the Castle, St. Mary's Church must be visited for its beautiful chapel with altar tomb, on which lies prostrate in humble prayer the effigy of Richard Beauchamp, Earl of Warwick, styled "the Good." This Beauchamp was Regent of France in 1425, during the absence of the Duke of Bedford, and carried on the war there with signal success. He was afterwards governor of the infant king, Henry VI. While a second time ruling over France, he died at Rouen on the 30th April, 1439. It was the daughter of the Good Earl who married Richard Nevil, created, on succeeding to the Warwick estates through his wife, Earl of Warwick, known as "the king maker;" a grand character in Shakspeare's Henry VI., and the hero of Sir Bulwer Lytton's "Last of the Barons."

Then there is Leicester Hospital, founded in the time of Richard II., as two guilds, in honour of the Virgin and St. George the Martyr, which, after the Reformation, was re-established under its present name by Queen Elizabeth's favourite, Robert Dudley, Earl of Leicester, as an almshouse for a master and twelve brethren, "being impotent or infirm men." These last have been, in consequence of the improved value of the trust-funds, increased to twenty, and receive each an allowance of 80 pounds per annum: the master has 400 pounds. The buildings of this charity consist of a quadrangle, formed by the brethren's lodgings and public kitchen, of a chapel of ancient architecture over the west gate of the town, and an ancient hall.

Previous to the Reform Bill, the influence of the Warwick family returned two members for the borough of Warwick: since that period they have as yet only returned one; but, in the absence of the countervailing influence of any manufactures, it seems likely that a popular Earl, of whatever politics, would be able to resume the ancient influence of the house, and again return two.

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Leamington, about two miles distant, may be reached by two turnpike roads and a pleasant footpath; the distance of all being about two miles.

Mineral waters, fashion, a clever physician, the Warwickshire hounds, the surplus capital of Birmingham, speculative builders, and excellent sanitary regulations have contributed to the rapid rise of this picturesque and fashionable watering-place; in what proportions it would be difficult to say.

The waters, which resemble mild Epsom salts, first brought the village into notice in 1794, although the existence of mineral springs at Leamington Priory had been recorded by Camden and Dugdale. In 1794 people drank harder than they do now, read less, played cards more, were altogether "faster," and had more need of purifying waters and pump-room amusements. A long war shut out our idlers from the Continent, and created an additional demand for our native mineral produce. At a later period the talents of Dr. Jephson attracted an army of invalids and would-be invalids; Sir Walter Scott's novels brought Kenilworth and Warwick Castle into fashion, just as Garrick, like a second Peter the Hermit, preached up a pilgrimage to Stratford-on-Avon. So land-jobbers and builders rushed to prepare tempting abodes for the armies of the sick, the sporting, and the romantic, who gathered round the springs.

Although the beautiful stone which has made Bath the queen of watering-places, was not to be had, the materials for Roman cement, then lately invented, were plentiful. With these aids the town authorities had the good sense to enforce cleanliness, and all manner of rules for making the streets fit for the lounging promenades of the well-dressed. Water-carts and brooms were kept in active employment; beggars and dust-heaps were under the eye of a vigilant police.

The result was, that at the expense of many ruined builders and speculators, Leamington grew from a pretty village into a fine town, peopled not only by invalids in the water-drinking season, and sportsmen in the winter season, but by a number of permanent residents of independent fortune, of all ranks between retired manufacturers and Irish peers. Attached to the manufacturing districts, it has become what Brighton is to the London Stock Exchange.

As hunting quarters, Leamington is convenient for men with few horses, as the meets are near and the railways convenient. An ill-natured opinion prevails that the scarlet coat is more worn there by fortune-hunters than fox-hunters, and that the tailor is a person of more importance with the majority of the field than the huntsman; but this story probably originates in the number of carriages full of pretty faces to be found at the cover sides round Leamington. The country cannot be compared with Northamptonshire or Leicestershire, or even Oxfordshire. The farmers are better sportsmen than agriculturists. Warwickshire landlords think more of the politics of their

tenants, than of their intelligence or capital. Great improvements have, however, been effected within the last ten years, and we must not forget to mention that the Birmingham Agricultural and Poultry Show, which is the finest local exhibition in the kingdom, draws a great many of its exhibitors from this county.

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Leamington, long without direct railway communication, is now wrapped up between the broad-gauge and the narrow-gauge, like a hare in a bottle-spit. The opening of the line to Rugby affords a new short way to London. The population will henceforward increase at the expense of its gentility, but the police and sanitary arrangements before alluded to, will always make Leamington a favourite with invalids, hypochondriacs, and flaneurs.

The multiplicity of these railroads compels us to abandon the plan of describing, as we pass, the more celebrated towns, mansions, or castles, because it would be impossible to follow out such a zig-zag of topography. It is better to take it for granted that the traveller will stop at certain places, and from them make excursions to everything worth seeing in the neighbourhood.

In this manner, as Birmingham gave occasion for an examination into the leading manufactures, we presume that Leamington will be the best central encampment for a survey of everything within a circle of ten miles interesting to the Antiquarian, the Historian, the Artist, the Poet, the Agriculturist, and the happy beings who have a taste for all these pursuits.

The number of interesting places within an easy walk or drive of Leamington, forms one of its great advantages as a watering place.

Either on foot or in a carriage (and Leamington is extremely well provided with carriages for hire), Warwick Castle, or Stratford-on-Avon, or Guy's Cliff, and Kenilworth, or Stoneleigh Abbey, may be visited in the course of a day, or part of a day.

The detailed beauties of these places will be found fully set forth in county histories and local guides. A brief reference, sufficient to enable a traveller to make up a plan of campaign, will be all we shall attempt.

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Stoneleigh Abbey, the residence of Lord Leigh, is noticeable for its fine woodland scenery,—splendid oaks adorn the Park, and as having been the subject of a series of very extraordinary trials at the suit of claimants of the estate and ancient title. The true heirs of this estate have never been discovered; many claimants have successively appeared, and endeavoured to prop up their claims by extraordinary fabrications of evidence. For instance, a certain tombstone, bearing inscriptions of great importance, was not only described and sworn to by a cloud of witnesses, as having been at a certain year in Stoneleigh Church, but other witnesses, with equal circumstantiality, related how, on a particular occasion, this said tombstone was taken down and destroyed. And yet, it was clearly proved before the House of Lords that no such tombstone ever existed.

The present family are now secure in the estates under the Statute of Limitations, but the late Peer, up to a short period before the old title was revived in his favour, occupied Stoneleigh as a trustee, as it were, for want of a better claimant.

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In the incidents of the Leigh Peerage, are the materials of half-a-dozen romances.

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Guy's cliff—where Guy, Earl of Warwick, and slayer of the Dun Cow, lived and died as a hermit, fed daily by his Countess, little knowing whom she fed—is situated on the banks of the Avon, about a mile from Warwick, on the high road to Kenilworth, and may also be approached by footpaths across the fields leading to the same village. The pictures of Guy's Cliff have been extravagantly praised, but the natural and artificial beauties of its gardens and pleasure grounds constitute its chief attraction. For, says Dugdale, it is “a place of so great delight in respect to the river gliding below the rock, the dry wholesome situation, and the fair grove of lofty elms overshadowing it, that to one who desireth a retired life, either for his devotions or study, the like is hardly to be found.”

What Dugdale said two hundred years ago may truly be repeated now, especially in a warm autumn or summer evening, when the click of a water-mill adds sound to the pleasure to be derived from the thick shade of the lofty trees overhead, mossy turf under the feet, and the sight of flowing water. Henry V. visited this hermitage; and Shakspeare, on what authority we know not, is said to have frequented it.

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Kenilworth follows *Guy's Cliff*, once a retired country village of one street, one church, and one inn, now vulgarized by being made the site of a railway station. At the risk of offending the Kenilworthians, we strongly advise the romantic youths and maidens inspired by Sir Walter Scott's romance not to visit the ruins, which, although an excellent excuse and pleasant situation for a picnic, have nothing romantic about them beyond grey walls. The woods and waters which formed so important a part of the scenery during Queen Elizabeth's visit, have disappeared, as well as all the stately buildings.

At the same time, imagination will go a long way, and it may not be a day ill spent after reading Laleham's “*Princely Pleasures of Kenilworth*,” in which he describes what he himself saw when Queen Elizabeth visited the Earl of Leicester there in 1575, to journey over, especially if accompanied by a cold collation, including a salad of the Avon crawfish, and a little iced punch. It would be still better for good pedestrians to walk the distance by the fields and push on to the inn for refreshment, without which all tame scenery is so very flat. In the sublimity of the Alps, the Pyrenees, or even the great Highland hills, a man may forget his dinner; but, when within the verge of the horizon church-towers and smoking chimneys of farm-houses continually occur, visions of fat, brown, sucking pigs, rashers of ham and boiled fowls, with foaming tankards, will intrude unbidden after an hour or two of contemplation.

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Stratford on Avon, with SHOTTERY, where Ann Hathaway was courted by Shakspeare and CHARLECOTE, the residence of the Sir Thomas Lucy whom the poet immortalised as Justice Shallow, are all within ten miles of Leamington. On all these so much has been written that we will not venture to “pile up the agony” any higher. The best companion on the road to Stratford is Charles Knight’s *Life of Shakspeare*, which colours all the scenes of the poet’s life in Warwickshire with the atmosphere of the sixteenth century, and summons to meet us in the streets of Stratford costumes and characters contemporary with Falstaff, Shallow, and Dogberry so well, that we do not see the Clods in corduroys, the commercial Gents in paletots, and the Police in trim blue, whom we really meet.

[*The Avon viaduct*: ill13.jpg]

SOHO. WATT, BOULTON, MURDOCH.

On leaving Birmingham, the railway almost immediately passes from Warwickshire into Staffordshire, through two parishes, Handsworth and Aston, which, presenting nothing picturesque in natural scenery or remarkable in ancient or modern buildings, with one exception, yet cannot be passed over without notice, because they were residences of three remarkable men, to whom we are largely indebted for our use of the inventions which have most contributed to the civilisation and advance of social comfort in the nineteenth century.

Two miles from old Birmingham, now part of the modern town, lies Soho, in the suburb of Handsworth, which, in 1762, was a bleak and barren heath.

In that year Matthew Boulton, the son of a wealthy Birmingham hardwareman, purchased Soho, and erected on it a mansion, with pleasure grounds, and a series of workshops, for carrying on the then staple trades of the town, in shoe buckles, buttons, and other articles included in the general title of “toys.” In 1774, Boulton entered into partnership with James Watt, and commenced, in concert with him, the experiments in which Watt had been for some years engaged for improving Savary’s imperfect Steam-Pumping Engine. After years of the concentrated labour of genius of the highest order, and the expenditure of not less than 47,000 pounds, their success was complete, and Watt’s inventions, in the words of Lord Jeffrey, rendered the Steam Engine “capable of being applied to the finest and most delicate manufactures, and its power so increased, as to set weight and solidity at defiance. By his admirable contrivances, it became a thing stupendous alike for its force and its applicability, for the prodigious power it can exert, and the ease and precision, and ductility with which that power can be varied, distributed, and applied. The trunk of an elephant that can pick up a pin or rend an oak, is as nothing to it. It can engrave a seal, and crush masses of obdurate metal like wax before it; draw out, without breaking, a thread as fine as gossamer, and lift a ship of war like a bauble in the air. It can embroider muslin, and forge anchors, cut steel into ribands, and impel loaded vessels against the fury of the winds and waves.”

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The march of death and time have removed all the men who were engaged in assisting James Watt and Matthew Boulton in their great works. The numerous mechanical trades in coining, plating, and other Birmingham manufactures, in addition to the construction of steam engines, which first turned the waste of Soho into the largest workshop in Europe, have passed into other hands, and been transplanted. The manufactory of steam engines, removed to another site, still exists under the name of the old firm; but within a very recent period the pleasure grounds in which James Watt often walked, in earnest converse with the partner to whose energetic and appreciative mind he owed so much, have been invaded by the advances of the neighbouring town, and sliced and divided into building lots. Aston Hall and Park must soon suffer the same fate.

[*Aston viaduct*: ill14.jpg]

Very soon there will be no vestiges of the homes of these great men, but they need no monuments, no shrines for the reverence of admiring pilgrims. Every manufactory in the town of Birmingham is a monument of the genius which first fully expanded within the precincts of Soho. Thousands on thousands find bread from inventions there first perfected or suggested.

When Watt explained to Smeaton, the architect of Eddystone Lighthouse and the greatest engineer of the day, the plan of his steam engine, he doubted whether mechanics could be found capable of executing the different parts with sufficient precision; and, in fact, in 1769, when Watt produced, under the patronage of Dr. Roebuck, his third model, with a cylinder of block tin eighteen inches in diameter, there were only one or two men capable of giving the requisite truth of workmanship to air-pump cylinders of two inches in diameter. At the present day, as before observed in reference to Wolverton, there are thousands of skilled workmen employed at weekly wages, to whom the most difficult problems of Watt's early experiments are familiar handiwork.

At Handsworth, too, working for a long life in the Soho manufactories as the servant, confidential assistant, and friend, lived another remarkable man, William Murdoch, the inventor of illumination by gas, and the author of the first locomotive steam engine, and of several important contributions to practical science, to which justice has scarcely been done.

William Murdoch employed coal gas so early as 1792, for the purpose of lighting his house and offices at Redruth, in Cornwall, when he was superintending the pumping engines erected there by Messrs. Boulton and Watt; for it was he who erected for them in that district the first Cornish pumping engine, with separate condenser. He had at that time in regular use a portable gas lantern, formed by filling a bladder with gas, and fixing to it a jet, which was attached to the bottom of a glass lantern, which he used for the purpose of lighting himself home at night across the moors from the mining engines.

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His locomotive engine, made upon the non-condensing principle (since adopted in all engines for that purpose), was constructed, in consequence of a lameness which confined him to the sofa, and set to work at Redruth in 1784. It is still in existence in perfect working order, and was exhibited before a meeting of the Mechanical Engineers at Birmingham, in the year 1850, when a memoir of Mr. Murdoch was read, which has been kindly forwarded to us by the President, John M'Connell, Esq., C.E.

It is among the traditions of Redruth, that one night William Murdoch, wishing to try an experiment with his new invention, lighted the lamp under the boiler, and set it a-going on a narrow, smooth, hard-rolled gravel walk leading to the church, a mile distant. The little engine went off at a great pace, whistling and hissing as it went, and the inventor followed as fast as he could in chase. Soon he heard cries of alarm, horror, despair, and came up to the worthy clergyman of the parish cowering up against the hedge, almost in a fainting fit, under a strong impression that it was the Evil One in person who just hissed past him in a fire-flaught.

Those of this generation who remember their first encounter with a locomotive in a dark night, can realize the terror of a country clergyman on encountering so strange an apparition in a night walk.

It speaks as highly for Messrs. Boulton and Watt, in whose service he passed all the active years of his life, as for Mr. Murdoch, that on leaving Cornwall, he refused 1000 pounds a-year, which was offered him by the mining adventurers to remain in the county, in charge of the steam-pumping engines. Liberal as the offer seems, it would have paid them well, for on his departure the engines lost twenty-five per cent. of their working power.

Handsworth Church, near Soho, contains a marble statue of James Watt, by Chantrey, a copy of that erected in Westminster Abbey.

The railway passes Aston Hall, where James Watt and his only surviving son lived until his death a few years ago. The park contains some fine trees, and the house is a good specimen of the domestic architecture of the time of Elizabeth.

[*Aston hall*: ill15.jpg]

It was sold for a trifling sum, with an imperfect title, which time has cured, to a speculating banker; and, after having been let to the late James Watt on a long lease, is now likely to exchange mansion and park for a congeries of cottages in rows, forming forty-shilling freeholders.

The passion which the mechanics of Birmingham have for investing in land has rendered land near that town dearer than in parallel situations near London.

THE BLACK COUNTRY. WALSALL, DUDLEY, WEDNESBURY, DARLASTON.

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The first diverging railway after leaving Handsworth, on the road to the north, is what, for want of a better name, is called the South Staffordshire, which connects Birmingham with Dudley, Walsall, Lichfield, and Tamworth, thus uniting the most purely agricultural with the most thoroughly manufacturing districts, and especially with that part of the great coal-field which is locally known as the "Black Country." In this Black Country, including West Bromwich, Wednesbury, Dudley, and Darlaston, Bilston, Wolverhampton, and several minor villages, a perpetual twilight reigns during the day, and during the night fires on all sides light up the dark landscape with a fiery glow. The pleasant green of pastures is almost unknown, the streams, in which no fishes swim, are black and unwholesome; the natural dead flat is often broken by huge hills of cinders and spoil from the mines; the few trees are stunted and blasted; no birds are to be seen, except a few smoky sparrows; and for miles on miles a black waste spreads around, where furnaces continually smoke, steam-engines thud and hiss, and long chains clank, while blind gin-horses walk their doleful round. From time to time you pass a cluster of deserted roofless cottages of dingiest brick, half-swallowed up in sinking pits or inclining to every point of the compass, while the timbers point up like the ribs of a half-decayed corpse. The majority of the natives of this Tartarian region are in full keeping with the scenery—savages, without the grace of savages, coarsely clad in filthy garments, with no change on week-days and Sundays, they converse in a language belarded with fearful and disgusting oaths, which can scarcely be recognized as the same as that of civilized England.

On working days few men are to be seen, they are in the pits or the ironworks, but women are met on the high-road clad in men's once white linsey-woolsey coats and felt hats, driving and cursing strings of donkeys laden with coals or iron rods for the use of the nailers.

On certain rare holidays these people wash their faces, clothe themselves in decent garments, and, since the opening of the South Staffordshire Railway, take advantage of cheap excursion trains, go down to Birmingham to amuse themselves and make purchases. It would be a useful lesson for any one who is particularly well satisfied with the moral, educational, and religious state of his countrymen, to make a little journey through this Black Country. He will find that the amiable enthusiasts who meet every May at Exeter Hall to consider on the best means of converting certain aboriginal tribes in Africa, India, and the Islands of the Pacific, need not go so far to find human beings more barbarous and yet much more easily reclaimed.

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The people of this district are engaged in coal-mining, in ironworks, in making nails, and many other articles, or parts of articles, for the Birmingham trade. Their wages are, for the most part, good; fuel is cheap; well supplied markets, and means of obtaining the best clothing are close at hand. But, within sixty years a vast dense population has been collected together in districts which were but thinly inhabited as long as the value lay on the surface, instead of in the bowels of the earth. The people gathered together and found neither churches, nor schools, nor laws, nor customs, nor means for cleanliness at first, nor even an effective police to keep order. And thus they became one of the most ignorant, brutal, depraved, drunken, unhealthy populations in the kingdom, unless it be a set of people in the same occupations in the neighbourhood of Manchester.

We shall never forget, some five-and-twenty years ago, passing near Bilston on a summer's holiday, and seeing a great red, pied bull foaming, and roaring, and marching round a ring in which he was chained, while a crowd of men, each with a demoniacal-looking bulldog in his arms, and a number of ragged women, with their hair about their ears, some of them also carrying bull-dog pups, yelled about the baited bull. It gave us an awful fright, and haunted our childish dreams for years after.

The first change forced upon the governing classes, by feelings of self-protection was an organized police, and the "Black" people are now more disgusting than dangerous. The cholera of 1832, which decimated Bilston and Wednesbury, did something toward calling attention to the grievous social and sanitary wants of this district. In that pestilence several clergymen and medical men died, like heroes, in the discharge of their duties. Some churches were built, some schools established; but an immense work remains to be done. Bull-baiting has been put down, but no rational amusements have been substituted for that brutal and exciting sport.

In the northern coal fields, near Newcastle-on-Tyne especially, we have noticed that when the miner ascends from the pit in the evening, his first care is to wash himself from head to foot, and then to put on a clean suit of white flannel. As you pass along the one street of a pitman's village, you will see the father reading a Chambers' Journal or a cheap religious magazine at the door of his cottage while smoking a pipe, and nursing a child or two on his knee; and through the open door, a neat four-post bed and an oak or mahogany chest of drawers bear witness to his frugality.

In Wednesbury, Bilston, and all that district, when work is over you find the men drinking in their dirty clothes and with grimy faces at the beer-shop of the "Buttey," that is to say, the contractor or middleman under whom they work, according to the system of the country, and the women hanging about the doors of their dingy dwellings, gossiping or quarreling,—the old furies and the young slatterns.

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In the face of such savagery, so evidently the result of defective education, two opposite and extreme parties in the State, the anti-church Mialls and the pro-church Anthony Denisons, combine to oppose the multiplication of education that teaches decency if it teaches nothing else.

One great step has been made by the Health of Town's Act, which is about to be applied to some of these coal towns; and railways have rendered the whole district so accessible that no foul spot can long remain unknown or unnoticed.

* * * * *

Walsall, eight miles from Birmingham, the first town in our way, which may be reached directly by following the South Staffordshire, or by an omnibus, travelling half-a-mile from Bescot Bridge, lies among green fields, out of the bounds of the mining country, although upon the edge of the Warwickshire and Staffordshire coalfield,—indeed the parliamentary borough includes part of the rough population just described. It is very clean, without antiquities or picturesque beauties, and contains nothing to attract visitors except its manufactures, of which the best known is cheap saddlery for the American, West Indian, and Australian markets. They make the leather and wooden parts, as well as stirrups and bridles; also gunlocks, bits, spurs, spades, hinges, screws, files, edge tools, and there is one steel-pen manufactory, besides many articles connected with the Birmingham trade, either finished or unfinished, the number of which is constantly increasing. *Walsall* is celebrated for its pig-market, a celebrity which railroads have not destroyed, as was expected, but rather increased. Special arrangements for comfortably disembarking these, the most interesting strangers who visit *Walsall*, have been made at the railway station.

The principal church, with a handsome spire, stands upon a hill, and forms a landmark to the surrounding country. The ascent to it, by a number of steps, has, according to popular prejudice, produced an effect upon the legs of the inhabitants more strengthening than elegant, which has originated the provincial phrase of “*Walsall-legged*.” But this is, no doubt, a libel on the understandings of the independent borough.

The houses are chiefly built of brick, but it seems as if some years ago the inhabitants had been seized with an architectural disease, which has left its marks in the shape of an eruption of stucco porticoes, and one or two pretentious mansions, externally resembling jails or infirmaries, internally boasting halls which bear the same proportion to the living rooms as Falstaff's gallon of sack to his halfpennyworth of bread. No doubt there are persons whom this style of house exactly suits, the portico represents their pride, the parlour their economy. What was intended for the *Walsall* public library consists of a thin closet behind a gigantic Ionic portico, now tottering to its fall; and in like manner a perfectly dungeon-like effect has been given to the principal hotel by

another portico, which affords a much better idea of the charges than of the accommodation to be found within.

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As a general rule in travelling, we pass by all hotels with porticoes to take refuge in more modest Green Dragons or Blue Boars.

Walsall has a municipal corporation of six aldermen and eighteen councillors. The Reform Bill, to increase the troubles of this innocent borough, placed it in schedule B, and gave it the privilege of making one M.P.

Fierce contests at every general election have been the result, in which some blood, much money, and more beer, have been expended. But neither party has thought it worth while to make the education of the savages of the Black Country a piece of politics, and, if any one did, he would only be torn to pieces between Church and Dissenters.

* * * * *

Dudley in Worcestershire, about six miles from Walsall by the South Staffordshire Railway, has a castle and more than one legend for the antiquarian, a cave, and limestone pits full of fossils for the geologist, and especial interest for the historical economist, being the centre of the district where the first successful attempts were made to smelt iron by coal,—a process which has contributed, almost as much as our success in textile manufactures, to give this small island a wealth and power which a merely agricultural non-exporting community could never have attained.

Iron was manufactured with charcoal in England from the time of the Romans till the middle of the eighteenth century, when the timber of many counties had been entirely exhausted by the process. In 1558, in the reign of Elizabeth, it was enacted that “no timber of the breadth of one foot square at the stub, and growing within fourteen miles of the sea, or any part of the river Thames or Severn, or any other river, creek, or stream, by the which carriage is commonly used by boat or other vessel, to any part of the sea, shall be converted to coal, or fuel for making iron;” {125a} and, in 1581, a further Act was passed to prevent the destruction of timber. “For remedy whereof it was enacted that no new iron works should be erected within twenty-two miles of London nor within fourteen miles of the river Thames, nor in the several parts of Sussex near the sea therein named. This Act not to extend to the woods of Christopher Durrell, in the parish of Newdigate, within the weald of Surrey, which woods have been coppiced by him for the use of his iron works in those parts.”

At the same period, we find from a letter in the Stradling Correspondence, {125b} that, while iron was made in Surrey, Sussex, and Kent, where not a pound is now manufactured, in Glamorganshire, at present a great seat of iron manufacture, iron was so scarce that an anvil was leased out at the rent of 3s. 4d. a year, {126} a rent at which, taking the then value of money, a very tolerable anvil could now be purchased.

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When the woods of the kingdom began to be exhausted, attention was turned to pit coal, which had long been in use for fuel in the counties where it was plentifully found. A curious account of the first successful experiments is to be found, told in very quaint language, in the *Metallum Martis* of Dudley Dudley, son of Lord Edward Dudley (an ancestor of the late Earl Dudley and Ward, and of the present Lord Ward, who now enjoys the very estates referred to, and derives a princely income from the mineral treasures, the true value of which was discovered by his unfortunate ancestor), published in the reign of Charles II.

This Mr. Dudley was an early victim of the patent laws, which, to this day, have proved to be for the benefit of lawyers and officials, and the tantalization of true inventors and discoverers. The following extracts contain his story, and enable us to compare the present with the then state of iron manufacture:—

“Having former knowledge and delight in ironworks of my father’s when I was but a youth, afterwards, at twenty years old, was I fetched from Oxford, then of Baliol College, anno 1619, to look after and manage three ironworks of my father’s, one furnace and two forges in the chace of Pensnel, in Worcestershire; but wood and charcoal growing very scanty, and pit-coals in great quantities abounding near the furnace, did induce me to alter my furnace and to attempt by my new invention, the making of iron with pit-coal, and found at my trial or blast, *facere est addere inventioni*. After I had proved by a second blast and trial, the feasibility of making iron with pit-coal and sea-coal, I found by my new invention the quality good and profitable, but the quantity did not exceed above three tons a week.”

After this, the inventor obtained a patent from King James I., for thirty-one years in the nineteenth year of his reign. “But the year following the grant there was so great a flood of rain,—to this day called the great May-day flood,—that it ruined the author’s ironworks and inventions, and at a market town called Sturbridge, in comitatu Wigorniae, one resolute man was carried from the bridge in the day time.” “As soon as the author had repaired his works, he was commanded to send all sorts of bar iron up to the Tower of London, fit for making of muskets and carbines, {127} and the iron being so tried by artists and smiths, that the ironmasters and ironmongers who had complained that the author’s iron was not merchantable, were silenced until the twenty-first of King James.” “At the then parliament all monopolies were made null, and divers of the ironmeasters endeavoured to bring the invention of making iron with pit-coal within the compass of a monopoly; but the Lord Dudley and the author did prevail, yet the patent was limited to continue but fourteen years.”

This exception in the Statute of Monopolies, which incontestably proves the claim of the Dudley family to the honour of having invented the art of smelting iron with coal, runs in the following terms:—“Provided also that this Act shall not extend to, or be prejudicial to, a graunt or priviledge for the melting of iron ewer, and of maling the same into sea coals

or pit coals, by His Majesties letters Patent under the Great Seale of England, made or graunted to Edward Lord Dudley.”

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After the passing of the Act, it seems that Dudley Dudley made “great store of iron and sold it at 12 pounds a ton, and also cast-iron wares, as brewing cisterns, pots, mortars;” but, being ousted of his works, he again set up a furnace at “Himley, in the county of Stafford.” Himley Hall is the present residence of Lord Ward, the representative of the Dudley family. From that time forward, the life of the unfortunate inventor was but one series of misfortunes. Under Charles I. he got into law-suits, was the victim of riots set on by the charcoal ironmasters, and was eventually lodged in prison in the Compter. Then came the Great Rebellion, during which he had the disadvantage of being a Royalist as well as an inventor, and of having “Cromwell, with Major Wildman and many of his officers, as opponents in rival experiments tried in the Forest of Dean, where they employed an ingenious glassmaster, Edward Dagney, an Italian then living in Bristow,” but they failed. And so he was utterly ruined. On the accession of Charles II., he petitioned, and eventually sent in the statement from which the preceding extracts have been made, but apparently without any success. The king was too busy making dukes and melting the louis d'ors of his French pension, to think of anything so common as iron or so tiresome as gratitude.

The iron manufacture, for want of the art of smelting by coal, and of a supply of wood, which the march of agriculture daily diminished, dwindled away, until, in the middle of the eighteenth century, it was revived at Colebrook Dale by the Darbys. In the intermediate period, we were dependent on Russia, Spain, and Sweden for the chief part of the iron used in manufactures.

But one of the most curious passages in Dudley's *Metallum Martis*, is the following picture of the Dudley coal-field:—“Now let me show some reasons that induced me to undertake these inventions. Well knowing that within ten miles of Dudley Castle, there be near 20,000 smiths of all sorts, and many ironworks within that circle decayed for want of wood (yet formerly a mighty woodland country); secondly, Lord Dudley's woods and works decayed, but pit-coal and iron stone or mines abounding upon his lands, but of little use; thirdly, because most of the coal mines in these parts are coals ten, eleven, and twelve yards thick; fourthly, under this great thickness of coal are very many sorts of ironstone mines; fifthly, that one-third part of the coals gotten under the ground are small, when the colliers are forced to sink pits for getting of ten yards thick, and are of little use in an inland country, unless it might be made use of by making iron therewith; sixthly, these colliers must cast these coals and slack out of their ways, which, becoming moist, heat naturally, and kindle in the middle of these great heaps, often sets the coal works on fire and flaming out of the pits, and continue burning like *AEtna* in Sicily or *Hecla* in the Indies.” (sic.)

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At present, for more than ten miles round Dudley Castle, iron works of one kind or another are constantly at work; no remains of mighty woodland are to be found. The value of the ten yard coal is fully appreciated, but the available quantity is far from having been worked out. The untouched mineral wealth of Lord Ward in this district was valued, ten years ago, at a million sterling. The small coal is no longer wasted, but carefully raised from the pits and conveyed by the numerous canals, tram-roads, and railroads, to iron works, glass works, and chemical works. But still heaps of waste, moistened by rain, do smoke by day, and flaming by night in conjunction with hundreds of fiery furnaces and natural gases blazing, do produce, on a night's journey from Dudley to Wolverhampton, not the effect of one Aetna or Hecla, but of a broad "inferno," from which even Dante might have gathered some burning notions.

The political croakers who are constantly predicting that the last inevitable change, whether it be a Municipal Corporation Reform, a Tithe Commutation, or a Corn Tax Repeal, will prove the ruin of England, should study the geographical march of our manufactures, and mark how, on the whole population, the rise of a new staple in one district, or the invention of a new art, constantly creates a new demand for labour. The exhaustion of our forests, instead of destroying, founded one great element of our world-wide commercial influence.

We make no apology for this digression, knowing that, to many minds, facts connected with the rise of the iron trade will have as much interest as notes on the scene of a battle or the birthplace of a second-rate poet, besides, as we omit to say what we do not know, it is necessary we should say what we do.

Besides mining and smelting iron ore, a considerable population in and around Dudley is engaged in the manufacture of glass and of nails; the latter being a domestic manufacture, at which men, women, and children all work at home.

The castle dates from a Saxon prince, Dodo, A.D. 700; but, like the bird of the same name, the original building is extinct. But very interesting ruins of a Norman gateway, tower, and keep, are in existence; and form, with the caves, a show-place leased by the South Staffordshire as an attraction to their excursion trains. The caves are lighted up on special occasions, and were honoured by a visit from the geologists of the British Association when last they met at Birmingham. A fossil, called the Dudley locust, is found in great quantities and varieties in the limestone quarries, which form part of the mineral wealth of the neighbourhood.

The broad gauge line through Birmingham and Oxford will shortly afford Dudley a direct and rapid communication with London. To passengers this will be a great convenience, but a mode of conveyance so unwieldy, clumsy, and costly, is singularly ill fitted for a mineral district, as experience among the narrow tram-ways of the north has amply proved.

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Dudley returns one member to Parliament; whose politics must, it is supposed, be those of the holder of the Ward estate.

Returning from Dudley through Walsall to Bescot Bridge, the rail pursues its course through a mining country to Bilston and Wolverhampton. On the road we pass in sight of the Birmingham canal, one of the finest works of the kind in the kingdom. An enormous sum was spent in improving the navigation, in order to prove that any railway was unnecessary. The proprietors, under the influence of their officials, a snug family party, shut their eyes and spent their money in opposing the inevitable progress of locomotive power to the last possible moment. Even when the first London and Birmingham railway was nearly open, a scheme for a new canal was industriously hawked round the county; and, although there were not enough subscribers found to execute the work, a small percentage was sufficient to furnish a surveyor's new house very handsomely. Still, there is no probability of the canal ever ceasing to be an important aid to the coal trade in heavy freights.

* * * * *

Wednesbury, {130} pronounced Wedgebury, and spelt Wednesberie in Domesday Book, stands in the very heart of the coal and iron district, and is as like Tipton, Darlaston, Bilston, and other towns where the inhabitants are similarly employed, as one sweep is like another. Birmingham factors depend largely on Wedgebury for various kinds of ironwork and "heavy steel toys." The coal pits in the neighbourhood are of great value, and there is no better place in the kingdom to buy a thoroughbred bull dog that will "kill or die on it," but never turn tail. The name is supposed to incorporate that of the Saxon god Woden, whose worship consisted in getting drunk and fighting, and, to this day, that is the only kind of relaxation in which many of the inhabitants ever indulge. The church stands upon a hill, where Ethelfleda, Lady of Mercia, built a castle to resist the Danes, A.D. 914, about the time that she erected similar bulwarks at Tamworth and other towns in the Midland counties, but there are no antiquities worth the trouble of visiting.

Parties who take an interest in the progress of education in this kingdom among those classes where it is most needed, that is to say, masses of miners and mechanics residing in districts from which all the higher and most of the middle classes have removed; where the clergy are few, hard worked, and ill paid; where the virtues of a thinly peopled agricultural district have been exchanged for the vices, without the refinements, of a crowded town population, should traverse this part of Staffordshire on foot. They will own that, in spite of the praiseworthy labours of both Church and Dissent,—in spite of the progress of Temperance Societies and Savings' Banks,—a crowd of children are daily growing up in a state of ignorance, dirt, and degradation fearful to contemplate.

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To active philanthropists, not to seekers of the picturesque, archaeologists, and antiquarians, do we address ourselves. Still we ought to add that, in the iron works and rolling mills, there are studies of half naked men in active motion at night, with effect of red firelight and dark shade, in which the power of painting flesh and muscular development might be more effectively displayed than in the perpetual repetition of model Eves and sprawling nymphs.

* * * * *

Wolverhampton formerly lay away from railroads, at a convenient omnibus distance; but competition has doubly pierced it through and through. One line connects it with Shrewsbury; another, on the point of completion, will connect it with Dudley, Birmingham, and Oxford, and another with Worcester,—add to these means of communication the canals existing before railroads commenced, extending to Hull, Liverpool, Chester, and London, and it will be seen that *Wolverhampton* is most fortunately placed.

The great railway battle of the gauges commenced at *Wolverhampton*, and has been carried on ever since at the cost of more than a million sterling in legal and parliamentary expenses, beside the waste of capital in constructing three railways where one would have been sufficient, and the extra cost of land traversed where a price was paid, 1st, for the land; 2nd, for the revenue; 3rd, for compulsion; 4th, for influence, and 5th, for vote, if the landowner were a member of either House of Parliament.

At the end of the battle, a competing line to London has been established, which will end shortly in a compromise; and, if one district has two railways, others, much needing, have none. The shareholders on both sides have lost their money, the engineers have reaped a harvest, and the lawyers have realized a fortune.

The experience of water companies, gas companies, canal companies, and railway companies, has distinctly been, that, between great monied corporations with large capitals sunk in plant, competition is impossible and must end in a compromise.

But these contests are profitable to lawyers, who must always win, whether their clients do or not. It is no exaggeration to say that, as surely as Spain and Portugal are priest-ridden, so surely is Great Britain lawyer-ridden. No sooner does the science, the industry, and the enterprise of the country carve out some new road to commercial prosperity, than the attorney sets up a turnpike upon it and takes toll; and, if dispute arises as to the right of road, however the contest be decided, it ends in two attorneyes taking toll. In chancery, in the laws affecting patents of inventions, in the law affecting canals, in railways, a standing army of lawyers are constantly engaged in fighting

battles, which end in our bearing the wounds and their sharing the spoil. So it was in these battles of the gauges.

But to return to Wolverhampton, the name of which recalled battles wherein so much useful money has been wasted, the town, although of rising importance in a commercial point, offers no other attraction to the curious traveller than its numerous manufactories of hardware, and machinery of various kinds, including firearms, tinned ware, locks and keys, of extraordinary cheapness, gun locks, files, screws, and japanned ware.

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The tea trays, and other japanned ware of Wolverhampton, are equal in taste and execution to anything produced in Birmingham; indeed, it was at the manufactory of the Messrs. Walton that the plan of skilfully copying the landscapes of our best artists on japan were originated. The first tea-tray of the kind was copied from one of Turner's Rivers of France, by a gentleman who has since taken up a very important position in applying the true principles of art to British manufactures.

Wolverhampton, and all the towns and villages in the coal and iron district, are only so many branch-Birminghams; in that hardware metropolis the greater part of the goods made are ordered and sold.

The town is of great antiquity, although with as few remains as most flourishing towns built of brick, where manufactures have chased away mansions. The name is derived from Walfrana, a sister of King Edgar, who founded a monastery there in A.D. 996, and collected a village round it named Walfrana Hampton, which was eventually corrupted into Wolverhampton. In the oldest Church, St. Peter's, there is a pulpit formed of a single stone, elaborately sculptured, and a font, with curious bas-relief figures of saints. The Church is collegiate, and the College consists of a dean, who holds the prebend of Wolverhampton, which was annexed by Edward IV. to his free chapel of St. George, within the Castle of Windsor.

A Free Grammar School, supported by endowments, affords a head master 400 pounds a-year; the second master 200 pounds; and a third master 120 pounds. Some years ago these gentlemen had only seventy scholars to teach, but we trust this is, or will be, amended.

Wolverhampton was made a Parliamentary borough by the Reform Act, returning two members from boundaries which include the townships of Bilston, Willenhall, Wednesfield, and the parish of Sedgeley. The population has increased more than five fold in the last forty years.

Bird, the artist, Congreve, inventor of the rockets which bear his name, and Abernethy, the eminent surgeon, were natives of Wolverhampton; Huskisson, who began the commercial reforms which Peel finished, was born at Oxley Hall, in the immediate neighbourhood.

Close to the town is a good racecourse, well frequented once a year, formerly one of the most fashionable meetings in the country. The ladies' division of the Grand Stand used to be a complete parterre of the gayest flowers; but railroads, which have added to the quantity, have very much deteriorated the quality of the frequenters of races, and unless a change takes place, a Grand Stand will soon be as dark, as busy, and as dull as the Stock Exchange.

From Wolverhampton a line nineteen miles in length, through Albrighton (where Staffordshire ends and Shropshire begins) and Shifnal to Wellington, shortens the route to Shrewsbury by cutting off an angle; but as there is nothing to be said about this route except that at Albrighton are the kennels of the hunt of that name, (a hunt in which the greater or less luxury in horseflesh of the young ironmasters affords a thermometer of the state of the iron trade,) we shall on this occasion take the Stafford line.

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Within an easy distance of Wolverhampton are a very large number of the noblemen's and gentlemen's seats, in which Staffordshire is so rich; more than one ancient and dilapidated family has been restored by the progress of smoke-creating manufactures, which have added to the wealth even more than they destroyed the picturesqueness of the country.

If we were conducting a foreigner over England with the view of showing him the wealth, the power, and the beauties of our country, we should follow exactly the course we have hitherto pursued, and after an exhausting inspection of the manufactories of the coal country, should turn off the rail, after leaving Wolverhampton on our road to Stafford, and visit some of the beautiful mansions surrounded by that rich combination of nature and art which so eminently distinguishes the "stately homes of England."

For instance, before reaching Penkridge we pass—on the right hand, Moseley Court, where the ancestors of the proprietors, the Whitgreaves, concealed Charles II. after the Battle of Worcester,—on the left, Wrottesley Hall, the seat of the scientific nobleman of that name, and Chellington Park, the residence of the ancient Roman Catholic family of the Giffords, where an avenue of oaks, the growth of centuries, with a magnificent domain stocked with deer and game, afford the admirers of English scenery delicious vistas of wood, water, and rich undulating pasture.

The contrast between the murky atmosphere and continued roar of the ironmaking country, and the silence of the deer-haunted green glades is most striking, and most grateful to eye and ear.

As we rush along the valley of the Penk, too rapidly to drink in its full beauties; on the right, Teddesley Hall, the mansion of Lord Hatherton, rising above the tops of the trees, reminds us that the noble lord's farms are well worth a visit from any one taking an interest in agriculture. Poor land has been rendered comparatively fertile, and by a complete system of drainage, mere marshy rush-growing meadows have been made capable of carrying capital root and wheat crops, while the waste water has been carried to a head, and then by a large overshot water wheel, working below the surface of the ground, made useful for thrashing, chaff and root cutting, and other operations of the farm.

At Penkridge, a rural village of considerable antiquity, ten miles from Wolverhampton, adorned by a Gothic Church, and several picturesque houses of the Elizabethan style of domestic architecture, it will be convenient to descend, if an expedition is intended, over Cannock Chase to Beaudesert, the seat of the Marquis of Anglesey.

[*The railway near Penkridge*: ill17.jpg]

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This Cannock Chase completes the singular variations of soil and occupation to be found in Staffordshire. From the densely-populated iron districts, and the model agriculture of disciples of the same school as Lord Hatherton, we can turn our faces to a vast moorland, forty miles square, stretching from where it is first seen on the banks of the railway to the banks of the Trent, as wild as any part of Wales or Scotland, intersected by steep hills, by deep valleys, covered with gorse and broom, dotted with peat marshes, tenanted by wild deer and feathered game, and fed over by the famous “Kenk” sheep, nearly as wild as deer, and in flavour rivalling the best mountain mutton. This great waste was once covered with dense forests, in which the wolf, the bear, the wild boar, and the wild bull were hunted by our Saxon Kings. It is not among the least wonders effected by the locomotive that a short hour can transport us from the midst of the busiest centres of manufactures to a solitude as complete as is to be found in the prairies of America or Australia, unless we by chance stumble upon a prying gamekeeper or an idle rustic seeking whortle-berries or snaring hares.

On this chase, begged by his ancestors from an easy king as a kitchen garden, the hero of the Light Cavalry at Waterloo annually takes his sport, mounted on a perfect shooting cob, and with eighty years upon his shoulders, can still manage to bring down his birds right and left.

Long may such blanks of solitude and wild nature remain amid the busy hum of commerce to remind us of what all England once was, to afford, at a few holidays in the year, a free breathing place to the hardworking multitude, and to the poet and student that calm delight which the golden fragrance of a gorse-covered moor can bestow.

Before we reach Stafford we leave on the right, although not in sight, Shugborough, the deserted mansion of the Earl of Lichfield, a descendant of the Lord Anson who “sailed round the world but was never in it.”

STAFFORD.

Stafford castle, on the summit of a high hill, whose slopes are clothed with forest trees, gives in the romantic associations it awakens a very false idea of the town to be found below. The towers of the Castle built by the son of Robert de Tonei, the Standard Bearer of William the Conqueror, have survived the Wars of the Roses and the contests of the Great Rebellion, while the remainder has been restored in an appropriate style by the family of the present possessors, representatives of the ancient barony of Stafford—no relation of the Staffords who in another part of the county enjoy the Dukedom of Sutherland. But the town, prosperous in spite of many changes of fashion, has completely lost any antique air it may ever have enjoyed, and now, in all the smugness of brick, quite realises the idea of a borough which at every election is for sale to the highest bidder.

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[Stafford: ill18.jpg]

The principal manufacture is that of shoes for exportation. Many remarkable men have represented Stafford, some as remarkable for their talent as for their folly. Sheridan's most brilliant speeches, and Urquhart's most undeniable failures in the House of Commons, were both due to the borough of Stafford. It is, in fact, a stepping-stone to the House of Commons, always ready for the highest bidder and promiser, but whoever would sit for Stafford for a series of Parliaments, would need the use of the Philosopher's Stone. The independent electors would exhaust California if they had the chance.

As the Stafford shoemakers, to the deep disappointment of its agricultural neighbours, have not yet been ruined by the influx of foreign boots and shoes, its chief interest at present is derived from its being the point from which several important railways radiate.

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Stafford to Manchester.—Beside the old Grand Junction line to Crewe, the Trent Valley line, about which we intend to say a few words on our return journey, ends, strictly speaking, at Stafford, after passing by Atherston, Tamworth, and Lichfield; but, since the construction of the North Staffordshire, which joins the Trent Valley at Colewich, the most direct way to Manchester is through the pottery district and Macclesfield, instead of by Stafford and Crewe. Direct lines have generally proved a great mistake, except so far as they have accommodated the local traffic through which they passed. To the shareholders they have been most unprofitable wherever the original shareholders were not lucky enough to bully the main lines into a lease, and, to the average of travellers very inconvenient, by dividing accommodation. But shareholders should look at the local traffic of a proposed direct line, on which alone good dividends can be earned.

These direct projects were partly the result of the imperfect manner in which, in consequence of opposition and from want of experience, the original main branch lines were executed, and partly in that plethora of money, which, in this thriving country, must be relieved from time to time by the bleeding of ingenious schemers. We are enjoying, in this year of 1851, the advantages derived from money spent, and lost to the spenders, in our own country instead of being sunk in Greek or Spanish bonds, South American mines, or the banks and public works of the United States.

At one period, in the height of the ten per cent. mania, a school of railway economists sprang up which advocated placing the construction and the profits of railways in the hands of government, and they supported their theories by ex post facto criticism on the blunders of railway companies,—on the astonishing dividends of Mr. George Hudson's lines,—and on the hard terms on which capitalists had agreed to execute French railways for the French government.

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These ingenious reasons did not prevail. People were reminded that the steam boats, the public works, the “Woods and Forests” under government charge, were not managed with remarkable success or economy. The tempting dividends melted away, and projects for French railways, on the principle of the State taking profits and the speculators the risk, which had excited the admiration of Cato Morisson, first hung fire and then exploded, so that rich districts of France which, on the system of “profits to private enterprise,” would have enjoyed railway conveyance ten years ago, are still left to the mercy of the slow diligences and slower waggons to this hour.

To a commercial country like England, the waste of a few millions on railways badly planned, are of little importance compared with the national saving effected by the cheap conveyance of produce. The great importance of the direct line between Rugby, Macclesfield, and Manchester, is not that it saves an hour in the transit of an impatient traveller, but that it places in easy communication purely agricultural and thoroughly manufacturing communities, so as to render an interchange of produce easy. Shareholders sometimes suffer, but the public always gains. On the other hand, Parliament should take care that railway extension to blank districts is not prevented by conceding parallel lines to directors hunting for a dividend, by dividing instead of increasing the existing traffic.

When an alteration of the law settlement has released from parish bondage and vegetation those adscripti glebae agricultural labourers, the advantage of our network of railways will be still more felt.

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Stafford to Shrewsbury.—The third line diverging from Stafford, counting the continuation of the London as a fourth, is the railway to Shrewsbury, passing through *Newport* and *Wellington*, where it joins the direct line from Wolverhampton, and affording, by a continuation which passes near Oswestry, Chirk, and Llangollen, {138} to Wrexham, Chester, and Birkenhead, another route to Liverpool, and, through Chester, the nearest way to Holyhead and Ireland.

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Newport.—The first station after leaving Stafford for Shrewsbury, and immediately after crossing into Shropshire, is a small market town and borough, with a corporation, which can be traced back to Henry *iii*. The church, of the fifteenth century, with an interior of great beauty, has been frightfully disfigured by aisles built of bricks in a common builders’ style of architecture.

This corporation offers an example which might be with advantage followed by greater men holding the same office; they have but a small income, and they apply it to keeping in order cisterns and conduits which supply the town with water.

There is a free grammar school founded by one William Adams in 1756, which has a library attached to the school and five scholarships. The best, of 80 pounds a year, to Christchurch, Oxford.

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Wellington stands at the base of the Wrekin, is the centre of the Shropshireman's toast and the chief town of the coal and iron district, and is the point where the line from Wolverhampton makes a junction, affording the nearest road from Birmingham to Shrewsbury. It was here that Charles I., on his march from Wellington to Shrewsbury, assembled his troops, and, in order to allay the growing disaffection among them, declared that he would "support the reformed religion, govern by law, uphold the privileges of parliament, and preserve the liberty of the subject."

From Wellington you may proceed by omnibus to Coalbrookdale, where the first iron bridge was built over the Severn, where the Darbys and Dickensons have carried on iron works for more than a century, where coal was first applied profitably to smelting iron, and where the fine iron castings of Berlin have been rivalled, and successful attempts have been made to introduce the principles of the fine arts into domestic manufactures. The firm are members of the Society of Friends. Fortunately their tenets do not prevent them from selling us coal-scuttles of beautiful design, although their wives and daughters are bound, according to the conservative principles of their sect, to wear bonnets of an unvarying and hideous coal-scuttle shape.

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Shrewsbury, 10 miles from Wellington, is, in more respects than one, an interesting town, situated partly on a precipitous peninsula formed by the swift clear waters of the Severn, united to the opposite side by bridges, in one of which the huge undershot waterwheels of a corn mill are for ever turning. A stranger without letters of introduction, condemned to spend a few hours here with nothing to do, may easily pass the time pleasantly in hunting out picturesque bits of river scenery, or even in chucking pebbles into the stream, instead of drinking sherry negus he does not want, or poking about the dull streets of a modern town, while all the respectable inhabitants are lost in wonder "who that strange man in the white hat is." The manufactures of Shrewsbury are not very important; thread, linen, and canvas, and iron-works in the neighbouring suburb of Coleham; a considerable and ancient trade is carried on in Welsh flannel and cloths from the neighbouring counties of Denbigh, Montgomery, and Merioneth, and markets and fairs are held for the benefit of the rich agricultural district around, in which, besides fine butter, cheese, poultry, and live stock, a large assemblage of the blooming, rosy, broad-built Shropshire lasses show the advantage of a mixture of Welsh and English blood.

But Shrewsbury is most famous for its school, its cakes, its ale, and the clock mentioned by Falstaff, for which on our last visit we found an ingenuous Frenchman industriously searching.

The royal free grammar school, endowed by Edward VI., was raised, by the educational talents of the late Dr. Butler, afterwards Bishop of Lichfield and Coventry, to a very high position among our public schools; a position which has been fully maintained by the present master, Dr. Kennedy.

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As for the cakes and ale, they must be tasted to be appreciated, but not at the same time.

In the history of England and Wales, Shrewsbury plays an important part.

It is supposed that the town was founded by the Britons of the kingdom of Powis, while they were yet struggling with the Saxons, or rather the Angles, for the midland counties, and, it is probable, was founded by them when they found Uttoxeter (the Uriconiam of the Romans), no longer tenable. On the conquest of the town by the Anglo-Saxons it received the name of Scrobbes-byrig; that is to say Scrub-burgh, or a town in a scrubby or bushy district, and, in the Saxon Chronicle, Scrobbesbyrig-scire is mentioned, now corrupted or polished into Shropshire. Ethelfleda, whose name we have so often had occasion to mention as the builder of castles and churches, founded the collegiate church of St. Alkmund; and Athelstan established a mint here. It is evident that the "Athelstan the Unready," mentioned in *Ivanhoe*, must have very much degenerated from the ancestor who established a mint for ready money.

According to *Domesday-Book*, Shrewsbury had, in Edward the Confessor's time, two hundred and fifty-two houses, with a resident burgess in each house, and five churches. It was included in the Earldom of Shrewsbury, granted by William the Conqueror to his kinsman, Roger de Montgomery, who erected a castle on the entrance of the peninsula on which the town now stands, pulling down fifty houses for that purpose. In the wars between Stephen and the Empress Maude, the Castle was taken and retaken; and in the reign of John the town was taken by the Welsh under Llewellyn the Great, who had joined the insurgent Barons in 1215; and again attacked and the suburbs burned by the Welsh in 1234. Shrewsbury was again taken by Simon de Montfort and his ally, Llewellyn, grandson of Llewellyn the Great, in 1266, the year before de Montfort fell on the field of Evesham. And here, in 1283, David, the last Prince of Wales, was tried, condemned, and executed as a traitor. Here, too, in 1397, in the reign of Richard II., a Parliament was held, at which the Earl of Hereford (afterwards Henry IV.) charged the Duke of Norfolk with treason. The charge was to have been decided by a trial of battle at Coventry. On the appointed morning, "Hereford came forth armed at all points, mounted on a white courser, barded with blue and green velvet, gorgeously embroidered with swans and antelopes of goldsmiths' work. The Duke of Norfolk rode a horse barded with crimson velvet, embroidered with lines of silver and mulberries."

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At that time it took more days to travel from Shrewsbury to Coventry than it now does hours. The cloth of gold was as splendidly, perhaps more splendidly, embroidered than anything we can do now; but in the matter of shirts, shoes, stockings, and the clothing necessary for health and comfort, and of windows and chimneys, and matters necessary for air and shelter, mechanics and day labourers are better provided than the squires and pages of those great noblemen. Five years after, the Harry of Hereford having become Henry IV. of England, assembled an army at Shrewsbury to march against Owen Glendower, and the following year he fought the battle of Shrewsbury against Hotspur, and his ally the Douglas, which forms the subject of a scene in Shakspeare's play of Henry IV. At that battle Percy Hotspur marched from Stafford toward Shrewsbury, hoping to reach it before the King, and by being able to command the passage of the Severn to communicate with his ally Glendower; but Henry, who came from Lichfield, arrived there first, on the 19th July, 1403. The battle was fought the next day at Hateley Field, about three miles from the town.

In the Wars of the Roses Shrewsbury was Yorkist. In the great Civil War Charles I. came to Shrewsbury, there received liberal contributions, in money and plate, from the neighbouring gentry, and largely recruited his forces; and in the course of the war the town was taken and retaken more than once. Thus it will be seen that Shrewsbury is connected with many important events in English history.

The first Charter of incorporation extant is of Richard I.

Two members are returned to Parliament of opposite politics at present; but a few years ago it was the boast of the Salopians, that the twelve members returned by the different constituencies of the county were all of that class of politics which, for want of a better name, may be called "Sibthorpians."

Shrewsbury is a good starting point for an expedition into Wales, and we can strongly recommend the walk from Chirk, one of the stations on the line to Chester, over the hills by footpaths to Llangollen: from one point a view may be caught of the three great civilizers of the eighteenth and nineteenth centuries. A splendid viaduct, carrying the Shropshire Canal over a deep valley, in its day considered a triumph of engineering art—the Holyhead mail road, perhaps the best piece of work of the kind in the world, and the railway, which has partly superseded both. There is more than one pleasant spot on the bye-path we have suggested where a thoughtful pedestrian may sit down, and, smoking a cigar in the presence of a sweetly calm landscape of grassy valleys and round-topped hills, ponder over these things, not without advantage, to the sound of bells borne by lively Welsh sheep, whose mutton has been raised 2d. a pound in value by Stephenson's steam-engines.

But our road lies by the English rail this time, therefore we must return to Stafford.

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Stafford to Crewe.—On leaving Stafford for Crewe we pass on the right Ingestrie Park, the seat of the Earl of Talbot; the ruins of Chartley Castle, the property of Earl Ferrers, the defendant in the action brought by Miss Smith for breach of promise of marriage; and Sandon Park, the seat of the Earl of Harrowby, who for many years, before succeeding his father, represented Liverpool in the House of Commons as Lord Sandon.

Soon after passing Norton Bridge Station, about seven miles from Stafford, we come in sight of Swinnerton Hall, the seat of the ancient family of Fitz-Herbert. The first lord of the manor of Swinnerton received this name at the hands of the Norman Conqueror. One of the farms of the present proprietor of Swinnerton Hall is held by a Liverpool merchant, who has carried out modern agricultural improvements, especially in stock feeding, with great success; having availed himself of the facilities of the railroad and his commercial knowledge, to import from Liverpool various kinds of nutritive pulse and grain.

Near the Whitmore Station the railway winds for two miles through an excavation in solid stone, enclosed by intermediate slopes of turf, ending, as it were in an arch, which, spanning the road, forms a sort of frame to a wild region that stretches on beyond.

[View near Whitmore: ill19.jpg]

Without anything very important to induce a halt by the way, the train runs into Crewe.

Crewe is a wonderful place; sixteen years ago, the quietest of country-villages, now intersected in every direction with iron roads pointing from it to almost every point of the compass.

A story is extant, with what foundation of truth we know not, of a gentleman who purchased a small farm here, as a safe investment and occasional retreat from the bustle of Manchester, and eventually realized from it, when a railway station was erected, more hundreds than he had paid pounds. At any rate, if it is not true, it might have been.

At present, besides the line formerly called the Grand Junction, until its amalgamation with the London and Birmingham, there is a line from Crewe to Chester and Birkenhead; another to Manchester direct, by Macclesfield, formerly known as the Manchester and Birmingham—both are now merged in the London and North Western; and lastly, a short cross branch of fifteen miles, forming a union with Burslem on the North Staffordshire.

In addition to the bustle created by the arrival and departure of innumerable trains at Crewe, the London and North Western Company have a large establishment for building and repairing the locomotives and other machinery in use on their lines north of Birmingham. This establishment is under the charge of Mr. Trevethick, C.E., a son of the Trevethick who, in 1802, in conjunction with Vivian, took out the first patent for a locomotive engine, which they executed the following year. {144}

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The railway village of Crewe is on the same plan as that of Wolverton, but situated in much prettier scenery; and includes a church, infant, boys' and girls' schools, a Library and Literary Institution, held in the Town-hall, where a fine room is occasionally well filled by popular lectures, and balls in the winter.

On one occasion, about three years ago, the name of a gentleman looking over the works in company with a foreman was recognized as that of a writer on a popular subject, and he was requested by a deputation of the men to deliver a lecture the same evening in the Town-hall. He consented; and a written notice, stuck up in the workshops at one o'clock, assembled at six o'clock upwards of six hundred of the mechanics and their wives and families, forming a most attentive and intelligent audience.

This establishment was considerably reduced during the depression in railway property, and several of the mechanics emigrated to the United States. One of these, a Chartist politician, a Methodist preacher, and a coach-spring maker, with a little taste for sporting, expressed himself, in a letter which found its way into the "Emigrant's Journal," well pleased with the people, the laws, and the institutions amongst which he had transplanted himself; but when he came to speak of the railroads, he considered them "not fit to carry hogs to market." So much for a man criticising his own trade.

We must not pause to describe as we could wish, in detail, the arrangements of this interesting village; for we have heavy work before us, and must press on.

Parties passing, who have leisure to stay a day, will find very fair accommodation at the inn overlooking the station, and often, about one o'clock, a fine hot joint of grass-fed beef of magnificent dimensions. In winter, this hotel is one of the quarters of gentlemen going to meet the Cheshire hounds, a first-rate pack, with a country which, if not first-rate, is far from second-rate, including certain parts of grass country which may be fairly compared to Leicestershire and Northamptonshire.

Crewe Hall, one of the "Meets," is the seat of Lord Crewe, the grandson of the beautiful Mrs. Crewe, so celebrated for her wit and Buff and Blue politics, in the time of Charles James Fox, the Duchess of Devonshire, the Westminster Election, and "All The Talents of the last century."

The Hall is picturesquely situated on a rising ground, well wooded, near a small lake, and contains, among other pictures, portraits of Fox, "Coke of Norfolk," and several other political friends with whom the first Lord Crewe was closely associated. The hounds meet there occasionally, when a "find" is sure, and a gallop through the park a thing to be remembered.

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Nantwich, about five miles from Crewe, is one of the towns which supplies Cheshire's salt exports, Middlewich and Northwich being the other two. In all, rich brine springs are found, but the celebrated mines of rock-salt are found at Northwich only. It is vulgarly imagined that the word *wich* has something to do with salt, these three towns being often described as the "*Wiches*." This is an error; and *wich* is merely an Anglo-Saxon corruption of the Roman word *vicus*, as in *Harwich*. The salt-works of *Nantwich* are mentioned in "*Domesday Book*." The town was more than once besieged during the great civil wars, lastly by Lord Byron, unsuccessfully, with an army chiefly Irish, which was compelled to raise the siege and defeated by Sir Thomas Fairfax and Sir William Brereton.

Among the antiquities remaining is a cross Church, in a mixture of styles, partly early English and partly decorated English, and a several curious old houses of black timber and plaster.

The trade of this place has derived much advantage from the junction of the Chester, Ellesmere, and Liverpool and Birmingham canals, close by.

At the *Nantwich* yearly fairs, samples of the famous Cheshire cheese made in the neighbourhood, of the best brands, may be found. Major-General Harrison, one of the Regicides who was put to death on the Restoration of Charles II., was a native of *Nantwich*, and Milton's widow, who was born in the neighbourhood, died there in 1726.

Just before reaching the Hartford Bridge Station, on the way to Chester, we pass Vale Royal Abbey, the seat of the Cholmondeley family, pronounced Chumleigh, whose head was created in 1821 Lord Delamere.

[*Vale royal viaduct*: ill20.jpg]

The Abbey lies in a valley sheltered by old trees, the remains of a great forest; wood-covered hills rise behind it, closing in the vale; below runs the Weaver, "that famous flood," whose praises were sung by Michael Drayton in his *Polyolbion*. In this instance, as in many others, the "monks of old" showed their taste in choosing one of the most beautiful and fertile sites in the county for their residence. The Cheshire prophet, Nixon, lived as ploughboy with the Cholmondeley family, according to tradition, for which we no more answer than for his prophecies, doubts having recently been thrown on both. A breed of white cattle with red ears are preserved at Vale Royal, in memory of the preservation of part of the family by a white cow when in hiding during the Civil Wars.

But we have not space to enter into the details of this, or the historical reminiscences connected with the ruins of Beeston Castle, which also falls in our way to Chester; for we must get on to Liverpool and leave for the present Cheshire, with its cheesemaking pastures, ancient mansions, and more ancient families, as well as its coal mines and

cotton mills, to visit the twin capitals of Liverpool and Manchester, which are at once the objects of the contempt and sources of the rent of the Cheshire territorial aristocracy.

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The antiquarian and historical student may linger long in Cheshire, which abounds in interesting architectural remains of several centuries, particularly of the black and white timbered mansions, and is studded with the sites of famous stories.

[*Excavation at Hartford:* ill21.jpg]

We shall pass Hartford Station without notice, and shall not pause to visit Northwich and the celebrated Marston Salt Pits, although well worth visiting, for which purpose a cricketer's suit of flannel will be found the best costume, and a few good Bengal lights an assistance in viewing the wonders of the salt caves. On across the long Dutton viaduct, spanning the Weaver navigation, we drive until, crossing the Mersey and Irwell canal and the river Mersey, we quit Cheshire and enter Lancashire, to run into the Warrington Station.

[*The Dutton viaduct:* ill23.jpg]

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Warrington may be dismissed in a very few words. It is situated in the ugliest part of Lancashire, in a flat district, among coal mines, on the banks of a very unpicturesque river, surrounded by a population in character much resembling that described in the "Black Country" of Staffordshire, and Worcestershire, and Shropshire. It was one of the earliest seats of manufacture in Lancashire, and has the advantage of coal close at hand, with canal and river navigation and railways to Chester through Runcorn (nineteen miles), to Crewe, to Liverpool, to Manchester, and thereby to all quarters in the north of England.

[*The Warrington viaduct:* ill22.jpg]

Coarse linens and checks, then sailcloth, were its first manufactures; at present, cotton spinning, power-loom weaving, the manufacture of glass, machinery, and millwork, pins, nails, tools, spades, soap, hats, and gunpowder, and many other trades, are carried on here. The markets for live stock of the district and from Ireland are important, and market gardening is carried on to a considerable amount in the neighbourhood of the town. The Mersey is navigable up to Warrington at spring tides for vessels, "flats," of from seventy to one hundred tons. A salmon and smelt fishery, which formerly existed, has disappeared from the waters by so many manufactories.

Warrington, under the Reform Act, returns one member to Parliament. Its ale is celebrated: it formerly returned an M.P. The inhabitants enjoy the benefit of three endowed schools, one of them richly endowed. Howard's work on Prisons was first printed at Warrington.

[*Warrington:* ill24.jpg]

On leaving Warrington, a few minutes bring us to Newton junction, upon the old Manchester and Liverpool Railway, where George Stephenson established the economy of steam locomotive conveyance twenty-one years ago.

In half an hour we are rolling down the Edgehill Tunnel into Liverpool.

LIVERPOOL.

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When you land on the platform, if you can afford it, go to the Adelphi Hotel, where the accommodation is first-rate, but the charges about the same as in Bond Street or St. James's Street, London.

There are others to suit all purses, and plenty of dining-houses on the London system, so that it is not absolutely necessary to submit to the dear and often indifferent dinners which are the rule in the coffee-rooms of most English hotels.

Liverpool has no antiquities of any mark; the public buildings and works worth seeing are few but important, although a page might be filled with the names of Institutions of various kinds.

By far the most interesting, original, and important, are those connected with the commerce of the town. That is to say, the docks and the gigantic arrangements at the railways for goods' traffic. St. George's Hall, a splendid building in the Corinthian style, containing the Law Courts and a hall for public meetings, as a sort of supplement to the Town-hall, meets the view immediately on leaving the railway station. The Mechanics' Institution in Mount Street, one of the finest establishments of the kind in the kingdom, provides an excellent education for the young, and for adults, at a very cheap rate.

A Collegiate Institution, opened in 1843, for affording a first-class education on the plan of the Durham and Marlborough Colleges, at a less expense than at Oxford or Cambridge, is to be found at Everton in a handsome Elizabethan building.

The Town-hall, with its auxiliary buildings, encloses the Exchange on three sides. The vestibule contains a statue of George Canning by Chantrey: in the centre of the Exchange stands a monument to Nelson, which we cannot admire. On the occasion of an invitation to dinner from the Mayor, or of a grand ball, it is worth while to penetrate beyond the vestibule, otherwise the walk through tolerably handsome rooms is scarcely worth the trouble, although it costs nothing.

The immense News-rooms of the Exchange, under one of the Arcades, are open to every respectable stranger introduced,—we may almost say without introduction. There are several other News-rooms with libraries attached. The Lyceum in Bold Street, and the Athenaeum in Church Street, which was founded by purchases from the library of William Roscoe, contain a number of valuable works of reference.

The Royal Institution of Science and Literature, founded by William Roscoe in 1814, by the subscription of shareholders, contains a museum of natural history of considerable value, some curious pictures, a set of casts from the Aegina and Phigaleian marbles, and a collection of philosophical instruments, with a laboratory and a theatre in which lectures are occasionally delivered. This Institution is not flourishing. It was lately offered to the Corporation as a free gift by the proprietors, on condition that the

museum, *etc.*, were to be open free to the town. The offer was declined by a small majority.

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There are several cemeteries, one of which has been ingeniously arranged in an exhausted stone quarry, and contains a marble statue of Huskisson, by Gibson, commemorating the facts of his having represented Liverpool in several Parliaments, and been killed on the 15th Sept., 1830, by a locomotive, at the opening of the Manchester and Liverpool Railway. On the last occasion of his election for Liverpool, in conjunction with the late General Gascoigne, without opposition, the windows of Huskisson's friends were smashed by the High Tory mob which accompanied Gascoigne's charring procession. Such are the changes of time. Where could a High Tory mob be found now, or who now differs with the mild liberalism of Huskisson?

A Workhouse on a very extensive scale, capable of affording indoor relief to 1800; a Blind Asylum, celebrated for the singing of the inmates, two Infirmarys, are far from completing the list of public institutions of a town with nearly 400,000 inhabitants; but, in the greater number, resemble all other institutions of the same kind, and, for the rest, a local guide may be consulted.

The best part of the town may be seen in a walk from St. Lukes' Church at the top of Bold Street, a short distance from the Adelphi Hotel, through Church Street, Lord Street, crossing Castle Street, down to St. George's Pier. By this line the best and the busiest streets of Liverpool will be seen, with shops nearly equal to the finest in London, and with customers in fine ladies, who are quite as pretty, and much more finely dressed, than the residents of that paradise of provincial belles, Belgravia. Indeed both sexes in this town are remarkable for their good looks and fashionable costume, forming a strong contrast to the more busy inhabitants of Manchester.

In Bold Street is the Palatine, a miniature copy of the Clubs of Pall Mall: at the doors and windows may be seen, in the intervals of business, a number of young gentlemen trying very hard to look as if they had nothing to do but dress fine and amuse themselves. But so far from being the idle fellows they would be thought, the majority are hardworking merchants and pains-taking attornies, who bet a little, play a little, dote upon a lord, and fancy that by being excessively supercilious in the rococo style of that poor heathen bankrupt Brummel, they are performing to perfection the character of men of fashion. This, the normal state of young Liverpool, at a certain period the butterfly becomes a grub, a money grub, and abandoning brilliant cravats, primrose gloves, and tight shiny boots, subsides into the respectable heavy father of genteel comedy, becomes a churchwarden, a patron of charities, a capitalist, and a highly respectable member of society. The Manchester man is abrupt, because his whole soul is in the money-making business of the day; the Liverpool gentleman's icy manners are part of his costume. The "cordial dodge," which has superseded Brummel's listless style in the really fashionable world, not having yet found its way down by the express train to the great mart of cotton-wool.

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'Change hours, which are twice a-day, morning and afternoon, afford a series of picturesque groups quite different to those of any other town, which should be kept in mind when visiting Manchester.

But perhaps the pleasantest thing in Liverpool is a promenade on one of the piers, or rather quays (for they run along and do not project into the river) when the tide is coming in, the wind fair for the Mersey, and fleets of merchantmen are driving up with full-bellied sails to take their anchorage ground before going into dock. An examination of the Docks, with the curious Dock arrangements of the Railway Companies, and the Sailor's Home, of which Prince Albert laid the first stone in 1846, will take a day. The Cheshire side of the Mersey forms a suburb of Liverpool, to which steamers are plying every ten minutes from the villages of Rock Ferry, Tranmere, Birkenhead, Monk's Ferry, Seacombe, Liskeard, Egremont, and New Brighton. The best idea of the extent of the Liverpool Docks may be obtained from the Seacombe Hotel, an old-fashioned tavern, with a bowling green, where turtle soup, cold punch, and claret are to be had of good quality at moderate charges.

In fine weather a seat after dinner at the window of this tavern is not a bad place for considering the origin, rise, progress, and prospects of the commerce of Liverpool. There is the river, with its rapidly-flowing muddy waters before you, ploughed in all directions by boats, by ships, by steamers, by river barges and flats; on the opposite side five miles of Docks, wherein rise forest after forest of masts, fluttering, if it be a gala day, with the flags of every nation—Russian, Sardinian, Greek, Turkish, French, Austrian, but chiefly, after our own, with the stripes and stars of the Great Republic.

No better text for such a contemplation can be found than the following inscription, copied from the model, contributed by Liverpool to the Great Exhibition of Industry:—

Progress of the commerce of Liverpool.

Under Queen Elizabeth, | Queen Anne, | Queen Victoria,
A.D.1570. | A.D.1710. | A.D.1850.

Population.	800		8,168		About 400,000
Tonnage {151}	268		12,636		3,336,337
Number of Vessels	15		334		20,457
Dock Dues.	—		600		211,743 pounds
Income of Corporation	20		1,115		139,152 pounds

Customs Dues 272 | 70,000 | 3,366,284 pounds

This extraordinary progress, of which we have far from seen the limits, has been founded and supported by a position which every commercial change, every new invention relating to sea-borne coasting trade, or inland conveyance, has strengthened.

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The discovery of the passage around the Cape of Good Hope, and improvements in the art of navigation, destroyed the commercial importance of Venice, and extinguished a line of river ports from Antwerp to Cologne. In our own country, the Cinque Ports, Harwich, Great Grimsby, and other havens, fell into decay when navigators no longer cared to hurry into the first harbour on coming within sight of land. But Liverpool, situated on the banks of a river which, until buoyed and improved at a vast expense, was a very inferior port for safety and convenience, has profited by the changes which have rendered the American the most important of our foreign customers, and Ireland as easily reached as Runcorn in a sailing flat.

The rise of the cotton manufacture has been as beneficial to Liverpool as to those districts where the yarn is spun and woven. The canal system has fed, not rivalled or “tapped,” the trade of the Mersey. The steamboats on which the seafaring population of Liverpool at first looked with dislike and dismay, have created for their town—first, a valuable coasting trade, independent of wind or tide, which with sailing vessels on such a coast and with such a river could never have existed; and next, a transatlantic commerce, which, through Liverpool, renders New York nearer to Manchester than Dublin was five and twenty years ago; while, at the same time, the opposite coast of Cheshire has been transformed into a suburb, to which omnibus-steamers ply every five minutes. And yet little more than five and twenty years ago there was only one river steamer on the Mersey, and that a flat bottomed cattle boat, with one wheel in the centre.

Bristol took the lead in establishing transatlantic steamers; but Liverpool, backed by Manchester, transplanted to her own waters the new trade, and even the steamers that proved the problem.

Railways (the only great idea in this generation that Liverpool has ventured to originate and execute) have not, as was promised, transferred any part of the Liverpool trade to Manchester; but, on the contrary, largely increased and strengthened their connection with the cotton metropolis. An hour now takes the cotton broker to his manufacturing customers twice a week, who formerly rose at five o'clock in the morning to travel by coach in four hours to Manchester, and returned wearied at midnight.

The Electric Telegraph, the next great invention of this commercial age was not less beneficial to this port by facilitating the rapid interchange of communication with the manufacturing districts, and settling the work of days in a few hours. A hundred miles apart merchants can now converse, question, propose, and bargain.

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By all these improvements uncertainties have been reduced to certainties, and capital has been more than doubled in value. On the expected day, well calculated beforehand, the steamer arrives from America; with the rapidity of lightning the news she brings is transmitted to Manchester, to Birmingham, to Sheffield, to London, to Glasgow; a return message charts a ship, and a single day is enough to bring down the manufactured freight. Thus news can be received and transmitted, a cargo of raw material landed, manufactured goods brought down by rail from the interior of England, and put on board a vessel and despatched, in less time than it occupied a few years ago to send a letter to Manchester and get an answer.

And under all these changes, while commerce grows and grows, the porters and the brokers, the warehousemen and the merchants, are able to take toll on the consumption of England.

Even the old dangerous roadstead, and far-falling tides of the Mersey, proved an advantage to Liverpool; by driving the inhabitants to commence the construction of Docks before any other port in the kingdom, and thus obtain a certain name and position in the mercantile world, from having set an example which cities provided with more safe and convenient natural harbours were unwilling to follow.

The first Dock ever constructed in England is now the site of the Liverpool Custom House; a large building erected at a period when our architects considered themselves bound to lodge all public institutions in Grecian temples.

This Dock was constructed in 1708, and twelve others have since been added, occupying the shore from north to south for several miles, including one which will accommodate steamers of the largest class. These Docks are far from perfect in their landing arrangements. Cargo is discharged in all but one, into open sheds. The damage and losses by pilferage of certain descriptions of goods are enormous. Attempts have been repeatedly made to establish warehouses round the docks into which goods might be discharged without the risk or expense of intermediate cartage. But the influence of parties possessed of warehouse property is too great to allow the execution of so advantageous a reform. Whigs and Radicals are, in this instance, as determined conservators of abuses which are not time-honoured as any Member for Lincoln City or Oxford University.

In 1764 more than half the African slave trade was carried on by Liverpool merchants. The canal system commenced by the Duke of Bridgewater next gave Liverpool an improved inland communication. After Arkwright's manufactures stimulated the trade of America, cotton imports into Liverpool soon began to rival the sugar and tobacco imports into Bristol. The Irish trade was rising at the same time, and the comparatively short distance between the midland counties, where Irish livestock was chiefly consumed, soon brought the Irish traders to Liverpool.

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The progress of steam navigation presently gave new openings to the coasting trade of Liverpool. In 1826 the admirable canal system, which united Liverpool with the coal and manufacturing districts in the kingdom, was found insufficient to accommodate the existing traffic, and the railroad was the result. By the railroad system Liverpool has been brought within an hour of Manchester, two hours of Leeds, and four hours of London; and into equally easy, cheap, and certain communication with every part of England and Scotland; while fully retaining all the advantages of being the halfway house between the woollen districts, the iron districts, and the cotton districts, and America—the intermediate broker between New Orleans, Charleston, New York, and Manchester.

Six-sevenths of all the woollen imported into England comes through Liverpool, besides a large trade in sugar, tobacco, tea, rice, hemp, and every kind of Irish produce.

Thus Liverpool is in a position to take toll on the general consumption of the kingdom; and this toll in the shape of dock dues, added to the increase in the value of landed property, occupied by warehouses, shops, and private residences, has enabled the municipal corporation to bestow on the inhabitants fine buildings, and greatly improve the originally narrow streets. Liverpool has no manufactures of any special importance. Few ships are built there in comparison with the demands of the trade, in consequence of the docks having taken up most of the space formerly occupied by the building-yards. The repairs of ships are executed in public graving docks, chiefly by workmen of a humble standing, called pitchpot masters,—a curious system, whether advantageous or not to all parties, is a matter of dispute.

The environs of Liverpool are particularly ugly, remarkably flat, and deficient in wood and water. There are scarcely any rides or drives of any kind. The best suburb, called Toxteth Park, although no park at all, lies on the southern side of the town, parallel with the Mersey. In this direction the wealthiest merchants have erected their residences, some of great size and magnificence, surrounded by pleasure-grounds and fancy farms, presenting very favourable instances of the rural tastes of our countrymen in every rank of life. But there is nothing in the environs of Liverpool to make a special ride necessary, unless a stranger possesses a passport to one of the mansions or cottages of gentility to be found on each side of the macadamized road behind rich plantations, where hospitality is distributed with splendour, and not without taste.

The north shore of the Mersey consists of flat sands, bounded on the land side by barren sand hills, where, driven by necessity, and tempted by a price something lower than land usually bears near Liverpool, some persons have courageously built houses and reclaimed gardens. On this shore are the two watering-place villages of Waterloo and Crosby, less populous, but as pleasant as Margate, with salt river instead of salt

sea bathing, in shade and plenty of dust. The hard flat sands, when the tide is down, afford room for pleasant gallops.

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The best settlement on the opposite shore, called New Brighton, has the same character, but enjoys a share of the open Irish sea, with its keen breezes. It must be bracing, healthy, dreary, and dull.

* * * * *

Birkenhead is a great town, which has risen as rapidly as an American city, and with the same fits and starts. Magical prosperity is succeeded by a general insolvency among builders and land speculators; after a few years of fallow another start takes place, and so on—speculation follows speculation. Birkenhead has had about four of these high tides of prosperous speculations, in which millions sterling have been gained and lost. At each ebb a certain number of the George Hudsons of the place are swamped, but the town always gains a square, a street, a park, a church, a market-place, a bit of railway, or a bit of a dock. The fortunes of the men perish, but the town lives and thrives. Thus piece by piece the raw materials of a large thriving community are provided, and now Birkenhead is as well furnished with means for accommodating a large population as any place in England, and has been laid out on so good a plan that it will be one of the healthiest as well as one of the neatest modern towns. It has also the tools of commerce in a splendid free dock, not executed so wisely as it would have been if Mr. Rendel, the original engineer, (the first man of the day as a marine engineer), had not been overruled by the penny-wise pound-foolish people, but still a very fine dock. Warehouses much better planned than anything in Liverpool; railways giving communication with the manufacturing districts; in fact, all the tools of commerce—gas, water, a park, and sanitary regulations, have not been neglected.

Some people think Birkenhead will be the rival of Liverpool, we think not: it will be a dependency or suburb of the greater capital. “Where the carcase is, there the eagles will be gathered together.” Birkenhead is too near to be a rival; shipping must eventually come to Birkenhead, but the business will still continue to be done in Liverpool or Manchester, where are vested interests and established capital.

An hour or two will be enough to see everything worth seeing at Birkenhead. To those who enjoy the sight of the river and shipping, it is not a bad plan to stop at one of the hotels there, as boats cross every five minutes, landing at a splendid iron pontoon, or floating stage, on the Liverpool side, of large dimensions, constructed with great skill by Mr. W. Cubitt, C.E., to avoid the nuisance of landing carriages at all times, and passengers at low tides in boats.

At Liskeard, a ferry on the Cheshire side, Mr. Harold Littledale—a member of one of the first firms in Liverpool—has established a model dairy farm, perhaps one of the finest establishments of the kind in the kingdom.

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All the buildings and arrangements have been executed from the plans and directions of Mr. William Torr, the well known scientific farmer and short-horn breeder, of Aylsby Manor, Lincolnshire. No expense has been spared in obtaining the best possible workmanship and implements, but there has been no waste in foolish experiments; and, consequently, there is all the difference between the farm of a rich man who spends money profusely, in order to teach himself farming, and a farm like that at Liskeard, where a rich man had said to an agriculturist, at once scientific and practical, "Spare no expense, and make me the best thing that money can make."

The buildings, including a residence, cottages, and gardens, occupy about four acres, and the farm consists of 350 acres of strong clay land, which has been thoroughly drained and profusely manured, with the object of getting from it the largest possible crops. Fifty tons of turnips have been obtained from an acre.

Eighty cows are kept in the shippons, ranged in rows, facing the paths by which they are all fed at the head. They are fed on turnips, mangels, or potatoes, with cut chaff of hay and straw, everything suitable being cut and steamed, in the winter—on green clover, Italian ray-grass, and a little linseed-cake, in the summer. They are curry-combed twice a day, and the dung is removed constantly as it falls. The ventilation and the drainage has been better managed than in most houses, so that the shippons have always a sweet atmosphere and even temperature. The fittings, fastenings, and arrangements of the windows, hanging from little railways, and sliding instead of closing on hinges, are all ingenious, and worth examination. Mr. Littledale makes use of a moveable wooden railway, carted over by a donkey in a light waggon, to draw root crops from a field of heavy land.

The churn in use in the dairy makes eighty pounds of butter at a time, and is worked by the steam-engine also used for cutting and steaming the food of the cows. The milk and cream produced at this dairy is sold by retail, unadulterated, and is in great demand. A brief account of this farm appeared in the "Farmer's Magazine" of May, 1848, with a ground plan; but several improvements have been made since that time. To parties who take an interest in agricultural improvement, a visit to Liskeard Farm will be both interesting and profitable.

We believe that Mr. Torr also farms another estate, which he purchased, in conjunction with friends, from Sir William Stanley, at Eastham, near Hooton (a pleasant voyage of an hour up the river), and cultivates after the North Lincolnshire style, in such a manner as to set an example to the Cheshire farmers—not a little needed. The country about Eastham is the prettiest part of the Mersey.

While on the subject of agricultural improvements, we may mention that Mr. Robert Neilson, another mercantile notability, holds a farm, under Lord Stanley, at a short railroad ride from Liverpool, which we have not yet had an opportunity of examining, but understand that it is a very remarkable instance of good farming, and consequently

heavy crops, in a county (Lancashire) where slovenly farming is quite the rule, and well worth a visit from competent judges, whom as we are also informed Mr. Neilson is happy to receive.

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If, as seems not improbable, it should become the fashion among our merchant princes to seek health and relaxation by applying capital and commercial principles to land, good farming will spread, by force of vaccination, over the country, and plain tenant-farmers will apply, cheaply and economically, the fruits of experience, purchased dearly, although not too dearly, by merchant farmers. A successful man may as well—nay, much better—sink money for a small return in such a wholesome and useful pursuit as agriculture, than in emulating the landed aristocracy, who laugh quietly at such efforts, or hoarding and speculating to add to what is already more than enough.

If a visit be paid to Mr. Neilson's farm, it would be very desirable to obtain, if possible, permission to view the Earl of Derby's collection of rare birds and animals, one of the finest in the world. But permission is rarely granted to strangers who have not some scientific claim to the favour. Lord Derby has agents collecting for him in every part of the world, and has been very successful in rearing many birds from tropical and semi-tropical countries in confinement, which have baffled the efforts of zoological societies. The aviaries are arranged on a large scale, with shrubs growing in and water flowing through them. In fine weather some beautiful parrots, macaws, and other birds of a tame kind, are permitted to fly about the grounds. There is something very novel and striking in beholding brilliant macaws and cockatoos swinging on a lofty green-leaved bough, and then, at the call of the keeper, darting down to be fed where stately Indian and African cranes and clumsy emus are stalking about.

The late Earl was celebrated as a cockfighter, and the possessor of one of the finest breeds of game fowls in the kingdom. A few only are now kept up at Knowsley, as presents to the noble owner's friends. Knowsley lies near Prescott, about seven miles from Liverpool. The family are descended from the Lord Stanley who was created Earl of Derby by the Earl of Lancaster and Derby, afterwards Henry IV., for services rendered at the battle of Bosworth Field. An ancestress, Charlotte de la Tremouille, Countess of Derby, is celebrated for her defence of Latham House against the Parliamentary forces in the Great Civil War, and is one of the heroines of Sir Walter Scott's novel of "Peveril of the Peak." {159}

Liverpool is particularly well placed as a starting point for excursions, in consequence of the number of railways with which it is connected, and the number of steamboats which frequent its port, where a whole dock is especially devoted to vessels of that class.

By crossing over to Birkenhead, Chester may be reached, and thence the quietest route to Ireland, by Britannia Bridge and Holyhead; or a journey through North Wales may be commenced. By the East Lancashire, starting from the Station behind the Exchange, a direct line is opened through Ormskirk to Preston, the lakes of Cumberland, and to Scotland by the west coast line.

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From the same station a circuitous route through Wigan and Bolton, on the Lancashire and Yorkshire Railway, opens a second road to Manchester, and affords a complete communication with the manufacturing districts of Lancashire and Yorkshire.

On the roads to London it is not now necessary to treat.

The steam accommodation from Liverpool has always been excellent, far superior to that afforded in the Thames. No such wretched slow-sailing tubs are to be found as those which plied between London and Boulogne and Calais, until railway competition introduced a little improvement. The interior fittings and feeding on board Liverpool boats are generally superior. The proprietors have taken the Scotch and Americans as models, and not the stingy people of the Thames.

It is very odd that while the French and Scotch can contrive to give a delicious breakfast or dinner on shipboard, while the Germans on the Rhine are positively luxurious, and while we know that a steam-boiler offers every convenience for petits plats, the real old English steam-boats of the General Steam Navigation Company never vary from huge joints and skinny chickens, with vegetables plain boiled.

We remember, some years ago, embarking on a splendid French steamer, afterwards run down and sunk in the Channel, to go to Havre, and returning by Boulogne to London. In the French vessel it was almost impossible to keep from eating,—soups, cutlets, plump fowls, all excellent and not dear. On board the English boat it was necessary to be very hungry, in order to attack the solid, untempting joints of roast and boiled.

This is a travelling age, and both hotel keepers and steam-boat owners will find profit in allowing the spirit of free trade and interchange to extend to the kitchen. Our public cooks are always spoiling the best meat and vegetables in Europe.

More than twenty lines of steamers ply from Liverpool to the various ports of Ireland; the Isle of Man, which is a favourite watering-place for the Lancashire and Cheshire people; Glasgow and other parts of Scotland, Whitehaven and Carlisle, Bangor, Caernarvon, and other ports of Wales, beside the deep-sea steamers to New York, Philadelphia, and Boston; to Constantinople, Malta, and Smyrna; and to Gibraltar, Genoa, Leghorn, Civita Vecchia (for Rome), Naples, Messina, and Palermo; so that an indifferent traveller has ample choice, which is sometimes very convenient for a man who wants to go somewhere and does not care where.

The amusements of Liverpool include two theatres, an amphitheatre for horsemanship, and several sets of subscription concerts, for the use of which a fine hall has been erected.

The race-course is situated at some miles distant from the town; races take place three times a-year, two being flat races, and the third a steeple-chase. They are well supported and attended, although not by ladies so much as in the Midland and Northern Counties. The Liverpool races are chiefly matters of business, something like the Newmarket, with the addition of a mob. A large attendance comes from Manchester, where more betting is carried on than in any town out of London. Gambling of all kinds naturally follows in the wake of cotton speculation, which is gambling.

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The crashes produced in Liverpool by the sacra fames auri are sometimes startling, and they come out in visible relief, because, in spite of its size, gossip flourishes as intensely as in a village. During one of the cotton manias a young gentleman, barely of age, in possession of an income of some two thousand a-year from land, and ready money to the extent of one hundred and fifty thousand pounds, joined an ingenious penniless gentleman in speculating in cotton, and found himself in less than twelve months a bankrupt; thus sacrificing, without the least enjoyment, a fortune sufficient for the enjoyment of every rational pleasure, or for the support of the highest honours in the State.

Such instances are not uncommon, although on a less magnificent scale; indeed, it is well to be cautious in inquiring after a Liverpool merchant or broker after an absence of a few years; a very few years are sufficient to render the poor rich and the rich poor, an eighth of a penny in the pound of cotton will do it.

The Municipal Corporation of Liverpool is the wealthiest in England after London, and virtually richer than London, inasmuch as the expenses are trifling, the property is improving, and the Liverpool aldermen and common-councillors have no vested claims to costly entertainments.

The majority is in the hands of the Conservative party, the Liberal party having only enjoyed the sweets of power for a brief period after the passing of the Financial Reform Bill; but the principle of representation keeps down any inclination toward the inevitable jobberies of a close self-elected body, and pushes local legislators on, quite up to the mark of the public opinion of the locality they govern.

A stranger, who has no interest in party squabbles, must confess that the funds of this wealthy estate are on the whole fairly and wisely distributed.

The Irish population, amounting to many thousands of the poorest and most ignorant class, who find a refuge from the miseries of their own country in the first port from Dublin, and employment in the vast demand for unskilled labour caused by the perpetual movement in imports and exports, impose a heavy tax on the poor-rates and police-rates of this borough.

In the education of this part of the community, the Liberal Corporation made provision in the extensive Corporation schools, by adopting the Irish Government scheme of instruction, permitting the Roman Catholics to make use of their own translation of the Bible, and to absent themselves from the religious instruction of the orthodox.

On this question the municipal elections were fought. The general education party were eventually beaten. The Roman Catholics were withdrawn from the schools, and thrown entirely upon the priests or the streets for education, and great was the rejoicing among the party who carried a large wooden Bible as their standard.

But subsequent events have induced those who have given any attention to the state of the operative classes in Liverpool, of whatever politics, to doubt whether it would not have been better to have been busy, for the last fifteen years, in teaching those classes something, who, knowing nothing, supply very expensive customers to the Liverpool courts of law and jail.

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Liverpool returns two members to the House of Commons.

The election contests were formerly wonderfully bitter and absurd, for on one occasion, just before the passing of the Reform Bill, nearly two hundred thousand pounds were spent by two parties, between whose politics there was scarcely a shade of difference.

William Roscoe represented Liverpool for a short time, but was rejected at a second election, in consequence of his opposition to the Slave Trade. He was the son of a publican, and rose from an office boy to be an attorney in large practice, and eventually a banker. He was ruined by the stopping of his bank, which, after being for many years under the taxing harrows of the old corrupt bankrupt system, paid twenty shillings in the pound. William Roscoe was a voluminous writer of political pamphlets and poetry, which are now quite forgotten; his literary reputation deservedly rests upon his lives of Lorenzo de Medici, published in 1796, and of Leo X; the former of which has recently been republished by Mr. Bohn, in his cheap series of reprints.

Of even more value than his literary productions, was the school, or party, which he founded in Liverpool, while he was still wealthy and influential, embracing all who had a taste for literature and art. At that period Liverpool was rising into wealth on a vigorous prosecution of the Slave Trade, of which its parliamentary representatives were the avowed supporters. At that time vulgar wealth was the only distinction, and low debauchery the almost only amusement of the principal merchants. Absurd as it may now seem, when all the well-to-do world profess to be educated and temperate, Roscoe and his friends rendered inestimable service by making elegant tastes and temperate habits respectable, and by raising up an opposition to the old Slave Trade party, whose paradise lay in turtle soup, port wine, and punch. He set an example to merchants of stocking a library as well as a cellar, which has been followed, until now it is considered a matter of course. William Roscoe died in 1831, at a very advanced age. He was a remarkably fine-looking man, with a grand aristocratic head.

In addition to Huskisson and George Canning, Liverpool once very nearly had the honour of sending to Parliament Henry Brougham, in days when the Chancellorship and the House of Lords could scarcely have been expected by that versatile genius, even in a dream.

At present Liverpool interests are well represented in the House of Commons. The borough has had the good sense to prefer a merchant townsman, Sir Thomas Birch, and the son of a merchant, and friend and co-minister of the late Sir Robert Peel, Mr. Cardwell, to a soldier, and the dreamy poetical son of a Protectionist duke. A place like Liverpool ought to find in its own body better men than young lords or old soldiers. But young Liverpool dearly loves a lord, of any politics; and a little polite attention from a duke will produce an unconscious effect even on the trade report of a broker of "fashion."

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Mr. William Brown, at the head of the greatest American house in the world, after Baring's, represents South Lancashire, but on Manchester influence, scarcely with the consent of Liverpool. Mr. Brown, who is an Irishman by birth, has been entirely the architect of his own fortune, and began business—on a very limited scale indeed—within the memory of persons now living. The firm has now agents in every town of any importance in the United States, and is the means of keeping in active employment hundreds of traders in all our manufacturing districts. The relations with Birmingham and the hardware country are very close. Another Liverpool man of whom the Liverpool people are justly proud, is the best debater in the House of Commons, if he only knew his own mind, the Right Honourable William Gladstone, the son of Sir John Gladstone, Bart., of Fasque, N.B., formerly a Liverpool merchant. Sir John Gladstone is a Scotchman, and in conjunction with another gentleman, also the head of a first-rate Liverpool house, Mr. Sandbatch, went out to the West Indies (Demerara) as journeyman bakers, in the same way that Mr. Miles, the grandfather of the members for East Somerset and Bristol, and founder of the great Bristol banking house, went out to Barbadoes as a journeyman cooper. If we add to these instances that the first Sir Robert Peel and Mr. Brotherton (who himself told the House, in a debate on the Factory Time Bill, that he had commenced life as a factory operative), beside many others, too numerous to mention, it will be found that our House of Commons is not so far out of the reach of industrious merit as foreigners usually imagine.

In conclusion, we may note that Liverpool, which gave very cold and niggard support to the Great Exhibition (chiefly because the project was ill received by the ducal house which patronizes the fashionables of the town), sent a contribution which very completely represented its imports, specifying the scientific and commercial name of each article, country of production, and quantity imported.

This collection occupies a considerable space, but it will be found, on examination, that a few staples employ the greater part of the shipping inwards. Cotton occupies by far the largest place, the air is filled with floating motes of cotton all round the business quarters of the town; timber probably stands next in the tonnage it employs; West Indian produce is less important than it was formerly; a great trade is done with South America, in hides, both dry and salted; tobacco, both from the United States and Cuba, arrives in large quantities. There are several great snuff and cigar manufactories in Liverpool. The hemp and tallow trade is increasing, as is the foreign corn trade. The Mediterranean, and especially the Italian, trade, has been rendered more important by steam communication. The China trade has not increased as much as was expected.

When the Docks and Public Institutions have been examined, and the places of interest on the Cheshire shore visited, Liverpool presents nothing to detain the traveller who has no private claims on his attention.

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It must be acknowledged that the general appearance of the town and of the people is more agreeable than that of Birmingham or Manchester, although Liverpool can claim none of the historical and antiquarian interest in which Bristol and Chester are rich. There are parts of the town devoted to low lodging houses, and accommodation for the poor Irish and emigrants, as bad as the worst parts of St. Giles's or Spitalfields. Indeed, the mortality is greater than that of any other town in England.

Liverpool is a great port for emigration to the United States and Canada. On the line of packet ships the accommodation for those who can pay 5 pounds and upwards is excellent; in the timber ships they are packed like herrings after being lodged like pigs. But what can be expected for the fare. At 2 pounds the shipowners undertake to give a passage, and find two quarts of water and a pound of bread per day. The Government Emigration Agents are indefatigable in their efforts, municipal and Parliamentary regulations have been from time to time applied to the subject, nevertheless the frauds and cruelties inflicted on emigrants are frightful.

An attempt was made some short time since to have an Emigrant's Home as a sort of Model Barrack, erected in one of the New Docks, so as to form a counterpoise to the frauds of emigration lodging-house keepers, but local jealousies defeated a plan which would have been equally advantageous to the town and the emigrants.

The state of poverty and crime in Liverpool, fed as it is by the overflowings of many districts, is an important subject, which has excited the anxious attention of several enlightened residents, among others of the late Police Magistrate, Mr. Edward Rushton, who died suddenly without being able to bring his plans to maturity.

In conclusion we may say of Liverpool, that it is a town which has a great and increasing population, a wealthy Corporation, a thriving trade, yet less of the materials of a metropolis than many other towns of less commercial importance.

For further temporary information, a traveller may advantageously consult the Liverpool papers, of which there is one for every day in the week—that is to say, an Albion, a Times, a Mail, a Standard, a Mercury, a Journal, a Chronicle—of all shades of politics, of large size, conducted with great ability, and affording, in addition to the news and politics of the day, a great deal of general information, in the shape of extracts from popular works and original articles.

If we would learn why the opinions of inhabitants of towns prevail over the opinions of landowners and agriculturists, we have only to compare the active intelligence of the two as exhibited by such journals as are to be found in Liverpool, Manchester, and Birmingham with those supported by the rural community. A single sect expends more on the support of the press than all the farmers and farmers' friends united, who are more numerous, more wealthy, not wanting in intelligence in their own pursuits, but quite without cohesion or combination.

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Liverpool to Manchester.—There are two ways from Liverpool to Manchester, one by the Lancashire and Yorkshire Railway, through Bolton, which has a station behind the Exchange, and one by the old route, through Newton. The line by the new one has Bolton upon its course, and renders the Aintree Racecourse half as near Manchester as Liverpool.

For choice take a Tuesday or Saturday, and travel up by the early Cotton Brokers' Express to Manchester, so as to see one more phase of the English commercial character. The Brokers are a jovial set and hospitable, as keen as Yankees and as industrious. There is a marked difference between them and the Spinners, but they are of no particular country. Liverpool, like Manchester, although not to the same degree, is colonised by strangers. Both Irishmen and Scotchmen are to be found among the most respectable and successful, and a considerable number of Americans are settled there as merchants and shipping agents; indeed it is half American in its character.

In this year of 1851, to describe the Liverpool and Manchester Railway would be absurd; acres of print, in all civilized languages, and yards of picture-illustration, have been devoted to it. At Newton Station you see below you a race-course of great antiquity, and what was once a huge hotel, built to supply a room large enough for the Mother Partingtons of Lancashire to meet and prepare their mops for sweeping back the Atlantic tide of public opinion. There they met, and dined and drank and shouted, and unanimously agreed that it was foolish legislation which transferred the right of representation from the village of Newton to the great city of Manchester; after which they went home, and wisely submitted to the summons which found its speaking-trumpets at Manchester. Fortunately for this country, a minority knows how to submit to a majority, and the Conservative Hall, by a sort of accidental satire on its original uses, has been turned into a printing office.

A little farther on is Chat-Moss, a quaking bog, which the opponents of the first railway proved, to the satisfaction of many intelligent persons, to be an impassable obstacle to the construction of any solid road. We fly across it now reading or writing, scarcely taking the trouble to look out of the window. But if we do, we may see reclamation and cultivation, in the shape of root-crops and plantations, extending over the wet waste.

William Roscoe was one of the first to attempt to reclaim this Moss; and it is worthy of note, that it was among the literary and scientific friends of Roscoe that George Stephenson's idea of a railroad from Liverpool to Manchester, through Chat-Moss, found its warmest supporters, at a time when support was much needed; for the shares were hawked, and even distributed among friends who were guaranteed against loss, in order to make up a fitting parliamentary subscription to what has proved one of the most successful speculations in public works, of this century.

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MANCHESTER.

As we roll into Manchester, and mark by what successive invasions the city has been half-surrounded by railways, it is amusing to remember the fears which landowners expressed in 1829, and really felt, lest the new flaming and smoking carriage-apparatus should damage the value of property which has been more than doubled in value by the new invention.

Manchester is the greatest manufactory in the world. The cradle and metropolis of a trade which employs a million and a half of souls, beside the sailors, the merchants, the planters and the slaves, who grow or carry or buy the raw material, it is the second city in the empire, and perhaps, considered in relation to the commercial influence of Great Britain, scarcely second. Blot out the capital, the credit, the living enterprise, the manufacturing power of Manchester, and we have lost a century of commercial progress. Manchester is essentially a place of work and action, carried on by men recruited from every district where a mental grenadier of the Manchester standard is to be found. Suffolk and Devonshire, Norfolk and Cornwall send their quota, as well as the neighbouring manufacturing schools of Yorkshire, Cheshire, and Lancashire. Scotchmen in great numbers, and some Irishmen, chiefly from the north, are also at home there. We are speaking now not of operatives, but of those who rise to be manufacturers or merchants. The Americans are rather constant visitors than permanent residents; but the Germans are sufficiently numerous to be able to form a society of their own, the most agreeable in Manchester; and the commerce of Greece is represented by a great number of houses, which are increasing in number and importance.

Then Manchester, although only an inland canal port, trades largely and directly, through Liverpool chiefly, to the most parts of the world, consuming one-tenth of the whole imports of that town. The correspondence of a first-class house for one morning would alone be a lesson in geography.

Then again, the ceaseless enterprise and enormous powers of manufacture are supported by a constantly-improving mechanical ingenuity, which seems to those unaccustomed to such works nothing less than miraculous: as, for instance, some of the inventions of Mr. Whitworth and of Mr. Roberts.

But all this is hidden from the eye of a stranger; and Manchester is a dark and dingy ledger, closely clasped, unless he comes prepared to open a good account, or armed with letters of introduction of a more than ordinarily pressing nature. The gentleman who was all smiles while accepting your civilities, and energetically amusing himself on a tour of pleasure, has scarcely time to look up from his desk to greet you when enthroned in his counting-house. The fact is, that these Manchester men rise early,

work hard, dine at one o'clock, work again, and go home, some distance out of town, to work or to sleep,—so they have no time for unprofitable hospitality or civility.

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We do not say this by way of idle reproach to the people of Manchester, who follow their vocation, and do work of which we as Englishmen have reason to be proud, but partly by way of warning to travellers who, armed with the sort of letters that have proved passports to everything best worth seeing throughout the rest of Europe, may expect to pass an agreeable day or two in the cotton metropolis; and partly by way of hint to politicians who, very fond of inveighing against the cold shade of aristocracy, would find something worth imitating in the almost universal courtesy of modern nobility, which is quite consistent with the extremest liberality of abstract opinions.

Dr. Dalton, the celebrated natural philosopher, for many years a resident in Manchester, has proved that Manchester is not so damp and rainy a place as is generally imagined; that the mean annual fall of rain is less than that of Lancaster, Kendal, and Dumfries. Nevertheless, it is better to expect rain, for although the day at Liverpool, Halifax, or Sheffield may have been brilliantly fine, the probability is that you will find the train, as it approaches the city, gradually slipping into a heavy shower or a Scotch mist.

The walk from any of the stations is very disheartening; tall warehouses, dingy brick houses, a ceaseless roar of carts and waggons in the main streets, and a population of which all the better dressed march at double quick time, with care-brent brows, and if pausing, only to exchange gruff monosyllables and short words.

At one o'clock the factory hands are dismissed, and the masters proceed to dinner on horseback and in all sorts of vehicles at a thundering pace. The working-class population will be found less unhealthy and better looking than would be expected. The costume of the women, a cap and a short sleeved jacket fitting the waist, called a Lancashire bedgown, is decidedly picturesque. For a quarter of an hour some streets are almost impassable, and the movement gives the idea of a population deserting a city. An hour's silence follows, after which the tide flows again: the footpaths are filled with the "hands;" and the "heads," with very red faces, furiously drive their hundred guinea nags back to business. Now this is one of the sights of Manchester.

Again, Tuesday is the business day at the Exchange, in St. Ann's Square. The room is one of the finest in the kingdom; the faces and the scene generally afford much curious matter for the study of the artist and physiognomist. Compare it with the groups of well dressed dawdlers at Leamington, Cheltenham, Bath, with the very different style of acute intellect displayed at a meeting of the Institute of Civil Engineers, or with the merchants of Liverpool, part of whom also attend Manchester.

The personal appearance of the Manchester manufacturers and their customers, as seen on 'Change, fully justifies the old saw, "Liverpool gentlemen, Manchester men, Rochdale fellows (fellies), and Wigan chaps."

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In Liverpool all are equal,—merchant deals with merchant; in Manchester the millowner is an autocrat, restrained by customs of the trade and occasional strikes, and he carries his rough ways into private life.

But facts show that, with all its plate and varnish, Liverpool is as inferior to Manchester in an intellectual, as it is superior in an external point of view.

In politics Manchester leads, and Liverpool and Lancashire unwillingly follow,—in the education of the operative and middle classes,—in literary, scientific, and musical associations,—in sanitary measures,—in the formation of public parks and pleasure grounds, Manchester displays an incontestable superiority; being more rapid, more energetic, and more liberal than her more fashionable neighbours.

A list of a few of the institutions and public establishments will show this.

The Royal Institution in Mosley Street occupies a large building, established for the encouragement of the Fine Arts by exhibitions of paintings and sculptures, and the delivery of lectures.

The Philosophical Society was established in 1781, and has numbered among its members Dr. Dalton, Dr. Henry, and Dr. Percival, and has had its Transactions translated into French and German.

The Natural History Society has filled a museum in Peter Street with objects of natural history, and opens it during holiday seasons to the public at a nominal charge, when thousands of visitors, chiefly operatives, attend.

The Mechanics' Institution, founded in 1824, after surviving many difficulties, has become one of the most flourishing and useful institutions of the kind in the kingdom. Its chief activity is displayed in the education of the operative members in the classrooms. The library is large, well selected, and in constant requisition. In one department the School of Design is carried on, and could not be conducted in a more appropriate building.

This School of Design, supported by the Government for the purpose of promoting design as applied to the staple manufactures, and diffusing a general feeling for art amongst the manufacturing community, was formerly accommodated within the walls of the Royal Institution as a tenant, paying a rent, strangely enough, for the use of a building which had ostensibly been erected for promoting art and science!

It was not until 1836, that, on the recommendation of a Committee of the House of Commons, active steps were taken to establish in England that class of artistic instruction applied to manufactures which had been cultivated in France ever since the time that the great Colbert was the minister of Louis XIV.

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At Manchester, some of the leading men connected with the calico-printing trade and looms of art, established a School of Design within the Royal Institution, where two rooms were lent rent-free; but, as soon as Government apportioned a part of a special grant to the Manchester School, the Committee, who were also as nearly as possible the Council of the Royal Institution, with that appetite for public money which seems incident to men of all nations, all classes, and all politics, voted 100 out of the 250 pounds per annum for rent. This school did nothing of a practical nature, and consequently did not progress in public estimation. The master was a clever artist, but not up, perhaps he would have said not down, to his work. A School of Design at Manchester is meant, not to breed artists in high art, but to have art applied to the trades of the city. The master was changed, and, at the request of the local committee, the Council of the School of Design at Somerset House sent down, in 1845, Mr. George Wallis, who had shown his qualifications as an assistant at Somerset House and as master of the Spitalfields school. At that time the Manchester school had been in existence five years, and had done nothing toward its original object. In two years from the time of Mr. Wallis taking the charge, the funds of the school were flourishing; the interest taken in it by the public was great, and nearly half the Institution was occupied by the pupils, while the applications for admission were more numerous than could be accommodated. Under this management the public, who care little for abstract art, were taught the close connexion between the instruction of the School of Design and their private pursuits.

This is what is wanted in all our towns. It is not enough to teach boys and girls,—the manufacturers and purchasers need to be taught by the eye, if not by the hand.

According to part of Mr. Wallis's plan, an exhibition was held of the drawings executed by the pupils for the annual prizes, which had a great influence in laying the foundation for the efforts made by Manchester at the Great Exhibition of Industry in Hyde Park.

While matters were proceeding so satisfactorily, the Somerset House authorities (who have since been tried and condemned by a Committee of the House of Commons), proceeded to earn their salaries by giving instructions which could not be carried out without destroying all the good that had been done. The Manchester Committee and Mr. Wallis protested against this red tapish interference. It was persisted in; Mr. Wallis {172} resigned, to the great regret of his pupils and manufacturing friends in the managing council.

The result was that the undertaking dwindled away rapidly to less than its original insignificance,—the students fell off, and a deficit of debt replaced the previously flourishing funds. Out of evil comes good. The case of Manchester enabled Mr. Milner Gibson, M.P. for Manchester, to get his Committee and overhaul the Schools of Design throughout the kingdom.

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Certain changes were effected. The school, no longer able to pay the high rent required by the Royal Institution, was removed to its present site in Brown Street, placed under the management of Mr. Hammersley, who had previously been a successful teacher at Nottingham, and freed from the meddling of incompetent authorities. And now pupils anxiously crowd to receive instruction, and annually display practical evidence of the advantages they are enjoying.

The Manchester Mechanics' Institution was one of the pioneers in the movement which led to the Great Exhibition. In 1831, was held its first Polytechnic Exhibition for the purpose of showing the connexion between natural productions, science, and manufactures. Subsequent Exhibitions were carried out with great effect as a means of instruction and education, and with such success as to pay off a heavy debt which had previously cramped the usefulness of the Institution.

There are also several other institutions of the same class, amongst others Salford, Ancoats, and Miles Platting Auxiliary Mechanics' Institutes.

The Athenaeum constitutes a kind of literary club for the middle classes, who are provided with a good library and reading-room in a very handsome building.

The Manchester Library contains 10,000 volumes, the Manchester Subscription Library, established 1765, has the most extensive collection of books in the city.

A Concert Hall in Peter Street, exclusively used for the purposes indicated by its name, is supported by 600 subscribers at five guineas each.

The Chetham Society has been founded for the purpose of publishing ancient MSS. and scarce works connected with the history of Lancashire.

The Exchange has upwards of two thousand subscribers.

By way of helping the body as well as the mind, in 1846 the inhabitants of Manchester formed by subscription three public parks, called Queen's Park, Peel's Park, and Philip's Park, in three different parts of the suburbs.

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The free grammar school was founded by Hugh Oldham, Bishop of Exeter, in the early part of the sixteenth century. It was originally founded for the purpose of furnishing simple and elementary instruction to the poor. This design is sufficiently proved by the language of the foundation deed, which describes those sought to be benefited as persons who had been long in ignorance "on account of the poverty of their parents." The present income of the school is upwards of 5000 pounds a-year, leaving a considerable income over its expenditure, notwithstanding that the operations of the school have been extended by a decree of the Court of Chancery. In the year 1833 the

Court authorised the erection of a new building to include a residence for the master. There are two schools, called the Higher and Lower. The instructions given embrace the Greek and Latin, and the French, German, and other modern languages;

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English literature, mathematics, the modern arts and sciences, *etc.* A library is attached to the school for the use of the pupils. There are twelve exhibitions, of the annual value of 60 pounds each, for four years, in the gift of the Warden and High Master, who, however, respect the recommendations of the Examiners. These gentlemen are three in number, being Masters of Arts and Bachelors of Law of two years' standing, two of them appointed by the Professor, and one by the High Master. They each receive 20 pounds for their services. In addition to the twelve exhibitions mentioned above, there are fifteen others connected with the school, the bequest of a merchant named Hulme. These are appropriated to under-graduates of Brasenose College, Oxford. Their value is to be fixed by the patrons, but cannot exceed the sum of 220 pounds a year. They are to be held for four years from the thirteenth term after matriculation. There are sixteen scholarships to the same College; and sixteen to St. John's, Cambridge, varying in value from 18 to 26 pounds, stand in rotation with the pupils of Marlborough and Hereford Schools, and six scholarships of 24 pounds to Magdalen College, Oxford, Manchester pupils having the preference. The Examiners have also the power of making awards of books or mathematical instruments, to the value of 25 pounds, in any cases of great merit.

The High Master's salary is fixed not to exceed 600 pounds, with house-rent and taxes free. He is also allowed to take twenty boarders. He has the assistance of an Usher (salary 300 pounds, with house and fifteen boarders); an Assistant (salary 200 pounds, with house and twelve boarders); an Usher's Assistant (salary 150 pounds, with house and ten boarders). There are, in addition, a Master of the Lower School, a Writing, and a Mathematical Master, a teacher of English literature, and another of foreign languages; all, with the exception of the last, having houses, and their aggregate salaries amounting to 800 pounds.

Four hundred scholars attended in 1850.

Manchester new college is an institution belonging to the Unitarian body, on the plan of King's College, London, and was opened for the reception of students on the 5th October, 1840. The curriculum of instruction embraces every department of learning and polite literature.

The Lancashire independent college is one of the affiliated Colleges of the London University, and was established for the education of candidates for the Christian Ministry amongst Congregational dissenters. There are three resident Professors, the principal being the Rev. Dr. Vaughan, formerly Professor of History in the University of London.

Owen's college has recently been opened on the testamentary endowment of a Mr. Owen, for affording an education on the plan of University College, London.

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CHETHAM'S *hospital*, or, as it is more properly termed, "College," was founded by Charter in the year 1665, by Humphrey Chetham, a Manchester citizen and tradesman, who had, during his lifetime, brought up, fed, and educated fourteen boys of Manchester and Salford. He paid a heavy fine to Charles I. for persisting in his refusal of a baronetcy, and in 1634 was appointed Sheriff of his county. By his will Chetham directed that the number of boys he had previously provided for should be augmented by the addition of one from Droylsden, two from Crumpsall, four from Turton, and ten from Bolton; and left the sum of 7000 pounds to be devoted to their instruction and maintenance, from six to fourteen years of age, and for their apprenticeship afterwards to some trade. The funds having since increased, 80 boys are now received, in the following proportions, from the several places mentioned in the founder's will, viz.:—Manchester, 28; Salford, 12; Droylsden, 6; Crumpsall, 4; Bolton, 20; Turton, 10. They are clothed, fed, boarded, lodged, and instructed in reading, writing, grammar, and arithmetic. The boys are selected by the Feoffees in annual meeting at Easter, within six days before the Monday in which week an application must be sent in to the Governor, accompanied by a printed note of recommendation, signed by the overseers and churchwardens of the place in which the candidate resides.

The college library is situated in the same old building in which accommodation is found for the College, and is a fine collection of upwards of 25,000 volumes. The germ of this library consisted of the books bequeathed by Humphrey Chetham, many of them of great scarcity and value. The collection contains comparatively few volumes of modern date. The library is open to the use of the public without charge or restriction, and a small, but convenient, reading-room is provided for their accommodation. Books are not allowed to be removed from the premises, and every reader is obliged to make an entry of each volume he wishes to obtain. Notwithstanding the immense population of Manchester and Salford, this valuable institution is comparatively little used, the number of readers averaging less than twenty per day.

Swinton school.—In connexion with the Workhouse an Industrial House and School has been erected at Swinton, five miles from the City, which affords so admirable an example for imitation by all manufacturing or crowded communities, that we are glad to be able to extract the main facts concerning it from a graphic description in the first volume of Dickens's *Household Words*:—

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“Swinton School cost sixty thousand pounds, and is a handsome building in the Tudor style of architecture, with a frontage of 450 feet, containing more than 100 windows. Pleasure grounds and play grounds surround it, and it resembles more a nobleman’s palace than the Home of Pauper Children. The inmates consist of 630 children, of whom 305 are orphans, and 124 deserted by their parents, under charge of a Chaplain, a Head Master, a Medical Officer, a Roman Catholic Priest, a Governor, a Matron, six Schoolmasters, and four School-mistresses, with a numerous staff of officials, Nurses, and Teachers of Trades, receiving salaries and wages amounting to 1,800 pounds a-year, besides board. Some in the institution are as young as one year and a half. All are educated, and those who are old enough are taught trades and domestic employments. When they leave they are furnished with two suits of clothes. The character of the Institution stands so high, that the public are eager for the girls as domestic servants. If it has not already been done, we hope that the cultivation of land on the system of market gardens will be added to the trades, as affording a more certain, and, in some respects, more generally useful employment. Educated agricultural labourers are rare, much prized, and soon promoted to be overseers and bailiffs. The education at Swinton is conducted on the modern plan, which prevails in the best schools under Government inspection. The children are taught to love and look upon their masters and mistresses as friends, to be consulted and applied to as they would to kind parents.

For instance take this bit, familiar to visitors of Infant Schools, but still new to many:—

The children under six years of age, summoned by the sound of a whistle from the play ground, trooped in glad groups to an anteroom, and girls and boys intermixed, at a signal from the Master marched into the schoolroom singing a tune. Then followed such viva voce instruction as too many better endowed children do not get for want of competent teachers. Indeed a better education is now given in Workhouses than can be obtained for children under twelve years of age at any paid school that we know of. For instance:—

“What day is this?”

“Monday.”

“What sort of a day is it?”

“Very fine.”

“Why is it fine?”

“Because the sun shines, and it does not rain.”

“Is rain a bad thing, then?”

“No.”

“What is it useful for?”

“To make the flowers and the fruit grow.”

“Who sends rain and sunshine?”

“God.”

“What ought we to do in return for his goodness?”

“Praise him.”

“Let us praise him, then,” added the Master.

And the children altogether repeated, and then sang, a part of the 149th psalm.”

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Now all this is very fine, and a wonderful improvement on the old dog-eared Redinmadeasy, but better follows. After a time the children grew tired and sleepy, one fell asleep. Did the Master slap them all round and pull the ears of the poor little fat somnus? No. He marched them all out singing and beating time to play for a quarter of an hour.

We commend Swinton to the consideration of the credulous disciples of the firebrand school of economists, who believe that Manchester men devour little children daily, without stint or mercy for their poor little bodies or souls.

Manchester obtained a municipal corporation under the provisions of the general act for that purpose, passed in the reign of his late Majesty William IV. Gas works, established in 1817, are the property of the town, and produce a surplus income amounting to between three and four thousand pounds a year, which are devoted to public improvements. The corporation have recently obtained power to establish water works, and to purchase up the plant of an existing company.

The guardians of the workhouses of Manchester have a most difficult task to perform, especially in times of commercial depression, as thousands are thrown upon their hands at once. Among the most troublesome customers are the Irish, who flock to Manchester through Liverpool in search of work, and form a population herding together, very ignorant, very poor, and very uncleanly.

MANCHESTER MANUFACTURES.

It is quite impossible to give the same sort of sketch of the manufactures of this city as we gave of Birmingham, because they are on so much larger and more complicated a scale. One may understand how a gun-barrel or a steel-pen is made at one inspection; but in a visit to a textile mill, a sight of whizzing machinery, under the charge of some hundred men, women, boys, and girls, only produces an indefinable feeling of confusion to a person who has not previously made himself acquainted with the elements of the subject. To attempt to explain how a piece of calico is made without the aid of woodcuts, would be very unsatisfactory. Premising, then, that the cotton in various forms is the staple manufacture of Manchester, and that silk, mixed fabrics of cotton and silk, cotton and wool, *etc.*, are also made extensively, we advise the traveller to prepare himself by reading the work of Dr. Ure or the articles on Textiles in the Penny Cyclopaedia.

A visit to the workshops of the celebrated machinists Messrs. Sharpe, Roberts, & Co. would probably afford a view of some parts of the most improved textile machinery in a state of rest, as well as a very excellent idea of the rapid progress of mechanical arts. Improvements in manufacturing machines are so constant and rapid, that it is almost a

proverb—"that before a foreigner can get the most improved machinery which he has purchased in England home and at work, something better will be invented."

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A Manchester manufacturer, on the approach of a busy season, will sometimes stop his factories to put in new machines, at a cost of twenty thousand pounds.

Of equal interest with Messrs. Sharpe, Roberts, & Co., are the works of Messrs. Whitworth, the manufacturers of exquisite tools, more powerful than any elephant, more delicately-fitted than any watch for executing the metalwork of steam-engines, of philosophical instruments, and everything requiring either great power or mathematical nicety. Some of these tools for planing, boring, rivetting, welding, cutting iron and other metals, are to be found in great iron manufactories. Indeed, Mr. Roberts and Mr. Whitworth are of a class of men who have proved that the execution of almost all imitations of natural mechanics are merely a question of comparative expense. If you choose to pay for it, you may have the moving fingers of a man, or the prehensile trunk of an elephant, perfectly executed.

From the manufacture of machines, the next step lies naturally to some branch of cotton manufactures.

Cotton.—The rise of this manufacture has been wonderfully rapid. In the time of Henry VIII., the spinning wheel came into use in England, superseding the spindle and distaff, which may still be seen in the south of France and Italy, and in India, where no other tools are used. In the same reign Manchester became distinguished for its manufactures.

In the seventeenth century, Humphrey Chetham, whose name has already been mentioned as the founder of a splendid charity, was among the eminent tradesmen.

The barbarities of the Duke of Alva on the Protestants of the Netherlands, and the revocation of the edict of Nantes, by which the persecutions of the French Protestants was renewed, supplied all our manufacturing districts with skilful Artisans and mechanics in silk and woollen.

In 1786, the importation of raw cotton only amounted to nineteen million pounds weight, obtained from the West Indies, the French, Spanish, and Dutch colonies, and from Turkey and Smyrna. Two years previously an American ship which imported eight bags was seized, on the ground that so much cotton could not be the produce of the United States!

So early as 1738, one Charles Wyatt, of Birmingham, took out a patent for spinning yarn by machinery, which he tried at Northampton, but reaped no profits from the invention, which was discontinued and forgotten. In 1767, James Hargreaves, an illiterate weaver residing near Church, in Lancashire, who seven years previously had invented a carding machine, much like that in use at the present day, invented the spinning jenny, —by which eighty spindles were set to work instead of the one of the spinning wheel. Hargreaves derived no benefit from his invention; twice a mob of spinners on the old

principle rose and destroyed all the machinery made on his plan, and chased him away. In 1769, Richard Arkwright took out his first patent (having Mr. Need of Nottingham and Mr. Strutt of Derby as partners,) for spinning with rollers.

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Arkwright was born in the humblest class of life at Preston in Lancashire. At "Proud Preston" he first followed the business of a barber, then became a dealer in hair, travelling the country to collect it, and selling it prepared to the wigmakers. Having accumulated a little money, he set about endeavouring to invent perpetual motion, and, in the search, invented, or sufficiently adapted and improved, a cotton spinning apparatus to induce two practical men like the Messrs. Need and Strutt to join him. His claim to original invention has been disputed. That he was not the first inventor is clear, and it is equally clear that he must have been a man of very considerable and original mechanical genius.

With Arkwright's patent, the rise of the cotton trade began.

In 1786, Mr. Samuel Crompton's invention came into use, called the mule jenny, because partaking of the movements of both Hargreaves' and Arkwright's inventions, by which, for the first time, yarn fine enough for muslins could be spun. Crompton did not, probably could not, afford to take out a patent, but worked his mule jenny with his own hands in an attic at Bolton, where he carried on a small spinning and weaving business. Already, in 1812, there were between four and five million spindles on this principle, but the inventor continued poor and almost unknown. Mr. Kennedy (author of a brief memoir of Crompton), and Mr. Lee, raised 500 pounds for him by subscription, and he afterwards received a grant of 8000 pounds from Parliament, which his sons lost in business. Mr. Kennedy again exerted himself and raised an annuity of 63 pounds, which the unfortunate inventor only lived two years to enjoy.

The spinning machines threatened to out-travel the weaving powers of the country, when, in 1785, Dr. Cartwright, a clergyman of Kent, with no previous knowledge of weaving, after an expenditure of 40,000 pounds, invented the power-loom, for which he afterwards received a grant of 10,000 pounds from Parliament. To supply our cotton manufactures, there were imported in 1849 1,900,000 bales of 330lbs. each. Of this quantity, 1,400,000 bales came from the United States.

The Manchester manufacturers have lately raised a small fund by subscription, and sent out Mr. Mackay, a barrister, author of *The Western World*, to examine and report on the prospects of obtaining cotton from India; and the son of the late Mr. John Fielden, a great manufacturer, has embarked a considerable sum at Natal in the cultivation of cotton. The dependence on the United States for such a staple has begun to render our Manchester men uncomfortable. They have not, however, displayed the spirit and energy that might have been expected either from their usual political vigour or from the tone of their advice to the farmers in distress.

The successive improvements in weaving by machinery we shall not attempt to trace. To use the phrase of a Nottingham mechanic, "there are machines now that will weave anything, from a piece of sacking to a spider's web." But fine muslins and fancy goods are chiefly woven by hand.

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The power-loom has recently been adapted, under Bright's patent, to weaving carpets, which are afterwards printed.

With respect to spinning; fine yarns which cost twenty guineas a pound have been reduced to four shillings by improved machinery, and in the Great Exhibition of Industry Messrs. Houldsworth exhibited as a curiosity, a pound of cotton spun 2,000 miles in length.

Arkwright, among the early improvers, was the only one who realized a large fortune, which his patience, his energy, his skill, his judgment, his perseverance well deserved, whether he was an original inventor or not.

The large supplies of cheap coals by canal soon made Lancashire the principal seat of the manufacture.

Among the many who realized great wealth by the new manufacture, was the first Sir Robert Peel, who began life near Bolton as a labouring man, by frugality accumulated enough money to commence first with a donkey a small coal trade, and then to enter on a cotton mill, which eventually placed him in a position to become a Member of Parliament and a baronet, and to give his son that starting place in education and society of which he availed himself so wisely and so patriotically, to his own honour and the permanent benefit of his country.

There are several mills and factories in Manchester in which the most perfect productions of mechanical skill may be seen in operation; but it is a trade which will be seen under much more favourable circumstances in some of those valleys near Manchester, where the masters of the mill provide the cottages of their "hands," or where the cottages are held in freehold by the more frugal workmen themselves, with little gardens attached, in pure air in open situations.

There are many cotton lords, and the number is increasing, who take the warmest interest in the condition of the people in their employ, and who do all they can to promote their health, their education, and their amusements. A visit to one of these establishments, will convince those who have taken their ideas of a manufacturing population from the rabid novelettes and yet more rabid railings of the Ferrand school, that there is nothing in the factory system itself, properly conducted, opposed to the permanent welfare of the working classes. On the contrary, in average times, the wages are sufficient to enable the operatives to live in great comfort, and to lay by more than in other trades; while between the comfort of their position and that of the agricultural labourer there is no comparison, so infinitely are the advantages on the side of the factory hand. There have also been a series of legislative and other changes during the last twenty years, all tending to raise the condition of this class. At the same time, it is impossible not to observe that, quite irrespective of political opinions, there is

a wide gulf between the great mass of the employers and the employed. There is dislike—there is undefined distrust.

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Those who doubt this will do well to investigate working-class opinions for themselves, not at election time, and in such a familiar manner as to get at the truth without compliments. Probably in times of prosperity this feeling is not increasing—we are strongly inclined to think it is diminishing; but it is a question not to be neglected. Manchester men, of the class who run at the aristocracy, the army, and the navy just as a bull runs at a red rag, will perhaps be very angry at our saying this; but we speak as we have found mobs at fires, and chatty fustian jackets in third class trains on the Lancashire and Yorkshire line; and, although a friend protests against the opinion, we still think that the ordinary Manchester millhand looks on his employer with about the same feelings that Mr. John Bright regards a colonel in the guards. We hope we may live to see them all more amiable, and better friends.

Manchester during the last seventy years, has been peopled more rapidly than the “Black Country” which we have described, with a crowd of immigrants of the most ignorant class, from the agricultural counties of England, from Ireland, and from Scotland. These people have been crowded together under very demoralising circumstances.

But we do not dwell or enter further into this important part of the condition of Manchester, because, unlike Birmingham, the Corn Law discussions have, to the enormous advantage of the city, drawn hundreds of jealous eyes upon the domestic life of the poor; and because men of all parties, Church and Dissent, Radicals and Conservatives, are trying hard and as cordially as their mutual prejudices will allow them, to work out a plan of education for raising the moral condition of a class, who, if neglected in their dirt and ignorance, will become, in the strongest sense of the French term, *Dangereuse*!

But to return to the Manchester of to-day; it has become rather the mercantile than the manufacturing centre of the cotton manufacture. There are firms in Manchester which hold an interest in woollen, silk, and linen manufactures in all parts of the kingdom and even of the continent.

From a pamphlet published last year by the Rev. Mr. Baker, it appears that there are five hundred and fifty cotton manufactories of one kind or other in the cotton district of Lancashire and Cheshire. Of these, in Ashton-under-Lyne, Dukinfield, and Mosley, there are fifty-three mills, Blackburn fifty-seven, Bolton forty-two, Burnley twenty-five spinning manufactories, at Heywood twenty-eight mills, Oldham one hundred and fifty-eight, Preston thirty-eight, Staley Bridge twenty, Stockport forty-seven mills, Warrington only four, Manchester seventy-eight.

The following is a brief outline of the stages of cotton manufacture which may be useful to those who consider the question for the first time.

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When cotton has reached Manchester from the United States, which supplies 75 per cent. of the raw material; from Egypt, which supplies a good article in limited quantity; from India, which sends us an inferior, uncertain, but increasing, quantity, but which with railroads will send us an improved increasing quantity; or from any of the other miscellaneous countries which contribute a trifling quota—it is stowed in warehouses, arranged according to the countries from which it has come. It is then “passed through the willow, the scuthing machine, and the spreading machine, in order to be opened, cleaned, and evenly spread. By the carding engine the fibres are combed out, and laid parallel to each other, and the fleece is compressed into sliver. The sliver is repeatedly drawn and doubled in the drawing frame, more perfectly to strengthen the fibres and to equalize the grist. The roving frame, by rollers and spindles, produces a coarse loose thread, which the mule or throstle spins into yarn. To make the warp, the twist is transferred from cops to bobbins by the winding machine, and from the bobbins at the warping machine to a cylindrical beam. This being taken to the dressing machine, the warp is sized, dressed, and wound upon the weaving beam. The weaving beam is then placed in the power loom, by which machine, the shuttle being provided with cops with weft, the cloth is woven.”

Sometimes the yarn only is exported, in other cases the cloth is bleached, or dyed, or printed, all of which operations can be carried on in Manchester or the surrounding auxiliary towns.

The best mode of obtaining a general idea of the trade carried on in Manchester will be to visit two or three of the leading warehouses in which buyers from all parts of the world supply their respective wants. For instance, Messrs. J. N. Phillips and Co., of Church Street; Messrs. Bannermans and Sons, York Street; Messrs. J. and J. Watts and Co., of Spring Gardens; and Messrs. Wood and Westhead, of Piccadilly. Next, to go over one of the leading Cotton Mills, say Briley’s or Houldsworth’s; then Messrs. Lockett’s establishment for engraving the plates used in calico-printing, and Messrs. Thomas Hoyle and Son’s print works. This work completed, the traveller will have some idea of Manchester, not without.

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Silk.—The silk trade of Manchester and of Macclesfield, which for that purpose is a suburb of Manchester, arose in the restrictions imposed upon Spitalfields, at the request of the weavers, by successive acts of Parliament, for the purpose of regulating employment in that district. In 1830 there were not 100 Jacquard looms in Manchester and its neighbourhood, whilst at the present time there are probably 12,000 employed either on silk or some branch of figure weaving. The most convenient silk manufactory for the visit of the stranger is that of Messrs. James Houldsworth of Portland Street, near the Royal Infirmary. This firm was established by a German gentleman, the late Mr. Louis Schwabe, an intelligent German, who introduced the higher class of silk

manufacture with such success as to enable him to compete with even the very first class of Lyons silks for furniture damasks.

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In addition to the extensive application of the Jacquard loom, Mr. Schwabe introduced, and Mr. Henry Houldsworth improved and perfected, the embroidering machines invented by Mr. Heilmann of Mulhausen. The improvements are so great that the original inventor cannot compete with them. Rows of needles elaborate the most tasteful designs with a degree of accuracy to which hand labour cannot approach.

Messrs. Winkworth and Proctor are also producers of high class silks for ladies' dresses and gentlemen's waistcoats.

Manchester is particularly celebrated for plain silk goods of a superior quality at a moderate price. There are also manufactories of small wares, which include parasols and umbrellas. A parasol begins at 4.5d. wholesale.

In Manchester the tastes and costumes of every country are consulted and suited. The brown cloak of the Spaniard, the poncho of the Chilean, the bright red or yellow robe of the Chinese, the green turban of the pilgrim from Mecca, the black blanket of the Caffre, and the red blanket of the American Indian may all be found in bales in one Manchester warehouse.

In passing through the streets, the sign "Fents" is to be seen on shops in cellars. These are the odd pieces, of a yard or two in length, cut off the goods in the manufactories to make up a certain even quantity; and considerable trade is driven in them. Selections are sometimes bought up as small ventures by sea captains and emigrants.

Paper-making is carried on extensively in the neighbourhood of Manchester from cotton waste. This was formerly thrown away; scavengers were even paid to cart it away. After a time, as its value became quietly known among paper-makers, parties were found willing to take on themselves the expense of removing it. By degrees the waste became a regular article of sale; and now, wherever possible, a paper-mill in this part of the country is placed near, or worked in conjunction with, a cotton-mill. The introduction of cotton waste has materially reduced the price of paper. No doubt, when the excise is abolished, many other articles will be employed for the same purpose.

To describe the railroads, which are every hour departing for every point of the compass, would take up too much space. But the railway stations, several of which have been united by works as costly, and almost as extensive, as the Pyramids of Egypt, are not among the least interesting sights. At these stations barrels of flour will be found, literally filling acres of warehouse room, and cucumbers arrive in season by the ton.

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The canals must be mentioned, and remind us that at Worsley, near Manchester, the Duke of Bridgwater, "the Father of Inland Navigation," aided by the genius of Brindley

(another of the great men, who, like Arkwright and Stephenson, rose from the ranks of labour, and directly contributed to the rise of this city) commenced the first navigable canal constructed for commercial purposes in Great Britain.

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At the present day the construction of a canal is a very commonplace affair, but it is impossible to doubt the high qualities of the mind of the Duke of Bridgwater, when we consider the education and prejudices of a man of his rank at that period, and observe the boldness with which he accepted, the tenacity with which he adhered to, the energy and self-sacrifice with which he prosecuted the plans of an obscure man like Brindley.

A disappointment in love is said to have first driven the Duke into retirement, and rendered him shy and eccentric, with an especial objection to the society of ladies, although he had once been a gay, if not dissipated, young gentleman, fond of the turf. He rode a race at Trentham Hall, the seat of his brother-in-law, the Marquis of Stafford.

When he retired from the pleasures of the fashionable world, his attention was directed to a rich bed of coal on his estate at Worsley, the value of which was almost nominal in consequence of the expense of carriage. He determined to have a canal, and, if possible, a perfect canal, and who to carry out this object he selected Brindley, who had been born in the station of an agricultural labourer, and was entirely self-educated. To the last he conducted those engineering calculations, which are usually worked out on paper and by rule, by a sort of mental arithmetic. Brindley must have been about forty years of age when he joined the Duke. He died at fifty-six, having laid the foundation of that admirable system of internal commerce which is better described in Baron Charles Dupin's *Force Commerciale de la Grande Bretagne* than in any English work.

One often-told anecdote well illustrates the characters of the nobleman and his engineer, if we remember that no such works had ever been erected in England at that time. "When Brindley proposed to carry the canal over the Mersey and Irwell Navigation, by an aqueduct 39 feet above the surface of the water, he desired, for the satisfaction of his employer, to have another engineer consulted. That individual, on being taken to the place where the intended aqueduct was to be constructed, said, that 'he had often heard of castles in the air, but never was shown before where any of them were to be erected.'" But the Duke had faith in Brindley, persevered and triumphed, although, before the completion of all his undertakings, he was more than once reduced to great pecuniary difficulties.

The canal property of the Duke of Bridgwater, with the Lancashire estates, are now vested in the Earl of Ellesmere, a nobleman who well knows, and conscientiously works out, the axiom, "that property has its duties as well as its rights." A visit to Worsley will prove what an enlightened and benevolent landowner can do for a population of colliers and bargemen.

The educational and other arrangements of a far-sighted character show that there are advantages in even such large accumulations of property as have fallen to the share of the present representative of the Duke of Bridgwater.

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Those who desire to pursue closely the state of the operative population in Manchester, will find ample materials in the annual reports of factory inspectors, and school inspectors, under the Committee of the Council of Education, and of the municipal officers of health.

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Fires.—Dreadful fires occur occasionally in Manchester. If such a catastrophe should take place during the stay of a visitor, he should immediately pull on an overcoat, even although it be midnight, and join in the crowd. An excellent police of 300 officers and men renders the streets quite safe at all hours; and a fire of an old cotton factory, where the floors are saturated with oil and grease, is indeed a fearfully imposing sight. It also affords an opportunity of some familiar conversation with the factory hands.

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In taking leave of Manchester, which is indeed the great heart of our manufacturing system, we may truly say that it is a city to be visited with the deepest interest, and quitted without the slightest regret. On our political railroad we are under deepest obligations to the Manchester stokers; but Heaven forbid that we should be compelled to make them our sole engineers.

THE ROAD TO YORKSHIRE.

Middleton.—And now, before taking a glance at the woollens and hardware of Yorkshire, we suggest, by way of change from the perpetual hum of busy multitudes and the whizzing and roaring of machinery, that the traveller take a holiday, and spend it in wandering over an agricultural oasis encircled by hills, and so far uninvasioned by the stalks of steam-engines, where the air is comparatively pure and the grass green, although forest trees do not flourish.

The visit requires no distant journey. It is a bare six miles from the heart of Manchester to Middleton. Nine times a-day omnibuses ply there. These original, if not primitive vehicles, are constructed to carry forty-five passengers, and on crowded market-days may sometimes be seen loaded with seventy specimens of a note-worthy class.

Middleton, lately a dirty straggling town, of 15,000 inhabitants, a number at which it has remained stationary for ten years, built without plan, without drains, without pavement, without arrangements for common decency, stands on the borders, and was the manorial village, of the Middleton and Thornham estates, which had been in the family of the late Lord Suffield for many hundred years. In the village, land was grudgingly leased for building, and no steam-engine manufactories were permitted. The agricultural portion of some 2500 acres of good land for pasturage and root crops,

celebrated for its fine supplies of water and for its (unused) water-power, was divided into little farms of from twenty to seventy acres, very few exceeding fifty acres, inhabited by a race of Farmer-Weavers, who, from generation to generation, farmed badly and wove cleanly in the pure atmosphere of Middleton. They were, most of them, bound to keep a hound at walk for the Lord of the Manor.

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Now the old Lords of the Manor and owners of the estate of Middleton (the Harbords, afterwards Barons Suffield), were proud men and wealthy, who despised manufactures and resisted any encroachment of trade on the green bounds within which their old Manor House had stood for ages. So when the inventions of Crompton, Hargreaves, Arkwright, and Cartwright began to coin gold like any philosopher's stone, for well-managing cotton manufacturers, speculators cast their eyes upon the pleasant waters of Middleton and Thornham, proposing to erect machinery and spin the yarn or thread, and otherwise to use the abundant water-power. But the Lords of Middleton would have none of such profits, (and if they could afford to reject them, we will not say that up to a certain point they were not wise), and so they gave short answers to the applicants, who went away and found, half-a-mile off, on the borders of Yorkshire, similar conveniences and more accessible ground-landlords in the Byrons, Lords of the Manor of Rochdale. And when, some time afterwards, a like application met with a like answer, other manufacturers went away to another corner, and built Oldham.

So the Middleton farms continued very pretty picturesque farms; Middleton village grew into a miserable town, and was passed over in 1830, when every population was putting forth its claims to a share in making the laws of the United Kingdom; while Oldham, with 30,000 inhabitants, was allotted two members, (an honour which cost the life of one of them, our best describer of English rural scenery, in racy Saxon English, William Cobbett); Rochdale, with 24,000, obtained one, and eventually made itself loudly heard in the House, in the person of John Bright, a gentleman of pluck not without eloquence, who has done a good deal, considering the disadvantages he has laboured under, in not having been brought to his level in a public school, and in having been brought up in the atmosphere of adulation, to which the wealthy and clever of a small sect are as much exposed as the scions of a "proud aristocracy."

A few years ago, the late lord, who had occasionally lived on the estate, died. His successor pulled down the Manor House, became an absentee, always in want of ready money, and introduced the Irish system into the management of his estate. That is to say, good farming became a sure mode of inviting an increase of rent—for indispensable repairs no ready money was forthcoming, so tenants who had an indisputable claim to such allowances, received a reduction of rent instead; they generally accepted the reduction, and did no more of the repairs than would just make shift. The land in the town suitable for building was let at chief rents to the highest bidder, with no consideration for the mutual convenience of neighbours, or the welfare of future residents.

Thus mismanaged and dilapidated, the estates were brought into the market, and purchased for Messrs. Peto & Betts, by their land agent, Mr. Francis Fuller, for less than 200,000 pounds; and the lands of the aristocracy of blood passed into the possession of the aristocracy of trade. Here was a subject for a doleful ballad from "A Young Englander," commencing—

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“Ye tenants old of Middleton ye cannot need but sigh,
Departed are the traces of your own nobility,
The Locomotivocracy have gone and done the trick,
And England’s aristocracy’s obliged to cut its stick.”

A visit to Middleton, however, will show that on this occasion the tenantry have no reason either to sigh or weep, and the visit is worth making, independently of the pleasantness of a change from town to country, because it affords an opportunity of seeing what can be done with a neglected domain when it passes into the hands of men of large capital, liberal views, and a thorough determination that whatever they take in hand shall be done in the best possible manner.

Messrs. Peto & Betts are managing this estate on the same principles that they have conducted the undertaking by which, in a very few years, they have acquired a large fortune and an influential position. Not by avariciously grasping, and meritlessly grinding all the subordinates whose services they required; not by squeezing men like oranges, and throwing them away when squeezed; but by choosing suitable assistants for every task they undertook, and making those assistants, or advisers, feel that their interests were the same, that they were prepared to pay liberally for services strenuously rendered. By this system servants and sub-contractors worked for them with all the zeal of friends, and by this system the tenantry of Middleton will attain a degree of comfort and prosperity hitherto unknown, while the estate they occupy will be largely increased in value.

It is most fortunate that, at a time when so much landed property is passing into the hands of men of the class of which these gentlemen may be considered the intellectual leaders, an example has been set, by them, of liberal and judicious management.

For this reason we do not think these rough notes on Middleton will be considered a useless digression.

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Drains and repairs.—Instead of the ordinary system of bit-by-bit repairs and instead of arrangements for the tenants to execute drains, as the first step after the change of proprietorship, a complete survey was made of the defects and of the value of all the holdings. On this survey the rents were fixed, with the understanding that while no increase of rent would be imposed on a good tenant, lazy slovenly farming would be forthwith taxed with an additional ten per cent.

The landlords have themselves undertaken to execute a complete deep drainage of the whole property at a cost of 20,000 pounds. For this they charge the tenants five per cent. on the outlay per acre occupied. Farm buildings and farm houses are being put in thorough repair, and tenants are expected so to keep them.



In the course of these repairs farm houses were found in which the windows were fixtures, not intended to open! While as to the farming, it is scarcely possible to imagine anything more barbarous. It is not a corn-growing district, and what corn is grown these weaver farmers, indifferent apparently to loss of time, first lash against a board to get part of the grain out, and then thrash the rest out of the straw!

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Market garden cultivation, stall feeding, and root crops would answer well, but at the time of the survey only two gardens were cultivated for the sale of produce in the unlimited markets of Oldham, Rochdale, and Manchester; and little feeding except of pigs.

Orchard trees are now supplied by the landlords, free of cost, to all willing to take charge of them.

It will be very difficult to induce these people to change their old slovenly style of farming, for their chief pride is in their weaving, which is excellent, and many of them are in possession of properties held for two and three generations without change. But the system of encouraging the good, and getting rid of the lazy, will work a reformation in time, especially as there are some very good examples on the estate. For instance, Benjamin Johnson, who, paying the highest rent per acre, has creditably brought up ten children on nine acres of land, without other employment.

Middleton is a district especially suited for small farms, so much so that it has been determined to divide one or two of the larger ones.

Altogether it is a very primitive curious place, with several originals among the tenantry, and some beautiful natural scenery, among whom a morning may be spent with profit and pleasure.

With the town and building land an equally comprehensive system has been adopted.

The defects of the existing buildings are to be cured as soon as, and in the best manner, that circumstances will admit; while all new houses are to be built and drained on a fixed plan, and all roadside cottages to have at least a quarter of an acre of ground for a garden.

It will take some years to work out complete results; it is, however, gratifying to see a landowner placing himself in the hands of competent advisers, planning not for the profits of the hour, but for the future, for the permanent health, happiness, and prosperity of all dwelling on his property.

The pecuniary results promise to be highly satisfactory; it is already evident that increased rents will be accompanied by increased prosperity, and it is thought in the neighbourhood that in the next ten years, the property will, from the judicious expenditure of 30,000 pounds, be worth at least 300,000 pounds.

So much for employing a scientific and practical agriculturist as land agent, instead of a fashionable London attorney. {193}

YORKSHIRE.

From Manchester to Leeds is a journey of forty-five miles, and about two hours. We should like to describe Yorkshire, one of the few counties to which men are proud to belong. We never hear any one say, with conscious pride, "I am a Hampshireman or an Essex man, or even a Lancashireman," while there are some counties of which the natives are positively ashamed.

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But we have neither time nor space to say anything about those things of which a Yorkshireman has reason to be proud—of the hills, the woods, the dales, the romantic streams,—above all, of the lovely Wharfe, of the fat plains, the great woods, the miles of black coal mines, where we have heard the little boys driving their horses and singing hymns, sounding like angels in the infernal regions, the rare good sheep, the Teeswater cattle, that gave us short-horns, of horses, well known wherever the best are valued, be it racer, hunter, or proud-prancing carriage horse; hounds that it takes a Yorkshire horse to live with; and huntsmen, whom to hear tally-away and see ride out of cover makes the heart of man leap as at the sound of a trumpet; foxes stanch and wily, worthy of the hounds; and then of those famous dalesmen farmers, tall, broad-shouldered, with bullet heads, and keen grey eyes, rosy bloom, high cheek bones, foxy whiskers, full white-teethed, laughing mouths, hard riders, hard drinkers, keen bargainers, capital fellows; and besides those the slips, grafts, and thinnings from the farms, who in factories, counting-houses, and shops, show something of the powerful Yorkshire stamp. Everything is great in Yorkshire, even their rogues are on a large scale; in Spain, men of the same calibre would be prime ministers and grandees of the first class; in France, under a monarchy, a portfolio, and the use of the telegraph, with no end of ribands, would have been the least reward. Here the honours stop short between two dukes, as supporters arm in arm; but still we are obliged to own that no one but a Yorkshireman could have so bent all the wild beasts of Belgravia and Mayfair, from the Countess Gazelle to the Ducal Elephant, to his purpose, as an ex-king did. Our task will be confined on the present occasion to a sketch of Huddersfield and Leeds, centres of the woollen manufacture, which forms the third great staple of English manufactures, and of Sheffield, famed for keen blades.

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Huddersfield, twenty-six miles from Manchester, is the first important town, on a road studded with stations, from which busy weavers and spinners are continually passing and repassing. It is situated in a naturally barren district, where previously to 1811 the inhabitants chiefly lived on oaten cake, and has been raised to a high degree of prosperity by the extension of the manufactures, a position on the high road between Manchester and Leeds, intersected by a canal, uniting the east and west, or inland navigation, and more recently by railroads, which connect it with all the manufacturing towns of the north. An ample supply of water-power, with coal and building stone, have contributed to this prosperity, of which advantage has been taken to improve the streets, thoroughfares, and public buildings. The use of a light yellow building stone for the houses has a very pleasant appearance after the bricks of Manchester and Liverpool.

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The Huddersfield Canal, which connects the Humber and Mersey, is a very extraordinary piece of work. It is carried through and over a backbone of hills by stairs of more than thirty locks in nine miles, and a tunnel three miles in length. At one place it is 222 yards below the surface, and at another 656.5 feet above the level of the sea.

When we examine such works, so profitable to the community, so unprofitable to the projectors, how can we doubt the capability of our country to hold its own in any commercial race? Men make a country, not accidents of soil or climate, mines or forests. For centuries California and Central America have been in the hands of an Iberian race, fallow. A few months of Anglo-Saxon rule, and land and sea are boiling with fervid elements of cultivation, commerce, and civilization. With time the dregs will disappear, and churches and schools, cornfields and fulling-mills, will supersede grizzly bears and wandering Indians.

All the land in Huddersfield belongs to the Ramsden family, by whom the Cloth Hall was erected. Six hundred manufacturers attend this hall every Tuesday.

The principal manufactures are of broad and narrow cloths, serges, kerseymeres, cords, and fancy goods of shawls and waistcoatings, composed of mixed cotton, silk, and wool.

The neighbourhood of Huddersfield was the centre of the Luddite outbreak, when a large number of persons engaged in the cloth manufacture, conceiving that they were injured by the use of certain inventions for dressing cloth, banded together, traversed the country at night, searching for and carrying off fire-arms, and attacking and destroying the manufactories of persons supposed to use the obnoxious machines.

Great alarm was excited, some expected nothing less than a general insurrection; at length the rioters were attacked, dispersed, a large number arrested, tried, and seventeen hanged. Since that period not one but scores of mechanical improvements have been introduced into the woollen manufacture without occasioning disturbance, and with benefit in increased employment to the working classes.

The case of the Luddites was one of the few on which Lord Byron spoke in the Upper House, and Horace Smith sang for Fitzgerald . . .

“What makes the price of beer and Luddites rise?
What fills the butchers’ shops with large blue flies?”

The population is about 30,000, and returns one member to the House of Commons.

About half a mile from the town is Lockwood Spa, of strongly sulphurous waters, for which a set of handsome buildings have been provided.

LEEDS.

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Leeds, seventeen miles from Huddersfield, is the centre of five railways, by which it has direct connection with Hull, Liverpool, Manchester, Newcastle, on the east, and Carlisle on the west coast, Sheffield, Nottingham, Derby, and Birmingham, in the Midland counties, possesses one of the finest central railway stations in the kingdom, and has also the advantage of being in the centre of inland navigation (a great advantage for the transport of heavy goods), as it communicates with the eastern seas by the Aire and Calder navigation to the Humber, and westward by the Leeds and Liverpool to the Mersey. The town stands on a hill, which rises from the banks of the river Aire. Leeds has claims to antiquity, but few remains. When Domesday Book was compiled it appears to have been an agricultural district.

Wakefield was formerly the more important town. Lord Clarendon, in 1642, speaks of Leeds, Halifax, and Bradford, "as three very rich and populous towns, depending wholly upon clothing."

The first charter was granted to Leeds by Charles I., and the second by Charles II., on petition of the clothworkers, merchants, and others, "to protect them from the great abuses, defects and deceits, discovered and practised by fraudulent persons in the making, selling, and dyeing of woollen cloths."

The principal manufacture of Leeds is woollen cloth. Formerly the trade was carried on by five or six thousand small master clothiers, who employed their own families, and some thirty or forty thousand servants, and also carried on small farms. But the extension of the factory system has somewhat diminished their numbers. There are still, however, in connection with Leeds, several small clothing villages, in which the first stages of the operation are carried on, in spinning, weaving, and fulling.

Large quantities of worsted goods are brought to Leeds to be finished and dyed, which have been purchased, in an undyed state, at Bradford and Halifax. The dye-houses and dressing-shops of Leeds are very extensive. Goods purchased in a rough state in the Cloth Halls and Piece Halls are taken there to be finished. There are also extensive mills for spinning flax for linen, canvas-sailing, thread, and manufactures of glass and earthenware. In connection with Messrs. Marshall's flax factory, the same firm are carrying on extensive experiments near Hull in growing flax.

Cloth Halls.—Previous to 1711, the cloth market was held in the open street. In 1755, the present Halls were erected, and in them the merchants purchase the half manufactured article from the country manufacturers.

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The Coloured Cloth Hall is a quadrangular building, 127.5 yards long, and 66 broad, divided into six departments called streets. Each street contains two rows of stands, and each stand measures 22 inches in front, and is inscribed with the name of the clothier to whom it belongs. The original cost was 3 pounds 3s. This price advanced to 24 pounds at the beginning of the present century; but it has now fallen below its original value—not owing to a decrease in the quantity of manufactured goods, but owing to the prevalence of the factory system—in which the whole operation is performed, from sorting the piece to packing the cloth fit for the tailor's shelves—over the domestic system of manufacturing. An additional story, erected on the north side of the Coloured Cloth Hall, is used chiefly for the sale of ladies' cloths in their undyed state. The White Cloth Hall is nearly as large as the Coloured Cloth Hall, and on the same plan. The markets are held on Tuesdays and Saturdays, on which days alone the merchants are permitted to buy in the Halls. The time of the sale is in the forenoon, and commences by the ringing of a bell, when each manufacturer is at his stand, the merchants go in, and the sales commence. At the end of an hour the bell warns the buyers and sellers that the market is about to close, and in another quarter of an hour the bell rings a third time, and the business of the day is terminated. The White Cloth Hall opens immediately after the other is closed, and the transactions are carried on in a similar manner.

The public buildings of Leeds are not externally imposing, and it is, without exception, one of the most disagreeable-looking towns in England—worse than Manchester; it has also the reputation of being very unhealthy to certain constitutions from the prevalence of dye-works.

The wealthy and employing classes in Leeds (we know no better term) have a reputation for charity, and good management of charitable institutions. Howard the philanthropist visited the workhouse, and praised the management, at a period when to deserve such praise was rare. The subscriptions to public charities are large, and there is an ancient fund for pious uses, said to amount to upwards of 5000 pounds a-year, managed by a close self-elected corporation, about the distribution of which they do not consider themselves bound to give any detailed information. Dr. Hook, the Vicar of Leeds, has organized a system of house-to-house visitation, for the purpose of affording aid, in poverty and sickness, to the deserving and religious, and educational instruction to all, which has effected a great deal of good, and would have done more, had not well known circumstances shaken the confidence of the Leeds public in the honesty of some of the teachers. All parties agree, however differing in opinions, that Dr. Hook himself is a most excellent, charitable, self-sacrificing man.

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A New Grammar School—first founded in 1552 by the Rev. Sir William Sheffield, and since endowed by several other persons—is lodged in a building of ample size, with residence for the head master, and enjoys an income of 2000 pounds a-year; and there are four Exhibitions of 70 pounds a-year to Magdalen College, Cambridge, tenable till degree of M.A. has been taken; one Exhibition of 100 pounds a-year, tenable for five years, at Queen's College, Oxford, open to a candidate from Leeds school; and four of 50 pounds each, at Oxford or Cambridge, for four years. There were 174 scholars in 1850. It is open to the sons of all residents in Leeds, without any fee to the masters, who are liberally paid. The elements of mathematics are taught. The Charity Commissioners reported it to be satisfactorily and ably conducted.

The Leeds Philosophical and Literary Society, the Leeds Literary Institution, and the Leeds Mechanics Institute, are all respectable in their class. The Mechanics Institute forms the centre of a union of Yorkshire associations of the same kind.

Three newspapers are published in Leeds, of large circulation, representing three shades of political opinion.

The Leeds Mercury—which has, we believe, the largest circulation of any provincial paper—was founded, and carried on for a long life, by the late Mr. Edward Baines, who represented his native town in the first reformed parliament, and for some years afterwards—a very extraordinary man, who, from a humble station, by his own talents made his way to wealth and influence. He was the author of the standard work on the cotton trade, as well as several valuable local histories. The Mercury is still carried on by his family. One son is the proprietor of a Liverpool paper, and another, the Right Honourable Matthew Talbot Baines, represents Hull, and is President of the Poor-Law Board.

Among the celebrated natives of Leeds, were Sir Thomas Denison, whose life began like Whittington's; John Smeaton, the engineer of Eddystone Lighthouse, the first who placed civil engineering in the rank of a science; the two Reverend Milners (Joseph, and Isaac, Dean of Carlisle), great polemical giants in their day, authors of "The History of the Church of Christ;" Dr. Priestly, inventor of the pneumatic apparatus still used by chemists, and discoverer of oxygen and several other gases; David Hartley, the metaphysician whom Coleridge so much admired that he called his son after him; and Edward Fairfax, the translator of Tasso. Nor must we forget Ralph Thoresby, author of "Ducatus Leodiensis, or the Topography of the Town and Parish of Leeds"—a valuable and curious book, published in 1715; and of "Vicaria Leodiensis, a History of the Church of Leeds," published in 1724.

Wool Growing, and Woollen Manufactures.—Yorkshire is the ancient seat of a great woollen manufacture, founded on the coarse wools of its native hills; but coal and cheap conveyance, with the stimulus mechanical inventions have applied in the neighbouring counties to cotton, have given Yorkshire such advantages over many ancient seats of

manufacture, that it has transplanted and increased a considerable portion of the fine cloth trade formerly carried on in the west of England alone, besides engrafting and erecting a variety of other and new kinds of textiles, in which wool or hair have some very slight part.

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It is quite certain that woollen garments were among the first manufactured among barbarous tribes. We have seen this year, in the Exhibition in Hyde Park, specimens of white felted cloth from India, equal, if not superior, to anything that we can manufacture for strength and durability, which must have been made with the rude tools, of the form which has been in use for probably at least two thousand years.

English coarse wools have been celebrated, and in demand among foreign nations, from the earliest periods of our history. In the time of William the Conqueror, an inundation in the Netherlands drove many clothiers over, and William of Malmesbury tells us that the king welcomed them, and placed them first in Carlisle, where there are still manufactories, and then in the western counties, where they could find what was indispensable for their trade—streams for washing and plenty of wood for boiling their vats. Very early the manufacturers applied to restrain the exportation of English wool. In the time of Edward I., we find a duty of twenty shillings to forty shillings per bag on importation. Edward *iii.* prohibited the export of wool, at the same time he took his taxes and subsidies in wool, which became a favourite medium of taxation with our monarchs, and sent his wool abroad for sale. Under his reign, Flemish weavers were encouraged to settle here and improve the manufacture, which became spread all over England thus—Norfolk fustians, Suffolk baize, Essex serges and says, Kent broadcloth, Devon kerseys, Gloucestershire cloth, Worcestershire cloth, Wales friezes, Westmoreland cloth, Yorkshire cloth, Somersetshire serges, Hampshire, Berkshire, and Sussex cloth: districts from a great number of which woollen manufactures have now disappeared. We have Parliamentary records of the mutual absurdities by which the woollen manufacturers, on the one hand, sought to obtain a monopoly of British wool, and the wool growers endeavoured to secure the exclusive right to supply the raw material. Act after act was laid upon everything connected with wool, so that it is only extraordinary that, under such restrictive trammeling, the trade survived at all.

“Odious! In woollen! ’twould a saint provoke!
Were the last words that poor Narcissa spoke.”

In 1781, when, the price of wool being low, the Lincolnshire woolgrowers met under the chairmanship of their great landowners, and resolved on petitions praying “that British might be exported and that Irish wool might be excluded from England;” thereupon the Yorkshire manufacturers met and resolved that “the exportation of wool would be ruinous to the trade and manufactures of England,” that the manufacturers would be obliged to leave the kingdom for want of employment, and that the importation of Irish woollen yarn ought to be interdicted.

The manufacturers were under the impression that no other country than England could produce the long wools suitable for the manufacture of worsted.

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Some time afterwards the woollen manufacturers thought themselves likely to be ruined by the introduction of cotton cloth, "to the ruin of the staple trade of the kingdom," and succeeded in placing an excise duty upon the new fabric.

The contention between sheepowners and manufacturers continued until, in 1824, when the influence of Mr. Huskisson's opinions on trade were beginning to be felt in Parliament, and to the disgust of both parties, a compromise was effected by a reduction of all wool duties to a uniform duty of 1d. per lb. on the export of British and importation of foreign wool. The last step was a total repeal of all duties.

English wools may be divided into long and short staples. The long is used for worsted, which is finished when it leaves the loom; the short for cloth, which is compacted together, increased in bulk and diminished in breadth, by fulling; that is, so beating as to take advantage of the serrated edges of the wool which lead it to felt together.

Foreign wool, known as merino, has been used from an early period. In the time of the Stuarts, an attempt was made to monopolize all the Spanish wool exported.

Wars and bad government in Spain have destroyed the export trade in merino wool, but the breed, transplanted into Germany, has multiplied and even improved. Our finest wool is obtained from Silesia, and the breed is cultivated with more or less success in many parts of the European continent. In England, all attempts to cultivate the merino with profit have failed. Next to Germany in quality, and exceeding that country in quantity, we obtain our greatest supply of fine wool from Australia, where, in the course of twenty-five years, the merino sheep has multiplied to the extent of twelve or thirteen million head, and is still increasing; thus doubling our supply of a fine article, not equal to German, but, at the low price at which it can be furnished, helping to create entirely new manufactures by intermixing with our own coarse wools, which it renders more available and valuable. We also obtain wool from the Cape of Good Hope, from India, from Egypt, and from South America.

Besides pure wool, our manufacturers use large quantities of goat's hair, called mohair, from the Mediterranean, of camel hair, of Thibet goat's hair, of the long grey and black hair of the tame South American llama and alpaca, and of the short soft red hair of the vicuna, a wild animal of the same species. Indeed, almost every year since the repeal of all restrictions on trade, has introduced some new raw material in wool or hair to our manufacturers.

The alpaca and vicuna, now an important article of trade and manufacture, although well known to the native Peruvians at the time of the conquest by the Spaniards, has only come into notice within the last twenty years. The first article of the kind that excited any attention was a dress made for Her Majesty from a flock of llamas belonging to Her Majesty, under the superintendence of Mr. Thomas Southey, the eminent wool broker.



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The stock from the small flock of merinos taken out by Colonel Macarthur to what was then only known as Botany Bay, now supports 300,000 souls in prosperity in Australia, and supplies exports to the amount of upwards of a million and a half sterling per annum.

The Great Exhibition afforded an excellent display of the variety and progress of Yorkshire woollen manufactures, proving the immense advantage they derived from choice and mixture of various qualities and materials. In several examples the body was of stout English wool, with a face of finest Australia,—in some cases, of mohair,—and, in one instance, a most beautiful article was produced by putting a face of vicuna on British wool.

As at present conducted, the process of a woollen factory up to certain stages of machinery is the same as that of a cotton factory. But it will be seen that a great deal depends on an ample supply of water of good quality.

Cloth Manufacture.—(1.) The first operation is that of sorting the wool. Each fleece contains several qualities,—the division and arrangement requires judgment; the best in a Silesian fleece may be worth 6s. a pound, and the rest not worth half the money. After sorting, wools are mixed in certain proportions.

(2.) The mixture is first soaked in a hot ley of stale urine and soap, rinsed in cold water, and pressed between rollers to dry it.

(3.) If the cloth is to be dyed in that operation, next succeeds the scouring. Supposing it dyed,

(4) wyllying follows, by which it is subject to the operation of the spikes of revolving wheels, for the purpose of opening the fibres and sending it out in a light cloud-like appearance, to where a stream of air driven through it, clears away all impurities by a sort of winnowing process, and sends it out in a smooth sheet.

(5.) If any impurities remain, it is hand picked.

(6.) It is laid on the floor, sprinkled with olive oil, and well beaten with staves.

(7.) The operation of the scribbling machine follows, by which it is reduced to a fleecy sheet and wound on rollers.

(8.) The carding machine next reduces it to hollow loose short pipes. These are joined

(9) in the slubbing machine into a weak thread, and here we see the use of the young hands, boys and girls, who piece one of these pipes as they are drawn through the machine by a slow clockwork motion, bending one knee every time as they curtsy sideways toward the machine. They earn very good wages and look healthy; but,



where the wool is dyed, what with the dye and what with the oil, the piecers are all ready toiled to sing to a banjo; and sometimes, with rubbing their faces with their dirty hands, they get sore eyes.

(10.) Spinning hardens the thread.

(11.) Weaving is done by hand or by power-loom. The power-looms are becoming more common. After weaving, it is washed in soap-water and clean water by machinery,—then stretched on tenterhooks and allowed to dry in a smooth extended state:

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(12) then examined for all hair and impurities to be picked off by “burlers.” After this follows

(13) fulling, or felting, which gives woollen goods that substance which distinguishes them. Every hair of wool is saw-edged, and this by beating will mass together. Superfine cloth with a thick solution of soap spread between each layer, and, folded into many piles, is exposed to the long continued action of revolving wooden hammers on wheels, three separate times, for four hours each time. This process diminishes both breadth and length nearly one half.

After “fulling” cloth is woolly and rough; to improve the appearance it is first

(14) teazled—that is, raked with cylinders covered with the round prickly heads of the teasle plant. Many attempts have been made to invent wire and other brushes for the same purpose, but hitherto nothing has been found more effective and economical than the teasle. To apply them the cloth is stretched on cloth beams, and made to move in one direction, while the teasle cylinders turn in another. When the ends of the fibres have been thus raised, they are

(15) sheared or clipped, in order to produce the same effect as clipping the rough coat of a horse. Formerly this operation was performed by hand. The introduction of machinery created formidable riots in the west of England. At present the operation is performed with great perfection and rapidity, by more than one process.

When the cloth has been raised and sheared once, it is in the best possible condition for wear; but in order to give superfine cloth beauty, it is sheared several times, then exposed to the action of steam, and at the same time brushed with cylinder brushes. Other operations, of minor importance, are carried on for the purpose of giving smoothness and gloss. It may be observed that a brilliant appearance does not always, in modern manufactures, betoken the best cloth. An eminent woollen manufacturer having been asked what cloth he would recommend for wear and warmth to a backwoodsman, answered quickly, “Nothing can wear like a good blanket.” The small manufacturers generally dispose of their cloth in the rough state.

The progress of machinery has called into existence a great number of factories, especially in worsted and mixed stuffs, has given value to many descriptions of wool formerly valueless, and, coupled with the repeal of the duty, brought into the market many kinds unknown a few years ago. “Properties once prized,” Mr. Southey remarks in his *Essay on Wools*, “have given way to some other property upon which machinery can better operate, and yield more desirable results. Spanish wool, once deemed indispensable, is now little sought after. It is supplanted by our colonial wool, which is steadily advancing in quality and quantity, while angora goat, and alpaca wools are forcing their way into and enhancing the value of our stuff trade.”

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. . . “Machinery has marshalled before its tremendous power the wool of every country, selected and adopted the special qualities of each. Nothing, in fact, is now rejected. Even the burr, existing in myriads in South America and some other descriptions of wool, at one time so perplexing to our manufacturers, can now, through the aid of machinery, be extracted, without very material injury to the fibre.” . . . “In no description of manufacture connected with the woollen trade has machinery been more fertile in improvements than in what may be termed the worsted stuff trade.”

“The power-looms employed, in the West Riding of Yorkshire, in the worsted stuff trade, increased from 2,763 in 1836, to 19,121 in 1845 (and are probably not far from 28,000 at the present time). Worsteds goods formerly consisted chiefly of bombazets, shalloons, calamancoes, lastings for ladies’ boots, and taminies. Now the articles in the fancy trade may be said to be numberless, and to display great artistic beauty. These articles, made with alpaca, Saxony, fine English and Colonial wools, and of goats’ hair for weft, with fine cotton for warp, consist of merinoes, Orleans, plain and figured Parisians, Paramattas, and alpaca figures, checks, *etc.*”

The machines for combing and carding, of the most improved make, will work wool of one and a half inch in the staple, while for the old process of hand-combing four inches was the minimum.

But we must not enter further into these details, as it is our purpose rather to indicate the interest and importance of certain manufactures than to describe the process minutely.

The Yorkshire woollen manufacture is distributed over an area of nearly forty miles by twenty, occupied by clothing towns and villages. Leeds, Bradford, Halifax, Huddersfield, Dewsbury, and Wakefield, are the great manufacturing centres. Mixed or coloured cloths are made principally in villages west of Leeds and Wakefield; white or undyed cloths are made chiefly in the villages occupying a belt of country extending from near Wakefield to Shipley. These two districts are tolerably distinct, but at the margins of the two both kinds of cloth are manufactured. Flannels and baizes are the principal woollen articles made in and near Halifax, together with cloth for the use of the army. Blankets are made in the line between Leeds and Huddersfield. Bradford provides very largely the spun worsted required for the various manufactures. Stuffs are made at Bradford, Halifax, and Leeds, and narrow cloths at Huddersfield. Saddleworth furnishes broadcloth and kerseymeres. As a specimen of the variety of articles produced in one factory, take the following list, exhibited in the Crystal Palace by a Huddersfield manufacturer:—“Summer shawls; summer coatings; winter woollen shawls; vestings; cloakings; table covers; patent woollen cloth for gloves; do. alpaca do.; do. rabbits’ down do.; trowserings; stockingnett do.”

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We may observe, that there is no more pleasant mode of investigating the processes of the woollen manufacture, for those resident in the south of England, than a visit to the beautiful valley of the Stroud, in Gloucestershire, where the finest cloths, and certain shawls and fancy goods, are manufactured in perfection in the midst of the loveliest scenery. White-walled factories, with their resounding water-wheels, stand not unpicturesque among green-wooded gorges, by the side of flowing streams, affording comfortable well-paid employment to some thousand working hands of men and women, boys and girls.

THROUGH LINCOLNSHIRE TO SHEFFIELD.

On leaving Leeds there is ample choice of routes. It is equally easy to make for the lake districts of Cumberland and Westmoreland, or to proceed to York, and on by Newcastle to Scotland, or to take the road to the east coast, and compare Hull with Liverpool—a comparison which will not be attended with any advantage to the municipal authorities of Hull.

The aldermen of Hull are of the ancient kind—"slow," in the most emphatic sense of the term. For proof,—we have only need to examine their docks, piers, and landing-places; the last of which are being improved, very much against the will of the authorities, by a Lincolnshire railway company.

From Hull there is a very convenient and swift railway road open to London through Lincolnshire, which, branching in several directions, renders easy a visit either to the Wolds, where gorse-covered moors have been turned, within the last century, into famous turnip-land, farmed by the finest tenantry in the world; or to the Fens, where the science of engineers learned in drainage, greatly aided by the pumping steam-engine, has reclaimed a whole county from eels and wild ducks.

Lincolnshire is not a picturesque county; both the wet half and the dry half, both the Fen district and the Wold district, are treeless; and the Wolds are only a line of molehills, of great utility, but no special beauty. But it is the greatest producing county in England, and the produce, purely agricultural, is the result of the industry and intellect of the men who till the soil. In Devonshire and Somersetshire we are charmed by the scenery, and amazed by the rich fertility of the soil, while we are amazed by the stolidity of the farmers and their labourers—nay, sometimes of the landlords—whose two ideas are comprised in doing what their forefathers did, and in hating every innovation. There fences, guano, pair-horse ploughs, threshing machines, and steam-engines, are almost as much disliked as cheap bread and Manchester politics. But on the Wolds of Lincolnshire a race of agriculturists are to be found who do not need to be coddled and coaxed into experiments and improvements by the dinners and discourses of dilettanti peers; but who unite the quick intelligence of the manufacturer with the hearty hospitality for

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which the English used to be famous. Among the Lincolnshire farmers rural life is to be seen in its most agreeable aspect. The labourers are as superior to the southern peasantry as their employers to the southern tenantry. Books, newspapers, and music may be found in the farm-houses, as well as old ale and sound port wine. At Aylsby, six miles from Great Grimsby, Mr. William Torr has a fine herd of short horns and a flock of pure Leicester sheep, well worth a visit. The celebrated Wold farmers are about ten miles distant. Any one of them is worth six Baden barons.

After crossing from Hull, if a visit to these Wold Farms be intended, Grimsby is the best resting-place, a miserable town of great antiquity, which, after slumbering, or rather mouldering, for centuries on the profits of Parliamentary privileges and a small coasting trade, has been touched by the steam-enchancer's wand, and presented with docks, warehouses, railways, and the tools of commerce. These, aided by its happy situation, will soon render it a great steam-port, and obliterate, it is to be hoped, the remains of the squalid borough, which traces back its foundation to the times of Saxon sea-kings. We must record, for the credit of Great Grimsby, that it evinced its improved vitality by subscribing a larger sum to the Exhibition of Industry than many towns of ten times its population and more than ten times its wealth.

The execution of the railway and dock works, which will render Great Grimsby even more important than Birkenhead, has been mainly due to the exertions of the greatest landowner in the county, the Earl of Yarborough, who has wisely comprehended the value of a close connexion between a purely agricultural and manufacturing district.

His patriotic views have been ably seconded by Mr. John Fowler, the engineer of the Manchester and Lincolnshire Railways, and Mr. James J. M. Rendel, the engineer of these docks as well as of those at Birkenhead.

The Grimsby docks occupy thirty-seven acres, cut off from the sea. The work was courageously undertaken, in the midst of the depression which followed the railway panic, by Messrs. Thomas, Hutchins, & Co., contractors, and has been carried through in an admirable manner, in the face of every kind of difficulty, without an hour's delay. They will open in March next. The first stone was laid by Prince Albert in May 1849, when he electrified the audience at dinner by one of those bursts of eloquence with which the events of the Great Exhibition have made us familiar. It was on the occasion of his ride to Brocklesby that Lord Yarborough's tenantry rode out to meet the Prince, and exhibited the finest farmers' cavalcade for men and horses in England.

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Lord Yarborough has done for Lincolnshire what the Duke of Bridgwater did for Lancashire; and, like the Duke, he has been fortunate in having for engineering advisers gentlemen capable of appreciating the national importance of the task they undertook. It is not a mere dock or railway that Messrs. Fowler and Rendel have laid out—it is the foundation of a maritime colony, destined not only to attract, but to develop new sources of wealth for Lincolnshire and for England, as any one may see who consults a map, and observes the relative situation of Great Grimsby, the Baltic ports, and the manufacturing districts of Yorkshire, Lancashire, and Cheshire.

For the sake of the future it may be well worth while to visit these great works. It may be a pleasant recollection for the man who, in some ten or twenty years, beholds the docks crowded with steamers and coasters, and the railway busy in conveying seaborne cargoes, to recall the fact that he saw the infancy, if not the birth, of that teeming trade; for it is not to every man that it is given to behold the commencement of such a future as seems promised to gloomy, swampy Great Grimsby.

At Great Grimsby we are in a position to take a large choice of routes. We may go back to London by Louth, famous for its church, spire, and comical coat of arms; {209} by Boston and Peterborough; or take our way through the ancient city of Lincoln to Nottingham and the Midland Counties, where the famous forest of Robin Hood and the Dukeries invite us to study woodland scenery and light-land farming; but on this occasion we shall make our way to Sheffield, over a line which calls for no especial remark—the most noticeable station being East Retford, for the franchise of which Birmingham long and vainly strove. What delay might have taken place in our political changes if the M.P.'s of East Retford had been transferred to Birmingham in 1826, it is curious to consider.

SHEFFIELD.

The approach to Sheffield from Lincolnshire is through a defile, and over a long lofty viaduct, which affords a full view of the beautiful amphitheatre of hills by which it is surrounded.

The town is situated in a valley, on five small streams—one the “Sheaf,” giving the name of Sheffield, in the southern part of the West Riding of Yorkshire, only six miles from Derbyshire.

The town is very ugly and gloomy; it is scarcely possible to say that there is a single good street, or an imposing or interesting public building,—shops, warehouses and factories, and mean houses run zigzagging up and down the slopes of the tongues of land, or peninsulas, that extend into the rivers, or rather streamlets, of the Porter, the Riving, the Loxley, the Sheaf, and the Don. Almost all the merchants and

manufacturers reside in the suburbs, in villas built of white stone on terraces commanding a lovely prospect.

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The picturesqueness, the wild solitude of the immediate neighbourhood of Sheffield, amply compensates for the grimy gloom in which the useful and disagreeable hardware trade is carried on. All around, except where the Don opens a road to Doncaster, great hills girdle it in, some of which at their summit spread out into heath-covered moorlands, where the blackcock used lately to crow. Almost in sight of the columns of factory smoke, others of the surrounding ridge are wood-crowned, and others saddlebacked and turfed; so that a short walk transports you from the din of the workshop to the solitude of "the eternal hills." We do not remember any manufacturing town so fortunately placed in this respect as Sheffield. For an excellent and truthful description of this scenery, we may turn to the poems of Ebenezer Elliott, who painted from nature and knew how to paint in deep glowing colours.

"Hallamshire, which is supposed by antiquarians to include the parish of Sheffield, forms a district or liberty, the importance of which may be traced back to even British times; but Sheffield makes its first appearance as a town some time after the Conquest. In the Domesday Book the manor of Sheffield appears as the land of Roger de Busk, the greater part held by him of the Countess Judith, widow of Waltheof the Saxon. In the early part of the reign of Henry I. it is found in the possession of the De Levetot family, and the site of their baronial residence. They founded an hospital, called St. Leonard's (suppressed in the reign of Henry VIII.), upon an eminence still called Spital Hill, established a corn mill, and erected a bridge there, still called the Lady's Bridge, from the chapel of the Blessed Lady of the Bridge, which had previously stood near the spot; and their exertions and protection fixed here the nucleus of a town. The male line of the Levetots became extinct by the death of William de Levetot, leaving an infant daughter, Maud, the ward of Henry II. His successor, Richard, gave her in marriage to Gerard de Furnival, a young Norman knight, who by that alliance acquired the lordship of Sheffield. There is a tradition that King John, when in arms against his barons, visited Gerard de Furnival (who espoused his cause), and remained for some time at his Castle of Sheffield.

"On the 12th of November, 1296, Edward I. granted to Lord Furnival a charter to hold a market in Sheffield on Tuesday in every week, and a fair every year about the period of Trinity Sunday. This fair is still held on Tuesday and Wednesday after Trinity Sunday, and another on the 28th of November. The same Lord Furnival granted a charter to the town, the provisions of which were of great liberality and importance at that period, *viz.*, that a fixed annual payment should be substituted for the base, uncertain services by which they had previously held their lands and tenements, that Courts Baron should be held every three weeks for the administration of justice, and that the inhabitants of Sheffield should be free from the exaction of toll throughout the entire district of Hallamshire, whether they were vendors or purchasers."

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About this time Sheffield began to be famous for the manufacture of falchion heads, arrows, files, and whittles. Chaucer tells us of the miller that

“A Sheffield thwytle bare he in his hose,
Round was his face, and camysed was his nose.”

The ample water-power, the supply of iron ore close at hand, and in after times, when its value for smelting was discovered, the fields of coal—all helped Sheffield.

“Another only daughter, and another Maud, transferred by her marriage the lordship of Sheffield to the more noble family of Talbot, Earl of Shrewsbury. William Lord Furnival died 12th April 1383, in his house in Holborn, where now stands Furnival’s Inn, leaving an only daughter, who married Sir Thomas Nevil, and he in 1406 died, leaving an only daughter, Maud, who married John Talbot, Earl of Shrewsbury. George, fourth Earl of Shrewsbury, built the lodge, called Sheffield Manor, on an eminence a little distance from the town, and there he received Cardinal Wolsey into his custody soon after his apprehension. It was on his journey from Sheffield Manor up to London, in order to attend his trial, that the Cardinal died at Leicester Abbey. In the reign of Queen Elizabeth, Mary Queen of Scots, who had been committed to the custody of George, sixth Earl of Shrewsbury, after being confined in Tutbury Castle, was removed in 1570 first to Sheffield Castle, and then to Sheffield Manor House, where she spent fourteen years. It was for the alleged intention of moving her hence that Thomas Duke of Norfolk, an ancestor of the ducal family, still closely connected with Sheffield, suffered on the scaffold. The grandson of this Duke of Norfolk, at whose trial the Earl of Shrewsbury presided as High Steward, afterwards married the granddaughter of the Earl, and thereby became possessed of this castle and estate.” And now, in 1851, another son of Norfolk is about to acquire a large fortune by a Talbot.

During the reign of Elizabeth, the Duke of Alva, whose persecutions did more for extending and improving the manufactures of this country than any amount of parchment protection, drove over, in addition to the weavers of linen and fullers of cloth, artisans in iron and steel. These, according to the wise rule of settling all one craft in one spot, were by the advice of the Queen’s Chamberlain, the Earl of Shrewsbury, settled on his own estate at Sheffield, and the neighbourhood thenceforward became known for the manufacture of shears, sickles, knives of every kind, and scissors.

About this time (1613), according to a survey, Sheffield contained about 2207 inhabitants, of whom the most wealthy were “100 householders, which relieve the others, but are poore artificers, not one of whom can keep a team on his own land, and above ten have grounds of their own, which will keep a cow.” In 1624, an act of the incorporation of cutlers was passed, entitled “An act for the good order and government of the makers of sickles, shears, scissors, and other cutlery wares in Hallamshire and parts near adjoining.”

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Gilbert, seventh Earl of Shrewsbury, the last of the male line of the house of Talbot, who inherited the Hallamshire estates, died on the 8th May 1616, leaving three daughters, co-heiresses. The Lady Alethea Talbot, the youngest, married the Earl of Arundel, and the other two, dying without issue in 1654, the whole estates descended to her grandson, Thomas Howard, Earl of Arundel, who was restored to the title of Duke of Norfolk by Charles II., on his restoration, and in that family a considerable property in Sheffield remains to this day—not without narrow escapes of extinction. Charles James Fox's friend, Jockey of Norfolk, was one of a family which seems to afford every contrast of character in possession of the title.

In the great civil wars, Sheffield was the scene of more than one contest. In 1644, on the 1st August, after the battle of Marston Moor, the castle was besieged by twelve thousand infantry dispatched by the Earl of Manchester, compelled to surrender in a few days, and demolished by order of parliament.

The manor was dismantled in 1706 by order of Thomas Duke of Norfolk, and the splendid park, shaven of its great trees, was converted into building land, or accommodation land, part of which is still known by the name of the Park.

During the eighteenth century the Sheffield trade was entirely confined to the home market, and chiefly conducted by pack horses. In 1751 a step toward extension was made by the completion of works, which rendered the Don navigable up to Tinsley. In 1819 the Sheffield and Tinsley Canal was completed; and now Manchester, Leeds, Hull, and Liverpool, are all within a morning's ride.

The art of silver-plating was invented at Sheffield by Thomas Bolsover, an ingenious mechanic, in the latter half of the eighteenth century, and extensively applied by Mr. Joseph Hancock. This trade has been seriously affected by the invention of electro-plating, which has transferred much of the Sheffield trade to Birmingham. The invention of Britannia metal speedily followed that of plating.

In 1750 a direct trade to the continent was opened by Mr. Thomas Broadbent. The example was soon followed. The first stage-coach to London, started in 1760, and the first bank was opened in 1762.

At present the population can be little short of 120,000. The passing of the Reform Bill gave to Sheffield two representatives. The constituency is one of the most independent in the kingdom. No "Man in the Moon" has any room for the exercise of his seductive faculties in Sheffield.

What is still more strange, until after the enactment of the Municipal Corporation Bill, Sheffield had no local authorities. The Petty Sessions business was discharged by county magistrates, and the Master Cutler acted as a sort of master of the ceremonies

on occasions of festivity, without any real power. That honorary office is still retained, although Sheffield has now its aldermen and common councillors.

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There is a "Royal Free Grammar School" founded in 1649, with an income from endowments of about 150 pounds a-year. Free to thirty boys, as regards classics, subject to a charge of four guineas per annum for instruction in the commercial department. In 1850 there were eighty-one scholars.

Manufactures.—Sheffield, through every change, has deservedly retained its reputation for the manufacture of razors, surgical instruments, and the highest class of cutlery, and a considerable number of carpenters' and other steel tools.

In the coarser steel articles Birmingham does a considerable and increasing business, and Sheffield workmen settling in Germany and in the United States have, from time to time, alarmed their native town by the rivalry of their pupils; nevertheless, it may confidently be asserted, that with its present advantages Sheffield can never lose her pre-eminence in cutlery if her sons are only true to her and themselves.

The steel consumed in England is manufactured chiefly from iron imported from Sweden and Russia. It has not been exactly ascertained whence arises the superiority of this iron for that purpose. But all foreign iron converted into steel is composed of magnetic iron ore, smelted with charcoal. This kind of ore is found in several countries, particularly in Spain. In New Zealand, at New Plymouth it is said to be found in great quantities; but from the two countries first mentioned we obtain a supply of from 12,000 to 15,000 tons, of which about 9000 come from Sweden. The celebrated mines of Danemora produce the finest Swedish iron, and only a limited quantity is allowed to be produced each year. All the steel-iron used in England is imported into Hull. Bar-steel is manufactured by heating the iron, divided into lumps, in pots, with layers of charcoal, closely covered over with sand and clay, for several days. By this means the iron is carbonized and converted into what is commonly called blistered steel. The heat is kept up a longer or shorter time according to the hardness required.

Bar-steel, as it comes from the furnace, is divided and sorted, and the pieces free from flaws and blisters are rolled out and converted into files, knives, coach-springs, razors, and common implements, according to quality. It will be seen that there is a good deal of science and judgment required to manufacture the best steel.

Sheer steel is made from bar-steel by repeated heating, hammering, and welding.

Cast steel, a very valuable invention, which has in a great degree superseded sheer steel for many purposes, was first made in 1770 by Mr. Hunstman, at Allercliff, near Sheffield. It is made by subjecting bar-steel, of a certain degree of hardness, to an intense heat, for two or three hours, in a crucible, and then casting it in ingots.

The Indian Wootz steel, of which such fine specimens were exhibited in the Exhibition, and from which extraordinary sabres have been made, is cast steel, but, from the rudeness of the process, rarely obtained perfect in any quantity. Whenever we have the

good fortune to intersect India with railroads, steel-iron will be among the number of our enlarged imports.

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The hard and elastic qualities of steel, known as “temper,” are obtained by heating and then cooling rapidly. For this purpose baths of mercury and of boiling oil are used. Some waters are supposed to have peculiar virtues for tempering steel.

Case-hardening, a process much used for tools and plough-shares, consists in superficially hardening cast iron or wrought iron by heating it in a charcoal crucible, and so converting it into steel.

The successful operations for converting steel into various kinds of instruments, depends very much upon manual skill. The mechanics are united in trades’ unions of great power, and have exercised an influence over the manufacturers of the town of a very injurious nature. At one period, the razor-grinders and superior mechanics in several branches, were able to earn as much as five and six, and even ten, pounds a-week. At that period, when they had almost a monopoly of the cutlery trade, on a very trifling excuse they would decide on taking a holiday, or, as it is termed, “playing.” Strikes for higher wages generally took place whenever any good orders from foreign markets were known to have reached the town. By these arbitrary proceedings, arising from an ignorance of the common principles of political economy, which it is to be hoped that the spread of education will remove, the Sheffield cutlery trade has been seriously injured. A few years ago large numbers of the cutlers emigrated.

Further depression was produced by the rivalry of Birmingham in the electrotpe process, which has, to a considerable degree, superseded the Sheffield plate and other trades, the latter town being better placed for the foreign trade, while the workmen are less turbulent.

Beside cutlery and Sheffield plate, Britannia metal, and other similar ornamental and domestic articles, a good deal of heavy ironware is made in Sheffield. We may notice the fire-grates, stoves, and fenders, of which all the best, wherever sold and whatever name and address they bear, come from Sheffield. In this branch of manufacture a great deal of artistic taste has been introduced, and many scientific improvements for distributing and economizing heat.

The firm of Stuart and Smith, Roscoe Place, distinguished themselves at the Great Exhibition, by producing a series of beautiful grates, at prices between two pounds and one hundred guineas.

There are some establishments for the manufactory of machinery.

Within the last year or two Sheffield has enjoyed a revival of prosperity, especially in the article of edge tools.

The mechanics of Sheffield are a very remarkable and interesting set of people, with a more distinct character than the mechanics of those towns which are recruited from various parts of the country. They are “Sheffielders.”

A public meeting at Sheffield is a very remarkable scene. The rules of public business are perfectly understood and observed; unless in periods of very great excitement, the most unpopular speaker will receive a fair hearing. A fair hearing does not express it. The silence of a Sheffield audience, the manner in which they drink in every word of a stranger, carefully watching for the least symptom of humbug, and unreduced by the most tempting claptrap, is something quite awful.

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A man with a good coat on his back must dismiss all attempts at compliments, all roundabout phrases, and plunge into the middle of the business with the closest arguments he can muster, to produce any effect on the Sheffield blades. Although they look on all gentlemen with the greatest distrust, and have a most comical fear of imaginary emissaries from Government wandering to and fro to seduce them, they thoroughly understand and practise fair play. The sterling qualities of these men inspire one with respect, and regret that they should be imposed upon by such “blageurs” as Feargus O’Connor and his troop. Perhaps they are wiser now.

The Sheffielders, by way of relaxation, are fond of gardening, cricket, dog fighting, and formerly of hunting. They are very skilful gardeners,—their celery is famous. A few years ago, one of the trades hired land to employ their unemployed members. Many possess freehold cottages.

Cricket and similar amusements have been encouraged by the circumstance that, in summer droughts, the water-power on which the grindstones depend often falls short, and then there is a fair reason for turning out to play or to garden, as the case may be, according to taste.

Sheffield bulldogs used to be very famous, and there are still famous ones to be found; but dog fighting, with drinking, is going out of fashion.

But, although other towns play at cricket, and love good gardening and good dogs, we presume that the Sheffielders are the only set of mechanics in Europe who ever kept their own pack of hounds. Such was the case a few years ago, when we had the pleasure of seeing them; and, if they are still in existence, they are worth going a hundred miles to see. The hounds, which were old English harriers, slow and deep-mouthed, were quartered at various cottages in the suburbs. On hunting mornings, when the men had a holiday, the huntsman, who was paid by a general subscription, took his stand on a particular hill top and blew his horn.

In a few minutes, from all quarters the hounds began to canter up to him, and he blew and blew again until a full complement, some ten or twelve couples, had arrived.

The subscribers came up in twos and threes on the hacks of the well known “Shanks,” armed with stout sticks; and then off they set, as gay and much more in earnest than many dozen who sport pink and leathers outside on hundred guinea nags.

Music is a good deal cultivated among all classes in Sheffield. There are two scientific associations, but of no particular mark. Sheffield has produced two poets of very different metal, James Montgomery and Ebenezer Elliott, both genuine; and a sculptor, Chantrey, who was apprenticed there to a wheelwright.

The railway communications of Sheffield were long imperfect,—they are now excellent. The clothing districts of Yorkshire are united by two lines. The North Midland connects it with Derbyshire, and affords a short road by Derby and through Leicestershire to London on one side, and by Burton to Birmingham on the other. The Lincolnshire line has shortened the distance to Hull, whence the steel-iron comes, and fat cattle; the Manchester line carries away the bars converted into cutlery, and all the plated ware and hardware, by Liverpool, to customers in America, North or South.

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We must not forget that there are coal-pits close to the town, of extensive workings, which are extremely well suited for the visit of an amateur. Even a courageous lady might, without inconvenience, travel underground along the tramways in the trucks, if she did not mind the jolting.

The miners are not at all like our Staffordshire friends, but are very decent fellows. There are a good many Wesleyan Methodists among them, and hymns may be heard sometimes resounding along the vaulted galleries, and rising from behind the air-doors, where children sit all day on duty,—dull work, but not hard or cold.

A well managed coal mine is a very fine sight.

DERBYSHIRE.

From either Sheffield or Manchester a most delightful journey is open through Derbyshire to a good pedestrian, or to a party of friends travelling in a carriage with their own horses. For the latter purpose an Irish outside car, fitted either with a pole or outrigger for a pair of horses, is one of the best conveyances we know. The front seat holds the driver; two ladies and two gentlemen fill up the two sides. The well contains ample space for the luggage of sensible people; umbrellas and waterproof capes can be strapped on the intermediate cushion, and then, if the horses are provided with military halters and nosebags, you are prepared for every eventuality. To other impedimenta it is not amiss to add a couple of light saddles, so that, if necessary, some of the party may ride to any particular spot.

This mode of travelling is particularly well suited for Derbyshire, Wales, Devonshire, and all counties where there are beautiful spots worth visiting to which there are no regular conveyances, and which, indeed, are often only accidentally discovered. By this mode of travelling you are rendered perfectly independent of time and taverns, so long as you reach an inn in time to go to bed; for you can carry all needful provant for both man and beast with you.

Derbyshire is in every respect one of the most beautiful counties in England, and deserves a closer investigation than can be obtained from the outside of a coach, much less from the windows of a flying train, whenever the promised railway line, which we propose to traverse, shall be completed.

Derbyshire possesses two kinds of scenery totally distinct in character, but both remarkably picturesque, several natural curiosities of a very striking character, two very pleasant bath towns,—Buxton and Matlock; beside the antiquarian glories of Hardwicke and Haddon, and the palatial magnificence of Chatsworth, with its porticoes, its fountains, its pleasure grounds, its Victoria Regia, and the House of Glass that has been the means of making Joseph Paxton famous all over the civilized world.

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While the country round the Peak is wild, bare, and rugged, the line of valleys and dales on which lies the road from Matlock to Burton and Manchester, presents the most charming series of pictures of undulating woodland scenery, adorned by mansions and cottages, that it is possible to imagine. The high road continually runs along the steep side of valleys,—on one side are thick coverts climbing the rocky hill-sides, all variegated with wild flowers, briars, and brushwood; on the other side, sometimes on a level with the road, sometimes far below, a river winds and foams and brawls along; if lost for a short distance, again coming in sight of the road, enlivening and refreshing the scene.

In the main avenue of the Crystal Palace, Mr. Carrington exhibited a model which represented with extraordinary accuracy all this country, and which gave a very exact picture of Derbyshire, with all the undulations of its hills and rivers worked to a scale. Those who have never been in the county should endeavour to see it, as it will teach them that we have a Switzerland in England of which they knew not.

One charm of this part of Derbyshire is the intermixture of cultivation and wild nature, or woods so planted as to well emulate nature. On bits of level space you meet a cottage neatly built of stone, all covered with roses and woodbines, which flourish wonderfully on the loose soil in the showery atmosphere. The cottages of Derbyshire are so pretty that you are at first inclined to imagine that they are for show,—mere fancy buildings. But no; the cheapness of good building stone, the suitability of the soil for flowering shrubs, and perhaps something in the force of example, create cottage after cottage fit for the dwellings of Arcadian lovers. And every now and then the landscape opens on a villa or mansion so placed that there is nothing left for the landscape gardener to do.

The farm buildings, and corn mills, and silk mills, are equally picturesque: game abounds. Early in the morning and in the evening you may often see the pheasants feeding close to the roadside, and, in the middle of the day, the sudden sharp noise of a detonating ball will set them crowing in the woods all around.

We cannot say that the streams now swarm with trout and grayling as they did when honest Isaac Walton sung their praises in quaint poetical prose, although they still twine and foam along their rocky beds all overhung with willows and tufted shrubs; but, where the waters are preserved, there good sport is to be had.

The roadside inns are not bad. The half-mining, half-farming people are quaint and amusing. The caverns of the Peak and the lead mines, afford something strange and new. Altogether we can warmly commend a trip through Derbyshire, as one affording great variety of hill and dale, wood and stream, barren moors, and rich cultivation, fine parks and mansions, and beautiful hamlets, cottages, and roadside gardens, where English peasant life is to be seen under most favourable aspects.

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Hardwicke.—Supposing that we proceed from Sheffield, we would take the railway to Chesterfield, which is not a place of any interest. Thence make our way to Hardwicke, on the road to Mansfield.

Hardwicke Hall is a good specimen of the style of domestic architecture in the time of Queen Elizabeth, which has remained unaltered since that period. Mary Queen of Scots was imprisoned here, and some remains of tapestry worked by her are exhibited, as well as furniture more ancient than the house itself. It belongs to the Duke of Devonshire.

From Hardwicke we proceed to Matlock, which may be reached by an unfinished railway, intended to traverse the vales, and thence run into Manchester.

The village and baths are in the centre of a dale through which the river Derwent flows, along between overhanging trees, except where, in some parts, its course lies through the narrow gut of perpendicular rocks. On either side rise hills, for the most part adorned with wood, to the height of three hundred feet.

The waters, which are supplied to several small and one large swimming bath, have a temperature of from 66 to 68 degrees of Fahrenheit. They are not now much in fashion, therefore the village has continued a village, and is extremely quiet or dull according to the tastes of the visitor. At the same time, there are a number of delightful expeditions to be made in the neighbourhood, on foot or horseback, and on donkeys,—hills to be ascended and caves to be explored.

By permission of Sir Richard Arkwright of Willersley Castle, close to Matlock and several other river preserves, good fishing may be obtained.

From Matlock, the next halt should be at Bakewell, where there is an excellent inn, which is a good encampment for visiting both Chatsworth and Haddon Hall.

Chatsworth is three miles from Bakewell. The present building occupies the site of that which was long occupied by Mary Queen of Scots during her captivity, and which was taken down to make room for the present structure at the close of the seventeenth century.

The park is ten miles in circumference, and is intersected by the river Derwent, which flows in front of the mansion.

This place has long been celebrated for its natural and artificial beauties, but within the last few years the Duke of Devonshire has largely added to its attractions, by alterations carried on at an immense expense, under the direction of Mr. Joseph Paxton, which, among other things, include the largest greenhouse in the world—the house where the

Victoria Regia was first made to flower, and a fountain of extraordinary height and beauty.

These grounds, with the house, containing some fine pictures, are open to the visits of all well-behaved persons. Indeed, from the arrangements made for the convenience of visitors, it would seem as if the Duke of Devonshire has as much pleasure in displaying, as visitors can have in examining, his most beautiful domains, which is saying a great deal.

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Haddon Hall, one of the most perfect specimens of a mansion of the fifteenth and sixteenth centuries, is situated on the left bank of the Wye, at a short distance from Bakewell. The “interiors” of Mr. Joseph Nash have rendered the beauties of the architecture of Haddon Hall well known, but it also enjoys the advantage of a very fine situation, backed by old trees. It is the property of the Duke of Rutland, uninhabited, but perfectly preserved. Good fishing is to be obtained near Bakewell, through the landlord of the hotel.

Buxton may be the next halt, the Leamington of Manchester, but although more picturesquely situated, it has not enjoyed anything like the tide of prosperity which has flowed for the Warwickshire watering place. The thermal waters of Buxton have been celebrated from the time of the Romans.

The town is situated in a deep basin, surrounded by bleak hills and barren moors, in strong contrast to the verdant valley in which the village of Matlock lies. The only entrance to and exit from this basin is by a narrow ravine, through which the river Wye flows on its way to join the Derwent toward Bakewell.

The highest mountains in Derbyshire are close at hand, one of which is one thousand feet above the valley in which Buxton stands, and two thousand one hundred feet higher than the town of Derby. From this mountain four rivers rise, the Wye, the Dove, the Goyt, and the Dean.

Buxton consists of a new and old town. In the old town is a hall, in which Mary Queen of Scots lodged whilst visiting the Buxton waters for her health, as a prisoner under charge of the Earl of Shrewsbury. A Latin distich, a farewell to Buxton, scratched on the window of one of the rooms, is attributed to the hand of that unhappy princess.

The new part of the town commences with the Crescent, which contains two houses, a library, an assembly-room, a news-room, baths, and other buildings, and is one of the finest structures of the kind in the kingdom. The stables, on a magnificent scale, contain a covered ride, a hundred and sixty feet long. This immense pile was built by the late Duke of Devonshire in 1781, and cost 120,000 pounds.

The public baths are very numerous and elegant; and indeed every comfort and luxury is to be obtained there by invalids and semi-invalids, except that perpetual atmosphere of amusement, without form, or fuss, or much expense, which forms the great charm of German watering places.

We cannot understand why at the present moderate price of all kinds of provisions in England, a tariff of prices, and a set of customs of expense are kept up, which send all persons of moderate fortune to continental watering places, or compel them to depart at the end of a fortnight, instead of staying a month.

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Why do we English,—after dining at a table d'hôte, all the way from Baden-Baden to Boulogne, for something not exceeding half-a-crown a-head, without drinking wine, unless we like,—find ourselves bound, the moment we set our foot in England, to have a private or stereotyped dinner at five or six shillings a-head, and no amusement. In London, for gentlemen only, there are three or four public dinners at a moderate figure. When will some of our bell-wethers of fashion, to whom economy is of more consequence than even the middle classes, set the example at Leamington, Tunbridge Wells, Buxton, and Cheltenham, of dining with their wives and daughters at the public table? How long are we to be slaves of salt soup, fried soles, and fiery sherry?

The decayed watering places, ruined by the competition of the continent, should try the experiment of commercial prices, as an invitation to idlers and half-invalids to stay at home.

Another great help to our watering places and farmers, would be the repeal of the post-horse tax. It brings in a mere trifle. The repeal would be an immense boon to places where the chief attraction depends on rides and drives. It would largely increase the number of horses and vehicles for hire, and be a real aid to the distressed agricultural interest, by the increased demand it would make for corn, hay, and straw. Besides, near a small place like Matlock, or Ilfracombe, in Devonshire, farmers would work horses through the winter, and hire them out in summer. It is a great tax to pay four shillings and sixpence as a minimum for going a mile in any country place where flies and cabs have not been planted.

The environs of Buxton afford ample room for rides, drives, picnics, and geological and botanical explorations. Beautifully romantic scenes are to be found among the high crags on the Bakewell road, overhanging the river Wye. Among the natural curiosities is a cave called Poole's Hole, five hundred and sixty yards in length, with a ceiling in one part very lofty, and adorned with stalactites, which have a beautiful appearance when lighted up by Roman candles or other fireworks. As Buxton is only twenty-two miles from Manchester, travellers who have the time to spare should on no account omit to visit one of the most romantic and remarkable scenes of England.

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Macclesfield.—From Buxton it will not be a bad plan to proceed to Macclesfield, and again in Cheshire, on the borders of Derbyshire, take advantage of the rail. The turnpike road to that improving seat of the silk manufacture is across one of the highest hills in the district, from the summit of which an extensive view into the "Vale Royal" of Cheshire is had. The hills and valleys in the vicinity of Whaley and Chapel-en-le-Frith are equally delightful. Macclesfield has one matter of attraction—its important silk manufactories. In other respects it is externally perfectly uninteresting. The Earl of Chester, son of Henry *iii.*, made Macclesfield a free borough, consisting of a hundred

and twenty burgesses, and various privileges were conferred by Edward *iii.*, Richard II., Edward IV., Elizabeth, and Charles II.

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One of the churches, St. Michael's, was founded by Eleanor, Queen of Edward I., in 1278. It has been partly rebuilt, but there are two chapels, one the property of the Marquis of Cholmondeley, which was built by Thomas Savage, Archbishop of York, whose heart was buried there in 1508. The other belongs to the Leghs of Lyme. A brass plate shows that the estate of Lyme was bestowed upon an ancestor for recovering a standard at the battle of Cressy. He was afterwards beheaded at Chester as a supporter of Richard II. Another ancestor, Sir Piers Legh, fell fighting at the battle of Agincourt. We do not know what manner of men the Leghs of Lyme of the present generation are, but certainly pride is pardonable in a family with an ancestry which took part in deeds not only recorded by history, but immortalized by Shakspeare.

There is a grammar school, of the foundation of Edward VI., with an income of 1500 pounds a-year, free to all residents, with two exhibitions of 50 pounds per annum, tenable for four years. But there must be some mismanagement, as it appears from Parker's useful Educational Register, that in 1850 only twenty-two scholars availed themselves of these privileges; yet Macclesfield has a population exceeding thirty thousand.

The education of the working classes is above average, and music is much cultivated. We abstain from giving the figures in this as in several other instances, because the census, which will shortly be published, will afford exact information on all these points.

The establishment of silk factories on the river Bollen brought Macclesfield into notice in the beginning of this century. Unhampered by the restrictions which weighed upon the Spitalfields manufacturers, and nurtured by the monopoly accorded to English silks, the silk weaving trade gradually attained great prosperity between 1808 and 1825. At that period the commencement of the fiscal changes, which have rendered the silk trade quite open to foreign competition, produced a serious effect on the prosperity of Macclesfield.

In 1832 the number of mills at work had diminished nearly one-half, and the number of hands by two-thirds. Since that period, after various vicissitudes, the silk trade has acquired a more healthy tone, and we presume that the inhabitants do not now consider the alterations commenced by Huskisson, and completed by Peel, injurious to their interests; since, at the last election, they returned one free-trader, a London shopkeeper, in conjunction with a local banker and manufacturer.

Macclesfield has now to contend with home as well as foreign competition, for silk manufactories have been spread over the kingdom in many directions.

We may expect to see in a few years, as the result of the universal extension of railway communication, a great distribution and transplantation of manufacturing establishments to towns where cheap labour and provisions, or good water or water-power, or cheap fuel, offer any advantages, There is something very curious to be noted in the manner in

which certain of our principal manufactures have remained constant, while others have been transplanted from place to place, and in which ports have risen and fallen.

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The glory of the Cinque Ports seems departed for ever, unless as harbours of refuge, while Folkestone, by the help of a railway, has acquired a considerable trade at the expense of Dover. The same power which has rendered Southampton great has reduced Falmouth and Harwich to a miserably low ebb. The sea-borne trade of Chester is gone for ever, but Birkenhead hopes to rise by the power of steam.

No changes can seriously injure Hull, although railways will give Great Grimsby a large share of the overflowings of the new kind of trade created by large steam boats and the repeal of duties on timber; and so we might run through a long list of commercial changes, past, present, and to come.

Macclesfield has shared largely in these influences. Having acquired its commercial importance as one of the glasshouses in which, at great expense, we raised an artificial silk trade, when it lay at a distance of at least three hours from Manchester for all heavy goods, and at least three days from London; it has now communication with London in five hours, and with the port of Liverpool, through Manchester, in two hours if needful. Thus it enjoys the best possible means of obtaining the raw material and sending off the manufactured article.

In the time of Queen Charlotte, the wife of George *iii.*, it was contrary to the laws of the palace for any servant to wear a silk gown; but extended commerce and improved machinery have rendered it almost a matter of course for the respectable cook of a respectable lawyer or surgeon, to afford herself a black silk gown without extravagance or impertinence,—which is so much the better for the weavers and sailors.

We shall not attempt to describe the silk manufacture, which is on the same principles as all other textiles, except that less work can be done by machinery. But it is one of the most pleasant and picturesque of all our manufacturing operations. The long light rooms in which the weaving is conducted are scrupulously clean and of a pleasant temperature,—no dust, no motes are flying about. The girls in short sleeves, in the course of their work are, as it were, obliged to assume a series of graceful attitudes. The delicacy of their work, and the upward position in which they hold them, render their hands white and delicate, and the atmosphere has something of the same effect on their complexion. Many of the greatest beauties of Belgravia might envy the white hands and taper fingers to be found in a silk mill.

Unfortunately this trade, which in factory work is healthy and well paid, is, more than any other, subject to the vicissitudes of fashion. The plain qualities suffer from such changes less than the rich brocades and fancy patterns.

It must be remarked that, although the repeal of protective duties to eighteen per cent. produced a temporary depressing effect on the trade of Macclesfield, the general silk trade has largely increased ever since 1826, and has spread over a number of counties

where it was before unknown, and has become an important article of export even to France.

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An example of the readiness with which, in these railroad days, a manufacture can be transplanted, was exhibited at Tewkesbury four years ago. The once-fashionable theatre of that decayed town was being sold by auction; it hung on the auctioneer's hammer at so trifling a sum that one of the new made M.P.'s of the borough bought it. Having bought it, for want of some other use he determined to turn it into a silk mill. In a very short space of time the needful machinery was obtained from Macclesfield, with an overseer. While the machinery was being erected, a bevy of girls were acquiring the art of silk weaving, and, in less than twelve months, five or six hundred hands were as regularly engaged in this novel process, as if they had been so engaged all their lives. Without railroads, such an undertaking would have been the work of years, if possible at all.

Raw silk is obtained from Italy, from France in small quantities, as the exportation of the finest silk is forbidden, from China, from India in increasing quantities, and from Brusa in Asia Minor through Constantinople.

The raw silk, imported in the state in which it is wound from the cocoons, has to be twisted into thread, after being dyed, so as to approach the stage of yarn in the cotton manufacture. This twisting is technically called throwing, and is one of the departments in which the greatest improvements have been introduced, as shown by silk throwers from Macclesfield in the machine department of the Great Exhibition; and, by the improvements, the cost of throwing, or twisting, has been reduced from 10s. per lb. to 3s.

It takes about twelve pounds of cocoons to make one pound of reeled silk, and that pound will produce from fourteen to sixteen yards of gros de Naples.

Many attempts have been made to naturalize the silk-worm in this country, but, after rather large sums have been expended on it, it is now quite clear that, although it be possible to obtain large quantities of silk of a certain quality, the undertaking cannot be made to pay: the climate is an obstacle.

For centuries the silk-worm was only known to the Chinese,—the Greeks and Romans used the substance without knowing from what it was produced or whence it came. In the sixth century, in the reign of Justinian, the eggs of the silk-worm were brought secretly to Constantinople from China by the Nestorian monks in a hollow cane, hatched, and successfully propagated. For six centuries the breeding of silk-worms was confined to the Greeks of the Lower Empire. In the twelfth century the art was transferred to Sicily, and thence successively to Italy, Spain, and France.

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Great efforts were made in the reign of James I. to promote the rearing of silk-worms in England, and mulberry trees were distributed to persons of influence through many counties. The scheme failed. But in 1718 a company was incorporated, with a like purpose, and planted trees, and erected buildings in Chelsea Park. This scheme also failed. Great efforts were made to plant the growth of silk in the American colonies, and the brilliant prospects of establishing a new staple of export formed a prominent feature in the schemes for American colonization, of which so many were launched in the beginning of the eighteenth century. But up to the present time no progress has been made in it in that country, although silk-worms are found in a natural state in the forests of the Union. Indeed, it seems a pursuit which needs cheap attentive labour as well as suitable climate. Some attempts have been made in Australia, but there again the latter question presents an insurmountable obstacle. If the mulberry would thrive in Natal, where native labour is cheap, it would be worth trying there, although we cannot do better than develop the resources of the silk-growing districts of India, where the culture has been successfully carried on for centuries.

At the Great Exhibition an extremely handsome banner was exhibited, manufactured from British silk, cultivated by the late Mrs. Whitby of Newlands, near Southampton, who spent a large income, and many years in the pursuit, solely from philanthropic motives, and carried on an extensive correspondence with parties inclined to assist her views; but, although to the last she was sanguine of success in making silk one of the raw staples of England, and a profitable source of employment for women and children, we have seen no commercial evidence of any more real progress than that of gardeners in growing grapes and melons without glass-houses.

Almost every country in Europe has made the same attempts, but with very moderate success. Russia has its mulberry plantations, so has Belgium, Austria Proper, Hungary, Bavaria, and even Sweden; but Lombardy and Cevennes in France bear away the palm for excellence, and there is an annual increase in the quantity and quality of silk from British India. But no matter where it grows, we can buy it and bring it to our own doors nearly as cheap as the natives of the country, often cheaper.

In Macclesfield every kind of silk article is produced, including ribbons, narrow and richly-ornamented satin, velvet, silk embroidered for waistcoats and gown pieces.

FROM CHESHIRE TO NORTH STAFFORDSHIRE.

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On leaving Macclesfield we are, as usual, embarrassed by a choice of routes, due to the perseverance of Mr. Ricardo, one of the members for the Potteries, who has endowed his constituents with a set of railways, which cut through their district in all manner of ways. These North Staffordshire lines, *Tria juncta in uno*, form an engineering continuation of the Trent Valley, and are invaluable to the manufacturers of porcelain and pottery in that district. To the shareholders they have proved rather a disappointment. The ten per cent. secured to the Trent Valley Company, by the fears of the London and North-Western, has not yet rewarded the patriotism of the North Staffordshire shareholders. But to our route, we may either make our way by Leek, Cheadle, Alton, and Uttoxeter to Burton, famous for the ale of Bass and game of cricket nourished on it, and through Burton to Derby. (The learned and lively author of the “Cricket Field” remarks, that the game of cricket follows malt and hops—no ale, no bowlers or batsmen. It began at Farnham hops, and has never rolled further north than Edinburgh ale.) Or by Congleton, Burslem, Hanley, and Stoke upon Trent (the very heart of the Potteries), then either pushing on to Uttoxeter to the north, or keeping the south arm past Trentham to Norton Bridge, which will convey you to the Trent Valley Line, the shortest way to London.

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Congleton is an ancient borough of Cheshire, on the borders of Staffordshire, containing a number of those black and white oak frame and plaster houses, which are peculiar to that county, and well worth examining. It is situated in a deep romantic valley on the banks of the river Dane, and enjoys a greater reputation for health than commercial progress. The population does not appear to have increased between the two last census. The Municipal Corporation dates from a remote period. It appears from the Corporation Books that the Mayor and Aldermen patronised every kind of sport—plays, cock fights, bear baiting, morris dancing. So fond were they of bear baiting, that in 1621, by a unanimous vote, they transferred the money intended for a bible to the purchase of a bear.

Times are changed; every inhabitant of Congleton can now have his own bible for tenpence. Bear baiting and cock fighting have been discontinued; but we hope the inhabitants have grown wiser than they were some fifteen years ago, when they allowed themselves, for the sake of petty political disputes, to be continually drawn through the Courts of Law and Chancery—a process quite as cruel for the suitors, and more expensive and less amusing than bear-baiting.

At the Town Hall is to be seen a “bridle” for a scold, which the ladies of the present generation are too well behaved ever to deserve. President Bradshaw, the regicide, was a Cheshireman, born and christened at Stockport. He practised as barrister, and served the office of mayor in 1637, at Congleton, of which he afterwards became high steward. At Macclesfield, according to tradition, he wrote, when a boy, on a tombstone, these prophetic lines:—

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"My brother Henry must heir the land,
My brother Frank must be at his command,
Whilst I, poor Jack! will do that,
That all the world shall wonder at."

Bradshaw became Chief Justice of the County Palatine of Chester under the Commonwealth, was dismissed by Cromwell for his Republican opinions, died in 1659, was magnificently buried in Westminster Abbey, and disinterred and gibbeted with Cromwell and Ireton at the Restoration. A piece of vengeance on poor dead bones that remained unimitated until one of the mobs of the first French Revolution scattered the bones of the French Kings buried in the vaults of St. Denis.

THE LAKES.

Some of our readers may feel disposed to visit the charming scenery with which Cumberland and Westmoreland abound; and that they may be assisted in their route thereto, and in their rambles through that beautiful district, we will furnish a few notes descriptive of the most convenient and pleasant routes.

From Congleton an easy diversion may be made, by railway, to Crewe, and from thence the journey, along the North-Western line, passing Northwich (Cheshire) and Warrington (Lancashire), via Parkside, to Preston, Garstang, and Lancaster, is rapid and agreeable. The approach to Preston is remarkably pleasing, the railway being carried across a magnificent vale, through which the river Lune, a fine, wide stream, equalling in beauty the far-famed Dee, runs towards the Irish Channel.

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Preston is a populous manufacturing town, in which cotton-spinning is carried on to a very large extent, and is surrounded by a rich agricultural district, which furnishes in abundance every kind of farming produce. The borough returns two members to Parliament, is a corporate town, and has acquired a distinction by its Guilds, which are conducted with great spirit every twenty years. The market, which is held on the Saturday, is well supplied with fruits, vegetables, and fish, salmon included, taken from the river Lune.

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Lancaster, twenty miles northward, is also a borough town, returning two members to Parliament, and is governed by a mayor and town council. It is one of the ancient ports of Lancashire, and, being the county town, the assizes for North Lancashire are held there. Some years ago the assizes for the whole of Lancashire were regularly holden at Lancaster, and in those palmy days, as the judicial sittings generally extended to sixteen



or twenty days, a rich harvest was reaped, not only by “the gentlemen of the long robe,” but also by the numerous innkeepers in the place. The assize business for South Lancashire was at length removed to Liverpool, as the most convenient site for the large number of suitors from that part of the county; and since that period the town of Lancaster has lost much of its importance. There are many objects of especial interest within

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the town and in the immediate district. The ancient castle (now the county gaol), once the residence of John of Gaunt, Duke of Lancaster; the Nisi Prius Court, an elegant and spacious building from a design by the late Mr. Harrison of Chester; and the old parish church, are worthy of close inspection; whilst from the castle terrace and churchyard delightful views of the river, Morecambe Bay, and the distant hills of Cumberland and Westmoreland, are commanded. The village of Hornby, a few miles northward, situated on the banks of the Lune, is one of the most picturesque and retired spots in the kingdom. The river, for several miles from Lancaster, is studded with enchanting scenery, and is much frequented by the lovers of the rod and line.

From Lancaster the tourist may proceed easily, via the Lancaster and Carlisle railway, into the very midst of the Lake district. Kendal is about twenty miles from Lancaster, and from the former pretty town a branch line runs direct to Windermere, whence parties may proceed to Bowness, Ambleside, Keswick, and other delightful and time-honoured places in Westmoreland and Cumberland. From Kendal also Sedburgh, Orton, Kirkby Stephen, Shap, Brough, and the high and low lands circumjacent, may be visited. Ulverston, Ravenglass, Whitehaven, Cockermouth, all nearly equally accessible from the Kendal railway station, will furnish another interesting route to the traveller.

The midland part of Cumberland consists principally of hills, valleys, and ridges of elevated ground. To the tourist the mountainous district in the south-west is the most interesting and attractive. This part comprises Saddleback, Skiddaw, and Helvellyn, with the lakes of Ulleswater, Thirlmere, Derwent-water, and Bassenthwaite. Besides these lakes there are several of smaller size, equally celebrated for their diversified and striking scenery. Buttermere, whose charms are sweetly sung by many of our poets, Crummock-water, Loweswater, Ennerdale, Wast-water, and Devock-lake, are frequented by hosts of travellers, and retain no small number of admirers. The most remarkable phenomena connected with the Lakes are the Floating Island and Bottom-Wind, both of which are occasionally seen at Derwent-water, and neither of which has yet received a satisfactory explanation. Most of the lakes abound in fish, especially char, trout, and perch; so that anglers are sure of plenty of sport in their visits to these fine sheets of water. In Cumberland there are several waterfalls, namely, Scale Force and Sour Milk Force, near Buttermere; Barrow Cascade and Lowdore Cascade, near Keswick; Airey Force, Gowbarrow Park; and Nunnery Cascade, Croglin. The highest mountains in the same county are,—Scaw Fell (Eskdale), 3166 feet, highest point; Helvellyn (Keswick), 3055; and Skiddaw (Keswick), 3022. The climate of Cumberland is various; the high land cold and piercing; the lower parts mild and temperate. The district is generally considered to be healthy, and many remarkable instances of longevity are noted by the local historians.

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The oldest inhabitants on record are John Taylor, of Garrigall, who died in 1772, aged 132 years, and Mr. R. Bowman, of Irthington, who died June 13, 1823, aged 118 years. The oldest oak tree in Cumberland of which there is any record—a tree which had stood for 600 years in Wragmire Moss, Inglewood Forest—fell from natural decay on the day of Mr. Bowman's demise.

Cumberland is wholly in the diocese of Carlisle, with the exception of the wood of Allerdale-above-Derwent, in the diocese of Chester, and the parish of Alston, in that of Durham. It contains 104 parishes. It is comprehended in the province of York, and in the northern circuit. The assizes are held at Carlisle twice a-year. The principal coach roads in Westmoreland are the old mail road from Lancaster to Carlisle and Glasgow; and the road (formerly a mail road) through Stamford, Newark, Doncaster, and Greta Bridge, to Carlisle and Glasgow. There is a second road from Lancaster to Kendal, through Milnthorpe. Roads lead from Kendal south-westward to Ulverston and Dalton-in-Furness; westward to Bowness, and across Windermere by the ferry to Hawkshead, and Coniston Water in Furness, and to Egremont and Whitehaven in Cumberland; north-westward by Ambleside to Keswick, Cockermouth, and Workington, in Cumberland; north-eastward by Orton to Appleby, with a branch road to Kirkby Stephen to Brough; eastward to Sedbergh, and onwards to Yorkshire.

The railways in the district are, the Preston and Carlisle, the Kendal and Windermere, the Cockermouth and Workington, the Furness (between Fleetwood, Furness Abbey, Ulverston, Broughton, and the Lakes), the Maryport and Carlisle, Whitehaven Junction, and Whitehaven and Furness Junction (between Whitehaven, Ravenglass, Bootle, and Broughton).

Wordsworth, whose soul, as well as body, was identified with this district, says of the mountains of Westmoreland, that "in magnitude and grandeur they are individually inferior to the most celebrated of those in some other parts of the island; but in the combinations which they make, towering above each other, or lifting themselves in ridges like the waves of a tumultuous sea, and in the beauty and variety of their surfaces and colours, they are surpassed by none."

The lakes are numerous, beautiful, and extensive in size. Ulleswater is embosomed in the centre of mountains, of which Helvellyn forms part. The upper part of it belongs wholly to Westmoreland, while its lower part, on the border of Cumberland and Westmoreland, is about seven miles long, with an average breadth of half a mile. The higher portion of the lake is in Patterdale. Haweswater is formed by the expansion of the Mardale-beck; and all the larger affluents of the Eden, which join it on the left bank, rise on the northern slope of the Cumbrian ridge. The river Leven, which flows out of Windermere, belongs to Lancashire; but the Rothay, or Raise-beck, which drains the valley of Grasmere, the streams which

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drain the valleys of Great and Little Langdale, and the Trout-beck, which all flow into Windermere, and may be regarded as the upper waters of the Leven, belong to Westmoreland. Elterwater, Grasmere, and Rydal Water, are connected with the streams which flow into Windermere. This last-named lake has been described as situated in Lancashire; whilst in a county survey, and in the court rolls at Lowther Castle, it is included in Westmoreland. All the lakes, large and small, have some distinguishing feature of beauty. Their boundary lines are either gracefully or boldly indented; in some parts rugged steepes, admitting of no cultivation, descend into the water; in others, gently sloping lawns and rich woods, or flat and fertile meadows, stretch between the margin of the lake and the mountains. Tarns, or small lakes, are generally difficult of access, and naked, desolate, or gloomy, yet impressive from these very characteristics. Loughrigg Tarn, near the junction of the valleys of Great and Little Langdale, is one of the most beautiful.

The county of Westmoreland is divided between the dioceses of Carlisle and Chester. The parishes are only thirty-two in number. The population in 1841 was 56,454. Of monumental remains there are but few in the county. "Arthur's Round Table," near Eamont Bridge, is worthy of a visit, as well as other fragments, supposed to be druidical, in the same district. There are several ancient castles which will attract the attention of the antiquary, if he should be near, in his journeyings, to the site of any of them. The most conspicuous remnant of other days in Cumberland is the druidical temple near Kirkoswald, consisting of a circle of sixty-seven unhewn stones, called Long Meg and her Daughters.

A brief description of the leading towns within the Lake District will be useful.

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Kendal, as we have already stated, is about twenty miles by railway from Lancaster. It is a market-town, pleasantly situated on the slope of a hill rising from the river Kent; contains two churches, and several dissenting places of worship; the ruins of the old castle of the barons of Kendal; and a town-hall, the town being governed by a Corporation under the Municipal Reform Act.

The Kendal and Windermere Railway runs no farther than Birthwaite, which is nine miles from Kendal, two from Bowness, and five from Ambleside. From the railway terminus coaches and omnibuses meet all the trains in the summer, and convey passengers onwards to Bowness, Ambleside, and other places.

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Bowness is a picturesque village placed on the banks of Windermere, and contains an ancient church, with square tower, dedicated to St. Martin. In the churchyard are deposited the remains of the celebrated Bishop Watson, author of "The Apology for the Bible," he having resided at Calgarth Park, in the neighbourhood, for several years. In the vicinity are the residences of Professor Wilson (Elleray), the Earl of Bradford (St. Catherine's), and the Rev. Thomas Staniforth (Storrs Hall, formerly the residence of Colonel Bolton, of Liverpool, the intimate friend of the late Mr. Canning). From the school-house, which stands on an eminence, delightful views of Windermere, and other parts of the district, are seen to great advantage, Belle Isle, on the lake, appearing to be part of the mainland. This island is more than a mile in circumference, and comprises about thirty acres. We may add, that Storrs Hall, whilst occupied by Colonel Bolton, was frequently the retreat of many "choice spirits," Canning, Wordsworth, Southey, and Wilson, of the number. Mr. Bolton was a princely merchant of Liverpool, and Colonel of a Volunteer Regiment whilst England was in dread of French invasion. He was one of Mr. Canning's warmest political friends, and always took an active part in the electioneering contests for Liverpool in which Canning was engaged. Lockhart, referring to one of these "gatherings," says:—"A large company had been assembled at Mr. Bolton's seat in honour of the minister; it included Mr. Wordsworth and Mr. Southey. There was high discourse, intermingled with as gay flashings of courtly wit as ever Canning displayed. There were beautiful and accomplished women to adorn and enjoy this circle. The weather was as Elysian as the scenery. There were brilliant cavalcades through the woods in the mornings, and delicious boatings on the lake by moonlight; and the last day Professor Wilson ('the Admiral of the Lake,' as Canning called him) presided over one of the most splendid regattas that ever enlivened Windermere. The three bards of the lakes led the cheers that hailed Scott and Canning." Looking back on that bright scene, of which nothing now remains but a melancholy remembrance, Wilson remarks, "Windermere glittered with all her sails in honour of the Great Northern Minstrel, and of him the Eloquent, whose lips are now mute in dust. Methinks we see his smile benign—that we hear his voice—silver sweet."

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Windermere has been termed, not inaptly, the English Zurich. Before its diversified beauties were "married to immortal verse," it was the favourite resort of thousands who admired external nature. But the "Lake Poets," as Wordsworth, Southey, Coleridge and others were once derisively termed, have linked the Lake District with the language of the nation. Windermere Lake is eleven miles in length, and one mile in breadth. Numerous islands diversify its surface, one of which (Belle Isle) we have already referred to. Its depth in some parts is about 240 feet. "The prevailing character of the scenery around Windermere is soft and graceful beauty. It shrinks from approaching that wildness and sublimity which characterise some of the other lakes." It abounds with fish, especially char (*salmo alpinus*), one of the epicurean dainties.

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Ambleside, fourteen miles north-west of Kendal, is partly in Windermere, but chiefly in Grasmere parish. This is one of the favourite resorts of travellers in quest of pleasure. It has been compared to a delightful Swiss village, the town reposing in a beautiful valley, near the upper end of Windermere Lake; “no two houses being alike either in form or magnitude,” and the entire place laid out in a rambling irregular manner, adding to its peculiarity and beauty. The pretty little chapel which ornaments the place was erected in 1812, on the site of an older structure. The neighbourhood is studded with attractive villas; but the most interesting of the residences is that of the lamented Poet Wordsworth, at Rydal Mount.

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Rydal village is one mile and a quarter from Ambleside, and is planted within a narrow gorge, formed by the advance of Loughrigg Fell and Rydal Knab. Rydal Hall, the seat of Lady le Fleming, stands in the midst of a finely-wooded park, in which are two beautiful waterfalls, shown on application at the lodge. *Rydal Mount*, Wordsworth’s residence for many years, stands a little above the chapel erected by Lady le Fleming. Mrs. Hemans describes it as “a lovely cottage-like building, almost hidden by a profusion of roses and ivy.” “From a grassy mound in front, commanding a view always so rich, and sometimes so brightly solemn, that one can well imagine its influence traceable in many of the poet’s writings, you catch a gleam of Windermere over the grove tops.” “A footpath,” Mr. Phillips says, “strikes off from the top of the Rydal Mount road, and, passing at a considerable height on the hill side under Nab Scar, commands charming views of the vale, and rejoins the high road at White Moss Quarry. The commanding and varied prospect obtained from the summit of Nab Scar, richly repays the labour of the ascent. From the summit, which is indicated by a pile of large stones, eight different sheets of water are seen, viz., Windermere, Rydal, Grasmere, and Coniston Lakes, and Loughrigg, Easdale, Elterwater, and Blelham Tarns. The Solway Firth is also distinctly visible.” Knab, a delightful residence formerly occupied by De Quincy, “the English Opium Eater,” and by Hartley Coleridge, eldest son of Samuel Taylor Coleridge, is situated close by. In the walk from Ambleside to Rydal, should the tourist pursue his course along the banks of the Rothay, he will, having crossed the bridge, pass the house built and inhabited by the late Dr. Arnold, Master of Rugby School.

Grasmere Village is a short walk from Rydal, and only four miles from Ambleside. Wordsworth lived here for eight years, at a small house at Town End; here he wrote many of his never-dying poems; to this spot he brought his newly-wedded wife in 1822; and in the burial ground of the parish church are interred his mortal remains. Wordsworth quitted this sublunary scene, for a brighter and a better, on April 23, 1850. Gray once visited Grasmere Water, and described its beauties in a rapturous spirit. Mrs. Hemans, in one of her sonnets, says of it:—

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“----- Fair scene,
Most loved by evening and her dewy star!
Oh! ne’er may man, with touch unhallowed, jar
The perfect music of the charm serene!
Still, still unchanged, may one sweet region wear,
Smiles that subdue the soul to love, and tears, and prayer.”

A comfortable hotel has recently been opened, from which, as it stands on an eminence, a fine view is obtained; and at the Red Lion and Swan Inns every necessary accommodation for tourists may be had.

In the neighbourhood there is some delightful panoramic scenery. From Butterlip How and Red Bank the lake and vale are seen to great advantage. “The Wishing Gate,” about a mile from Grasmere, should be visited. It has been so called from a belief that wishes indulged there will have a favourable issue. Helm Crag, a singularly-shaped hill, about two miles from the inn, commands an extensive and delightful prospect; Helvellyn and Saddleback, Wansfell Pike, the upper end of Windermere, Esthwaite Water, with the Coniston range, and Langdale Pikes, are all distinctly visible. The Glen of Esdaile, marked by highly-picturesque features, lies in a recess between Helm Crag and Silver How, and the ascent commands fine retrospective views. Throughout this district the hills and dales are remarkably interesting, and offer numerous attractions to the tourist. Delightful excursions may be made from Grasmere into Langdale and Patterdale, and the ascent from Grasmere to the top of Helvellyn, to Langdale Pikes, and to Dunmail Raise will be events not easily to be forgotten. A heap of stones on the summit of Dunmail Raise marks the site of a conflict in 945 between Dunmail, King of Cumberland, and Edmund, the Saxon King. In descending this hill Thirlmere comes into view. Thirlmere lies in the Vale of Legberthwaite, and the precipices around it are objects of special admiration. The ascent of Helvellyn is sometimes begun at the foot of Thirlmere.

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Keswick is a market town, in the county of Cumberland, and parish of Crosthwaite, and is situated on the south bank of the Greta, in a large and fertile vale, about a mile from Derwent Water. Coleridge, describing the scene, says:—“This vale is about as large a basin as Loch Lomond; the latter is covered with water; but in the former instance we have two lakes (Derwent Water and Bassenthwaite Mere), with a charming river to connect them, and lovely villages at the foot of the mountain, and other habitations, which give an air of life and cheerfulness to the whole place.” The town consists only of one street, and comprises upwards of two thousand inhabitants. Some manufactures are carried on, including linsey-woolsey stuffs and edge tools. Black-lead pencils made here have acquired a national repute: the plumbago of which they are manufactured is

extracted from “the bowels of the earth,” at a mine in Borrowdale. The parish church, dedicated to St. Kentigern, is

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an ancient structure standing alone, about three-quarters of a mile distant, midway between the mountain and the lake. Within this place of worship the remains of Robert Southey, the poet and philosopher, lie buried. A marble monument to his memory has recently been erected, representing him in a recumbent position, and bearing an inscription from the pen of Wordsworth, his more than literary friend for many years, and his successor to the poet-laureate-ship. A new and beautiful church, erected at the eastern part of the town by the late John Marshall, Esq., adds much to the quiet repose of the scene. Mr. Marshall became Lord of the Manor by purchasing the forfeited estates of Ratcliffe, Earl of Derwentwater, from the Commissioners of Greenwich Hospital, to whom they were granted by the Crown. The town contains a well-stocked public library, purchased from funds left for that purpose by Mr. Marshall; two museums, containing numerous specimens illustrating natural history and mineralogy; and a model of the Lake District, made by Mr. Flintoff, and the labour of many years. The residence of the poet Southey (Greta Hall) is, however, perhaps the most interesting object in the neighbourhood to visitors. The house is situated on an eminence near the town. Charles Lamb, describing it many years since, says:—"Upon a small hill by the side of Skiddaw, in a comfortable house, quite enveloped on all sides by a nest of mountains" dwells Robert Southey. The poet himself, who delighted in his beautiful and calm mountain-home, and in the charming scenery by which he was surrounded, remarks:—"Here I possess the gathered treasures of time, the harvest of so many generations, laid up in my garner, and when I go to the window there is the lake, and the circle of mountains, and the illimitable sky." On another occasion, when dallying with the muse, he says, in his finely-descriptive verse:—

"'Twas at that sober hour when the light of day is receding,
And from surrounding things the hues wherewith the day has adorned them
Fade like the hopes of youth till the beauty of youth is departed:
Pensive, though not in thought, I stood at the window beholding
Mountain, and lake, and vale, the valley disrobed of its verdure;
Derwent retaining yet from eve a glassy reflection,
Where his expanded breast, then smooth and still as a mirror,
Under the woods reposed; the hills that calm and majestic
Lifted their heads into the silent sky, from far Glaramara,
Bleacrag and Maidenmawr to Grisedale and westernmost Wythop;
Dark and distant they rose. The clouds had gather'd above them,
High in the middle air huge purple pillow masses,
While in the west beyond was the last pale tint of the twilight.
Green as the stream in the glen, whose pure and chrysolite waters
Flow o'er a schistous bed, and serene as the age of the righteous.
Earth was hush'd and still; all motion and sound were suspended;
Neither man was heard, bird, beast, nor humming of insect.
Only the voice of the Greta, heard only when all is stillness."

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The scenery in the neighbourhood of Keswick is replete with beauty, and the numerous walks and rides possess brilliant attractions. Villas and prettily-built cottages add grace and quietness to the landscape. Gray, on leaving Keswick, was so charmed with the wonders which surrounded him, that he felt great reluctance in quitting the spot, and said, "that he had almost a mind to go back again." From the eminence near Keswick on which the Druidical circle stands a magnificent view is obtained of Derwentwater, Latrigg, Skiddaw, Helvellyn, Dunmail Raise, with the vale of St. John and the Borrowdale mountains.

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Buttermere stands near the foot of the lake, and by Seatoller is fourteen miles from Keswick. Taking the vale of Newlands by the way, the distance is much less. In the vicinity of Seatoller is the celebrated mine of plumbago, or black lead. "It has been worked at intervals for upwards of two centuries; but, being now less productive, the ore has been excavated for several years consecutively. This is the only mine of the kind in England, and there are one or two places in Scotland where plumbago has been discovered, but the lead obtained there is of an inferior quality. The best ore produced at the Borrowdale mine sells for thirty shillings a pound. All the ore extracted from the mine is sent direct to London before a particle is sold." Buttermere is a mere hamlet, comprising a small episcopal chapel, only a few farm-houses, with the Victoria and another inn for the accommodation of visitors. De Quincy, who has long been a resident of the Lake District, and a fervent admirer of its many beauties, describes this secluded spot as follows:—"The margin of the lake, which is overhung by some of the loftiest and steepest of the Cumbrian mountains, exhibits on either side few traces of human neighbourhood; the level area, where the hills recede enough to allow of any, is of a wild, pastoral character, or almost savage. The waters of the lake are deep and sullen, and the barren mountains, by excluding the sun in much of his daily course, strengthen the gloomy impressions. At the foot of this lake lie a few unornamented fields, through which rolls a little brook, connecting it with the larger lake of Crummock, and at the edge of this miniature domain, upon the road-side, stands a cluster of cottages, so small and few, that in the richer tracts of the island they would scarcely be complimented with the name of hamlet." The well-known story of Mary, the Beauty of Buttermere, with the beautiful poem describing her woes, entitled, "Mary, the Maid of the Inn," has given to the village a more than common interest. As the melancholy tale is told, Mary possessed great personal beauty, and, being the daughter of the innkeeper, she fulfilled the duty of attendant upon visitors to the house. Among these was a dashing young man who assumed the aristocratic title of the Honourable Colonel Hope,

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brother of Lord Hopeton, but whose real name was Hatfield, and who had taken refuge from the arm of the law in the secluded hamlet of Buttermere. Attracted by Mary's charms, he vowed love and fidelity to her, and she, in the guilelessness of her youth, responded to his overtures, and became his wife. Soon after her marriage her husband was apprehended on a charge of forgery—a capital crime in those days; he was convicted at Carlisle of the offence, and forfeited his life on the scaffold. Mary, some years afterwards, took to herself a second husband, a respectable farmer in the neighbourhood, with whom she lived happily throughout the remainder of her days. She died a few years ago amidst her native hills.

While in this district the tourist will derive pleasure from visiting Crummock Water, Lowes Water, and Wast Water.

A coach travels daily between Birthwaite (the terminus of the Kendal and Windermere railway,) and Cockermouth, connecting the Whitehaven and Maryport line with the former railway. By this or other conveyances Cockermouth may easily be visited, as well as Whitehaven, Maryport, *etc.*

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Cockermouth is a neat market-town, and sends two members to Parliament. The ancient castle was a fortress of great strength, but since the Civil Wars it has lain in ruins. Traces of a Roman castrum, with other antique remains, are to be seen in the neighbourhood. Wordsworth was a native of Cockermouth, and Tickell, the poet, and Addison's friend, was born at Bridekirk, two miles distant. Inns:—The Globe and Sun. Maryport is seven miles from the town, Workington eight miles, Keswick (by Whinlatter) twelve miles, by Bassenthwaite Water thirteen and a half miles, Whitehaven fourteen miles, Wigton sixteen miles, and Carlisle twenty-seven miles.

* * * * *

Whitehaven, a market-town and seaport, in Cumberland, near the cliffs called Scilly Bank, in the parish of St. Bees, contains about 16,000 inhabitants. The Lowther family have large estates around the town, with many valuable coal-mines. Coarse linens are manufactured in the place; and a large maritime and coal trade is carried on there. There is a spacious harbour, giving excellent accommodation to vessels within it. "The bay and harbour are defended by batteries, formerly consisting of upwards of a hundred pieces, but lately suffered to fall into decay. These batteries received extensive additions after the alarm caused by the descent of the notorious Paul Jones in 1778. This desperado, who was a native of Galloway, and had served his apprenticeship in Whitehaven, landed here with thirty armed men, the crew of an American privateer which had been equipped at Nantes for this expedition. The success of the enterprise

was, however, frustrated by one of the company, through whom the inhabitants were placed on the alert. The only damage they succeeded in doing was the setting fire to three ships, one of which was burnt. They were obliged to make a precipitate retreat, and, having spiked the guns of the battery, they escaped unhurt to the coast of Scotland, where they plundered the house of the Earl of Selkirk.” Among the principal residences in the neighbourhood of Whitehaven are, Whitehaven Castle, the seat of the Earl of Lonsdale, and Moresby Hall, built after a design by Inigo Jones.

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Inns.—Black Lion and Golden Lion.

* * * * *

St. Bees, in which parish Whitehaven is situated, is four miles to the south of Whitehaven. The church, dedicated to St. Bega, is an ancient structure, and is still in tolerable preservation. Until 1810 the chancel was unroofed, but in that year it was repaired, and is now occupied as a college, for the reception of young men intended for the church, but not designed to finish their studies at Oxford or Cambridge. The grammar-school adjacent was founded by Archbishop Grindal. Ennerdale Lake is nine miles to the east of Whitehaven, from which town it is easily reached.

* * * * *

Maryport is a modern seaport on the river Ellen. The town is advancing in prosperity, and the population rapidly increasing: an excellent maritime trade is carried on between Maryport, Liverpool, Dublin, and other places. The village of Ellenborough, from which the late Lord Chief Justice Law derived his title, is in the vicinity of the town.

* * * * *

Workington stands on the south bank of the Derwent. Workington Hall afforded an asylum to Mary Queen of Scots when she visited the town.

* * * * *

Penrith, an ancient market town, containing about 7000 inhabitants, is on the line of the Preston and Carlisle railway. The ruins of the Castle, supposed to have been erected by Neville, Earl of Westmoreland, overlook the town from the west. It is built of the red stone of the district, and has suffered much from the action of the weather. The court is now used as a farm-yard. The parish church, dedicated to St. Andrew, is a plain structure of red stone. There are several ancient monuments within the church; and in the south windows are portraits of Richard, Duke of York, and Cicely Neville, his wife, the parents of Edward IV. and Richard *iii*. In the churchyard is a monument called the "Giant's Grave," said to be the burial-place of Owen Caesarius, who was "sole king of rocky Cumberland" in the time of Ida. Not far distant is another memorial, called the "Giant's Thumb." Sir Walter Scott, on all occasions when he visited Penrith, repaired to the churchyard to view these remains. The new church, recently built at the foot of the Beacon Hill, is in the Gothic perpendicular style of architecture. "The Beacon," a square stone building, is erected on the heights to the north of the town. "The hill upon which the beacon-tower stands," we are informed by Mr. Phillips, "is one of those whereon fires were lighted in former times, when animosities ran high between the English and the Scotch, to give warning of the approach of an enemy. A fiery chain of communication extended from the Border, northwards as far as Edinburgh, and

southwards into Lancashire. An Act of the Scottish Parliament was passed, in 1455, to direct that one bale should signify the approach of the English in any manner; two bales that they were coming indeed; and four bales that they were unusually strong. Sir Walter Scott, in his “Lay of the Last Minstrel,” has given a vivid description of the beacons blazing through the gloom like ominous comets, and startling the night:—

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"A score of fires
From height and hill and cliff were seen;
Each with warlike tidings fraught,
Each from each the signal caught,
Each after each they glanced to sight
As stars arise upon the night."

The antiquities in the neighbourhood are numerous and interesting; and the prospects from the heights are extensive and picturesque. Ulleswater, Helvellyn, Skiddaw, Saddleback, some of the Yorkshire hills, and Carlisle Cathedral can be distinctly seen on a clear day. *Brougham castle* is situated one mile and three-quarters from Penrith. It was one of the strongholds of the great Barons of the Borders in the feudal times. At present it is in a very decayed state, but still is majestic in its ruins. Its earliest owner was John de Veteripont, from whose family it passed by marriage into the hands of the Cliffords and Tuftons successively, and it is now the property of Sir John Tufton. Tradition records, but on what authority we know not, that Sir Philip Sidney wrote part of his "Arcadia" at this baronial mansion. Wordsworth's "Song at the Feast of Brougham Castle" is one of his noblest lyrical effusions. "The Countess's Pillar," a short distance beyond the castle, was erected in 1656 by Lady Anne Clifford, as "a memorial of her last parting at that place with her good and pious mother, Margaret, Countess Dowager of Cumberland, the 2nd of April, 1616, in memory whereof she has left the annuity of 4 pounds, to be distributed to the poor, within the parish of Brougham, every 2nd day of April for ever, upon a stone hereby. Laus Deo." This was the Lady Anne Clifford of whom it was said by the facetious Dr. Donne, that she could "discourse of all things, from predestination to slea silk." Her well-known answer, returned to a ministerial application as to the representation of Appleby, shows the spirit and decision of the woman:—"I have been bullied by an usurper (the Protector Cromwell), I have been neglected by a Court, but I'll not be dictated to by a subject—your man shan't stand!"

About two miles from Penrith is the curious antique relic called Arthur's Round Table, already referred to. It is a circular area above twenty yards in diameter, surrounded by a fosse and mound. Six miles north-east of Penrith are the ancient remains, Long Meg and her Daughters. *Dacre castle* is situated five miles west-south-west of Penrith. *Brougham hall*, the seat of Henry, Lord Brougham and Vaux, stands on an eminence near the river Lowther, a short distance from the ruins of Brougham Castle. It has been termed, from its elevated position and the prospects it commands, "The Windsor of the north." The mansion and grounds are exceedingly beautiful, and will repay the tourist for his visit thereto. *Lowther castle*, the residence of the Earl of Lonsdale, is in the same district, and is one of the most princely halls in the kingdom, erected in a park of 600 acres.

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Hackthorpe Hall, a farm-house, is contiguous, and was the birth-place of John, first Viscount Lonsdale. Shap (anciently Heppe), a long straggling village in the vicinity, and near which is a station on the Preston and Carlisle Railway, has derived some note from the elevated moors close by, known by the name of Shap Fells. Shap Spa, in the midst of the moors, attracts crowds of visitors during the summer season. The spring is said to yield medicinal waters similar to those of Leamington.

Inns.—Greyhound, and King's Arms.

In closing this rapid sketch of the Lake District we may add, that the leading mountains in Cumberland and Westmoreland are thirty-five in number; the passes, five; the lakes, eighteen; and the waterfalls, twelve. "*Wanderings among the lakes*," a companion volume to this, now in preparation, will form a useful illustrated guide to their most remarkable features.

HOME.

Following that plan of contrasts which travellers generally find most agreeable, we should advise that tourists, taking their route southward, will avail themselves of the North Staffordshire lines to visit two of the most beautiful mansions, if they were foreign we should say palaces, in England—Alton Towers, the seat of the Earl of Shrewsbury, and Trentham Hall, the seat of the Duke of Sutherland, and conclude by investigating the Porcelain Manufactories, which, founded by Wedgwood, are carried on with excellent spirit and taste by a number of potters, among whom Alderman Copeland and Mr. Herbert Minton are pre-eminent.

Alton Towers stand near Cheadle, on the Churnet Valley Line; Trentham Hall not far from Stoke.

A day may be pleasantly spent in examining the elaborate gardens of Alton, which are a magnificent specimen of the artificial style of landscape gardening. Mr. Loudon gives a very elaborate description of them in his large work on the subject of gardens to great houses.

At Cheadle the Earl of Shrewsbury has erected at his own expense, Mr. Pugin being his architect, a small Roman Catholic Church, which is a magnificent specimen of that gentleman's taste in the "decorated" style. "Heraldic emblazonments, and religious emblems, painting and gilding, stained glass, and curiously-wrought metal work, imageries and inscriptions, rood loft and reredos, stone altar and sedilia, metal screenwork, encaustic paving, make up the gorgeous spectacle."



The doors of the principal entrance are painted red, and have gilt hinges fashioned in the shape of rampant lions spreading over nearly their entire surface.

In one of the canopied niches is a figure, representing the present Earl of Shrewsbury kneeling, with a model of the church in his hand as the founder, with his "patron," St. John the Baptist, standing behind him.

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This Cheadle Church, in which Mr. Pugin has had full scope on a small scale for the indulgence of his gorgeous faith and fancies, reminds us that at Oscot College, within sight of the smoke of Birmingham and Wolverhampton, towns where the best locks, clasps, hasps, bolts, and hinges can be made; the doors and windows, in deference to Mr. Pugin's mediaeval predilections, are of the awkward clumsy construction with which our ancestors were obliged to be content for want of better. On the same principle the floors ought to have been strewn with rushes, the meat salt, the bread black rye, and manuscript should supersede print. But it is not so, there is no school in the kingdom where the youth are better fed, or made more comfortable than at Oscot.

Trentham has a delicious situation on the Trent, which forms a lake in the park, inhabited by swans and monstrous pike. The Hall used to be one of the hideous brick erections of the time of pigtails and laced waistcoats,—the footman style of dress and architecture. But the genius of Barry (that great architect whom the people on the twopenny steamboats seem to appreciate more than some grumbling members of the House of Commons) has transformed, without destroying it, into a charming Italian Villa, with gardens, in which the Italian style has been happily adapted to our climate; for instance, round-headed laurels, grown for the purpose, taking the place of orange trees.

This Trentham Hall used to be one of the magical pictures of the coach road, of which the railway robbed us. For miles before reaching it, we used to look out for the wooded park, with its herds of mottled deer, and the great lake, where the sight of the swans always brought up that story of the big pike, choked like a boa, with a swan's neck. A story that seems to belong to every swan-haunted lake.

But what one railway took from us another has restored much improved. So we say to all friends, at either end of the lines, take advantage of an excursion, or express train, according to your means, and go and see what we cannot at this time describe, and what exceeds all description. For the hour, you may enjoy Trentham Hall as much as if it were your own, with all the Bridgwater Estates, Mines, Canals, and Railways to boot. And that is the spirit in which to enjoy travelling. Admiration without envy, and pity without contempt.

From Trentham you may proceed through the Potteries. You will find there a church built, and we believe endowed, by a manufacturer, Mr. Herbert Minton. And then you may have a choice of routes. But to London the most direct will be by Tamworth and Lichfield, on the Trent Valley line.

To those who look below the surface, who care to know something about the workman as well as the work, such a tour as we have traced could not fail to be of the deepest interest. It embraces the whole course of the emigration from low wages to higher that is constantly flowing in this country. New sources of employment daily arising in mines, in ports, in factories, demand labour; to supply that labour recruits are constantly marching from the country lane to the paved city.

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The agricultural districts of Staffordshire have a population of under two hundred souls per square mile. The pottery and iron districts of the same county of over seven hundred. These swarms of men are not had where they labour, they are immigrants. Take another instance, in Kent and Devonshire, the wages of farm labourers are eight to nine shillings a-week. In North Cheshire they are fifteen. The cost of living to the labourer in both places is about the same; fuel is cheap in Cheshire. What makes the difference in the demand for labour in Cheshire but the steam-engines?

Towns must be prepared to lodge decently, and educate carefully, children of rural immigrants, or woe betide us all. It is education that has saved the United States from the consequences of the tide of ignorant misery daily disembarking on the Atlantic shores.

Sometimes we hear fears for the condition of farmers under manufacturer landlords. Those who express these fears must have travelled with their ears shut. More than seventy per cent. of the great landowners in the great travelling counties are manufacturers, or merchants, or lawyers, by one or two descents. In Lancashire, Cheshire, Yorkshire, or Warwickshire, examine closely, and you will find it so. As a general rule, a rich pawnbroker retired will make a better landlord than a poor baronet. But in this country two generations will make one of the baronet's sons a successful shopkeeper, and the pawnbroker's a baronet, or even a peer.

"I tell you what, sir," said a talkative stud groom once, in charge of race horses for Russia, and travelling first class, "I've been in Petersburg, in Vienna, and in Berlin, and I lived ten years with the Earl of ——. For all the points of blood our aristocracy will beat any of these foreign princes, counts, and dukes, either for figure or for going; but it won't do to look into their pedigree, for the crosses that would ruin a race of horses, are the making of the breed of English noblemen."

Here our irregular imperfect guidance ceases. Perhaps, although deficient in minuteness of detail, this pot pourri of gossip, history, description, anecdote, suggestion, and opinion, may not only amuse the traveller by railway, but assist him in choosing routes leading to those scenes or those pursuits in which he feels an interest.

NOTES.

{67} The operation of this personal influence on the individual boys with whom he was brought into contact, was much assisted by the system which about this time began to prevail at public schools, of giving each boy a small room called "a study" of his own, in which he might keep his books, and where he could enjoy privacy. The writer, who was at a public school both when all the boys lived in one great school-room in which privacy was impossible and after the separate studies were introduced, would wish to record his earnest conviction of the advantage

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of the present plan of separate studies,—of the vital influence it has on the formation of character, no less than of habits of study in the young. He can well remember how every better impression or graver thought was effaced, often never to return, as the boy came out from the master's room or from reading a letter from home, and was again immersed in the crowd and confusion of the one common school-room of such a school as Winchester. He would here venture to suggest that the plan of separate sleeping-rooms, like those in the model lodging-houses, would present equal advantage with that of separate studies, and might be introduced at little expense in public schools. It has already been introduced in the Roman Catholic College at Oscot.

{71} He appeared, in religious feeling, to approach the Evangelical party at more points than any other; pungently describing them, nevertheless, when he said—"A good Christian, with a low understanding, a bad education, and ignorance of the world, becomes an Evangelical." He appears to have died before he came to the application of the rules of German criticism (in which he followed Niebuhr in history) to theological subjects. It is curious to speculate on what the result would have been in the mind of this ardent Anglo-Protestant and lover of truth.

{81} These letters, full of information and suggestion, are attributed to Charles Mackay, Esq., LL.D., the well-known poet and prose writer.

{113} We were happy to find, while these sheets were passing through the press, that the Birmingham Corporation have introduced a Bill for absorbing the petty commissionership of the suburbs, which, once distant villages, now form part of the borough; and that they seek for power to compel efficient drainage and ample supply of water. To do all this will be expensive, but not extravagant; nothing is so dear to a town as dirt, with its satellites, disease, drunkenness, and crime. We sincerely trust that the Corporation will succeed in obtaining such ample powers as will render thorough drainage compulsory, and cause clean water to be no longer a luxury. Some of the opposition call themselves Conservatives. In this instance it means of dirt, fees, and bills of costs.

{125a} 1 Eliz., c.15.

{125b} Edited by the Rev. Montgomery Maherne.

{126} "Touchinge an anvyle wch he did sett for a yere. The bargayne is witnessed by two persons, viz., John Wallis Clerke, minister of Porlocke, and John Bearde of Selworthy, who sayeth that about our Lady-day last past, R. H. did sell to heire the said anvyle to the said Thomas Sulley at a rent of iii.s. iiij.d. for the yere."

{127} Showing that the manufactory of muskets had then commenced in England, contrary to Hutton's statement, see p.85 ante.

{130} The best way to Wednesbury is by an iron Canal Boat, drawn by horses, at ten miles an hour. The Inn is the Royal Oak, kept by a droll character. The event of his life is having seen the Duke of Wellington driving over Westminster Bridge in a curricule. To obtain a good view, as the horses went slowly up the ascent, he caught hold of a trace and hopped backwards for twenty yards with his mouth open.

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{138} See Cathrall's Wanderings in North Wales.

{144} See Heberts on Railroads, p.19.

{151} We may add that, in 1850, about 160,000 emigrants embarked from the port chiefly for the United States, employing 600 large vessels of 500,000 tons.

{159} The Earl of Derby has died while these sheets were passing through the press.

{172} At the Great Exhibition of Industry of 1851, Mr. G. Wallis, at the suggestion of the Board of Trade, had the management and arrangement of the department of manufactures.

{193} Mr. Francis Fuller, whose plan of management on this estate affords a model for both English and Irish landowners, is the gentleman, who, after taking most active and vigorous means, in co-operation with Mr. Scott Russell and Mr. Henry Cole, for bringing before the public Prince Albert's plan of a Great Exhibition of Industry of All Nations, alone saved the whole scheme from being abandoned before it was made public, by finding contractors in Messrs. Mundays to advance the 100,000 pounds, and who did actually advance 21,000 pounds, without which the President of the Board of Trade refused to issue the Royal Commission, on which the whole success of the scheme rested. Until the scheme was safely launched, Mr. Fuller, as a Member of the Executive Committee, devoted his time, and freely expended his money, for the purpose of supporting this great undertaking. When it was fairly launched the care of his important business, of which Middleton forms a very small part, occupied the greater part of his time, and hence his name has appeared less in conjunction with that splendid triumph of Industry than those of other gentlemen.

{209} A little boy undergoing the operation of being flogged, in the manner that Mother Hubbard performed the deed before sending the children to bed.

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