

MANUFACTURING INDUSTRY IN IRELAND.

BY MR. COMMISSIONER MAC CARTHY, DUBLIN.

EVERY prosperous community has "three strings to its bow"—agriculture, manufactures, and commerce. Whatever or whoever is to blame for it, all three have gone wrong in Ireland.

The rectification of the system under which agricultural industry was pursued naturally and properly claimed first attention. But it may fairly be assumed

the reader's attention—that of the manufacturing industry of Ireland, without the successful prosecution of which agriculture under any system must fail, and politics of all parties must be impotent, the true supplement of agriculture, the true concomitant of peasant proprietorship.

Without in the least deprecating the attention devoted to the agricultural industry of Ireland, the conditions under which it was pursued, and the legislative reforms needed for its revival, I am of opinion that permanent prosperity can be achieved only by that diversification of

industries which has led to prosperity elsewhere.

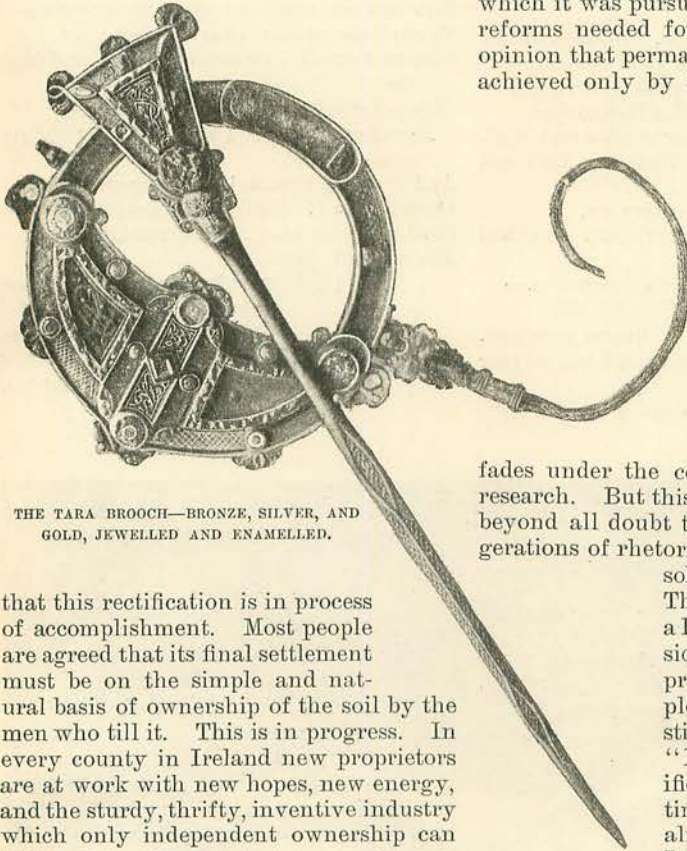
Poets and rhetoricians have in their usual free and easy way exaggerated the material prosperity of ancient Ireland. Much of the splendor attributed to Keltic kings and bishops and bards

fades under the cold light of historical research. But this very research has put beyond all doubt that beneath the exaggerations of rhetoric and song there lay a

solid substratum of truth. Thus the publication by a Parliamentary commission of the immense and previously almost unexplored mass of legal institutes known as the "Brehon Laws" has verified the fact that at a time when Britons were almost naked savages the Irish Keltic were clad in

woollens and linens of their own manufacture. The Brehon laws abound with references not only to woollen and linen goods, but to carding, weaving, dyeing, and the other processes of their manufacture.* Again, in the remarkable metrical account of the rights of the monarchs of Ireland and of the provincial kings, attributed to a contemporary of St. Patrick, and known as the *Book of Rights*, we

* Vol. i., pp. 151-3; vol. ii., p. 395, etc.

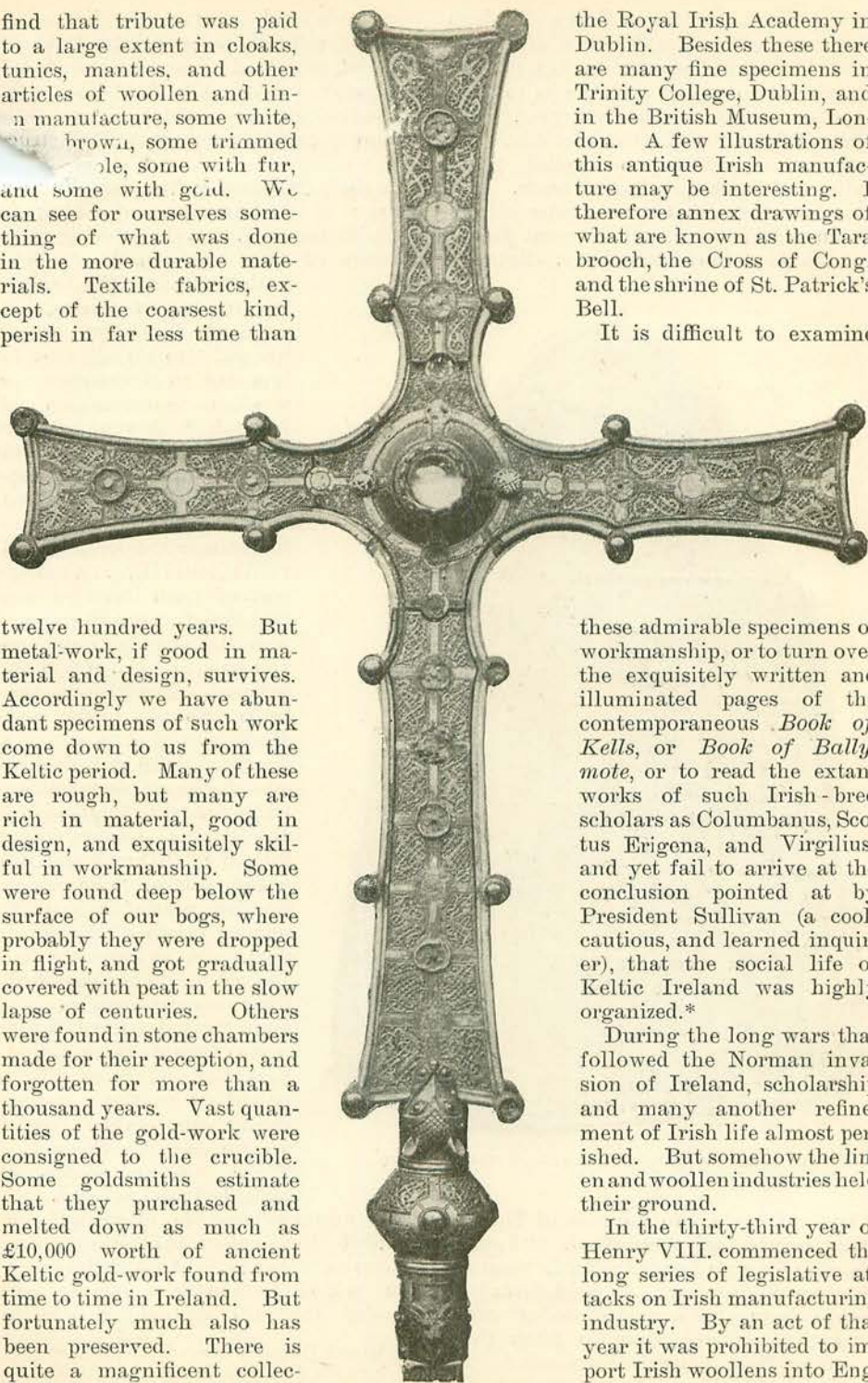


THE TARA BROOCH—BRONZE, SILVER, AND GOLD, JEWELLED AND ENAMELLED.

that this rectification is in process of accomplishment. Most people are agreed that its final settlement must be on the simple and natural basis of ownership of the soil by the men who till it. This is in progress. In every county in Ireland new proprietors are at work with new hopes, new energy, and the sturdy, thrifty, inventive industry which only independent ownership can give.

Having been honored by successive governments with the great trust of assisting in the rectification of the system under which agricultural industry was pursued in Ireland, I am precluded from discussing it, and my judicial position renders it impossible for me to touch any question of party politics. But quite distinct from the sphere of my duties, and far outside the region of party politics, lies a great subject to which I wish to invite

find that tribute was paid to a large extent in cloaks, tunics, mantles, and other articles of woollen and linen manufacture, some white, some brown, some trimmed with ermine, some with fur, and some with gold. We can see for ourselves something of what was done in the more durable materials. Textile fabrics, except of the coarsest kind, perish in far less time than



twelve hundred years. But metal-work, if good in material and design, survives. Accordingly we have abundant specimens of such work come down to us from the Keltic period. Many of these are rough, but many are rich in material, good in design, and exquisitely skilful in workmanship. Some were found deep below the surface of our bogs, where probably they were dropped in flight, and got gradually covered with peat in the slow lapse of centuries. Others were found in stone chambers made for their reception, and forgotten for more than a thousand years. Vast quantities of the gold-work were consigned to the crucible. Some goldsmiths estimate that they purchased and melted down as much as £10,000 worth of ancient Keltic gold-work found from time to time in Ireland. But fortunately much also has been preserved. There is quite a magnificent collection of works in gold, silver, and bronze in the museum of

the Royal Irish Academy in Dublin. Besides these there are many fine specimens in Trinity College, Dublin, and in the British Museum, London. A few illustrations of this antique Irish manufacture may be interesting. I therefore annex drawings of what are known as the Tara brooch, the Cross of Cong, and the shrine of St. Patrick's Bell.

It is difficult to examine

these admirable specimens of workmanship, or to turn over the exquisitely written and illuminated pages of the contemporaneous *Book of Kells*, or *Book of Ballymote*, or to read the extant works of such Irish-bred scholars as Columbanus, Scotus Erigena, and Virgilius, and yet fail to arrive at the conclusion pointed at by President Sullivan (a cool, cautious, and learned inquirer), that the social life of Keltic Ireland was highly organized.*

During the long wars that followed the Norman invasion of Ireland, scholarship and many another refinement of Irish life almost perished. But somehow the linen and woollen industries held their ground.

In the thirty-third year of Henry VIII. commenced the long series of legislative attacks on Irish manufacturing industry. By an act of that year it was prohibited to import Irish woollens into Eng-

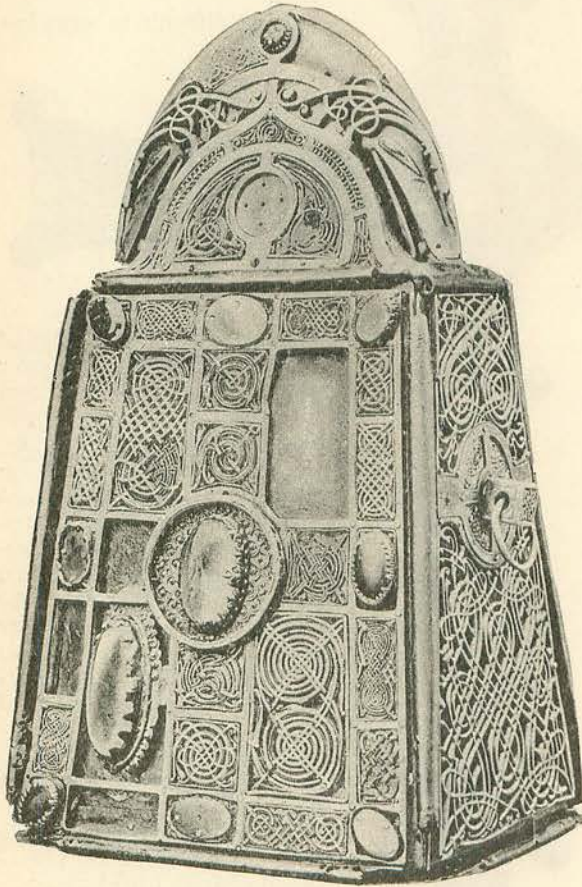
* Introduction to O'Curry's lectures, p. 17.

THE CROSS OF CONG—BRONZE, SILVER, AND GOLD, JEWELLED.

land. The thirteenth of Queen Elizabeth followed in the same direction, after a recital that it had been the practice of Irish merchants to export such goods to England for more than a hundred years. Thus severed from the English markets, Irish woollen manufacturers applied themselves to develop their foreign trade. This was done with great success, especially in Spain and Portugal, and the great American colonies of these kingdoms. But with

were prohibited export to foreign countries. Strafford's successor, the Duke of Ormond, mitigated these enactments by successful development of a home trade. But in the closing years of the seventeenth century came the final measures of destruction.

In reply to addresses from both English Houses of Parliament complaining to King William III. that the growing manufacture of cloth in Ireland interfered with the trade of the English woollen manufacturers, that monarch formally pledged himself "to do all that in him lay to discourage the woollen manufactures of Ireland."* Accordingly, by the Irish statute known as 10 William III., c. 5, prohibitive duties were put on Irish woollens. By the English statute known as 10 and 11 William III., c. 10, the export of Irish woollens was prohibited. Armed cruisers were stationed in Irish ports and seas to enforce this enactment. The Irish woollen trade was put under such disabilities that it was not worth while to manufacture even for home consumption, while export to England and abroad was absolutely prohibited.† "Thus," said Edmund Burke, "the whole woollen trade of Ireland, the natural staple of that kingdom, was deliberately destroyed."‡ The result of these measures was ruinous. Dean Swift described, in passages of great power and pathos, the sufferings of his neighbors in the manufacturing quarters of Dublin known as "The Coombe."§ There was an exodus of skilled Irish artisans. A



THE SHRINE OF ST. PATRICK'S BELL.—SILVER, JEWELLED.

great number went to Germany, and founded the celebrated manufacture known as "Saxony." Another large section settled in northern France, and founded the still flourishing woollen

Charles I. came the iron rule of Thomas Wentworth, Earl of Strafford. "I am of opinion," wrote Lord Strafford, "that all wisdom advises us... to hold them [the Irish] from the manufacture of wool, and thus enforce them to fetch their clothing from hence" (England).* Accordingly Irish woollen manufacturers

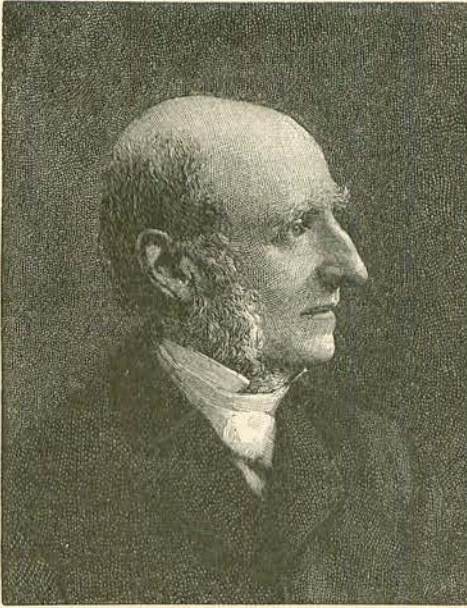
* Cooper's *Strafford*, vol. i., p. 185.

* English Commons Journal, ii., p. 241.

† Froude's *English in Ireland*, vol. i., p. 265.

‡ *Parliamentary Debates*, vol. xv., p. 181.

§ Swift's works, Scott's edition, vol. vii., p. 195.



JOHN GRUBB RICHARDSON.

manufactures of Abbeville, Amiens, and Rouen.* More than twenty thousand emigrated to America, where they helped to build up the great republic of the West.†

Other Irish industries followed the fate of the Irish woollen trade, the only notable exception being the linen trade of Ulster and the butter trade of the South.

In 1779 and 1780 these shamefully unjust restrictions were removed. Shrewd observers feared, and distinguished politicians prophesied, that after the lapse of so long a time the traditions of manufacturing industry would have been lost. But it was not so. The deserted "Coombe" soon became populous and busy again. Woollen manufactures sprung up in Cork, Bandon, and Clonakilty. Cotton manufacture sprung up in Drogheda. Poplin manufacture sprung up in Dublin. Irish tabinets were worn in every court in Europe. Paper-making, glass-making, and pottery, ship-building and carriage-building—these and a score of other manufactures were either revived or created. Palatial residences arose in Dublin. Canals opened up much of the country. Handlooms supplemented agricultural earnings. The spinning-wheel sped in thou-

sands of cottages. A prospect of manufacturing prosperity seemed to open. But this revival was of short duration. Retrogression began at the commencement of the nineteenth century in most Irish industries, and was accelerated in 1815 by the fall in prices and other financial disasters which in Ireland followed the cessation of European war. It was further accelerated by the competition of foreign countries, which resulted from increased facilities of transit, and by the introduction into England, Scotland, and Europe of improved machinery and processes. Whatever or whoever is to blame, the fact is that manufacturing industry, with two or three exceptions, almost died out. The woollen manufactures became almost extinct. Workshops and mills closed. There was another exodus of artisans. The "Coombe" was once more deserted. When the great famine was over, almost the only manufactures that survived were those of linen, of butter, and of whiskey.

The first place amongst the existing Irish manufacturing industries belongs to the linen manufacture.

The disruption of the cotton manufacture consequent on the American civil war brought a vast accession of business to Ulster. With the cessation of the war



NICHOLAS MAHONY.

* *Wools and Woollens*, by S. A. Gill and Son, Dublin, p. 74.

† *English in Ireland*, vol. ii., p. 245.



BARONESS BURDETT-COUTTS.

and the renewal of the cotton trade a reaction set in. The Ulster linen manufacturers, both spinners and weavers, have since had many troubles, and they have them still. But they have still the energy, the industry, and the adaptive power which have placed their country at the head of the linen trade of the world. They have over 800,000 spindles at work, while England has only 117,000, and Scotland 220,000. They have 22,000 power-loom, while England has only about 4000. The volume of their trade is estimated at no less than twelve million pounds sterling. It is a drawback to their success that they have to pay more than three millions a year for flax grown abroad, and this in a country especially adapted by soil and climate for the successful growth of flax.*

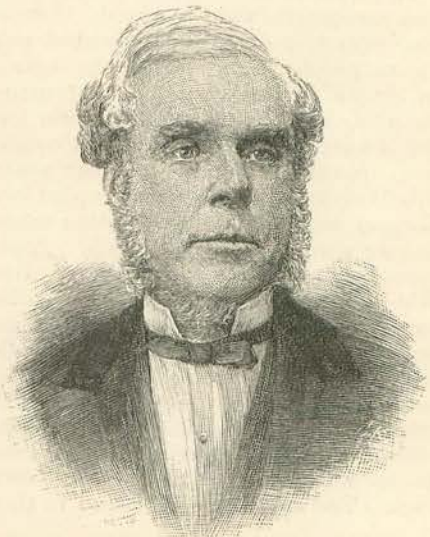
Mr. John Grubb Richardson, of Besbrook, is a type of the highest class of those "captains of industry" who have made the Ulster linen trade what it is. The Besbrook manufactory in Armagh was commenced in 1846 by the father of Mr. John Grubb Richardson. Its site and accessories were developed in 1867 by the purchase of Lord Charlemont's adjoining

* *Ireland, Industrial, etc.*, by J. N. Murphy, p. 34; also Dennis's *Industrial Ireland*, p. 97.

estate. It has grown ever since under the able management of Mr. John Grubb Richardson, Mr. James N. Richardson, formerly M.P. for Armagh, Mr. Wakefield Richardson, Mr. Harris, and Mr. Barcroft. It has at work 22,000 spindles, 400 power-loom, and 960 hand-loom. Its linens, and especially its damasks, enjoy a worldwide reputation. The sale is chiefly to the trade, who export Besbrook goods to all parts of the world. The concern employs 4000 people, and disburses in wages £80,000 a year. A town of 450 houses has grown up around it. In this town there is no police station, and not even a policeman. There is no workhouse, and not even a pauper. There is no public-house, and no sale of intoxicating drink. But there are churches for the three denominations, excellent schools, a town-hall, a library, a hotel, a club, a dispensary, a resident physician, a savings-bank, a post-office, and several shops. It is, in fact, a kind of Irish "Pullman City."

Turning now to the Irish woollen trade, such of my readers as have followed me hitherto in noting the changeable fortunes of what President Sullivan calls "this indigenious and ineradicable woollen industry,"* will have observed that it

* Introduction to the Catalogue of the Cork Exhibition, p. 15.



JOHN O'SULLIVAN.

appeared to have finally perished in the new "great famine" of 1847. But it had a birth at Blarney, in the county of Cork, in 1856. In the last century the then proprietor, Mr. St. James St. John Jeffrey, started a flax factory; and it was at Blarney (not, as is usually supposed, at Belfast) that the first machinery was set up in Ireland for spinning flax yarns. Large quantities of these machine-spun yarns were woven into cloth and sent to Portugal to clothe the British army in the lines of Torres Vedras. Out of this historical flax-mill has arisen the present great woollen factory of Martin Mahony Brothers, in which power-loom for weaving flannels and tweed looms with boxes were first employed in Ireland.* In 1862 further improvements were acutely observed in the London Exhibition, and were promptly adopted. The Irish broadcloth trade was practically commenced.† The famous "Blarney tweeds" were produced, which now compete successfully in the markets of the world with the choicest fabrics of Scotland, and are fashionable wear in New York and in Melbourne, in London, in Paris, and in Vienna. They are of the finest wool and perfect finish. The factory covers four acres, employs 700 hands, keeps going 12,000 spindles, and disburses £20,000 a year in wages. A village of nearly a hundred well-built houses surrounds the factory, and comprises a population of more than 1500. A co-operative store, a dining-hall, a reading-room, and a school supply the various wants of the inhabitants. The whole owes its prosperity to three able and energetic men. Martin Mahony, the head of the firm, was said to be the best judge of wool in the United Kingdom. Nicholas Mahony superintended the manufacture. Timothy Mahony developed the trade. All were men of rare intelligence, of sterling integrity, of indomitable energy. Martin has passed away. Nicholas and Timothy are rich in wealth, in honors, and in achievements. No nobler captain of industry was ever bred on Irish soil.

But this great Blarney factory was only the pioneer of the revival of woollen manufacture in Ireland. Messrs. Hill,

* Dr. Sullivan's Introduction, etc., p. 15.

† Hand-book to the Irish Section of the Manchester Exhibition, p. 14.



THE REV. CHARLES DAVIS.

of Lucan, near Dublin, commencing with only eight looms, have now a fine factory and well-deserved prosperity. Other factories sprang into existence at Navan and Athlone. An interesting little factory was created at Kilmacthomas, in the County Waterford, by Lady (now Dowager Marchioness of) Waterford, for the purpose of giving employment on her husband's estate. The present marquis munificently expended £10,000 in buildings and machinery. Its tweeds sell well, and its hands earn good wages by good work. Messrs. O'Brien Brothers have recently erected a factory at Douglas, near Cork, which already employs 300 hands, and can scarcely keep abreast of its orders. The Irish Woollen Manufacturing and Export Company, of Dublin, is doing excellent work by providing markets abroad, and especially in America, for Irish woollen goods.* On the whole, one may reasonably anticipate a prosperous future for the woollen trade of Ireland.

Let us now turn to another great indigenous industry, that of butter manufacture. The soil and climate of Ireland have serious deficiencies, but they are simply perfect for the production of good

* The Irish Woollen Manufacturing and Export Company, 2 Ussher's Quay, Dublin.



SIR HOWARD GRUBB, F.R.S.

butter. The very excess of moisture produces herbage which yields the soundest and sweetest butter in the world. To this natural advantage it adds the commercial facilities afforded by close proximity to the wealthiest of all butter-consuming countries, easy access to the greatest shipping ports, and the benefit of low freights and rapid communication with all countries.* For nearly two hundred years the city of Cork has been the headquarters of this industry. More than a hundred years ago its butter merchants established a market of which Ireland may be justly proud. The merchants being for the most part Catholics, their Continental connections proved serviceable for mercantile purposes; and even the penal laws were advantageous in giving them cousins and friendly correspondents in France, in Spain, in Portugal, and in Brazil. They had the far greater advantage of commercial honesty. The "brand" of the Cork butter market was accepted as a guarantee of excellence in London and in Lisbon, in the Mauritius and in Rio Janeiro. The annual output rose to more than four hundred thousand firkins, or fourteen thousand tons.

But in butter, as in greater things,

* See these advantages well elucidated in I. I. Clanchip's *Irish Butter Trade*. Guy and Company, Cork.

"the old order changeth." While, for various reasons, for which all concerned are more or less to be blamed, and are also more or less to be pitied, Irish agriculture declined, the agriculture, and especially the dairy farming, of other countries improved. In other countries the state intelligently fostered such improvement. In Ireland the state did nothing effectual in this direction. The increased facilities of transit made Normandy more accessible to London than Munster, and made Denmark as accessible as Ireland. The taste of the consumers changed with the times, but the Cork merchants were slow to adapt themselves to such changes. For these and other reasons it came to pass that the good and honest, but dirty and clumsy, Cork firkin could not hold its ground against the dainty rolls of Normandy and the hermetically sealed tins of Denmark. The well-salted butter that delighted King George IV. was set aside for the fresh or lightly salted butters of modern taste. The Cork merchants were losing their hold on the vast and rich butter-consuming population of Great Britain. They were being driven one by one from the foreign markets in which they had almost a monopoly. The outlook was serious, not only for the butter merchants of Cork, but for the dairy farmers of Ireland. The pioneer of reform was Mr. John O'Sullivan, of the firm of C. and J. O'Sullivan, of Cork. He saw the necessity for adapting the quality and form of the supply to the changed requirements of the demand, and his clear commercial insight was backed by sturdy personal pluck. He developed a vast trade, which he still conducts, with the assistance of his sons, one of whom (Sir Daniel O'Sullivan) was for several years Mayor and Sheriff of Cork. The reform thus commenced was followed up with energy and sagacity by Mr. Timothy Joseph Clanchy, of the "Munster Dairies," Cork, whose neat packages of exquisite fresh butter compete on London breakfast-tables with the choicest produce of Normandy, and whose tinned butter, for exporting purposes, has reconquered the colonial market from foreign competition. Alderman Dale, of the firm of Richard Clear and Sons, has also been energetic and successful in this new departure. By the efforts of these and other Cork butter merchants, and under the learned and sagacious guidance of Lord Fitzgerald, the

“Cork Butter Market Act” of 1884 was passed.

This act freed the Cork butter trade from restrictions which, however reasonable and salutary a hundred years ago, had become obsolete and mischievous. Since then a revival in the Cork butter trade has taken place. Much, however, remains to be done, not only in the way of commercial enterprise, but in the way of dairy-farming improvement. The methods of the last century will not do now. Sound practical technical instruction is wanting in this manufacture, as in every other manufacture. The Munster Dairy School has done much good in this way for Cork. Canon Bagot, of Kildare, has done still greater service by his pamphlets, his creameries, and his educational dairies. The experience of Continental countries shows that systematic instruction under the auspices of the state in all matters connected with the production of butter has been productive of the best results.

I now ask my readers to turn their attention to yet another great indigenous Irish industry—that of fishing. It can scarcely be said to be a manufacturing industry, but it is so important and so cogent that I may be permitted to include it. For it also Ireland has exceptional suitabilities and advantages. Ireland has a coast line of two thousand miles. Its waters teem with fish. Its harbors are best where fish is most abundant. Its bays are the best spawning-grounds in the world. Every year the Irish coasts are thronged by enterprising fishermen from England, Scotland, France, Spain, Holland, Denmark, and Norway. Mr. Dennis estimates the number of such annual visitors to Irish shores as not less than one hundred thousand.* Ireland gathers comparatively little of this “harvest of the sea.” The Irish fish which reaches English and foreign markets is rarely the capture of Irish hands. In other countries fishermen grow rich, found noble families, as in Cornwall, help to build up great cities and great states, as in Amsterdam; but in Ireland fishermen are amongst the poorest inhabitants of a poverty-stricken country. During the three best months of last year there was little more than £100,000 worth of fish landed in Ireland, while during the same period the neighboring island secured fish to the value of more than a million and a quar-

* *Industrial Ireland*, p. 47.

ter sterling.* In a country whose shores teem with fish it is difficult to get fresh fish as an article of diet. This want is partially supplied by cured fish; but our fish-curing establishments are mostly in ruins, and we pay more than a quarter of a million annually to other countries for cured fish, much of which was caught on our own shores. This is a sad state of things; but (unlike some other Irish troubles) its causes are ascertainable and remediable. One cause is that while the fisheries of other countries, and notably those of Scotland, were liberally and continuously fostered with bounties, Irish fisheries enjoyed that advantage only in scanty measure for a brief period, and not at all since 1830. Indeed for some years a bounty was paid for cured fish imported into Ireland, in order to encourage Newfoundland and other fisheries at the expense of Irish fishermen.† Bounties are now out of political fashion, but it may be worth considering whether, in the exceptional position of Ireland, the hardy, industrious, and peaceful class that practise this ancient industry might not receive the same help as their brethren in other countries. During the brief period in which they received such assistance the number of boats increased from 27 to 4889, and the number of men employed from 158 to 11,442.‡

Another and more serious difficulty is the distance of the best Irish fisheries from the great markets, and the absence of means of railway and other transit. It is melancholy to see poor fishermen on the western coast using for manure choice fish that would command high prices in London. The remedy, of course, is cheap railway extension. This is effected by the state in India with great advantage; why not in Ireland?§ Another difficulty is the want of technical knowledge in the fisherman's craft and in the various handiworks connected with it. Brave hearts and strong hands can achieve much, but if those who possess them are not versed in the elements of their craft, the result is disheartening.¶ It ought not to be impossible to supply this technical knowledge in Ireland, as it is liberally sup-

* Board of Trade Reports, 1887.

† Rev. W. S. Green's Report to Royal Dublin Society, p. 26.

‡ *Davis's Deep-Sea Fisheries*, p. 17.

§ *Dennis's Industrial Ireland*, p. 50.

¶ *Times*, 18th August, 1887.

plied in other countries. But the greatest difficulty remains to be stated. It is that the best fishing waters on the Irish coast lie thirty or forty miles off shore, and that Irish fishermen are not provided with boats suitable for this deep-sea fishing. Their frail craft must hug the shore, and dare not venture into the tumult of these distant waters. Hence the best Irish fisheries are abandoned to the English, Scotch, Manx, Dutch, and Norwegian fishermen, with their fine fleets of thirty-ton boats, equipped with every appliance that skill can suggest and money purchase. At Baltimore, in the County of Cork, this difficulty has been overcome by the energy of a good priest (the Rev. Charles Davis, P.P.), and the munificence of a noble lady (the Baroness Burdett-Coutts), whose portraits I present to my readers. The priest planned, and the baroness supplied funds for, a system by which the fishermen of Cape Clear and the neighboring islands have been enabled to supply themselves with a noble fleet of vessels, of as fine a model, as well equipped for their purpose, and as well manned, as any fishing-boats on the ocean. The results have been thoroughly satisfactory. The fishermen have proved worthy of the munificent assistance which they received. Their courage is so well known that Manx men describe a bad gale as one in which even a "Caper" (*i. e.*, an inhabitant of Cape Clear) would not venture out. Their honesty is evidenced by the unfailing punctuality with which the baroness's loans are being repaid. Their thrift is shown by the creation of substantial dwelling-houses and the putting up of bank deposits. A piscatorial industrial school is now being established at Baltimore under the same admirable auspices.

I now turn to another remarkable industry—that of ship-building. Its chief seat is in Belfast. It is said to have had a strange origin in 1636, when a Presbyterian clergyman, of all men in the world, built, manned, and commanded a successful privateer. Other Belfast men imitated his Reverence's unclerical but profitable enterprise. A legitimate trade in wooden ship-building sprang up, and continued to exist for more than two hundred years. When the days of "wooden walls" had passed, and iron ships took their place, Belfast ship-building seemed to be doomed. Belfast had neither iron nor coal. But Belfast had the

indomitable pluck and the inventive spirit, which are stronger than iron, and generate more energy than coal. In 1853 Messrs. Robert Hickson and Company commenced iron ship-building on the Queen's Island. In 1859 Mr. (now Sir Edward) Harland took up the work. In 1861 Mr. Wolf became a partner. The firm is since known as "Harland and Wolf," and has grown to be one of the greatest ship-building concerns in the world. It occupies forty-five acres; it employs upward of 5000 hands; it builds steamers for the Mediterranean and "East-Indiamen" for Southern seas, gun-boats and torpedo-boats, superb fleets of ocean steamers for a score of great services, including the fleet of White Star steamers, whose *Britannic* and *Germanic* are such favorites with transatlantic voyagers. Messrs. McIlwain and Lewis and Messrs. Workman and Clerk were vigorous offshoots, and are now prosperous rivals, of this great house. In Cork a similar effort was made. For many years it prospered under the energetic care of Ebenezer Pike and others. But somehow it has failed to hold its ground in Cork; and not even the rare ability, pluck, and resources of Sir John Arnott have been able to retrieve its fortunes. A royal dock has been for many years in slow progress of erection nearly opposite Queenstown. It owed its origin to the exertions of the late Mr. John Francis Maguire and Mr. (now Sir John) Pope Hennessy, then able and influential Irish members. It surely is time to complete a work of admitted importance not only to the interests of the locality and the defences of the empire, but to the seafaring population of the Western world.

Brewing is an old trade in Ireland. At the beginning of the present century there were fifty ale breweries in Dublin. The discovery of roasted malt as a coloring and flavoring material created the Irish porter trade. The great breweries of Dublin and Cork have few equals in the world. In 1886 Irish breweries produced more than two million barrels of porter and beer.*

The Irish whiskey trade is of even greater dimensions. One great Dublin distillery firm, founded a hundred years ago, employs 300 men, and has an annual output of a million of gallons. The buildings

* Hand-Book to Irish Section of the Manchester Exhibition, p. 32.

of another cover fourteen acres, and their annual output is about 900,000 gallons. The Cork Distilleries Company has absorbed several distilleries, and is conducted with energy and success. The importance of the distilling trade to the agriculture of Ireland is shown by the fact that the output of Irish whiskey during one season (that of 1885-6) was nearly eleven million gallons, representing a consumption of grain exceeding a quarter of a million pounds sterling.

Count Dandolo, the great authority on sericulture, states that the soil and climate of Ireland are peculiarly favorable to the cultivation of silk.* It was not, however, until the commencement of the last century that anything was done in this way here. We owe its introduction, as we owe a great improvement in linen manufacture, to the skilful and industrious French Huguenot artisans who left France in great numbers on the revocation of the Edict of Nantes. The silk-workers settled in Dublin, and shrewdly combining native and foreign materials, invented a stuff, part silk and part wool, which soon became famous as tabinet, or Irish poplin.

Toward the end of the last century the Irish silk trade engaged 2500 workmen in Dublin, besides perhaps as many more in Limerick, Cork, and other provincial towns. But the trade declined sadly after 1800. The Royal Dublin Society made praiseworthy but unsuccessful efforts to sustain it. The late Lord Kings-town planted 30,000 mulberry-trees on his estates, and sent to market raw silk of the best quality; but somehow the enterprise did not pay. In latter years Irish silk manufacture, like Irish woollen manufacture, though not to nearly the same extent, has had a revival. Irish poplins, brocaded silks, and other fabrics now manufactured are worthy of the best days of Irish silk manufacture. The Countess of Bandon and other ladies have formed an association for the promotion of silk cultivation in the south of Ireland. It is said that an acre of suitable land, judiciously planted with mulberry-trees, might be made to produce £100 worth of silk. The reeling of cocoons would afford remunerative employment to many a gentle and blameless sufferer from the reverses incidental to these times of transition.

* Vol. i., p. 85.

In the year 1866 the late Mr. Thomas Grubb, engineer to the Bank of Ireland, established at Rathmines, near Dublin, a manufactory of astronomical instruments. The work has in latter years been carried on by his son, Mr. (now Sir) Howard Grubb. By an extraordinary combination of scientific knowledge, mechanical skill, and commercial enterprise, Sir Howard Grubb has developed his establishment into one of the first of its kind in the world. It is remarkable to find the governments of Austria and Germany, of Spain and Italy, of Russia, Mexico, and China, sending to Ireland for the great equatorials of their state observatories. Hither also come orders from the universities of Oxford and of Göttingen, from the observatories of Greenwich, of Melbourne, and of Constantinople, from Yale College and Franklin College, from San Francisco, Texas, and Havana. Every branch of the work, scientific, optical, and mechanical, is done by Irish hands on Irish ground.

Of the twenty millions of acres which comprise the agricultural area of Ireland nearly one-fourth is almost unproductive mountain and swamp. When I was in Parliament I called the attention of the House to this terrible waste of resources, and especially to the subject of arterial drainage. At a later period Dr. Lyons, M.P., suggested the reafforesting of much of this vast waste. Mr. O'Connor Donelan, of Tuam, has very intelligently taken up the latter branch of the subject, and testifies from personal knowledge of both districts to the similarity in soil and natural features of the mountains of Connemara, now lying in bare and melancholy desolation, to the mountains of the Schwartzwald, covered, by the well-directed expenditure of the state, with forests of pine and fir, and thus not only supplying vast quantities of timber, but creating the varied industries connected with it, and thus supporting a large, industrious, and thriving population. In the former district you see only a few miserable hovels; in the latter district, a thousand factories for every description of wood-work, its rivers bearing to the Rhine on their way to Holland and England many million tons of timber, its streams turning mills, its bog converted into market gardens, its people hard at work as foresters, charcoal burners, wood-carvers, basket-makers, chip-hat plaiters, clock-makers, mu-

sical-box makers, and manufacturers of the cellulose out of which are now made paper, gun-cotton, collodion, knife handles, dental plates, and even chairs, tables, and boats.* Mr. Donelan may well ask why the mighty empire of Great Britain does not even attempt that which the little Duchy of Baden so admirably accomplished? Failing aid for greater enterprises, Mr. Donelan has made a small but practical effort at osier-planting near Galway. The fringes of bogs and the low-lying land along river-courses are the true fields for the osier. All the varieties of willow and alder grow rapidly in bogs. Osier-weaving and basket-making might become important industries.

It is often assumed that manufactures can only be successfully conducted in factories, and that modern machinery has quite superseded the old-fashioned, but ever new, and, when trained, ever deft, machinery of the human hand and fingers. This is happily an error. Some of the most exquisite manufactures of the world are carried on by the hands of peasants in remote valleys and mountain solitudes. Most of the so-called "Geneva watches" are made by Alpine mountaineers. Some of the most delicate textures of Parisian fashion are woven in Pyrenean valleys. The unrivalled Bohemian glass is made by the peasants of the Erz-Gebirge. It is thus in a hundred instances, and in every instance that I know of the peasant industry has been promoted by state teaching and state support. In this matter, as in so many other matters, the Irish peasant has been denied the aid which the governments of other countries habitually give to their humbler subjects. Nevertheless, a good deal has been effected by individual enterprise and individual benevolence. Thus at Besbrook it has been found that power-looms, urged by steam or turbine, are too rough for the finer qualities of linen, and that these are best made by hand-looms. Hence there are nearly one thousand cottage weavers in connection with the Besbrook mill. Several great English firms have made a similar discovery as regards the finer kinds of muslin and cambric embroidery. They consider that for this work the fingers of Irish peasant girls are the best of all machines. In fourteen large shirt-making factories at Londonderry the

* See for further details Mr. Donelan's suggestive pamphlet entitled "Young Forests." Gill: Dublin.

work is divided between the factories, where the raw material is cut up and advanced a certain stage, and the cottagers of the neighboring district, who earn more than £50,000 a year by finishing it. The convent schools of Kenmare, Youghal, Kinsale, and other places have taught the fingers of peasant children to produce exquisite lace. Mrs. Ernest Hart, of London, has taught Donegal peasants to produce homespun hosiery, homespun tweeds, hand-made linens, lace, and embroidery fit for the first establishments of London. Mrs. Ponsonby has taught the cottagers on Lord Besborough's Carlow estate to make embroidery and open-work on Irish and German damask from old Italian and Greek designs. Mrs. Power Lalor has energetically and skilfully promoted the lace industry. Miss Augusta Jane Gould has been indefatigable in the promotion of similar industries. The Countess of Aberdeen founded an association for the systematic development of such industries in all parts of Ireland.

But it must be admitted that what has been done bears no adequate proportion to what remains to be done by the state and by individuals. It is estimated that nearly a million of the Irish agricultural population, consisting chiefly of the small farmers and their families, are almost idle for six months in the year.

Glove-making has a sad little history. It first sprang into prosperity in the seventeenth century, when the expelled Irish nobles and gentry made Irish gloves fashionable in European courts. This prosperity was of brief duration. It was renewed, like so many other Irish industries, by the revival which took place in 1782. For several years subsequently it gave employment to many thousands. More than a million of kid-skins were used per annum. A special mode of dressing them was adopted, which made Irish gloves so much prized in France that French workmen came over here to learn the art, and returned to France with a select body of Irish glove-makers. They founded the kid-glove manufacture of France. Meantime the trade died out in Ireland, and we all wear the "French kids" which we taught French *ouvriers* to make.* A revival of the industry is being attempted in Cork by the nuns of the Good Shepherd Convent, with the sagacious help of Sir John Arnott. Messrs.

* Hull's *History of the Glove Trade*, p. 91.

Supple, of Dublin, are also endeavoring to utilize their large glove trade toward the revival of this Irish industry.

The manufacture of cotton fabrics used to employ 40,000 hands in Ireland. It declined before Lancashire competition. It still exists in Drogheda and other places, and is capable of revival.

Bacon-curing is largely practised in Limerick, in Cork, and in Waterford. This surely is an industry capable of development in the "land of pigs." The provision trade made great fortunes in Cork in the early part of this century.

Engine-making is in large operation at Inchicore, near Dublin, and in Belfast.

Mineral-water manufacture has been profitably conducted in Cork for fifty years, and latterly in Dublin and Belfast.

Pottery was formerly a great trade in Ireland, and has recently been revived with great spirit and artistic skill at Belleek, in the County of Fermanagh. Irish clays are said to be peculiarly suited for ceramic purposes; and Irish mountain lads learn so rapidly that workmen from Belleek were sought in Belgium and New York.*

Paper-making, which was formerly a great trade near Cork, has latterly almost died out in face of foreign competition. But it must be capable of revival. Rags ought not to be difficult to procure in Ireland; esparto-grass has been successfully grown on bogs. The application of wood to paper-making, which has assumed such vast proportions in Germany, Norway, and Sweden, ought not to be unpracticable in Ireland.

Much attention has lately been paid to technical education in several of our cities. The Crawford Institute in Cork is a splendid instance of private munificence admirably directed, while in Dublin the same most practically useful work has been forwarded with signal ability, intelligence, and public spirit by Lord Powerscourt, Mr. Arnold Graves, and Mr. Charles Dawson.

May we not hope for a speedy fulfilment of the promise recently made by the Prime-Minister in the following statesman-like words:

"Ireland has been unhappy partly for this reason—that she is a country of one industry, and that industry the most precarious of all. . . . We must try, by opening up such facilities as it is in the power of governments to create, to

* Dennis's *Industrial Ireland*, p. 111.

encourage the growth of other industries in Ireland."^{**}

But why, it may be asked, always look for government aid? Why not do something for ourselves? I think I have shown that we do much for ourselves, and that we ask only for such facilities and co-operation as European governments habitually give to the industries of their subjects.

Again, it is often objected that we lack the local supplies of coal and iron which are so important for manufacturing purposes. The objection is exaggerated. The Geological Survey shows that seven vast coal fields exist in Ireland. Some of these are partially worked; others are wholly neglected. Professor Hull, in his standard work on *The Coal Fields of Great Britain*, estimates the observable and workable contents of Irish coal fields at upward of two hundred millions of tons.† This is exclusive of what may be concealed in the lower strata, now worked so extensively in England. As to iron, it used to be largely found and smelted in Ireland. It was even an article of export. We still possess considerable resources of iron and other metals. The County Antrim is, so to speak, founded on iron. It contains 167 square miles of pisolitic ore, yielding forty per cent. of iron. In many other districts iron crops up almost under the spade. Pyrites and copper also exist in many districts, and were once extensively worked at Knockmahon, County Waterford, at Berehaven, County Cork, and at Ovoca, in the County of Wicklow.‡ But whatever be our deficiencies in those respects, and assuming, but not by any means admitting, that we must depend for coal and iron on supplies obtained from England, it must be remembered that, even on this hypothesis, we are no further from coal and iron than London is, and that London is the greatest manufacturing city of the world.

Ireland, as the kindly words of the Prime-Minister remind us, has seen much sorrow for many a weary century. Whoever has been to blame, the suffering certainly fell on us. Now that our chief industry—that of agriculture—is being set

* Lord Salisbury at Carnarvon. *The Times*, April 11, 1888.

† Hull's *Coal Fields of Great Britain*, p. 343.

‡ See Dr. Sullivan's Report for Cork Exhibition, p. 59.

right, on the true and natural basis of ownership of the soil by the man, be he peer or peasant, who farms it, other industries may reasonably be expected to share the revivifying effect which peasant proprietorship has exercised on the manufacturing industries of other countries. I have had much experience of Irish life in many phases, commercial, professional, Parliamentary, and official. Such experience unhappily does not con-

duce to over-sanguine expectations of the future. Nevertheless, I believe that we approach a brighter and happier day for Ireland when, the fierce animosities of the past being forgotten, and the fiery controversies of the present being settled, Irishmen of all ranks, of all races, and of all creeds may enjoy a fair share of the prosperity which comes, and which can come only, from industry, order, and peace.

THE CLERGY AND THE TIMES.

BY ARCHDEACON MACKAY-SMITH.

A SPIRIT of unrest, and a process of readjustment to meet altered conditions of life and thought, are clearly visible in the Protestant Churches of America to-day. Many observers think that they discover a like aspect of affairs in the Roman Catholic Church. But about the Protestant Churches there can be no possible doubt. Their fundamental principle of free discussion, so splendid in its courage, but often so inconvenient in practice, compels the mending of all machinery in public, as a driver ties up his broken shaft on Broadway surrounded by a curious crowd, and renders it impossible to avoid criticism, and frequently the jest or the sneer. On every side among our religious bodies is heard the clamor of contending voices eagerly discussing fresh ways of presenting old truths, new methods of work, the possibilities of bringing the gospel to bear upon men's hearts with renewing and transforming power. Whatever their critics may say, the Churches to-day most certainly are not dead, or even drowsy. They resound with debate, and are upheaved and tossed about with experiments and suggestions to a degree often disquieting to their graver, more sedate members. As an amusing illustration of this, the remark of a clerical speaker at a recent religious gathering may be quoted. He prefaced his address by saying that the older clergy of his neighborhood would welcome almost any subject of discussion, but were obliged to draw the line somewhere. They therefore declined to hear even one more essay on "The Evangelization of Large Cities."

Several subjects noteworthy for their importance stand forth from the multi-

tude of those which to-day engross the religious press and platform. As they have no unremote bearing on the interests of what is still the great majority of the American people, it is supposable that some discussion of them, free from technicalities, may have an attraction for the intelligent lay mind.

The first of these is that of ministerial supply. There is at present a somewhat alarming lack of candidates throughout the country. Both quantity and quality are said to justify anxiety. As it is known, or at least believed, that no such *questio vexata* is harassing the Churches of Great Britain to anything like the same extent, inferences unfavorable both to depth of spiritual life and fervor of religious faith among men in America have been drawn. But it is questionable whether such reasoning is based on substantial fact. The truth seems to be that, owing to the era of national development which has followed our late civil war—a development by which opportunities for adventure and enterprise, the gaining of wealth and the attainment of high social and political advancement, have been a thousandfold multiplied—the spiritual nature of our American youth inclining toward the ministry has been exposed to a tremendous strain. The varied occupations of what is called "business" offer to a young man here greater chances and more dazzling prizes than elsewhere in the world. Knowing what human nature is, we cannot severely blame the youth who, with the same faith and moral fibre which would carry his English brother into the pulpit, comes to the conclusion that he can remain a layman and serve God equal-