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## STATISTICAL AND SOCIAL INQUIRY SOCIETY OF IRELAND.

## PART LXXXI.

1.—The Bearing on Industry of the Impending Changes in Irish Education.

By C. H. Oldham, Esq., Barrister-at-law, Hon. Secretary, Barrington Lecturer in Political Economy, &c.

[Read Tuesday, 27th November, 1900.]

The decay of so many of their industries, and the persistent inadequacy of the remunerative employments remaining available for them, have weighed down the spirits of the Irish people for so many sad years, that a man must be very callous and very unintelligent who cannot sympathise with the wistful anxiety that is wide-spread in Ireland to aid in some way the promotion of an industrial revival in this country.

Without pausing now to examine how far the actual facts of the industrial decadence are commonly exaggerated or misinterpreted, I may be allowed to express my opinion that they furnish a substantial justification for the popular feeling on the subject. Thoughtful writers of the "Repeal" period of 1845 (writing without any conception of the economic crisis which was so soon to overwhelm Ireland), were able by a comparison between the 1rish Industries of 1845 and of 1800, to show clear evidences of the decadence that had even then occurred. We are accustomed to admit that the economic condition of Ireland at the epoch of the "Great Famine" was very bad. But bad as things may have been in 1845, there is reason to suppose that from the industrial standpoint they are much worse to-day. The population needing employment in Ireland in 1899 is smaller than that in 1845 by 3.763,876 persons. But productive employments in Ireland have been shrinking so much faster than the population that the Census of 1891 showed the country to be in an actually worse condition, industrially speaking, than at the Census of 1841. Take 100 "employed" persons in Ireland at these two Census periods, and contrast the nature of their occupations, we find the percentages for each kind of employment distributed thus:—

Census.	Percentages.		Persons.*	
	1841	1891	1841	1891
A. Productive Industry .	80 6	64 8	2,919	1,364
B. Distributive Industry .	3 1	80	112	168
C. Industrial Services	1,5	6.6	43	140
D. Non-Industrial Services .	15.1	20 6	547	434
Total "Employed"	100 0	100.0	3,621	2,106

<sup>\*</sup> The numbers of Persons are stated in thousands.

These figures, which we owe to Mr. Charles Booth, were discussed in the paper which I read to this Society on Wednesday, 14th March, 1900, and I will not discuss them again. They show that the producers of wealth have declined much faster than other sections of the population; that the distributors (transport, dealing, etc.), have steadily increased, notwithstanding the great decline in the population whose wants they serve; and that a much larger proportion are now getting their living out of "services" rendered to the others. The 140,000 persons in Group C are made up of two classes, viz -one-ninth of them render "commercial services," while eight-ninths of them constitute the "indefinite" Irish class described as "General Labourers," a class that sprung up here chiefly since the "Great Famine." The failures in other walks of life in Ireland are always dropping into this class, which is being at the same time always depleted by emigration: it furnishes three-fourths of the Irish emigrants. That class represents the blood that is momentarily filling the gaping wound in the economic condition of Ireland through which our population steadily bleeds away.

But while I agree with the popular opinion that industry in Ireland is declining and fully sympathise with the prevailing anxiety on this subject, I cannot see much to approve in the trend of popular effort to counteract this decline. A thing does not appeal to me as patriotic, although it be thoroughly well-meant, if at the same time it happen to be idiotic. That epigrammatic pluase is discourteous and therefore I quickly drop it. I mean merely that the patriotic efforts made intentionally (I | elieve) to promote Irish industries are often, in my judgment, so unwise economically, that they aggravate the disease: my patriotism would urge me to condemn them as at once futile and pernicious. Of this soit is the popular doctrine that industry can be promoted

in Ireland by Irish consumers resolving to purchase only Irish-manufactured articles. No addition to the total volume of Irish industry can be made in that way, no more than you can add to the bulk of a field by shovelling the soil from one part of it to another. There may be great damage done the field by displacing its soil by such a process; or the natural fertility of the field may be promoted if the thing is done intelligently. But the bulk of the field is neither increased nor diminished. The Irishman who buys a foreign article must (I suppose) pay for it, and it is by the export of an equivalent Irish article that the payment is made. Whether it is an Irish article that is consumed or an Irish article that is exported, the bulk of Irish industry remains the same.

I would not deny that, for my own part, I have a sentimental satisfaction in using an Irish-made article, especially if I know where it is made. That is a sentiment which I both feel and understand. But I do not delude myself into thinking that I am promoting industry in Ireland by indulging the sentiment. I know it is not the case.

The whole of this popular trend of thought in Ireland is mixed up with the old mercantile fallacy which is nearly as rife in the Ireland of to-day as it was in the days of Dean Swift. I think it was Professor Bastable who laid down a proposition which, if followed, would enable us all to help to promote industry in Ire land without dropping into this mercantile futility. The proposition is simply this: operate on production, try to improve production by every possible means—if we begin at the other end and try to operate on consumption we may easily do more harm than good.

Now, I think those who cannot see their way yet to accept this latter proposition (that to operate on consumption is a mistake) may, nevertheless, agree that any improvement in production is a Therefore I wish to invite the attention of the mempure gain. bers of "Industrial Leagues" in Ireland to this aspect of their problem. I think that the impending changes in Irish education. some of which are in process of realisation, have a very important bearing on the problem of promoting industry in Ireland. education can be so directed as to vastly facilitate practical steps: being taken to improve the industrial processes and products of Irish industry. It is an opportunity such as, I think, never occurred before; and unless it be actively embraced by those who are concerned on behalf of industry in this country, and their particular influence is made effective on these changes in Irish education, the chance of an industrial regeneration in Ireland will be missed.

What are the "impending changes in Irish education of which I speak? It will give definiteness to our thoughts to set them our seriatim, but they must be familiar to you all.

(1.) Primary Education.—As a result of the most excellent

Report issued in July, 1898, by the Viceregal Commission on Manual and Practical Instruction in Primary Schools under the Board of National Education in Ireland, there has been issued in September, 1900, the New Programme and Rules which inaugurate changes in Irish Primary education that can only be described as revolutionary. (a). The Results' Fees and Results' Examinations are abolished, which will alter the whole system of teaching in the schools (b). The organization of the school-work, instead of being on rigid universal lines, becomes elastic, much simplified, and modifiable to the circumstances of each locality according to the discretion of the manager and teacher acting under the advice of the Board's inspector. (c.) The schools of the country will no longer be all on the same footing, for they will be graded; teachers will receive fixed salaries, but these will be different for the different grades of teachers; capable teachers who prove their ability in conducting and teaching a small school may expect promotion to a higher grade school, and (while existing teachers will not have their class altered) a higher grade school found in charge of an inferior teacher will soon find a better one. (d). New subjects are introduced into the curriculum, viz., Object Lessons and Elementary Science; Manual Instruction, or "Hand and Eve Training;" Drawing, Cookery, etc (e). The Curriculum takes this Some subjects are compulsory for all schools—viz: English (with its sub-heads), and Arithmetic. Some subjects are optional in all schools, viz: Irish, French, Latin, Mathematics, and Instrumental Music. But many important subjects are in an intermediate position; they are compulsory in all those schools in which there are teachers possessing certificates of competency Such subjects are Manual Instruction (which in to teach them. Infants' Schools means the use of Kindergarten Methods), Drawing, Object Lesson's, Elementary Science, Singing, School Discipline, and Physical Drill; and, for Girls' Schools, Cookery, Laundry Work and Needle Work. In practice, ultimately, all higher-grade schools may be expected to have teachers qualified to teach these subjects. I cannot compress into terse statement a more complete account of these important and revolutionary changes in our Primary Education,

(2). Intermediate Education. As a result of the extensive inquiry by another Vice-Regal Commission important changes are impending in the work of the Intermediate Education Board, which sways with absolute and immediate authority, albeit through indirect means, the working of probably ninety-nine per cent. of the Secondary Schools in Ireland. The Board has been itself enlarged from seven to twelve members, the additions being selected because they were professional educationalists. I am not aware what these changes amount to. But it is understood that the universal submergence of educational aims to the one purpose of getting "Marks" that secure

the payment of money down, may be henceforward abated (if it cannot be abolished); that the teaching of science, the study of things other than book-print, and the development of faculties other than that of "getting up for exams." may be no longer made impossible in all Irish schools that have to depend on the "Intermediate" Endowment for its subsistence. The ruinous effect of the Intermediate Education Act Intherto on Industry in Ireland can hardly, I think, be exaggerated; the large funds which it has annually dispersed over the country were most effective means for bribing the youth of Ireland to incapacitate themselves for industrial life. Its influence can hardly become that of a tonic,—such is the constitution of the Board; but if it should even cease to exercise its debilitating influence on industry in Ireland, the change will be very advantageous.

(3). Technical Education. Under the operations of the Department of Agriculture and Technical Instruction in Ireland the annual sum of £55,000 became available for the promotion of Technical Education. For the first arrangement, the Department, with the sanction of its Board for Technical Instruction, set aside £20 000 for the six County Boroughs, in proportion to their respective populations; £20,000 is to be applied elsewhere than in those six Boroughs, or is to be spent on the other purposes named in Section 16 of the enabling Act (62 & 63 Vic, cap 50); leaving a balance of £15,000 reserved for initial expenses of putting this part of the Department's work into Now it is important to notice that this money is not the measure of Ireland's expenditure for Technical education. It is the appetiser which is used at first in order to stimulate the consumption of the solid food later on. None of the Department's money can be handled by a locality which does not proceed to tax itself for the part-support of its own schools of technical instruction. This condition likewise involves the consequent that the local taxing authority forms a sub-committee of local men who begin to interest themselves in the project (technical instruction in their locality) which they have taken in hand. Now, business men who have some practical familiarity with industry and industrial needs in Ireland, are often enough members of these local taxing authorities. Therefore, at this one single point, there is some ground for expecting that the machinery which is cumbrously working our educational system for the first time, come under the control of men who know something about business. That is certainly a new departure in Ireland. If the leaven of business men thus introduced at one remote corner could be gradually worked in so as to leaven more of the whole lump, it would supply to Irish education a species of brain-power that it badly needs in every department.

4. Compulsory Education. Although the Irish Education Act passed in 1892 is not "impending," I am justified in mentioning it here; because its operation is only gradual, its introduction into

Rural Districts is still pending, and the need for its operation still exists. But there is a feature in this operation that also makes the Art a novel influence. Let me say, first that there are 120 Municipal or Urban Districts in Ireland. and I think that 85 of these have commenced to put the compulsory clauses of the Education Act into force. Now, in all Ireland, it appears that of the children on Rolls in the National Schools in Ireland, only 64.5 per cent, were in attendance for the past year. Thus 36 out of every 100 children on Rolls (observe) were getting little or no benefit from any educational system in force. But, next, we find that in those 85 Urban Districts aforesaid the percentage was 71.3. Eliminate them, and it would appear that for the Rural Schools the percentage must run down to about 50. So far as I know the Roscrea Union, covering parts of Tipperary and King's County, is the only Rural District that has put the Compulsory clauses into operation. After six months working, the Secretary of the School Attendance Committee reports that the attendance at his schools has increased 25 per cent. while the expense on the rate pavers is just  $\frac{1}{2}$ d in the £. Now there is no good reason why the Act should not be extended further into the Rural Districts, as well as into the remaining Urban Districts. But observe, that by interesting the local taxation authority in education, this Act has the same effect as that noted in regard to Technical Education viz., it may bring men with some knowledge of industry and business into contact with the educational machinery of this country.

(5). Elimination of South Kensington.—This last feature of the changes impending in Irish education has a title to be separately enumerated, if only for the purpose of emphasising its importance. By Section 2 of 62 and 63 Vic., ch. 50, there were tranferred to our new Department of Agriculture and Technical Instruction, not merely the administration of the grant in aid of technical instruction (under 52 and 53 Vic., ch. 76), but also

(among other matters) the following, viz.:-

"The administration of the grant for Science and Art in Ireland;
"The powers and duties of the Department of Science and Art ir relation to any public building or institution in Ireland under their control, and also any property in Ireland held by or for the purpose of that Department."

The result of that has been, of course, to transfer the management of these things to Irish officials who are resident in Dublin and can be approached, who are in touch with Irish wants as no department of the Irish administration has ever been before, and who are the very same officials as are engaged in assisting economic development in Ireland elsewhere, so far as State aid can assist it. That is a large change for the better. It would be easy to show that the Art Schools receiving State support in Ireland could now be used to apply teaching in art to the practical needs of industry in Ireland in ways that were quite beyond

our reach under the South Kensington regime. But, in illustrating our new advantage, I must content myself by a reference to the teaching of science. The late Mr. Thomas Preston, F.R.S.. whose premature death has deprived Ireland of a scientific genius of a high order and of a most capable official, had had often to point out that science-teaching was, year after year, steadily disappearing from Irish schools. This was a most serious fact, from the point of view of industry in Ireland. The arrangements made in the past for the Intermediate examinations have been directly responsible for part of this evil. But, as regards Mr. Preston's own work, the grant applied for scienceteaching in Ireland by the Science and Art Department was dwindling down to the vanishing point owing to a remarkably simple cause. Irish schools had to devote their main energies to the Intermediate examinations. There was science in the programme; but the courses in science for the Intermediate examinations did not run parallel with the similar courses for the South Kensington examinations. The schools could not be running two different sets of science classes at the same time was that the Irish schools ceased to prepare students for the South Kensington examinations in science; and Ireland, in this way, was steadily losing the finnacial help provided by that Department for science-teaching, for the purchase of scientific apparatus, and We have, however, a right to expect that under Irish administrators this extraordinary official tangle will be unravelled. The new Department must see to it that the different programmes for the examinations in science open to Irish students shall be harmonised, so that one science class in a given school can prepare students for either course, or both. This is provided for under Section 23 of the Act creating the Department: for that Section created a "Consultative Committee" on Education "for the purpose of co-ordinating educational organisation." The Commissioners of National Education, the Intermediate Education Board, and the new Department can thereby be brought into relations with each other expressly to prevent this counteraction of divergent programmes. We ought to be able, therefore, to use the "grant in aid of Science and Art" derived from funds voted by Parliament to much better advantage than heretofore for the revival of the teaching of Science in Irish schools. It is appalling to realize that at a time when industry is depending more and more on the refined application of science to industrial processes, and when the progressive nations have in consequence been spending more and more time and money in the development of science teaching in their schools, Ireland should have been going steadily backward in this essential matter, and that the teaching of science should have been steadily disappearing from the curriculum of Irish schools. Under the regime of the New Department we have a right to expect that the Royal College of Science in Dublin shall become the headquarters of a science

revival, whose influence will be ultimately felt in every school to the remotest corner of Ireland.

I have now surveyed, in briefest outline merely, under these five heads, the large and far-reaching changes in Irish Education, now impending, which have a direct bearing on industry in Ire-Taking these five divisions as a whole, it becomes obvious that there does exist in Ireland at this moment an unprecedented opportunity which ought surely not to be missed by all persons, to whatever party they belong, who are anxious to aid in promoting an industrial revival in Ireland. Our municipal, urban, and rural Councils, which are the local taxing authorities in these matters; our amateur economists, belonging to Industrial Leagues, to Trades Councils, and other Societies, such as the one I am now addressing; the Royal Dublin Society, the Chambers of Commerce, the Harbour Boards, and other bodies where men engaged in the commerce and industry of Ireland habitually congregate together; and lastly, our scattered individual manufacturing concerns where courageous employers are arduously labouring under many adverse influences to keep alive the remaining productive industries of this country. All these various bodies are composed of able, influential, hard-headed men of business who, knowing "little Latin and less Greek," have grown accustomed to look upon Irish Education as a more or less ornamental department of national activity which might be the concern of Schoolmasters, of Clergymen, of Civil Service grinders, of University Professors, and other "Society drones;" but they have long felt satisfied that this Irish Education in no way concerned them, the actual wealth-producers, except for the financial Now I hope this paper may burden it threw upon the country, do something to challenge that stereotyped attitude. great changes in Irish Education have a direct bearing on industry: and unless the business men engaged in industry can be brought to recognise this, and can be induced to take an active participation in promoting and inspiring these new educational developments, it will be almost impossible to lift the school-work of Ireland into a groove where it will really minister to the needs of industry, instead of thwarting them as in the past.

I read a speech of the Most Rev. Dr. O'Dwyer, in Limerick, in which he recently denounced the unpractical character of Irish education; he said it was an education to make men clerks not tradesmen, and to fit men for Civil Service, not for business, etc. Every business man in Ireland who read that statement must have agreed with it; has, indeed, been thinking or saying the same thing himself ever since he knew what business training meant. Irish education has been ruinous in the last degree to Irish industry. But the situation has now altered: for the men who guide Irish education have come to see that the men of business were right; they are trying to bring the education of the country into more sensible relation to its industrial requirements, and they require the co-

operation of men with a practical knowledge of industry to help them.

We ought to have business men on all our educational boards. But in any case where we have at present business men elected on our local taxing authorities, these men ought to be the only men chosen for the educational committees now being required in connection with these councils. Nearly every School Manager in Ireland is a clergyman; and no class of men knows less about industry. There is a tendency to also appoint clergymen on the educational committees that these local district and borough councils are now forming. This is a fundimental mistake, due to a confusion of thought. The clergy have already an overwhelming influence over our educational machinery, and must always have. But, on the committees here referred to, the clergy are out of their place; for the very purpose of these committees is to bring the educational machinery into contact with the industrial wants of the country. It ought to be the duty of these Local Government bodies to supply to Irish Education a much needed corrective, and to appoint none but business men (and above all men familiar with manufacturing industry) upon their committees for technical education, for compulsory attendance, and so forth. I am convinced that this matter is of vital importance, and it does not at present receive our attention. But in America, Germany, and other countries where education is now actively used to supply the requirements of the highly-specialized industries of modern times, we do not find that clergymen are put in control of this part of the educational machinery.

There is a very real urgency in the plea put forward in this paper for action to be taken immediately in the matter of these educational changes by all those people who are in earnest about the decay of Irish industry. Such people must at once give their attention on the problem of making our new school education a preparation for industrial life. This cannot be accomplished in fact without wrenching our educational system out of old grooves and launching it with a powerful impetus into new grooves. Force of habit in the old ways and ignorance of industry will both conspire to obstruct and distort these new measures in Ireland regarding education. So the school teachers, the school managers, and similar persons (who were hitherto left in sole possession of Irish education) must now be taught the lesson that patriotism demands this change, and that the prosperity of Ireland depends vitally on what I may be allowed to call the industrialisation of Irish education. Let the friends of industry see to it, that they at once exert their influence in teaching this lesson. The persons who understand industry are really very few in Ireland: they must be all the more active to counteract the inertia of a bad past tradition.

Let me illustrate this by a quotation. It is from the letter of a National School Teacher, published in one of the teachers' journals, in which the writer denounced the (so-belated) introduction of "Hand and Eye Training into Irish education. He is one of those who will be required to put this system into practical operation. He wrote:—

"My second objection is that it is unsuited to the youth of Ireland. Our National Schools have turned out some of the best boys in the world, as the long list of Honours in Civil Service, Intermediate Competitions, etc., achieved by the youth of our country will show. The National Schools have been the training grounds of the most brilliant, hterary, and mathematical geniuses of the country; and this is as it should be, because all who know Irishmen know that they take to literature and mathematics as "a duck takes to water." Now all is to be changed. No account is to be taken of the natural vent of the minds of our youth. Literature and mathematics are to take a back seat it is to be feared, and our pupils are to be made deft wire-workers, card-board modellers, flower-makers, and incorrigible idlers."

It is not necessary to comment on this deplorable letter. It is largely true to fact. Irish education has powerfully operated to give exactly that (so-called) "natural vent" to the minds of Irish youth. The only faculty we have developed is the faculty of passing examinations. This means the annual exportation of the brains of Ireland into the Civil Service, and the professions, depleting Irish Industry of the trained intelligence of the pick of our people. The people so educated are unable to make their livelihood in trade, and are no use whatsoever to their native land. Any business employer will tell you that "Intermediate" boys are no use to them: they want boys "fresh from the country," who have not yet been injured by being educated.

One of the greatest difficulties of employers who are carrying on industry in Ireland is to find competent foremen, able to apply intelligence to carrying out instructions Skilled men are few in Ireland, and their skill is a rule of thumb. They have no idea of the scientific principles underlying their work, and they can neither make a working drawing to scale nor work from one when handed to them. The employer has to stand over them and show them how to do every minute detail of the work. The reason is that the class from which competent foremen are to be drawn are in Ireland educated to be clerks, or reporters, or Civil Servants, or anything but tradesmen. Now, a good tradesman is far more useful to the community, can earn much better emolument, and is far more independent for his livelihood. The men who now become clerks in Ireland are so well educated that they cannot sink into association with the uneducated class of artizans that alone form the tradesmen of Ireland. But if Irish education were on right lines many faculties besides bookknowledge would be esteemed and cultivated with pride which are now held in ignorant contempt. Manual skill in anything, ideas of scientific relation of cause and effect, use of tools and materials, sense of accuracy in measurement and in quantitative proportions, the faculty of drawing as a language of expression, etc., are things not understood to be admirable and important in Ireland, because they are not understood at all. Were Irish clerks educated to have these faculties, Irish "captains of Industry" would have educated foremen available for the conduct of their industries, and the clerks themselves would be working at occupations with great chances for promotion, would be earning much better pay, discharging much more important functions, and living much happier existences No man can be happy unless he feels that he is of use and valued therefor. The industrialisation of Irish education would bring hope and happiness back again into Irish life.

In all these educational reforms Ireland is not originating anything. Long after other nations have created new industrial possibilities for themselves by these same educational methods we are following tentatively in their steps. The Commission on Manual Instruction found this thing necessary for Irish Education because it had been worked out in detail and applied successfully in practice in England. In England? Why England is behind Europe in these matters. And Europe is far behind America. Why shall we accept England as our model when

England herself has only adopted this thing since 1890?

Everyone knows now that the Americans have captured the industrial primacy of the world as much by the higher education (industrially) of its artisans as by the exploitation of its great resources. The Americans began working out their system of Manual Instruction as long ago as 1868. They caught the idea from what they long called the "Russian Method" of tool instruction, developed by one Della Vos, director of the Imperial Technical School (for Government engineers) at St. Petersburg. But they developed this Russian hint on their own lines after 1876. D. Runkle, President of the Massachusetts Institute of Technology, and Dr. C. M. Woodward, Director of the famous Manua<sup>1</sup> Training School of St. Louis, are the two leaders of an educational development that has engaged the minds of many other thinkers, and which has resulted in America originating a new method in education elsewhere unapplied before. America was the first country to develop manual training as a feature of general education for boys of fourteen years or younger, quite apart from technical education. "The trades are many, the arts are few. Making the art, and not the trade, fundamental, and then teach ing the art by purely educational methods, is the 'Russian' system." Thus wrote Dr. John C. Rundle in 1876; and he epitomised the whole system in the American motto: "Instruction before Construction." We require the application of that motto in Irish industry.

In the summer of 1885 Dr. C. M. Woodward, of the St. Louis School, made a visit to England and Europe to study technical and industrial schools. He was astonished to find that Europe could teach America nothing; on the contrary, his visit of that year sowed seeds that led to a new development in Europe.

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Writing in 1893, about that visit of his, Dr Woodward summed the matter in the following interesting and modest passage:

"The writer is free to say that while European industrial schools had much to suggest in regard to the capacity of pupils for manual work, and of their enduring interest in it, they suggested to him no improvement in his methods of instruction, and very little in regard to the scope of his work. On the contrary they exhibited a narrowness of purpose and a crudeness of method which ought by all means to be avoided. With the exception of some of the primary schools of Paris, he saw no pupil in an industrial school who was not there to learn a trade. The general educational value of manual training for pupils who might not become craftsmen was not then recognised in any school.

"Such was the state of things in 1885. Great changes have taken place in Europe during the past time years, but it is a historical fact, which some appears religiously that many large many religious as we in America.

some appear reluctant to admit, that manual training, as we in America understand it was not imported from any country." (Report of Commissioner of Education, Washington, for year 1893-'94, p. 894).

The international position in regard to Manual Training appears, then, to be this. A hint caught from Russia in 1868 was developed in America to the proportions of a new educational method. A visit to Europe in 1885 enabled Dr. C. M. Woodward to show Manchester and other places the true inwardness of the American system. As England was already well aware of the industrial advantages that America enjoyed from her superior education, this knowledge was applied there, and has since 1890 been grafted on to the whole primary school system of England. It has proved so successful there that now in 1897-99 our Irish educational authorities have recommended its adoption in Irish schools. And in the end of 1900 we are beginning to adopt it, tentatively and gradually. Let us recollect that we are ten years behind England, which was itself already twenty years behind America. That will show us that we have no "new-fangled fid" And as so many Irish youths go to America we so deal with. may reflect what "hewers of wood and drawers of waters" they must find themselves condemned to be by the mere fact that they land in the New World handicapped by the total lack of that education which the Great Republic has so munificently provided for all the American youths.

2.—Educational Value of Co-operation among Irish Farmers.

By P. J. HANNON, Esq.

[Read Wednesday, 19th December, 1900.]

Those who have followed the career of Mr. Horace Plunkett's co-operative agricultural propaganda in Ireland during the past ten years can hardly entertain any doubts as to the great results achieved from a material point of view. When one realises that Irish butter, which practically had been superseded