

crown for the charters necessary to enable them to enter into the business. Since then increased facilities have been afforded for the formation of companies, especially by and since the passing of the Joint Stock Companies Act in 1844. It now appears that these increased facilities for the formation of life assurance companies have not been accompanied by sufficient provisions for the protection of the persons interested therein, either as policy holders or shareholders.

It is pretty evident from the introduction of Mr. Cave's bill in the last session of Parliament, and the events which have since occurred, that legislation will be attempted, if not carried through, in the next session of Parliament, for the protection of persons interested in life assurance companies. It is of the utmost importance that such legislation shall afford the most perfect protection to policyholders and shareholders—without at the same time any unnecessary interference with the individual freedom of management of individual companies.

I do not advocate the entire adoption of the American law on this subject, but he is a wise man who profits by his own experience; he is a happy man who profits by the experience of others; and he is a fool who profits by no experience at all. It so happens that from the state of society in a new country, formed to a great extent by immigration, attention was directed to this question sooner than in an old country, where the facilities for the formation of insurance companies are more recent. It is therefore of advantage in considering this question to profit by the experience of our American cousins. In the foregoing sketches of American law on this subject, I have selected such points as appeared to be of interest and importance in the discussion of this question.

II.—*The Utilization of the Reclaimable Waste Lands of Ireland.*

By George Orme Malley, Esq., Q.C.

[Read Tuesday, 25th January, 1870]

THE title of this paper is so suggestive, that the greatest difficulty arises in endeavouring to arrange the topics which crowd upon the mind when proceeding to treat upon it. The idea is not new. It has occurred to many writers, has formed a portion of almost every comprehensive treatise which has been published on the Land Question in recent years, and has been referred to by every statesman who has ventured to prescribe for the wants of our country; yet I am compelled to observe that to the present time I have not discovered any author who has treated the matter in a practical manner, or who has presented the subject in such a form as to be capable of being grasped by the statesman or approved by the political economist in all its details. The theory is familiar to every advanced thinker, and to almost every newspaper editor; the practice has been tested

by individuals, and even by one or two public companies ; but the beneficial effects, in a more enlarged or national point of view, and the manner in which the remedy should be applied, have not, I venture to affirm, as yet been thoroughly examined or practically suggested. It will be my duty to endeavour to supply this latter defect, and to point out, as clearly as I can, a plan by which the waste lands of Ireland may be economically and beneficially reclaimed, for the purpose of contributing to the alleviation of a portion of our national distress, and the removal of one great cause of our national discontent.

It would be tedious and unnecessary to waste time or occupy attention, with endeavouring to prove that which is as familiar as it is indisputable to every Irishman, that the hindrances to the enjoyment of the land and its fruits form at present the great cause of Irish disaffection, and that anyone who endeavours to suggest a feasible remedy for allaying that evil is engaged on an important as well as an all-absorbing subject. But that importance in itself renders the successful treatment of the subject more difficult, as the feelings, the prejudices, and the self-interest of many, and of one influential class in particular, are so wound up and involved in the question, that groundless alarm and baseless apprehensions are sure to be entertained as to the results of any measure that may be suggested. Still it is the duty of every man who wishes honestly to serve his country, to face these difficulties boldly, and even at the risk of giving offence in quarters where he would desire to deserve approval, to state fearlessly what he conceives would be beneficial to all—injurious to none.

The observations of John Stuart Mill, in the chapter on "Property in Land," in his "Principles of Political Economy," are now admitted on all hands and among all parties to be true as regards the condition of landed property in Ireland. He says: "Landed property in England is very far from completely fulfilling the conditions which render its existence economically justifiable. But if insufficiently realized even in England, in Ireland these conditions are not complied with at all." After describing this noncompliance, in terms which I, for one, consider rather exaggerated, he concludes by stating: "When landed property has placed itself upon this footing, it ceases to be defensible, and the time has come for making some new arrangement of the matter." He then proceeds to show the fallacy of the principle of the "sacredness of property" as regards land, and its exceptional nature when compared with other kinds of property. I do not at present intend to say whether, in their general application, I concur or disagree with these sentiments ; but with those which are applicable to unutilized waste lands, productive of no benefit to the proprietor or the nation, which have lain unused and unprofitable for centuries, and which contain within themselves dormant wealth sufficient, if drawn forth, to satisfy the cravings of hundreds of thousands of our starving and discontented fellow countrymen—I say with the sentiments applicable to that portion of his subject I am bound, with some slight modifications, to concur.

Mr. Mill goes on to say: "When land is not intended to be culti-

vated, no good reason can in general be given for its being private property at all, and if anyone is permitted to call it his, he ought to know that he holds it by sufferance of the community, and on an implied condition that his ownership, since it cannot possibly do them any good, at least shall not deprive them of any which they could have derived from the land, if it had been unappropriated. Even in the case of uncultivated land, a man whom, though only one among millions, the law permits to hold thousands of acres as his single share, is not entitled to think that all this is given to him to use, and abuse, and deal with as if it concerned nobody but himself. The rents or profits which he can obtain from it are at his sole disposal, but with regard to the land, in everything which he does with it, and in everything which he abstains from doing, he is morally bound, and should, whenever the case admits, be legally compelled, to make his interest and pleasure consistent with the public good. The species at large still retains, of its original claim to the soil of the planet which it inhabits, as much as is compatible with the purposes for which it has parted with the remainder."

Now if this great principle be properly understood and applied, it will be found not to be at all consistent with, but rather subversive of, what is generally termed communism. It presumes an exclusive ownership of land and its protection as long as it is not abused; and when unused to the prejudice of the remainder of mankind, it steps in and suggests a remedy; but, as I understand the author, not that of spoliation. He merely says the proprietor should make his interest and pleasure consistent with the public good. To that extent only do I intend to push the principle in this paper; and, bearing that golden rule in mind, to treat the important subject we are here assembled to consider and discuss.

In treating of waste lands, I do not propose to include all untilled or mountain wastes as such, or to exclude land which has heretofore, at periods less or more remote, been brought under reclamation. If I were necessarily to include the former in every condition, I should necessarily treat of tracts within the confines of extensive domains, such as Killarney and Hazlewood. If I were to exclude the latter, I should necessarily except land which has been heretofore tilled and reclaimed but is now out of cultivation, or let at such a low rent, or so neglected and abused, as to be neither a source of profit to the occupier or the community. I must therefore treat waste land as a matter of *selection* rather than of *definition*, and, bearing this in view, my suggestions will be more easily understood as being capable of practical application.

It would be useless, tedious, and unprofitable for me to refer to the vast accumulation of statistics, the inexhaustible supply of indisputable authorities, which show that a great portion of the agrarian population of Ireland are in a state of shameful misery and destitution, and a dark blot on the page of English history. It must be conceded that we have at present an industrious and frugal, though discontented population, much too numerous for the land they live on, eagerly desirous of obtaining on fair and just terms a sufficient portion of the earth's surface on which to support themselves and their families,

able and willing to till that portion to advantage, and capable of extracting from it a produce sufficient to enable them to live, and to pay reasonable rent for the permanent and undisturbed occupation of it. But where should that portion of the earth's surface be found? I say, not in the wilds of Canada, the backwoods of America, the arid plains of South Australia or Queensland, or the dangerous and picturesque settlements of New Zealand, but within the confines of our own native land, on the swelling hills which border our over-inhabited or pre-occupied plains, within sight of many of our towns, and within easy reach of our markets, our fairs, our railway stations—in fine, at home with ourselves, amidst the scenes familiar to their and our childhood; where a strong, active, and hardy population may be cultured and encouraged—capable of becoming a contented and a happy people, a credit to our country in time of peace, and, instead of a source of danger, a succour and support in time of war.

It is now universally conceded that emigration is a bad and dangerous remedy for the evil of over-population. But especially is it dangerous in a country where the unfortunate exile retains an undiminished affection for his native land, and where his passions and resentments, instead of being obliterated by his newly attained happiness or independence, are fanned and fomented by association with those who, like himself, have been despoiled of what they consider to have been their birthright. In America and Canada the Irish exile looks back to the place of his nativity with the yearning of the expatriated Israelite. The “hills and the valleys he once called his home” are as dear to him as the Temple to the Jew; and the former labours for an independence with the hope of enabling him to return to his country and his kindred, as eagerly as the latter accumulates wealth with the expectation of enjoying it under the cedars of Lebanon, in the kingdom of the expected Messiah. Can this state of things be beneficial to the “old country”? Does it not foster and foment a dangerous element in a foreign land, continually increasing with each migration? Independently of the many other arguments which experience suggests, should not this alone induce any statesman, having the welfare of the country at heart, to grasp eagerly at any remedy likely to prove a substitute, even in a small degree, for this dangerous drain on our national resources?

But there is still another objection to emigration, which in itself ought to be sufficient to condemn it. In the pamphlet lately published by Mr. McCombie, the editor of *The Aberdeen Free Press*, in the shape of a letter to Mr. Gladstone, he says at page 22, “Things cannot go on as they have been doing. A heavy responsibility will attach to the legislature if they allow them to drift into a still worse state. The soil of the country must become gradually more and more impoverished, the people continue poor, helpless, and discontented. But once let the government show a really practical interest in their condition; let it be clearly understood that the aim of the government is not to drive the people out of Ireland, but to give them food, labour, and homes on their native soil, and a new spirit would be

infused into the whole nation. *Ireland for the Irish* would become a rallying cry, with more in it of genuine practical reality than has ever yet been. Travelling one day by mail car in the south of Ireland, the driver picked up a man near the end of the journey, who would not have been taken for other than a beggar in this country—whose shirt, if he had one, had long ceased to be a luxury. In the course of conversation, the driver, who was evidently familiar with him, remarked, ‘I heard from Jane from America yesterday.’ ‘Well, how is she getting on?’ ‘She does not complain, *but Ireland is better—everything is taxed there.*’ There was a world of suggestiveness in these few words. When the feeling begins to prevail that Ireland is better than America, then will be our opportunity for conciliating the Irish people. In the view of many, we owe Fenianism to the American war. It will be a curious example of the law of compensation, if to the same cause we should owe the antidote to Fenianism. Nor do I doubt that it will be so, if we have only the wisdom and the courage to give this new feeling free scope to operate. ‘*Ireland is better—in America everything is taxed.*’

This consideration leads us irresistibly to the necessity of discovering a substitute—a substitute sufficient to divert some portion at least of the stream of emigration into a safe and profitable channel, and that channel I conceive to be the location of our cottiers and rack-rented tenantry on that portion of their native soil where they would have sufficient scope for their industry, and a sure expectation of reaping reward for their frugality and their patient endurance.

Since I submitted the title of this paper to the consideration of the Council of this Society, I was rather surprised to see an article copied into *The Freeman's Journal* of the 19th of November, from the columns of *The Kilkenny Journal*, referring to this very subject under the heading of the “The Waste Lands and Land Bill.” That article was evidently written by one who had closely studied the subject, and fully appreciated its importance; and as it summarizes in an able and convenient manner some of the authorities and the arguments I intended to use, I shall take the liberty of quoting from it more largely than I otherwise would think justifiable in a paper of this description. After referring to the fact that Father Hayden had raised the question in the previous week at the inaugural meeting of the Kilkenny Tenant League, the writer goes on to say that “The idea of the reclamation of the cultivable waste lands of Ireland is not a new one, but we think the introduction of the subject at present, when the land question of Ireland is to all appearance about being settled, most opportune. The watchword of this country has long been ‘the land for the people,’ but here is land for the people, if the government will only take the matter in hand and deal with it in a statesmanlike manner. One of the great sources of evil, in connection with the Irish land question, is and has been the undue competition for farms. But the reclamation of the waste lands would, at least to a great extent, lighten this pressure, by opening up new fields for the energy of the cultivator—besides adding materially to the wealth of the country. It is now

sixty years since the reclamation of the waste lands of Ireland attracted the public attention, and yet nothing has been done with reference to it. In 1809 a commission was issued to inquire into the subject, and the report was most favorable; stating that, of the four or five million acres of waste, the greater part could not only be easily but profitably reclaimed. Several subsequent Parliamentary Committees reported to the very same effect, and urged upon Government the expediency of promoting the project. Again, in 1836, a commission, presided over by the late Archbishop Whately, for inquiring into the condition of the Irish poor, suggested an experiment in this direction, as a most hopeful means of providing remunerative employment, and mitigating their sufferings; but of course, as usual, nothing was done. Again, in 1844, the Devon Commission urged the question strongly, and in their report they state, 'There is scarcely any subject investigated by the Commissioners upon which the evidence is so concurrent as that of waste land reclamation, with a view of increasing remunerative employment for the labouring population. Mr. Griffith's valuable report and table show that Ireland contains 1,425,000 acres of waste land improvable for *tillage*; 2,330,000 acres improvable for *pasture*; and 2,535,000 acres unimprovable; making in all 6,290,000 acres, of which 3,755,000 acres are improvable. Connected with many of the largest estates in Ireland are extensive tracts of land, thinly peopled, and affording opportunities for easy reclamation. Without going the length of saying that employment for the people, upon bringing such lands into profitable cultivation, is to furnish a cure for the evils of Ireland, we concur in the opinion so strongly expressed in former reports, that very great advantages may be expected from judicious arrangements for this purpose.'

Acting on this report, a bill for the reclamation of the waste lands of Ireland was introduced into Parliament by Mr. Poulett Scrope, and another subsequently by Mr. French; but, as their proposals differ materially from that which I am about to submit to the Society, and are not, in my judgment, suited to the altered circumstances of the country, I shall not occupy your time with their details.

In 1847, Lord John Russell, during the famine time, in introducing a measure to the same effect, made the following statement: "Sir Robert Kane, in his 'Industrial Resources of Ireland,' says that the estimate that there are 4,600,000 acres of waste lands in Ireland, which might be reclaimed and formed into cultivated lands, was perfectly correct, and that it was by no means an exaggerated statement. We propose to devote £1,000,000 to this purpose, and we propose that the land should, if the proprietor be willing to part with it, be purchased; but that if he does not improve it, by accepting a loan under this measure, or out of his own resources, and if he refuses to sell, there shall be a compulsory power to the Commissioners of Woods and Forests to take and improve waste lands which are below a certain value. We propose that such lands shall be improved and reclaimed as far as general operations are concerned; that roads shall be made; *that general drainage shall be*

effected, and the necessary buildings erected; but that no cultivation of the land shall take place under the direction of a public department; and that the lands, having been so reclaimed, shall be divided into lots, and that when these lots shall have been reclaimed they may be either sold or let to tenants for a certain number of years, with a determination that the lands let shall be sold at the end of that time. I own that I expect that great advantages will gradually arise from this plan, if it be adopted. I expect that a great number of persons, who have hitherto been driven to despair, and many of them into crime by the great demand for land, will be placed on those holdings, and be able to earn a comfortable living by the produce of their labour. I think likewise that, with respect to those who purchase them, we shall, by means of the land reclaimed and purchased, raise a class of small proprietors, who, by their industry and independence, will form a valuable link in the future social conditions of Ireland."

In these anticipations I fully concur, although I differ in some respects with the details of the suggestions. I do not think the duty of reclaiming the lands should devolve on the state; but if they are not to be set or sold until reclaimed, by whom is that reclamation to be effected? I also disagree with the suggestion that the Commissioners of Woods and Forests should be the tribunal to whom this important duty should be committed, for the reasons hereafter stated.

It may be said that these authorities I have quoted are very satisfactory as far as the theory of the question is involved; but what guarantee has the public that the reclamation of waste lands would be a paying concern? Is there any evidence extant that such a speculation has ever been successful in practice? And although the arguments may be very plausible and convincing, yet the practical statesman and man of business will hesitate before he assents to theory, be it ever so persuasive; and will require some precedent, or some convincing proof of its feasibility, before he gives his approval to what may turn out on trial to be a disastrous failure. I think this is a fair objection, and that this scheme, in order to deserve general approval, should stand such a test. The project has been tried by companies as well as individuals; and although the limited time I have had for investigation has not enabled me to obtain all the information I should desire, yet some striking instances of its success can be quoted.

In the first place, I do not think I am entitled to quote the wonderful success of the reclamation of slob lands in Wexford, Londonderry, Donegal, Sligo, Clare, and elsewhere, as proofs of the correctness of my views. Slob lands are limited in area, and differ essentially in many particulars from inland wastes, and are not intended to be the subject of the scheme suggested in this paper; although, if facilities should exist, I do not see why they should be excluded from the operation of any measure that might be introduced. But I can refer to the operations of the Waste Land Improvement Society as an instance of the success which attended the trial of the plan on a comparatively restricted scale. Lord Devon's

Commission quotes the report made to the Society in 1845, by their manager, Colonel Robinson, as a proof of what could be effected by the reclamation of waste lands; and although that useful and well-organized Society was obliged to wind up their affairs in the disastrous famine years, yet they achieved wonders during the period of their existence. That Report states that "Two hundred and forty-five tenants, many of whom were a few years since in a state bordering on pauperism, the occupiers of small holdings of from ten to twenty plantation acres each, have, by their own free labour with the Society's aid, improved their farms to the value of £4,397—£605 having been added during the last year—being at the rate of £17 19s. per tenant for the whole term, and £2 9s for the past year—the benefit of which improvements each tenant will enjoy during the unexpired term of a thirty-one years' lease. These two hundred and forty-five tenants and their families have by spade industry reclaimed and brought into cultivation 1032 plantation acres of land, previously unproductive mountain waste, upon which they grew, last year, crops valued by competent persons at £3896—being in the proportion of £15 18s. each tenant; and their live stock, consisting of cattle, horses, sheep, and pigs, now actually upon the estate, is valued, according to the present prices of the neighbouring markets, at £4,162; of which £1,304 has been added since February, 1844; being at the rate of £16 19s. for the whole period, and £5 6s. for the last year, during which time their stock has thus increased in value a sum equal to their present annual rent. And by the statistical tables and returns referred to in previous reports, it is proved that the tenants in general improve their little farms, and increase their cultivation and crops in nearly direct proportion to the number of available working persons of both sexes of which their families consist."

The efforts of individuals have been equally successful in many parts of Ireland. Mr. Henry Brett, who for many years was county surveyor for Mayo, and now fills that office in the county of Wicklow, thus records his opinion of the feasibility of reclaiming waste lands in the western districts of the island, where his official duties brought him in close contact with those who tried the experiment, and enabled him to form a just estimate of the results:—"No part of Ireland," he says, "gives stronger proof of the means which exist for profitably improving the waste lands than the district known as the Barony of Erris, in the county of Mayo, containing nearly a quarter of a million of statute acres of surface. Previous to the year 1822 this country had no road or means of intercourse with the interior of the kingdom, save by almost unpassable bridle roads, and by boats to Westport, Killalla, and other accessible ports. Up to that period the country was thinly populated, and the vast tract referred to was chiefly used for feeding a poor description of mountainy cattle and sheep. After the great famine of the year referred to, Erris was made accessible by the main Erris road from Castlebar to Blacksod and Broadhaven Bays. The town of Belmullet was laid out and built, under the auspices of Mr. W. H. Carter, the proprietor. This place, which has risen to be a pros-

perous seaport, whence a large export of grain (oats and barley), amounting in some years to over 5,000 tons, was carried on, arising mainly from the reclamation and cultivation of the bog and moor lands, which were extensively carried out by the proprietors from the period referred to up to the famine year of 1846. It is believed that in the twenty years above referred to over 2,000 acres were brought into profitable cultivation, and added to the available arable surface of the country. During these years the population, wealth and general improvement of the district made rapid strides, and no peasantry could be better off or more contented than those inhabiting these wild western districts where the scenes of Maxwell's "Wild Sports" were laid. In the year 1838 I made a report on the progress and capabilities of Erris, its wants and requirements towards further development. This paper was printed in the Sixth Annual Report of the Commissioners of Public Works in Ireland, and drew a good deal of attention to Erris and the Western Highlands generally. The desolation caused by the famine of 1846 and the subsequent years stopped the current of improvement; for, although much was done towards opening up the remote parts of the district by important roads, to give the means for further reclamation, and affording facilities of transit for manures, produce, &c., yet the vast decadence in the numbers of the population proved almost a total barrier, for several years, to anything like the continual improvements which progressed in the previous period. Subsequent to the change of ownership of some of the large estates under the 'Incumbered Estates Act,' great and valuable improvements have been effected by men like Messrs. Clive and Birch at Ballycroy, Mr. Pike in the Island of Achill; and by several of the original proprietors, such as Messrs. Atkinson, Burns, O'Donnell, &c.; and I have very little doubt that the extent of land reclaimed within the last fifteen or sixteen years far exceeds that reclaimed before the famine of 1846. Although Erris is not favored with *lime* or *limestone gravel* fit for reclamation, it has great facilities for procuring *coral sand*, *shell sand*, and *sea-weed*, which prove good substitutes for the calcareous earths, and the reclaimed lands generally produce good crops of grain, potatoes, and grass.

"In the eastern and central parts of Mayo much has been done in the way of bog-land reclamation, chiefly by the tenants, who bring into profitable use the skirtings of cut-out bogs (a most excellent and simple mode of effecting such improvements). In these latter parts, as indeed in most of the central districts in Ireland, a great proportion of limestone gravel from the eskers, or manuring or corn gravel (gravel and earth from indurated banks) can be had; and by the simple application to the surface most valuable grass lands can be produced; and by further operations good general soils for most purposes can be obtained. In my opinion vast benefits can be conferred on the humbler classes of the community, by parcelling out the waste lands into good-sized farms, and treating the parts that can be really improved for arable purposes in the manner most suitable and economical, viz. by the occupying tenant farmers, and treating such parts as are most fit for arable purposes by a system of

small surface drains, for improvement of the pasturage. If to these divisions of bog and moor lands a small portion of land now available for tillage can be added, the whole proceeding may be made most effective, and at the same time simple, by erecting moderate dwellings, simple drains and fencing, and enabling the tenants to go on for a year, or perhaps two, until their first and most necessary improvements shall have been completed."

Those are the statements of a man of long-continued practical experience and great scientific knowledge, and therefore no mean authority—one who is actuated by no motive save the good of his country. His observations bring to my recollection what I have seen successfully tried in that wild and interesting country, Connemara, by Dr. Henry, Mr. Armstrong, and others. The former gentleman has, no doubt, the advantage of great wealth, and can sink thousands in the soil without feeling their loss, but still to the tourist visiting the romantic shores of Kylemore, his extensive sheep drains, and vast reclamation of barren mountain slopes, are almost as attractive and surprising as his winter gardens and crystal palaces adjacent to the site of his splendid mansion. I have seen his humble neighbours planting potatoes and growing plentiful crops of oats on deep bogs where the grouse and the snipe could scarcely find cover in former years; and although limestone is totally unknown in that region, yet by consolidating the bog by deep and frequent draining, it has arrived at such a state of consistency, that it has ceased to absorb the surface manure to any great depth, and has retained its superficial fertility after its reclamation and up to the present time. I know that deep red bog is inclined to absorb the manure, and when apparently reclaimed will return to its original barrenness after it has lain fallow, or even when laid down with grass seeds, but the demand for fuel will always make such tracts valuable, and therefore unsuited for reclamation until they are first *cut away*—when the substratum generally forms the most valuable and permanent arable or pasture land. Yet, even in the deep red bog, I believe a judicious system of deep and surface drains would soon reduce it to such a state of solidity as would make it capable of permanent reclamation. I anticipate that many will differ with me in this opinion, but even though I may be wrong in my conjecture, yet that will not detract from the applicability of reclamation to the vast tracts of unreclaimed alluvial and shallow moor, having limestone or impervious substrata, which exist in many districts of our country.

It would be a tedious task to quote the numberless authorities which recommend the reclamation of waste lands as a safe and profitable speculation; and, indeed, the frequent but abortive efforts made by experienced and patriotic men to obtain the co-operation of the legislature in times past, are proofs of the general estimation in which such a scheme has been held—an estimation based in many instances on personal experience, and in all on personal observation. The unanimity of the witnesses produced before the Devon Commission on this one subject should in itself be conclusive; and I have little doubt that if the potato failure had not supervened, the project would ere this have been forced from the legislature in one

shape or other. That great national calamity was a formidable check to reclamation. The poor man cannot reclaim profitably except by the assistance of the potato. No crop requires less previous pulverization of the soil, and that very preparation which is needed for its most successful cultivation is that which is most calculated to facilitate the reclamation of waste lands. The ridge and furrow, familiarly known as the lazy-bed system, is the simplest and most expeditious mode of reclamation—the most successful in wet soils, and most calculated to effect drainage simultaneously with the growth of the crop; and now that the favourite root seems to be reviving, our hopes of waste land reclamation should proportionally increase.

The prevalence of limestone in many unreclaimed districts of Ireland affords peculiar facilities for bog reclamation. The eskers, which, like immense zones traverse the central parts of Ireland from Ennis to Wexford, and from Galway to Drogheda, afford inexhaustible supplies for the bogs of Allen, Westmeath, Longford, Wexford, and Kildare, containing upwards of 200,000 acres. The maritime counties are, as stated by Mr. Brett, supplied with such inexhaustible quantities of coral sand, shell sand, and sea-weed, that the absence of limestone is scarcely felt. The undulating surfaces of the low-lying bogs and moors, and the frequency of rivulets in this moist climate of ours, supply peculiar facilities for drainage, and the vast efforts of the Drainage Commissioners of Ireland have further supplied facilities where they previously did not exist. I recollect when the arterial system of drainage was looked upon with great disfavour, almost universally condemned as a gigantic failure, and calculated to produce evil instead of good. I took no small part in the battle which was waged against Mr. Mulvany and his successors, and am therefore able to speak from personal knowledge of the effects produced by the great project originated by him and Sir Richard Griffith; and I must confess that this hitherto much abused Commission has, in my opinion, conferred lasting benefit upon Ireland. I except from this commendation the Shannon Navigation, which, from its incompleteness, and its incompleteness only, has been a national grievance instead of a blessing.

But while thus eulogising the past efforts of the Drainage Commissioners, I cannot abstain from affirming that much still remains to be done, ere the flooded lands throughout Ireland can be brought to a condition suitable for the effectual reclamation of the waste tracts which exist in the low-lying districts. Facilities have been afforded by the statute 26 and 27 Vic. ch. 88, entitled "The Drainage and Improvement of Lands (Ireland) Act, 1863," which have been successfully applied in many districts; but the preliminary expenses, the want of unanimity among proprietors, and the large claims for compensation, have contributed to impede the successful working of the measure. It is to be hoped that some means may soon be adopted to diminish the obstructive influences of these obstacles, and that a simple, short, and inexpensive act may be passed which will facilitate the efforts of those who desire to effect such a national as well as local benefit to the country.

These considerations have led me to conclude that the time has come for imperatively urging on the attention of the legislature this great national undertaking. The country is better prepared for it since the completion of the arterial drainage. The revival of the potato facilitates its execution. The necessity for employing the population in some extensive remunerative employment, so as to divert their attention from dangerous agitation, is more urgent now than ever. The insufficiency of other land measures to allay the national discontent is manifest, and the policy of staying a disastrous emigration is unquestionable. The only considerations therefore are, how should this great work be accomplished? by what agency? to what extent? with what materials? and under whose supervision and control? The experience gained by the Board of Public Works, in carrying into operation, the provisions of the Act of the 10th Victoria, chapter 32, known as the Land Improvement Act, points to that body as the best qualified for this purpose. The experience of the staff organised by Sir Richard Griffith, the vast quantity of statistical information at their disposal, and the efficiency of the Commissioners and their offices as at present constituted, render them the most suitable body to whom the execution of the measure could be entrusted. The great increase of duty which will thus be cast upon them will render it necessary to appoint an additional Commissioner, and to increase their engineering and working staff; but these and other details are easy of accomplishment, and are foreign to my object at present, which is to suggest general propositions, which, in the execution of every measure, must necessarily be subject to alterations and to modifications in exigencies as they arise.

According to the statistical returns, there are at the present time 4,356,863 acres of unoccupied bog and waste land in Ireland, more than one-fifth of its entire surface. From the year 1851 to the year 1869, a period of eighteen years, Ireland seems not to have progressed much in the reclamation of waste land. In the decade from 1851 to 1861, 662,244 acres were reclaimed, but that was principally attributable to the operations of the Drainage Commissioners, and the creation of farms consequent on the emigration produced by the potato disease. But from the year 1861 to the year 1868 the condition of the country seems to have retrograded, as waste lands increased in that period 70,754 acres, while in the one year of 1869 the loss of the previous seven years seems to have been recovered, as the diminution in waste and bog, or in other words, the increase of arable and pasture land, amounted to 71,475 acres in that short period. This leaves the country at present almost precisely in the same condition, as regards the extent of its bogs and waste lands, in which it was in the year 1861. Assuming that two millions of acres, or less than one half of the existing bog and waste land of Ireland, can be selected for the purpose of reclamation, the State should be empowered compulsorily to purchase the fee from the proprietors, at a rate not exceeding twenty-three years' purchase, as I deem this more than sufficient for any one who has himself, by his past neglect, proclaimed his own estimate of it. When the

land shall have been purchased and possession taken, it should be subdivided into farms varying from 5 to 100 acres, according to circumstances. Each farm should be surrounded, in the first instance, by a permanent boundary-fence sufficient to facilitate drainage when required; and where indigenous trees exist (as they do in many tracts of waste bog and mountain in Ireland), the fences should be double, about sixteen feet apart, and sufficient to keep out cattle and sheep, and so favour the growth of a belt of timber, which experience has already proved to be practicable in many places. A slated dwelling-house, cow-house, and piggery should then be erected, and the farm in this condition handed over to the tenant, free of rent for the first year or two, but subject to a reasonable notice to quit during that period only, in order to insure cultivation and prevent injury, dilapidation, or spoliation of the premises. I am not an advocate for brick and cut stone dwellings for the peasantry of Ireland. The Royal Agricultural Society have been for ten or fifteen years catering to the tastes of some of the wealthiest landlords, by offering prizes for model labourers' dwellings and tenants' cottages. These things may suit those who have large incomes and a taste for the picturesque, but are not adapted for the condition of the people generally, and are too expensive to be adopted on a large scale or in a waste land reclamation scheme. The cheapest of the plans I allude to will cost from £60 to £120, and contain improvements and architectural embellishments which would never be appreciated by the peasant farmer. I would much prefer the design adopted by the Midland Great Western Railway Company, on a bog situate in the county of Kildare, which came into their hands as portion of the Royal Canal property. After this bog had been nearly cut away, a number of persons squatted upon it in miserable wigwams, and at first declined to pay any rent. By a little management they were induced to atton to the Company, and send in proposals for their several little holdings. Having done so, the Company let the land to them at a very moderate rent, and proceeded to supply timber, consisting of old sleepers and other waste materials, for the frame-work of doors and windows, and the skeleton of a dwelling, the interstices of which were to be filled up with adobe, made by the tenants themselves from mud and straw, which are produced on the spot. A warmer residence than stone or brick is thus constructed, and is covered with a roof of slates, tiles, or tarred felt, the latter being the warmest of the three, and the most suitable. A lean-to can easily be provided for the pig or cow, and when the walls are covered with a coating of plaster, and Roman or Portland cement, mixed and well washed, they may be either painted or whitewashed, and will last for a century. The entire expense is from £10 to £12. Any one who desires to see this experiment tried can satisfy himself by taking a ticket to Enfield, and inspecting this little property, on which some of those houses have been already constructed for the sum I mention. This example should teach us to avoid the expensive and picturesque style, for which the people are not yet educated, or the climate suited. It is essential that the thatched cottage should, if

possible, be discountenanced. In exposed situations thatch must be frequently renewed, and the quantities of straw thus taken from the provender and manure heap is almost ruinous to the small farmer, and highly injurious to the land. The walls should be constructed of such materials as the locality can supply most conveniently, and no hard and fast rule should be adopted, or any particular plan or specification laid down or prescribed as unalterable. The greater part of each building could be constructed by the rude labour of the intended tenants, and thus great economy would be attained. When these permanent improvements shall have been effected, the farm should be handed over to the tenant under a lease containing covenants against subletting, alienation, waste, and non-repair. Occupation and cultivation on the part of the lessee should be essential.

The great objection to this plan will probably be the responsibility it is calculated to impose upon the government through the instrumentality of the Board of Works. It is obvious that an imperial government, already overtaxed with duties connected with innumerable state departments, will receive such a suggestion with disfavor, if not with actual hostility, and will endeavour to impose on private individuals (perhaps on the owners in fee), the responsibility of taking the initiative in all such measures of reclamation. But in a great crisis like the present this will assuredly be a mistake. The peasant farmer must be made the instrument of his own regeneration. If you interpose the landlord, you remove the great incentive to exertion. You leave him still a dependent being, and you deprive him of the advantage of unaided and uncontrolled self-reliance. If the state should decline to undertake the first and most essential steps towards permanent reclamation and occupation, it could safely entrust them to the intended occupier, on conditions and under supervision which could easily ensure their satisfactory completion; otherwise, any bill which may be introduced will be a bill for the *rich* and not for the *poor* of Ireland.

Presuming the average extent of each farm to be twenty acres, and 5s. an acre the annual value (rather a high estimate), £100 would purchase the fee, and £50 or £75 more would make the suggested farm and construct the dwelling and offices—making in all £135 for each farm. The 10th Victoria, chap. 32, already alluded to, suggests a mode of setting this for twenty-two years, at 6½ per cent. on the outlay—that would be about £10 a year for each farm, or about 10s. an acre; and at the end of twenty-two years principal and interest would be repaid to the state, and the occupier should then be entitled to hold the land for ever as a peasant proprietor in fee, free from any rent or burden whatsoever. The anticipation of leaving an unburthened patrimony to his children would be an incentive to exertion. Arthur Young says that the peasant proprietary on the Continent displayed an industry so conspicuous and so meritorious, that no commendations would be too great for it. It was sufficient to prove that property in land is, of all others, the most active instigator to severe and incessant labour; and this truth is of such force and extent, that I know no way so sure for carrying tillage

to a mountain top, as by permitting the adjoining villages to acquire it in property. In fact we see that in the mountains of Switzerland, &c., they have conveyed earth in baskets on their backs to form a soil where nature had denied it.

John Stuart Mill, in his "Political Economy," writing on this subject says: "On this point, at least, authorities are unanimous; those who have seen only one country of peasant proprietors always think the inhabitants of that country the most industrious in the world. There is as little doubt among observers, with what feature in the condition of the peasantry this pre-eminent industry is connected. It is the magic of *property* which turns land into gold. The idea of property does not, however, necessarily imply that there should be no rent any more than that there should be no taxes; it merely implies that the rent should be a fixed charge, not liable to be raised against the possessor by his own improvements, or by the will of a landlord. A tenant at a quit rent is to all intents and purposes a proprietor. What is wanted is permanent possession on free terms. Give a man the secure possession of a bleak rock, and he will turn it into a garden, give him a nine years' lease of a garden, and he will convert it into a desert."

The authorities on this subject are as numerous as they are unanimous. My greatest difficulty is to abstain from quoting too largely. All coincide in recommending perpetuity of tenure, either at a fixed rent or a gradually decreasing one. That supplied by the provisions of the Land Improvement Act is in my humble opinion the simplest, the most encouraging, and likely to be the most beneficial. Its application in details I will not enter into. Actual experiment will be the best test, and will suggest such modifications as the nature of the subject and the circumstances of each case may require.

In assuming that 2,000,000 acres are capable of being thus allocated among a peasant proprietary, I am within the estimate of reclaimable land formed by Sir Richard Griffith. He calculates the extent available for tillage and pasture, for the two counties of Galway and Mayo alone, at 880,000 acres, or nearly half the quantity I have assumed. If these 2,000,000 acres were allocated in farms averaging 20 acres, they would accommodate 200,000 peasant proprietors; and allowing five individuals for each family, they would afford homes to 1,000,000 of our discontented population. I do not think this would exhaust the capabilities of the scheme. I have no doubt that improvement would progress, and that wastes which have hitherto been considered unprofitable would be added gradually to those previously reclaimed. The inducement of a secure and permanent home would be irresistible to the rural labouring classes and cottier tenants of Ireland. In the evidence taken by the Devon Commissioners, the witnesses are unanimous in recommending waste land reclamation; and although their suggestions are of a general nature, yet the plan most recommended is "locating the tenant on the unimproved land, and assisting him in those operations which are beyond his own means, or which tend to bring the land more rapidly forward to a perfect state of tillage." I think the plan I have taken the liberty humbly to suggest is that which is best cal-

culated to "assist him in the operations which are beyond his own means," and tend to bring the land more rapidly to a perfect state of tillage. And the probable effects on the cottier tenants of Ireland, in thus affording them the inducement of such a home, are thus stated in page 571 of the Digest:—"A cottier tenant, holding an acre or two of land with a miserable cottage at a middleman's high rent, for example, would willingly move to a waste land lot of twenty-two acres, of which three or four may have been reclaimed, and where he finds a snug cottage ready to receive him at a fair rent."

In anticipating the effects which such a scheme as this would produce in our country, I cannot omit referring to the impetus which would thus be given to peaceful industry, and the vast increase to the agricultural produce of the land. The sister country would thus have an increased granary from whence to draw her supplies to meet the wants of an increasing manufacturing population. The example set by a comfortable and contented peasantry would disseminate its beneficial effects among the rest of the population; and if model agricultural schools were established in suitable remote localities, the extension of agricultural science could go hand in hand with the progressive improvement of the people.

III.—*On the Diminution of the National Wealth from Cattle Diseases.* By Thomas Baldwin, Esq.

[Read Tuesday, 15th February, 1870.]

THE agricultural live stock of Ireland is one of the great sources of our national wealth. In 1868 we exported 362,173 bulls, oxen, and cows; 45,707 calves; 781,558 sheep and lambs; and 242,423 pigs. The gross value of these was about £8,000,000. We got the market value for these animals; but we did not derive from a very large number of them the wealth which they were capable of producing. We sent away a vast number of half finished stall-fed beasts; and it is well known to experienced persons, that it is the last stage of the fatting process that pays best. I have seen Irish stock stall-feeding in England, where rent and labour are higher than in Ireland, and where the climate is greatly inferior for the production of roots and hay—two chief articles used for fatting beasts—to our climate. We are annually losing a quarter of a million sterling in this way.

In 1869 we had in Ireland 542,758 horses; 3,531,154 cattle; 4,141,280 sheep, and 1,157,734 pigs. The gross value of these was upwards of £50,000,000. The question I propose to submit for the consideration of the Society this evening is the proportion of this which was wasted by disease.

The subject is very comprehensive; so much so, that I find I cannot adequately discuss it in one paper. Up to the present no attempt has been made to put even an approximately correct estimate of the loss before the public. I have paid attention to the question