# THE WOODS, FORESTS, TURF-BOGS,

## FORESHORES OF IRELAND:

## OPPORTUNITY FOR, AND ADVISABILITY OF,

### ESTABLISHING

## GOVERNMENT MANAGEMENT AND PROTECTION.

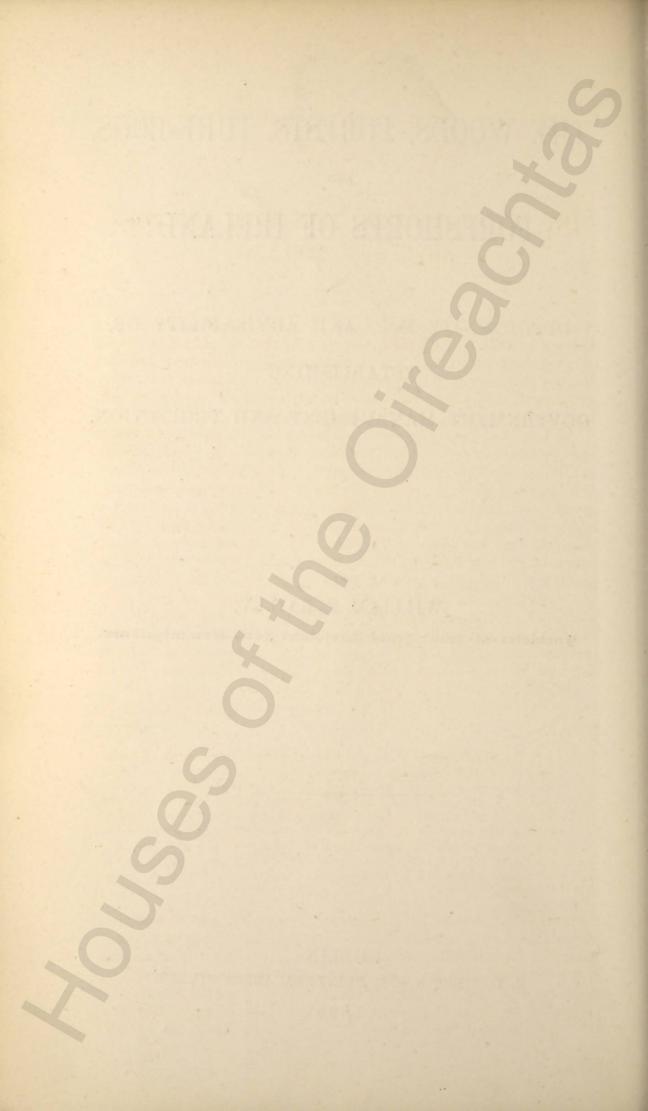
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## THE WOODS, FORESTS, TURF-BOGS, AND FORE-SHORES OF IRELAND.

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THE Land Purchase measure which the government intends to pass this session into law, affords an opportunity that should not be missed of protecting, preserving, and promoting forestry in Ireland, and also the use and benefit to a large section of the population of turbary and foreshore rights, which, unless now guarded and controlled, will lead to endless trouble and litigation in the future.

As I pointed out in a paper read before the Statistical and Social Inquiry Society last July, the Land Purchase Acts are already exhibiting disastrous tendencies so far as regards the growth of woods and forests in Ireland. No sooner does a farmer, in many instances, become the purchaser of his holding than he desires to exercise the rights of ownership, and assure himself of his emancipation by cutting down all the trees on the farm. In some cases also in which entire estates are sold on which there happen to be considerable plantations, these plantations not being attached to the holdings of any particular tenants, the owner, having no further interest in the place, proceeds to sell the timber to the highest bidder regardless of the consequences to the neigbourhood. In this way one of the prettiest wooded glens in Meath has lately been denuded of its trees, and now presents a barren and forlorn aspect. The Times Special Commissioner writing of the London Companies' estates in Derry has a like story to tell. Writing of the Fishmongers' estate, he says :-

"The woods, which were sold with the farms, have, in many cases, been disposed of to timber merchants, and ruthlessly cut down. Near Ballykelly is a fine oak wood of about two hundred acres, on either side of the old coach road between Derry and Belfast, which has been bought by a syndicate of four or five gentlemen with a view of preserving it (the meaning of Derry is 'the oak wood'). But this is the only one of the old woods still standing. Skinners' Company Estate some fine old trees which sheltered the market place of Dungiven have been cut down by some of the tenants since the sale by the Company."

On the Bath estate in Monaghan some useful and ornamental plantations have been cleared away since the estate has been sold. A similar state of things exists in almost every county in which the Land Purchase Acts have had an extensive operation. Should no steps be now taken to preserve and protect plantations from the ravages of the new proprietors, there will soon be very little land left under wood in the country, and the present scarcity of timber, which is much to be deplored, will be rendered still more noticeable, and its results will, in the long run, be very disastrous.

It is not alone in the matter of woods and forests that the extended operation of the Land Purchase Acts is likely to cause loss and future trouble in Ireland. To all well acquainted with the tenure and management of Irish land it is evident that there are few subjects more important as regards small holdings than the management and control of the turf bogs and of the turbary rights attached thereto. In many parts of Ireland a great part of the value of the holdings depends on the right of cutting turf. Where such right is not attached to a holding, its rent-paying capacity is frequently greatly reduced. Most large owners are well aware of this, and take good care to preserve for each tenant on the estate proportionate rights of cutting turf on the landlord's bogs. Under the Land Purchase Acts there is much danger that these turbary rights will, after a time, cease to exist. Turf-bogs will, in case of sale, be divided up between the farms of adjoining occupiers, who will, after a time, acquire a monopoly-doubtless beneficial to themselves, but ruinous to their neighbours. Already in many districts this state of things is being experienced. I am aware of instances in the North of Ireland where the peasantry on an estate, sold under the Purchase Acts, were prohibited by those of their number who were fortunate enough to obtain possession of the turf bogs from getting turbary, except at exorbitant charges. Summonses and cross-summonses were the consequences, and the tenantry on the estate have been plunged into litigation.

The same trouble threatens to arise with reference to foreshore rights: the taking of gravel, of sand, and of seaweed. All such rights should, without question, be reserved from all conveyances under the Purchase Acts, and should be vested in the Land Commission. Local bodies will, probably, after a time be created, to the care of which the management and control of such rights may finally be handed over.

#### I.—Woods and Forests.

In the paper on "Forestry in Ireland," read by me before the Statistical and Social Inquiry Society of Ireland, in July, 1889, I described at some length the forestry regulations of the principal European countries, and the measures taken to encourage and affect re-foresting. I would now shortly point out how the planting of trees may be protected and encouraged by government control. I would then show the advantages of forestry in Ireland from both an industrial and climatic point of view, and also as a means for the reclamation of waste lands, considering shortly some objections that may be made against proposals to re-forest the country.

#### How Government should interfere for the Protection and Development of Forestry in Ireland.

At the present time an opportunity is presented for the preservation and extension of forestry in Ireland, such as has not previously arisen. A large measure for the purpose of enabling tenants to become the owners of their holdings is being introduced into Parliament. As I have pointed out the very small proportion of land under timber in Ireland (1.6 per cent. of the total area of the country) is in danger of being still further reduced by the operations of the Purchase of Land Acts. These very acts at the same time afford an excellent opportunity of not alone staying the evil, but of promoting the planting of timber. A clause should be inserted in the proposed measure excepting and reserving from every farm sold under the Purchase Acts, all woods, forests, groves, and plantations, the continued existence of which would be of advantage to the district or community in which the holding may be situated. Such woods, forests, groves, and plantations, should, thereupon, be vested in the Irish Land Commission, which should have power to control and manage them as may be deemed best. Power also should be given to the Commission to reserve out of any estate disposed of to the tenant such lands as may be considered suitable or desirable for being planted with trees. Land so reserved, and all woods, groves, and plantations, excepted from the conveyances to the occupying tenants should be discharged from all liability to the repayment of instal. ments, and should be vested in the Land Commission with full powers to manage and deal with them on such terms and in such manner as they may think right. The profits that might accrue from such management could be devoted to the expenses of acquisition, and to the further development of forestry in desirable districts.

On many estates disposed of under the Purchase Acts-especially in the North of Ireland-groves and plantations had been planted and maintained with much care by the previous owners. Now that all restriction is removed by the transfer of ownership, there is, as I have said, a strong tendency to exercise the rights of ownership by doing that which was previously prohibited. Also on the sale of large estates the plantations which had been erected by the owners on patches of waste lands, excepted from the neighbouring holdings, being in the occupation of no one who would be entitled to purchase under the Land Acts, remain in the owner's or mortgagees' hands. He or they, however, having disposed of the rest of the estate have no further interest in the locality, and seek for a purchaser for the trees left in their possession. Such a purchaser, of course, buys only with the intention of cutting down the timber. After this operation, the ground from which the trees have been removed, presents an unsightly appearance, and becomes utterly useless for agricultural purposes. All such groves and plantations should be vested in the Land Commission, of course on the payment to the owner of a fair price. Glens, swamps, and other pieces of waste lands, which may form portions of an estate sold, and which are of little use, except for purposes of growing timber, should also be retained by the Land Commission, and utilized for planting.

The department of the Land Commission to which would be entrusted the management and control of woods so obtained, might after a time extend its area of usefulness, and acquire lands in various parts of Ireland for the purpose of having them planted. This would enable many important timber industries to be introduced into the country, and help to reclaim much of the waste lands which exists in so many districts. In fact, if properly handled, such a department might gradually undertake the duties and fill the place which in most European countries are entrusted to the Forestry Department of the government.

#### Forestry from an Industrial Point of View.

Most persons are ready to acknowledge that forest industries are admirable, that they afford multifarious employments, and that they tend to introduce habits of industry and thrift among the rural population wherever they flourish. People, however, acknowledge all this without any clear ideas of what the purposes are to which trees may be put, and are apt to discourage the reformer, who would advocate the introduction of forestry into Ireland, by objections that there are now no trees in the country, that it would take generations to provide them, and that they would not grow if planted in the districts most in need of them. The sceptical and boasted commonsense view affected by the careless or indolent thinker, is, indeed, sufficient to damp the ardour of the more practical and energetic advocate of improvements and reforms which he knows would be of enormous advantage to the country. The wise man will, however, give ear to him who, having practical experience of the wants of a district, has devoted time and attention to devising a remedy. Mr. Dermot O'Conor Donelan, J.P., of Tuam, County Galway, has for several years been impressed with the advantages to the west of Ireland of the promotion of forestry. He has spent much time in visiting the forest departments of various Continental countries, and has endeavoured to impress on the public the results of his inquiries. In a pamphlet published two years ago on Young Forests and their Industries, Mr. Donelan has gone at considerable length into the various industrial purposes to which timber has been put on the Continent. Many of these could easily be introduced into Ireland, and would serve to give employment to a large number of the inhabitants of the country now practically starving on the land.

The manufacture of paper from wood is now, perhaps, one of the most important of the timber industries. Within the past twelve years it has attained to immense proportions in Norway and Sweden, and to quote the British Consul's Report, "Wood-paper mills are springing up all over Germany." When we recollect the immense number of purposes to which paper-pulp can now be put, we can realize the enormous future that this industry has before it. The day has long passed away when linen rags and straw were the only substances used for the manufacture of paper. Rags are now used only for the manufacture of the most superior kinds of paper. Esparto grass, which is also largely used, is expensive. Straw of a suitable kind is nearly five times as expensive as wood. Timber, however, to be manufactured into paper requires the presence of considerable water power. This can readily be obtained in Ireland, and is an advantage which would render such an industry peculiarly suitable to the country.

The use of timber in the manufacture of paper has led to enormous developments in its uses. Paper barrels—one-half the weight of wooden ones—are now largely made. Railway carriage wheels, panels for carriages, felt for roofing, gas pipes, chimney-pots, carpets, artificial leather, and the thousand-and-one articles made of papiermaché, are some of the products of the timber industry. Celluloid made from paper-pulp is already proving an efficient substitute for ivory. It can be manufactured into cuffs and collars, backs of brushes, umbrella handles, and billiard balls, and makes drumheads better than parchment, as it is not affected by damp.

The chemical products of timber are also very important. Among them we may mention charcoal for gunpowder and filtering, woodtar, and extracts for tanning, and the pyroligneous acids from which are formed creosote and acetic acid.

In Germany the skin of the silver fir is used in the manufacture of leather, and according to Mr. Howitz, in his evidence before a recent Committee on Irish Industries, there is a very valuable commodity produced in Germany from pine leaves or needles, called Forest or Sanitary Wool, which is much used in hospitals, and is considered beneficial for persons suffering from rheumatic affections.

In Russia an immense number of sacks and mats are made annually out of bast or the under-skin of the lime tree. In one district alone upwards of 900,000 mats and 600,000 sacks are made each year of this substance.

Wicker industries have only to be mentioned to enable us to recognise their advantages, and the possibilities of their development. As a recent writer states, "the trade of basket-making is not difficult to learn, and it is admirably adapted to the condition of the Irish people; even a second-rate worker can earn at it a pound a-week."

The demand for timber for telegraph poles, railway sleepers, pit props, etc., is constantly increasing. These articles are mainly supplied from pine forests, which would undoubtedly flourish in Ireland.

Now the great majority of the uses mentioned here to which wood may be adapted can be put into operation within a few years after the timber has been planted, and are purposes for which the raw material is at its best before the wood has reached its twentieth year. For mature timber the uses are endless. As, however, one of the principal arguments against the introduction of forestry into Ireland is that it would take so long to produce the timber that only posterity could benefit, it is well to dwell upon industries that a few years would bring into full swing.

#### The Effect of Forestry on Climate ; and its Uses for purposes of Reclamation.

The modifying effects of woods and forests on climate are of undoubted importance, and of late years have been carefully noted by most European governments Ireland has for so long a period been denuded of trees that we have not the same opportunities of judging of their influence as have continental peoples. As the proportion of forest-covered lands has diminished in France, Switzerland, Italy, Spain, and other European countries, the adverse influence on the climate has been immediately perceived; the importance of the question has been recognised, and the work of cultivating the denuded ranges and hills has been undertaken with energy. In most European countries special forest laws and regulations are enforced by Government Forest Departments. These laws provide for the protection of existing forests, and the planting of trees in desirable localities. Schools of Forestry are maintained for the training of persons required to take charge of the woods and forests of the country—thus providing a skilled and scientific body of officials, who are in a position to guard and develop what is rapidly becoming one of the most important industries of European states.

In a report on the re-afforesting of waste lands in Ireland prepared in 1884, by Mr. D. Howitz, Forest Conservator, Copenhagen, and printed as a Parliamentary paper, the writer says :--

"There can no longer be any doubt that forests prevent sudden floods to a very great extent, and that by a judicious cultivation of slopes and high plateaus, in a few years these calamities are avoided. Experience has also proved that such cultivations ensure a steady flow of water during summer, and that the fertility of the agricultural lowlands is increased considerably by them. Baron von Muller, the celebrated botanist, in his work on forest plantation states that, in forest-bare countries, the productiveness of cereal fields increased fifty per cent. by the cultivation of forest belts, a statement never yet contradicted by experience. Whereas, in Ireland, the hills and ranges once have been covered with great, and, according to history, valuable woods (the traces of which are to be found everywhere in the bogs); and, where it should be so easy to rear the most valuable timber trees, the work of re-afforesting will not only be a boon to the country at large, by preventing the flooding of the lowlands during heavy rains, and fertilizing them by a steady flow of water throughout the year, making the climate more congenial and healthy, but it will have the great advantage of being a work eminently remunerative—an advantage it will have compared to the difficult and costly cultivation on the Alps, the Pyrenees, and the Ardennes, where only the hardy and cheap trees can be reared, and on which works, the French, Spanish, and Swiss governments are spending millions of money yearly."

As a proof of what can be done by afforesting in the way of reclamation, Mr. Howitz refers to the cultivation of "Les Landes," the low-lying lands near the river Garonne, in France. A report on this district, furnished to the Department des Forêts, in 1882, concludes as follows,—

"This is one of the most beautiful pages in the history of civilisation and progress; a region which, thirty years ago, was one of the poorest and most miserable in France, may now be ranked amongst the wealthy and prosperous."

This district which, some forty years ago, was not worth more than  $\pounds_{40,000}$  a year, is now worth at least  $\pounds_{40,000,000}$ . How the transformation has been effected is easily explained. About one-anda-half million of acres of pine (*pinus maritima*) have been planted on the *Landes*; and, although the soil is of the poorest description, the trees have grown fairly well.

"Where," says Mr. Howitz, "thirty years ago, a few thousand poor and unhealthy shepherds were walking about on stilts, to raise themselves above the uuwholesome flats, watching their flocks feeding on the scant herbage, found here and there, are now villages, with saw-mills, wood-working factories, charcoal kilns, turpentine distilleries: and for more than seventy miles are to be seen these vast forests interspersed with fertile agricultural lands, where farmers and foresters by the thousand are finding a healthy and prosperous existence. While here the poor and despised timber of the maratime pine can furnish such results, what cannot be done with humid and rich soil on the hills and ranges of Ireland, where the best and most costly timber trees of America and Europe should find a congenial home."

Mr. Fletcher Moore, in a paper read before the Statistical and Social Inquiry Society, in 1883, discussing this question of improvement of climate by planting, says :—

"Nor is this improvement of local climate caused by shelter imaginary ; it is real, for as the practical gardener knows that a little shelter will save his delicate plants from a winter or spring frost, so a practical farmer knows that a belt of plantation will let him grow better and earlier crops ; and he also knows that every beast on the farm has to burn away a portion of its food, for the mere purpose of keeping itself warm, and that by giving it shelter he is actually saving so much of its food, as it will do with less food, and at the same time thrive better. On this very point—I know well a mountain farm in the Wicklow mountains (not very far, indeed, from Glencree, which Dr. Lyons describes as being formerly a forest)—on that farm, by judicious planting, by belts and screens, the place has become quite different in its local climate to the surrounding mountains, and the plantations are highly valuable for their shelter."

It is sometimes objected that trees would not grow or flourish in districts of the country where they are most needed, such as the wilder parts of Mayo. But it is certain that, at some former period, there were few parts of the country uncovered by forests :—

"It is often surprising," says Mr. Donelan, "in districts as bare of trees as the Sahara, the number of hills and townlands, called after woods, which have long since disappeared. All along the coast from Ballina to Galway, these constantly recurring names prove that, at no very remote period, a great part of that district was covered with timber. Recent plantations, within twenty miles of the coast, have been too small. Woods, to thrive in exposed situations, must be of considerable extent, or else the wind will begin to pass through, and the trees then to dwindle and die. According to several authorities, no matter how rough the winds may be with which the forests have to contend, one hundred yards of shelter-belting solves the difficulty ; the trees grown in that fringe may be stunted and worth but little, but inside the regular forest will grow as luxuriously as thirty miles from the sea."

Mr. Howitz is of the same opinion, and thinks that seaboard woods would tend to protect and improve grass-lands and poor fields inside their influence, which are now waste and barren.

It is not my intention in this paper to go into the question of the cost of planting and maintenance, or of the profits that might be expected to be realised. Neither do I intend to discuss the kinds of trees that would be most suitable for selection, nor the particular localities in Ireland that might with advantage be utilized for the purpose. All these questions, though extremely important, are outside the scope of the present paper, in which I would merely strive to call attentien to the advisability of taking advantage of the passing of a Land Purchase measure to promote and protect an industry the effects of which on the welfare of the country would be well-nigh incalculable.

#### II.—Turf-bogs and Turbary Rights.

Of perhaps equal importance, so far as the future welfare of the community is concerned, is the administration and control of the turbary of the country. In many districts the supply of turf is of vital importance to the peasantry, and in many cases the solvency of a holding as security for a government advance, largely depends on the maintenance of turbary rights. Instances are common where the rent-paying capacity of a farm is very largely reduced by the failure of a sufficient turf supply. The Land Commission, consequently, for its own protection, should pay attention to the turbary supplies on the estate on which they make advances for purchase. Small tenants frequently measure the loss they suffer by the want of turbary at  $\pounds 6$  or  $\pounds 8$  a year. As Mr. Richard J. Kelly, B.L., (*Tuam Herald*) in an interesting pamphlet on *Some of Ireland's Resources*, says :—

"As a fuel resource for the country turf is positively invaluable. The subject of bog fuel affects all Ireland, and possesses a degree of economical interest of which the inhabitants of coal countries can form little conception."

On most large estates in Ireland the landlord preserves in his own hands the turf bogs, and allows each tenant on the estate to cut enough of fuel for the supply of his holding at a nominal rent. Where an estate is sold under the Purchase Acts one of two alternatives takes place. Either the bog is divided up among the adjacent occupiers and reckoned in with their holdings, or else it remains in the owner's hands. In the former case a rigid line is drawn which hands over to a few what is necessary for the comfort and well-being of all; in the latter, the owner having no longer any personal interest in the estate, naturally sets the bog to the highest bidder, and the poorer class of farmers are completely deprived of cheap fuel. This state of things will, in the long run, inevitably lead to confusion, trouble, and endless litigation.

In a memorandum drawn up by Mr. H. De F. Montgomery (of Fivemiletown) some years ago, it was pointed out that if these turbary and other similar rights were

"allowed to pass in fractions to the tenant with a Parliamentary title, there will be nothing left for rural municipalities of the future to administer, and the property and various rights and royalties, allowed to pass in this way, will be irrecoverable for the public benefit, except at great expense, and with immense friction."

#### In an address lately delivered by Mr. Montgomery, he said :-

"I have been told by a member of a Swiss commune that they look upon their parish bogs as a gold mine, though they also owned a considerable area of forest which yielded them a constant supply of wood fuel. Of how much more value is the peat supply of Ireland? I ask anyone to compare a well-administered peat bog with one on which a number of tenants are allowed to cut in the several plots allotted to them at their own sweet will, and also to compare even tolerably wellmanaged peat bogs in this country with the best managed communal peat bogs on the Continent, and I think he will agree with me that the system of parcelling out of peat bogs with which we are threatened, under a measure simply carrying further, as regards such matters, the operation of Lord Ashbourne's Act, involves a waste of one of the most valuable sources of wealth and general comfort in Ireland that would be nothing short of criminal."

The only rational way out of the difficulty undoubtedly is to vest in the Land Commission all such bogs—to be administered by them for the benefit of the neighbouring community. Ultimately they may be handed over to the local government bodies of the future to be administered as are similar rights in various Continental countries.

#### III.—Royalties, Foreshore, and Water Rights.

There are other rights connected with Irish land which, although not of so much importance as Forestry and Turbary rights, should, at the same time, be taken in charge by the Government Land Department in the case of sales carried out under the Purchase Act of estates to which such rights are attached. A bill was introduced into the House of Commons last session (backed by Mr. Murphy, Mr. Parnell, Mr. Sullivan, and Mr. Clancy), to provide for the vesting in the Commissioners of Public Works in Ireland of Royalties, Foreshore Rights, and Water Rights connected with lands sold under the Purchase of Land (Ireland) Acts. It is evident that the Land Commission, or new Land Department, is the proper body to have the administration of such rights. The bill in question, however, proceeded on excellent lines. It defined the rights and hereditaments which should be excepted from the conveyance to a tenant of his holding under the Purchase Acts as

"All such foreshores, and such soil and beds of tidal and non-tidal rivers and lakes, and such exclusive rights of taking gravel, sand, and seaweed thereon, and such other exclusive rights connected therewith, and such waters and exclusive rights of water and of fishing, and such mines, royalties, minerals, coals, and quarries, as respectively form portion of or adjoin such holding, or are appendant or appurtenant thereto, and as are held by the owner or owners of the estate purported to be conveyed or vested."

#### All such rights and hereditaments,

"Save such rights of water and of taking gravel, sand, or seaweed, and of quarrying open quarries as may be necessary for the use and proper cultivation of such holding,"

it is provided should be vested in the government department, which might do all things necessary for utilizing and managing the same. I have here shortly sketched the method of protection which might well be adopted by the government for the protection of rights and things of importance to a very large proportion of the community. An opportunity is now presented which cannot be easily recalled if allowed to go by. Every estate sold, every holding conveyed to a tenant, renders it more difficult to deal with the matter. The harm already done is infinitesimal as compared with what inevitably will result, unless steps be taken to protect the interests of the community at large from the depredations of the individual. Almost every European state has bestirred itself as regards these matters, yet in none of them is government control more urgently required than in Ireland.

12