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## Electric Scotland's Weekly Newsletter for January 29th, 2016

To see what we've added to the Electric Scotland site view our What's New page at:

<http://www.electricscotland.com/whatsnew.htm>

To see what we've added to the Electric Canadian site view our What's New page at:

<http://www.electriccanadian.com/whatsnew.htm>

For the latest news from Scotland see our ScotNews feed at:

<http://www.electricscotland.com/>

### Electric Scotland News

Happy Birthday to Rabbie Burns

Got an email in from Christopher Pratt which is an interesting way of celebrating our final Robert Burns tribute in which he said...

Happy Birthday to Rabbie Burns, The Bard of Ayrshire and Scotland's national poet (25 January 1759 – 21 July 1796).

Today we say, "Some hae meat and canna eat, And some wad eat that want it, But we hae meat and we can eat, And sae the Lord be thankit"

And we celebrate with poems, song, and the Haggis, Tatties & Neeps

[https://www.youtube.com/watch?v=C8l2m3\\_2Xjg](https://www.youtube.com/watch?v=C8l2m3_2Xjg)

A Man For A' That - Sheena Wellington on the occasion of the Opening of Scottish Parliament:

<https://www.youtube.com/watch?v=hudNoXsUj0o&feature=youtu.be>

My Love Is Like a Red Red Rose - Karen Matheson

<https://www.youtube.com/watch?v=CJGaRb3WCT4>

Ae Fond Kiss - Eddi Reader

<https://www.youtube.com/watch?v=RMmtBgMaF5I>

Annie Laurie - Jean Redpath

<https://www.youtube.com/watch?v=dHfE8VpQj70>

Robert Burns: The Man And His Legend (Documentary)

<https://www.youtube.com/watch?v=e6yGVYhVM1g>

And so, . . .

Here's tae us

Wha's like us

Damn few,

And they're a' deid

Mair's the pity!

May those who live truly be always believed,

And those who deceive us be always deceived.

Here's to the men of all classes,

Who through lasses and glasses

Will make themselves asses!

I drink to the health of another,  
And the other I drink to is he  
In the hope that he drinks to another,  
And the other he drinks to is me.  
Then let us toast John Barleycorn,  
Each man a glass in hand  
And may his great prosperity  
Ne'er fail in old Scotland!

"Cuimhnich air na daoine on tàinig thu." / Remember those from whom you are descended.

-- From the book of Crisdean

Slàinte mhòr!

Hawick Reivers

Hawick Reivers Association are delighted to announce the plans for this year's festival which will take place over Easter weekend 25th to 27th March.

While many of the main events remain the same there are a number of significant changes to the timetable for 2016.

The festival opens in grand style on the Friday evening with The Reivers Family Banquet and on this occasion the Banquet entertainment will be provided by Hawick's own Youth Theatre Company ACT1 who have a few surprises in store for their audience. This event includes a three course dinner and is sure to prove popular.

Saturday sees the popular Reivers Market on the High Street and the local primary schools are gearing up to take part in the parade, the Reivers Games and schools Drama productions.

As always - one of the main attractions will be the "Hot Trod" - the torchlight procession through Wilton Lodge Park ending with the fireworks display.

The Ghost walk makes a return this year but moves to the Saturday night after the fireworks and will again offer a few surprises along the way.

The main concert this year moves to Saturday night and the committee are delighted to welcome local band "Up in Arms" as the main performers. They are excited to take part in this year's festival and promise a great finale to the day.

Hawick Rotary Club are again hosting the Literary High Tea and welcome Gillian Fraser as their guest speaker. Gillian who will be known to many from her years with Border TV will take as her topic "'The vital part ponies played in the story of the Reivers.'" - a fitting wind-up to a full weekend of activities with something for all the family.

Tickets will go on sale this Saturday at the Reivers Coffee morning in Trinity Church (10-12) and thereafter will be available from ILF, Dorwards or Border Events Box Office.

How would you like to document yourself on Electric Scotland?

As you likely know this year will see us moving our sites to Simon Fraser University and this is to ensure all our content will be available for future generations.

As we shuffle off this mortal coil I often wonder how each of us will be remembered. That made me decide to offer each and everyone who reads this newsletter the opportunity to write up what you have done with your life and talk about your family and ancestors. You can include videos, pictures and audio files to go with the text. I'll then add your information to our Mini Bios section of the site.

So do consider this as this way your life will have meaning to those future generations. And I might add if you do send something in you can also add additional information at any time in the future.

Old age pensioner

Well on Sunday 31st I'll become an official old age pensioner. I also today got in a letter from the Department for Works & Pensions stating my Basic UK State Pension is at the full amount. I confess I had calculated it was likely to be only half that amount so that was a nice surprise.

And now here are stories from the Scottish Press this week...

War zone doctor David Nott wins Robert Burns Humanitarian Award  
Dr David Nott is a volunteer with Medecins Sans Frontieres and the International Committee of the Red Cross.

Read more at:

<http://www.bbc.com/news/uk-scotland-glasgow-west-35379463>

Remember how much we owe Barnett formula

This invaluable formula, has helped protect us from the fall in oil revenues and there's an extra £9m for flood victims

Read more at:

<http://www.scotsman.com/news/brian-wilson-remember-how-much-we-owe-barnett-formula-1-4009119>

Scottish gin sales growth surge

Think of a drink associated with Scotland and gin may not be the first thirst-quencher that springs to mind.

Read more at:

<http://www.bbc.com/news/uk-scotland-35351339>

Aberdeen: once-rich oil city now relying on food banks

Local charities say food parcels have doubled in a year as people used to earning good money in the oil and gas sector have fallen on hard times

Read more at:

<http://www.theguardian.com/uk-news/2016/jan/23/aberdeen-once-rich-oil-city-now-relying-on-food-banks>

Scottish salmon export sales drop

Sales of Scottish salmon to the export market dropped by more than a fifth last year

Read more at:

<http://www.bbc.com/news/uk-scotland-scotland-business-35379470>

The history of Robert Burns statues around the world

SCOTLAND'S most famous literary son is much more than words on a page.

Read more at:

<http://www.scotsman.com/heritage/more-heritage/the-history-of-robert-burns-statues-around-the-world-1-4007818>

Queen enters unusual dispute over Scottish baronetcy

SIMON and Murray Pringle have both laid claim to the Scottish title and the Queen has now asked judges to give their views

Read more at:

<http://www.dailyrecord.co.uk/news/weird-news/queen-enters-unusual-dispute-over-7241950#fH0eM3gmCUjYKY7A.97>

Swinney comments on export figures

Commenting on Export Statistics Scotland 2014 figures published today

Read more at:

<http://news.scotland.gov.uk/News/Swinney-comments-on-export-figures-21e2.aspx>

Education

Scotland may be in a state of denial.

Read more at:

<http://www.scottishreview.net/EileenReid22a.html>

Work starts on space technology centre in Edinburgh

Construction work has begun on a centre to support businesses involved in space technology in Edinburgh.

Read more at:

<http://www.bbc.com/news/uk-scotland-edinburgh-east-fife-35422617>

## Electric Canadian

The Life and Times of Sir Alexander Tilloch Galt  
By Oscar Douglas Skelton

Few among the makers of Canada have played so varied a part in her upbuilding as Alexander Tilloch Galt. There have been statesmen who impressed themselves more spectacularly upon popular memory. There have been business men who have since carried through greater projects of industrial development. There have, however, been few men in our annals who combined in such a degree eminence both in political and in commercial life.

You can read this at: <http://www.electriccanadian.com/makers/galt.htm>

## Electric Scotland

Beth's Newfangled Family Tree  
Got in Section A of the February 2016 issue.

You can read this at: <http://www.electricscotland.com/bnft/index.htm>

Snippets from the Glasgow Herald Archives  
Added a few more snippets...

Professor W MacNeile Dixon Obituary  
<http://www.electricscotland.com/history/snippets/education/19460201.htm>

Sir Allan Arthur dies  
<http://www.electricscotland.com/history/snippets/rugby/19231010.htm>

Inter-City Rugby  
<http://www.electricscotland.com/history/snippets/rugby/19651203.htm>

The Tower of Craigietocher  
Got in some pictures showing the outside is now pretty much complete.

See this report at <http://www.electricscotland.com/history/articles/cragietocher.htm>

Family Names  
From The Irish, Anglo-Saxon, Anglo-Norman and Scotch considered in Relation to their Etymology by Thomas G. Gentry (1892)

You can read this book at: <http://www.electricscotland.com/webclans/scotroot.htm>

Matthew Leishman of Govan  
Added this person to our Significant Scots pages.

You can read about him at: [http://www.electricscotland.com/history/other/leishman\\_matthew.htm](http://www.electricscotland.com/history/other/leishman_matthew.htm)

McMath Family  
Discovered a book about this family and so have now added a page for this family to the site.

You can read about this family at: <http://www.electricscotland.com/webclans/m/mcmath.html>

Old Church Life in Ballingry  
The History of a Fife Parish by The Rev. David Jamie, B.D. (1890) (pdf)

Read this book at: <http://www.electricscotland.com/bible/oldchurchlife.pdf>

Robert Burns Lives!  
Edited by Frank Shaw

I once wrote on Robert Burns Lives! that the Burns Club of Atlanta might be one of the best kept secrets in Atlanta. Well, there is a new Sheriff in town and he popped up on my computer yesterday in an email from Alastair McIntyre, friend and boss, informing me

that The Scotsman (the new Sheriff) had selected one of my pictures of our beloved Burns Cottage blanketed in a rare Atlanta snowfall as one of the best Burns memorials to be recognized during this month of the birthday of Burns. You heard it right, none other than the august newspaper The Scotsman listed us first among all of the memorials and statues around the world. Stand and bow your heads, ye members of the Burns Club of Atlanta! You have been well-known among global Burnsians for many years, and now Scotland's number one newspaper is singing your praises as well. So, as the ballplayers do, we will take the rest of the day to enjoy our recognition and then get back to the business of honoring the man we love so much, who has an intellect with which few poets can compare!

I wish to thank Sofiane Kennouche, a very talented writer, for allowing me to share her article that appeared in The Scotsman on the birthday of Burns - 25 January 2016. (FRS: 1.26.16) at:

[http://www.electricscotland.com/familytree/frank/burns\\_lives231.htm](http://www.electricscotland.com/familytree/frank/burns_lives231.htm)

Adventures of Donald MacLeod

Got in a page documenting his visit to London to claim his pension and thanks to the Royal Archivist at Windsor Castle for sending this into us.

You can see the page at: [http://www.electricscotland.com/history/articles/donald\\_macleod.htm](http://www.electricscotland.com/history/articles/donald_macleod.htm)

## THE STORY

I chose this story in part due to that well know Scottish saying...."Lang May Yer Lum Reek". The phrase came due to the high price of fuel and so wishing you that phrase meant they also wished you enough wealth to keep the fire going.

Our Fires and Fire-Sides

By John Murdoch

January 30, 1874.—On this date Mr. John Murdoch read a paper on

### OUR FIRES AND FIRE-SIDES.

The subject which I have chosen is a practical one, and I hope you will consider it seasonable. Even to those in whom the organs of ideality, wonder, and wit are largely developed, this evening devoted to the grosser matters of our Fires and Fire-sides will not, I hope, be a great sacrifice.

I have chosen this subject at the present time, thinking that the exorbitant price of fuel might induce people to give an amount of attention to the economics of our fires and fire-places which they might decline to do when coals were only at a reasonable price.

No doubt there could be a good deal of poetry and sentiment entwined around the subject. Numbers of beautiful pictures could be conjured up about our ingle-sides, our blazing logs, and our family circles, with their endearing associations and memories; but in one brief hour I can hardly dispose of the mass of matter which I have to lay before you; and in justice to myself, and in mercy to you, I shall not give more time to the subject.

"And," some one asks, "if we are not to have poetry and sentiment around our hearths, what are we to have?"

You shall have a treatise on our Fires, our Fire-places, and our Fuel.

In the first place, I need hardly mention the fact, that no question presses so heavily upon all classes of the community at this moment as that of Fuel does; and if I can do ever so little towards the solution of that question, it is my duty to do so.

Hitherto, as a rule, we have applied our fuel as if it had been an object with us to get it out of the way; or to bum as much as possible and get the least possible heat from it For example, the practice of placing the fresh coal on the top of the fire is one of the most flagrant pieces of waste of which we need be guilty. A great deal of the heat of the existing fire is expended in forcing up the chimney the gas which is distilled from the fresh coal. Large volumes of smoke escape up the chimney, or out through the house, when a fresh supply of coal is put on. The smoke which we thus waste is the material out of which, with more scientific contrivances, illuminating gas is manufactured. This smoke escapes, not only to our own direct and immediate loss, but it becomes a nuisance to the whole community; and what should be heating and lighting our houses, falls in smuts and in flakes of soot upon our persons, and upon white dresses which are spread or hung out to dry. That this is good fuel, you have abundance of proof in the fact that soot takes fire so readily when it falls back into the fire-place; and what we want is an apparatus which will burn it before it has gone up the chimney at all. Another proof is often displayed to you in the fire-place when you take time to watch it You see a jet of brown smoke escaping from a piece of fresh coal which has begun to split and crumble with the heat. Set a taper to this jet, and it becomes a bright and beautiful flame. Now, what is true of these jets of smoke is true of nearly the whole smoke together; and one of the practical questions which have been asked a thousand times is, "How can we best consume our own smoke, and convert it into heat and light?"

There have been a good many contrivances invented for this purpose, but there have been a good many—no doubt very stupid—excuses for not departing from the old wasteful way. The principle of all of them may be said to be one. You have a good example in the paraffin lamp of the present day. Without the brass dome and the glass, one-half the gas of the oil would escape in smoke, and rest in soot upon your ceilings and walls. But with the dome, the heat of the existing flame is kept in so as to set fire to part of that smoke; and when the glass is added, much even of what escapes the dome is kindled, and light comes out of darkness. The same thing is done in those furnaces in which the smoke of the fresh coal is made to pass closely over the red embers; or still better, where this gas is made to pass up, or down, or across, as the case may be, right through the strong, red fire. This is the secret of the whole affair—of consuming your own smoke, and taking both heat and light out of darkness.

The thing has been accomplished in thousands of instances, by simply placing the red fire on the top of the fresh coal. Then, as the gas or smoke escapes from the newly-heated coal, it passes into the overlying fire, is kindled, and becomes fire instead of smoke.

But the waste of fuel in these and in other respects is almost insignificant, as compared with the waste of fire after we have kindled it. The practice of putting our fire places, three sides in the wall, and only one side towards us, is surely very absurd in a country where heat is an object. At a rough estimate, we do not get more than one-fourth of the heat which is thus generated. You have, in fact, fire enough in one stupidly arranged grate or stove to give as much heat to each of three apartments as it at present gives to one, not to speak of the further heating which might be effected with what escapes by the vent.

Everyone who has seen the American stoves and ranges in use knows the very small amount of fuel which can be made to do the work of a very large fire in our ordinary ranges. And I have seen a Belgian apparatus which heated five different pans with a fire which you could put into a gallon measure. In Sweden they have carried their economical invention so far as to make one small fire cook half-a-dozen different dishes in such rapid succession as to be done simultaneously. They have a case covered with wadding, so as that it will allow scarcely any of the heat which it receives to escape. There is a cooking pan, or pot, or kettle, which fits exactly into this case. It is charged, say, with so many pounds of mutton to be boiled. It is placed in an opening in the stove, until it has begun to boil. The Swede lifts the heated vessel, and places it in the non-conducting wadding. The potatoes, the pie, the pudding, are in succession brought to the boil in the same manner, and placed in their respective non-conducting cases; and thus you see another way in which one small fire can be made to do three, four, or five times the cooking which we, in our extravagance, would think of making it do!

Instead of letting the heat away into dead walls, we should let it into one or two other rooms, and instead of letting so much heat out at the top of the chimney, make it heat one or two apartments in different storeys. This has actually been done by a clergyman near Dumfries. 'Then, there is the heating of a whole house by means of hot air pipes, by means of hot water, or by means of steam. The kitchen fire, with any of these, would render any other fire entirely unnecessary in a large house; and what people would in former years have scouted as un-British, &c., will, in the year 1875, be adopted as eminently practical and necessary, and we will wonder at our own slavish conformity to a wasteful custom.

No doubt it is pleasant to see the flame of our fires, and to watch the faces, of which we have heard so much; but these, I fancy, must give way to the inevitable, as our pleasant sailing craft gave way to the grinding and champing of the steamboat; as the pleasant stage coach made way for the iron horse and his train of unpoetical vans; and as the old system of signals from hill-top to hill-top has been banished by the telegraph.

For my own part, I look forward to the time when these hot air and hot water appliances shall have made our houses ten times more pleasant than they ever were with grates.

Let us have those appliances once in general use, and you will have every new house fitted up with means of delectable cleanliness which will give to every family at home some of the luxuries which cannot at present be enjoyed excepting at the cost of a visit to an establishment like Cluny Hill.

But I must pass from this mere economy in the use of fuel to the subject of how and where we are to get fuel with which to supply the more economical fire-places of the no distant future.

For my part, I do not see any good reason why we, away in the North, or why others away to the West, have waited so long to be taught the use of our peat bogs. I am afraid this waiting was only a matter of silly fashion and prejudice, begotten of a false deference to the denizens of the coal-producing regions of Great Britain. This is no mere flight of fancy; nor is it a random shaft let fly at another people. It is a well-grounded conviction of mine that in too many things—I do not say in all—we in the Highlands neglect advantages which nature has given us, for no better reason than that the example of utilizing them has not been set in the Lowlands. England and the South of Scotland have their coal beds far down in the bowels of the earth; we have ours spread out on the face of the earth. Thus, coal has had to be brought up at terrible sacrifices, physical, social, and moral; in so much, that whole populations have been, to a notorious degree and extent, demoralized, or, as some would say, brutalized—at any rate, degraded—far below the general level of our working classes. Yet, we have stood by lamenting the absence of the coal beds which cost so much, whilst our own coal beds might have been turned to account, in the light of day, and in the balmy breath of heaven. The right way of following the example of England would have been to go to work at the peat which God gave us, as she did at her own coal.

True, we have been cutting peats. But peats are not genteel. They are only fuel for poor, vulgar mountaineers ! We adopted the fire-places, too, of the coal countries, and thus shut ourselves out from the use of peats. Our peat-burning neighbours and progenitors had their fires in the middle of the floor, with none of the heat escaping into dead walls, and not much of it even escaping by the "chimney." They had the full benefit of all they burned.

To this night I have a lively impression, and a grateful recollection of a warning I got at a peat fire in a village inn in the southwest of Ireland nine years ago. I had travelled twenty-five Irish miles on a Bianconi, out-side car, in pelting rain, all the way from Killamey to Kenmare. Finishing my business at the latter place, I set out on a forty-two miles' journey in the evening of the same day, on another outside car, drawn by a blind horse, as it proved, and driven by a dozing coachman. About ten o'clock we came to a stage at the village of Sneem. I need not tell you that we were cold, and stiff, and hungry. I was shown into a tidy little stall-like room, to await the tea, the toast, the bacon, and the eggs. I did not stay long in my stall. I made a hurried survey, and shortly found the kitchen, bright and warm, and comfortable, and homely, where I readily received a hearty welcome from the inmates, who sat around the peat fire in the middle of the floor. I feel as if some of that warmth were still about me, and the picture of that pleasant, homely group still hanging up among my mind's furnishings and adornments. In and around that fire you can get poetry and philosophy as well as domestic economy, if you choose to hover about it. For me, I must leave it, and turn to our own peats and peat bogs.

There are fourteen years, or more, since I endeavoured to impress the public with the value of our peat mosses ; and when the country began in the beginning of last autumn, to feel the pressure of the coal famine, and when there was reason to think that there would be some weather to dry peats, I wrote to one of our local papers on the subject, urging that steps should be taken immediately to cut peats, and have them ready for the winter. Since then, numbers of others have taken the subject up.

It is far within the mark to say that in the Highlands we have 1,000,000 acres of peat bog, the depth of three feet. In Ireland there are over four and a quarter million acres, estimated at an average depth of eleven feet.

Our own million acres will give nearly five billions of solid yards; and if you assume that five yards will yield a ton of dried peat, compressed peat, or dense peat, as the case may be, we have one billion of tons of excellent fuel in Scotland, and somewhere about twelve billions in Ireland.

Now, as to the use of peat, that, as we have seen, is no innovation. There may, of course, be room for great improvements in the mode of preparation, both as regards economy in production, and pleasantness and utility in consumption.

There are many processes in which peat\* even as at present prepared in the Highlands, is found more serviceable than coal; as in smelting and finishing the best descriptions of iron, and in making malt for His Majesty's distilleries. For both of these purposes there has been a considerable traffic in peats ever since I can remember.

The using of our peat mosses would give to our own people the employment and wages which we now pay to others for the mining of coals. It would create traffic for the railways which pass over our mosses—as the Highland, the Dingwall and Skye, and the Sutherland and Caithness. It would lay bare for cultivation vast tracts of country now felt to be needed for the production of straw, hay, and turnips with which to produce more and cheaper beef and mutton.

In regard to the reclamation of land, I remember when Blair Drummond Moss was being reclaimed, and so great was the value attached to the land beneath the peat, that men were employed, and machinery was invented, to remove the peat moss into the river Forth, to be carried down the Firth, and now you will see some of the finest farms and crops in Scotland where, forty years ago, there was nothing but a brown wilderness, fit habitation for nothing but snipe!

I do not know any towns so well situated as Inverness, Nairn and Forres for turning our peat resources to account I have been on the look-out for available mosses, and I find the finest fields for such an undertaking on the south side of the Highland line, between Dava and Grantown, and Kildrummie Moss, near Nairn..

The peats which come into Inverness are brought a distance of from seven to ten miles in small carts, at a cost which you can readily understand to be enormous. To Forres they could be taken by train from Dava, and thus be less than half the price we pay for them in Inverness.

I know that many persons found coals cheaper than peats, and that coals are used in the heart of peat-producing countries. That is only analogous to the other fact that coals from Newcastle and from Lanark are burnt over the coal mines of Brora and Kilkenny. You can well understand that it would net pay the Durham and Staffordshire farmers to dig for their own use, the coal which lies under their own homesteads. The concentration of trained force and the division of labour make it better for the farmers to stick to their agriculture and for the miners to stick to their mining. If the coalmasters had no better roads to their pits than our fanners have to their mosses, and if they had no regular traffic, they would find the production of coals just as bad, if not worse, than our ordinary citizens find the producing of peats.

With trained hands, with proper implements and machinery, with drying sheds, with good roads, tramways, and railways—all made available for turning our mosses to account—does it not stand to reason that we might have peat fuel at our doors, at least as much cheaper as it is nearer to us than coal

And what is thus, as I think, so obvious a priori, is established by facts gathered from different parts of the Continent of Europe and America.

It is reported that on the Grand Trunk Railway, peat is manufactured in large quantities, at a cost of 9s to 10s per ton, where coals were 40s, and now, in all probability, 45s or perhaps 50s per ton. Peat, there, then, where the manufacture is gone about as it ought to be with us, is not one-fourth the cost of the coal

Another test. On a train running 177 miles, the coal expenditure was found to be £6. It took £6 3s worth of wood to do the same work ; but with peat it was done for £1 10s. There, they use machinery for pulping the peat moss. It is then lifted by another machine which travels over the ground, and spreads the pulp over the grass, heather, and rushes. In this rough way it is left to dry, and afterwards gathered in shapeless masses, and burnt without any further preparation. You will observe, that in this instance, the only improvement consists in the use of machinery. There is evidently no improvement in the finished article.

In Bavaria, there are considerable manufactories of peat, simply cut and prepared as is done already in this country; and the chief use to which the article is applied is that of feeding railway engines.

In the Netherlands, peat of the ordinary description, is the staple fuel of the country; and during the season people flock in from Hanover, and from the adjacent parts of Germany to work in the mosses, the same as the Irish reapers used to migrate to the English and Scotch harvest, and as the hop-pickers flock to Kent and Farnham.

But in the Netherlands the manufacture of peat has made some progress towards the production of a perfect article of fuel So it has in Bavaria, in Prussia, in Bohemia, and in France.

There have been two principles attempted to be carried out in this improved manufacture. The one is that of compressing the peat by machinery. This finished article I wish you to remember under the name of "compressed peat." The other principle is that of so preparing and placing the material, that it will become dense in obedience to the law by which the particles of matter are drawn to each other. The finished article in this case is called "dense peat."

Of the first of these, I shall only wait to say, that machinery is used to tear up the moss, and reduce it as quickly as possible to dust. This is then placed in a machine, and so driven together by force, that it comes out in solid cakes, ready for use. I have seen them, and in form they were very much like as if you cut a large sausage in discs of about an inch and a-half in thickness.

Attempts have been made to compress the peat in a wet state, but I do not know that it has been successfully done anywhere.

One of the methods adopted is that of reducing the moss to the finest pulp, then spreading it out of a certain thickness, and allowing it to dry and solidify of its own accord.

It is a curious thing that this method is simply an improvement upon what was done by our forefathers when the more tenacious bogs had been exhausted. I have seen them take the more brittle strata of the peat, mix the substance with water, and spread it out on the sward. In the course of a few days, it had acquired a certain degree of solidity, when they entered with their bare feet, and cut it in long pieces from side to side of the patch. It was then cut across into lengths of an ordinary peat, and afterwards treated in every respect as is done with peats cut in the usual way.

Now, in the four northern provinces of Holland, in Brandenburg, in Gratzen, in Bohemia, and in the French department of Oise, the old-fashioned principle is being carried out by machinery. The material is macerated by being put through a machine somewhat like that used in preparing clay for making bricks.

In some of these places, the macerated mass comes out in two continuous pieces, which are cut, either by hand or by machinery, into suitable lengths. The peats are then placed on trays, and laid out to dry in racks.

At Aibling, in Bavaria, the material is prepared in pretty much the same way, under the direction of Dr. Herold of Munich; but instead of being formed into peats or bricks, it is cut into junks of about four inches in length. These pieces are placed upon enclined trays, on which they move, gradually passing from one tray to another, until at the end of their journey they drop off in dry balls.

At Gratzen, and at several other places, the pulp is simply spread out on a prepared surface, and levelled to a certain thickness by means of boards attached to the feet of the workers. In the course of a day or two, or three, according to the state of the weather, the stratum is cut, lengthwise and across, into something the size and shape of bricks. And such is the attraction of the particles that every peat is found in the course of drying to contract and solidify so as to leave a large space between the rows, where there was only a cut to begin with.

When they are sufficiently firm to be handled, they are lifted and placed in racks to dry.

It is to be noticed that in all the instances I have given, the excepting Aibling, the drying is done in the open air. Dr. Herold, however, has done what I have no doubt we shall do when we take the matter up—he has erected sheds, so as not only to keep off the rain,



but cause a greater draught through the racks.

There is one fact which I shall mention by way of counterbalancing what a very patriotic gentleman in Rossi-shire said a short time ago. Early in the season he went manfully into the peat-cutting; but when the time for carrying them home arrived, he made inquiry, and found that to get at them you had to wade through two hundred yards of water! This "dished" his peat-cutting enterprise, and he gave the fact to the world as an evidence of the impossibility of doing anything in the matter. But mark.

In the peat manufacture of M. Colart at Fontaine-sur-Somme, the material is all taken from a marsh under water, from one to two feet in depth. The peat is actually cut under the water. And a German of the name of Brosowsky has invented a machine to be used for the purpose. What would our friend in Ross-shire say to these Frenchmen and Germans? What they would say to him, I presume, would be, to adapt his plans to the requirements of the case, and not to wait till Jupiter dried up the marsh.

Even in the German case, the finished article did not cost more than 6s per ton, including the labour of taking the raw material from under the water.

The cost at Herzfelde was 6s 6d per ton; at Aibling, 12s 2d, but expected to be reduced by Dr. Herold; in America, on the Grand Trunk, 9s to 10s; New England, 8s to 10s; New York, 9s to 10s.

I have said nothing about Box's method, which has been patented, and which has been pretty well ventilated in the press. Besides, there are some points connected with that method of which some of us are not quite sure yet.

I must not, however, pass over the fact, that we can have light as well as heat from peat. I have seen peat gas made, I have seen it burnt, and have seen it tested, and know it to be a fact that it can be made; and it is expected that the suburb of Inche-core, near Dublin, will be lighted with gas made from peat.

Another fact. You will see in this day's Scotsman that a company is being formed to manufacture fuel from the bogs of Kerry, in the south-west of Ireland.

And speaking of Ireland, as I should like to so do of Scotland, I must direct attention to the fact that a commission, originated by Mr. Edward Purdon, ex-Lord Mayor of Dublin, and proprietor of The Irish Farmer's Gazette, has just returned from the Continent with a large mass of valuable information—not merely in theory or in science—as to what has actually been done in the way of utilizing bogs to yield fuel. To the report published by this commission I am indebted for some of the most telling facts in this paper ) and when we in this country, as well as our friends in Ireland, shall have had the sense to make proper use of our bogs, we shall, if we have the good taste and honesty which ought' to characterise us, ascribe a good deal of the result to the patriotism and enterprise of Alderman Purdon, and to the information collected and made public by the other members of the commission.

And that's it for this week and hope you all enjoy your weekend.

Alastair