

The Castleconnell Bogs, John's Canal and the Stein Brown Distillery

The six-inch Ordnance Survey map of 1840¹ shows a canal, crossed by a wooden bridge, leading into the bog at Portcrusha from the Shannon, upstream of Castleconnell and downstream of Montpellier. Traces of the canal, referred to locally as John's Canal, can still be seen, and a stone quay, at the junction between canal and river, has recently been uncovered.

The distillery at Thomondgate

The bog was used at first to supply the Thomondgate distillery, which was called Stein & Brown in the Holden Triennial Directory² of 1809. John Browne suggested in 1825 that the firm may have been founded in that year, although in 1837 (see below) he said that he had twenty-two years' experience of the Limerick area.

The firm was referred to as Stein, Brown & Co of Thomondgate in 1824,³ Brown & Co in 1838,⁴ Stein Brown & Co in 1840,⁵ James Stein jun & Co in 1846⁶ and Stein Brothers & Co in 1856.⁷

The distillery was a significant one: in 1822 John Browne of Limerick distilled 231 790 gallons of spirits out of a total of 4 230 377 in Ireland. There were several others producing over 200 000 gallons; the largest was Thomas Wise of Cork at 312 172.⁸ In 1825 John Brown was the largest Irish producer of spirits made from a mixture of malt and raw corn, at 575 286 gallons (Stein & Brown also made spirits from malt only).⁹ In 1827 John Brown produced 415 069 gallons of wash, about one sixteenth of total Irish production and almost twice what Jamesons were producing at Marybone Lane in Dublin.¹⁰

It is possible that the Steins were related to the Steins of the Marlfield, Clonmel Distillery, who were variously described as M Stein,¹¹ Messrs John Stein & Co¹² or Andrew Stein.¹³ They may also have been related to the Steins who ran the Bow Street Distillery in Dublin, later sold to Jamesons, who had married into the family.¹⁴ And they may¹⁵ have been related to the Scottish distilling Steins,¹⁶ cousins of the Haigs, one of whom had invented a continuous still.

It seems likely that the Steins had taken over altogether by the 1840s. During the Famine, the firm seemed to have two Steins and a Walnutt, who was charged with having substituted inferior corn of his

by Brian J Goggin

own for the firm's corn when supplying the Relief Committee of Broadford and O'Callaghans Mills.¹⁷ In 1850 the Griffiths Valuation¹⁸ had two entries for Stein Brothers & Co and one for James Stein but no mention of Brown.

John Browne

There is more information about Brown (or Browne: both spellings are used).¹⁹ In 1825 John Browne gave evidence to the Select Committee on the State of Ireland.²⁰ He said that he lived in Limerick, where he was concerned in a distillery with four stills, producing about 450 000 gallons a year. He also had a share in a distillery in Clonmel (the Stein distillery in Marlfield?). He had never had any problem with the people of the country. He was aware of religious differences: he was a Protestant himself, from Scotland, but he supported Catholic Emancipation and felt that most

[...] capitalists would consider it in the same light, if religious feuds were done away, and the minds of the people were tranquilized.

In 1830 John Browne Esquire appeared before another parliamentary committee, this time the Select Committee on the State of the Poor in Ireland,²¹ where he said he was one of the proprietors of a "considerable distillery in the south of Ireland" employing a "great number" of persons and paying seven shillings a week for six days, in money, every Friday night. He had twenty-two years experience of the area. He was asked about the bog:

Have you employed a great number of persons as labourers in agricultural works, or in procuring fuel and turf? We have, at a bog near Castle Connel.

What is the rate of wages which you have paid to those agricultural labourers? The rate we used to pay was 10d Irish; on the change of currency we paid 9.5d British. Were those wages also paid in money? Yes, in money.



The quay at Macnab's Bog

(courtesy Mick Murtagh)



The main stem of the canal in Macnab's Bog

You were the proprietor of a farm in the neighbourhood of Limerick? We had three farms, but we gave up one of them.

There are some John Browns and one John Browne on the Griffiths Valuation lists but no John Browns or Brownes on the 1852 Register of Electors. It seems possible that Brown(e) died, retired or sold his shareholding to his partners in 1841 or 1842: certainly it seems that the lease on the bog was sold to James Macnab on 20 September 1841.²²

Turf for Limerick

As early as 1775 the availability of the short canal (now called the Park Canal) had improved the supply of turf to Limerick:

The good effect of a very short cut, made near the town, is already sensibly felt; for sea-coal, which was formerly their fuel, is so disused, that its price is much lowered; turf, the material and manufacture of which is all their own, now supplying their hearths.²³

The same was true in 1801:

The firing of the inhabitants is chiefly turf, and the bogs are conveniently situated.²⁴

And Samuel Lewis said:

The supply of fuel is abundant, large quantities of coal being imported from England; but turf, of which a very large supply is brought up and down the Shannon, is still the chief fuel of the lower classes, and is also much used in manufactories and in the kitchens of the higher ranks.²⁵

Lewis's phrase "up and down the Shannon" was accurate. Turf was brought up the Shannon estuary and discharged in Limerick city at the Long Dock at Merchants Quay. Much of it came from Poulanishery, west of Kilrush in Co Clare, but turf was also carried from Tarbert to Limerick by boats that collected limestone from Askeaton on the return journey — and from the bogs owned by Trinity College, Dublin, at Ballylongford.²⁶

The distillery installed what was probably Limerick's first steam engine in 1822.²⁷ By 1830 there were twelve steam engines in Limerick, two of them (of 10hp and 30hp) "for distillery purposes."²⁸ Paul Duffy shows that the steam engines must have been running on turf by 1830 at the latest, and possibly from as early as 1822. Lewis²⁹ said that Limerick received turf from Castleconnell "particularly for its large distillery".

James and A A Macnab

Like John Brown, James Macnab was a Scot. He and his brother John had worked with their father, also John, at a distillery in the Alloa area, where there were two distilleries owned by the Stein family. John and James, and the third brother Alexander, all moved to Ireland: Alexander to Cork and John and James to Limerick. John soon moved again, to Canada.³⁰

James was employed to manage the bog from the first, which may have been about 1823,³¹ and took it over altogether in 1841. He died in 1865³² and his son Alexander Allen Macnab took over. He achieved national fame in the 1870s but he emigrated to the USA in 1885.³³ The property was sold in 1897.³⁴

Mr J McC Meadows ME, a member of the Irish Peat Fuel Committee, wrote four papers about systems for cutting and preparing turf for fuel. Writing about it in the *Irish Times* in 1873 he praised the Macnab operation:

There the cutting and saving of turf as a marketable commodity has been followed for many years. Fifty years ago this land had more the character of a morass than of a firm bog, but this circumstance did not discourage enterprise. A substantial pier for boats was built; from the Shannon a canal was cut into the morass, with branches for drainage and transport. Some three hundred persons were soon employed every season in the cutting and saving of turf. In 1842 the property passed into the hands of Mr James Macnab, who from the first conducted its management, and from that time to the present the raising of turf for sale to the public, coupled with the reclamation of the bog, has been followed as a "special business." The cutting commences in March, and is continued until August; and five thousand tons are made and sold annually. Mr A A Macnab, the present proprietor, states that wet weather does not prevent the safe harvesting of the turf, and during the dripping summer and autumn of 1872 he cut and saved in good condition five thousand tons, all of which was disposed of to the public a month or two before the end of the year. The present state of this tract of country, which, within the memory of many now living, was a waste, is instructive and encouraging. About fifty statute acres of the cut-away bog have been reclaimed into excellent pasturage for cattle, producing an annual rental of £85, and forty other statute acres are in progress of reclamation. About Mona Lodge are about eighty acres under grass and tillage, with fences interspersed with shrubs and hedgerow trees. Last year the turf was sold at 6s 6d per ton, and this included the proprietor's profit and return from the work. There has since been an increase of 2s per ton, but altogether it is not a serious item when we consider the still seriously high price of coal.³⁵

In 1874 he added this information:

This undertaking was originated and carried on by the proprietors of a distillery in Limerick, and from it all the fuel they required for their works was obtained and conveyed by water to that city.³⁶

In 1872 there had been a fuel shortage, which was discussed in the editorial and letters pages of the *Irish Times*. An editorial commended Mr Macnab:

Early next year we hope measures will be taken to render this country independent of English complications. We would recommend the exhaustive letter addressed to us by Mr Alexander Macnab, who has effected so much in the way of supplying

excellent and cheap fuel to the people of his own country. We understand he is engaged in considering the best means of converting the light brown turf into excellent fuel³⁷ with every prospect of success.³⁸

A A Macnab had argued vigorously for the better use of the national fuel:

*The Parliamentary Commission, appointed to inquire into the nature and extent of bogs in Ireland reported in the year 1814 the amount to exceed 2830000 acres. We may take the quantity capable of being utilized for fuel at 2000000 acres, and an average depth of ten feet the entire mass. Now, one acre of well drained bog, one foot in depth, will contain 300 tons of dry peat, therefore the entire mass will yield the enormous quantity of over 6000000000 tons of dry peat. What a nice thing to have that quantity of fuel in our midst, and in this the nineteenth century to hear talk of a fuel famine!*³⁹

The Macnab method

A A Macnab gave an account of how the quality of the national fuel might be improved:

From my knowledge of peat, and from close observation, I have come to the conclusion that too much compressing will never do. Peat is of an elastic nature, and distention will always take place after the pressure is removed. In the ordinary way of cutting turf in Ireland by the old-fashioned slane a great amount of the very best of the bogs are wasted; I go so far as to say, one-half of the peat cut off undrained bogs, and one-third off drained bogs, which are in use at the present time to cut turf from, are wasted by the

*mode of cutting. Turf cut by the slane is also very slow to dry; and why? Because naturally peat is full of little cells which are full of air. If this air is ejected by working up the peat to a thick pulp, and condensing it a little by machinery, it will dry fit for use in the ordinary summer weather in about two weeks. A simple proof of the above lies in the fact that "hand turf", which is puddled and moulded by the hand, dries much quicker than slane turf, and is much better firing.*⁴⁰

Macnab was clearly well aware of technology used elsewhere but his own product was in great demand, as Mr Barre from Dublin wrote in response:

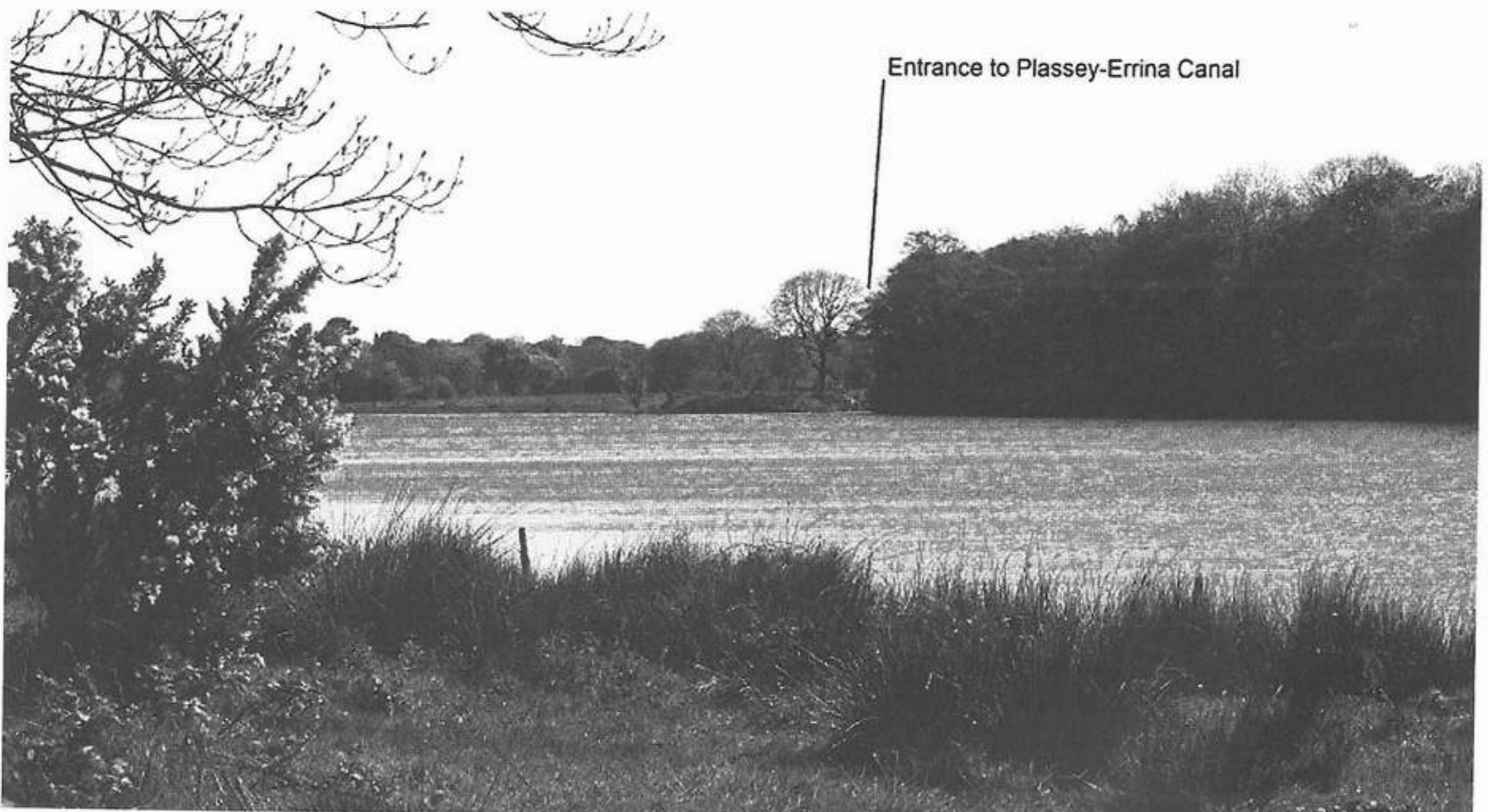
[...] I have been in correspondence with Mr M'Nab, and sent him a large order for his "stone turf", to be delivered in Dublin at an advance on the price he asked, to secure the supply, and which price my customers had agreed to pay me; but he replied "As regards my trade in peat at the present time, such is the demand that I am not able to supply the orders I have on hands. My present supply, dry, is about 6000 tons, and I have orders for the entire of it." By this your correspondent will perceive that it is not "the names of those who want the peat" that we require, but the means of supplying the immense demand for the article. The turf that is generally brought to Dublin is soft, spongy stuff, only fit for lighting fires, and would not be at all a substitute for coal. It is the dense hard peat we want, what Mr M'Nab calls "stone turf", which is an excellent substitute for coal, and ought to be sold, with a fair remunerative price to the vendor, at less than half the present price of coal. Now, if any of your readers will inform you where a large and certain supply of

*this "stone turf" is to be obtained, or if they have it to sell and will communicate with me on the subject, I will guarantee to sell any quantity of it for them. I am now in communication with several persons on the subject, and have been asked as much as £1 per ton by the boatload delivered in Dublin for the kind I require, but from Mr M'Nab's prices and what others have told me, it ought to be sold at a much less rate. [...]*⁴¹

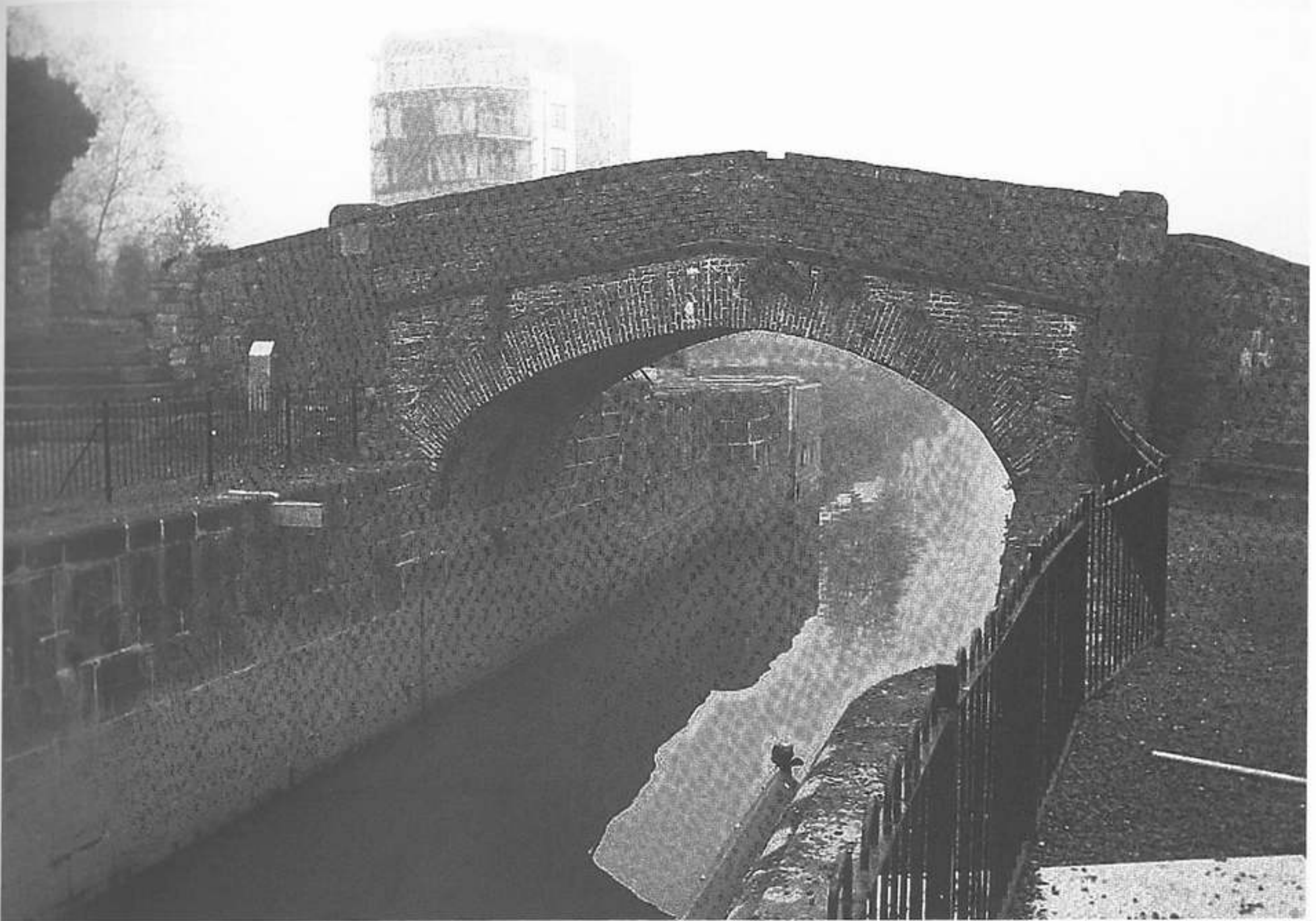
Macnab pointed out the benefits of the proper use of well-produced turf:

Great numbers of poor people in my district make a livelihood in that way, and manage to keep themselves alive during the winter months when employment is not to be had. The class of fuel they produce is of the worst description. The bogs are undrained and the people cut only the top layers of white and brown turf, leaving the dense black peat after them covered with water. The poor turf-cutters little care what quality they have so as they have the quantity and can get it sufficiently dry to burn. They will never be got to produce a better article until capital and energy come to their aid to assist them.

Bogs which lie convenient to our noble river "the Shannon," and on the banks of canals are the most extensively in use. The great advantage of water transit is availed of, and large quantities are cut and boated to convenient markets. On the Lower Shannon, the counties of Clare and Kerry keep a regular fleet of sailing boats bringing it up to Limerick. [...] From the very able and scientific articles by Sir Robert Kane great information and light have been thrown on the subject. His researches and experiments have proved its great value. He mentions



Looking towards the Plassey-Errina Canal from Macnab's Bog



The tidal lock in Limerick where the canal meets the Abbey River

it as having been used extensively at one time on all the steamers plying on the Shannon, also in large flour mills and distilleries. Turf of a good quality, if properly dry, I know myself to be a good fuel for steam engines. Sir Robert Kane gives the example of working a 3.5 horse power condensing engine employed grinding corn, burning no other fuel but turf: Consumption in a day of 12 hours, 50 boxes, about 7 tons; cost of turf per box, 6d; cost of fuel, 9d per horse power, for a day of 12 hours.

Another very good authority, Mr Charles Wye Williams, gives the result of the expenses for working a steamer, the [Lady] Lansdowne, plying on the Upper Shannon, in the year 1843, running daily (Sundays excepted) a distance of 48 miles: Average of coal consumed for one month, 120 tons, at 18s per ton — £108. The same duty was done by burning turf: Amount consumed, 1410 boxes, or about 250 tons, at 7d per box — £41 7s 9d; difference in cost of fuel per month £66 12s 3d. These reports go to prove the value of turf cut and saved in the old way; how much more valuable would it be if properly condensed and manufactured?⁴²

Land reclamation

The Macnab operation not only produced fuel but also reclaimed land. The benefits were described in the *British Farmer's Magazine*:

With the last number of my notes I gave some extracts from the report of two Manchester merchants, who travelled over nearly three-fourths of our island last autumn, to see, with their own eyes, the true state of Ireland and the Irish. When in the county of Limerick, at Castle Connell, they inquired if there was any one in that locality reclaiming waste land? They were directed to James M'Nabb, of Mona-lodge. They called on him, and he politely showed them over his farm, and explained the whole process of reclamation. They say: — 'We were highly interested in what we saw; and are convinced that the bogs of Ireland, under similar circumstances and management, may be reclaimed. The farm consists of 272 statute acres. Eight years ago he set to work upon this bog land, which, as land for agriculture, was not then worth 6d per acre. He has reclaimed 120 acres; 6 are under plantation, and the remainder (104) under crop. The produce of his potatoes, wheat, and oats, was equal, in quantity and quality, to that of the best land in Ireland; and his garden produces as fine vegetables as any in the island, which is saying a great deal. The condition of the cattle and sheep upon the farm was most beautiful. We saw a field of clover, which had been three times mowed this year, and was then most luxuriant, where there was nothing but deep bog five years ago. The land reclaimed is on a bog, six feet deep; yet the surface is sound,

elastic, and hard. On his farm of 104 acres, which eight years ago would not have fed a goat, he now has 20 milch cows, 14 bullocks, 26 calves, 50 sheep, 3 horses, and 12 pigs. He sends 130 boat-loads of turf to Limerick annually, — each load, on an average, is worth £10. This gives great employment to the people, besides reclaiming the land; the handling of the turf employs old men, women, and children. This bog was let, 23 years ago, for a term of 999 years, at a fixed rent; yet the present proprietor brought an action to recover possession, and it was tried last July, at Limerick. The plea set up was, that the father of the present proprietor had no power to grant such a lease, and that the land was poached. The idea of poaching a bog was laughed at, and scouted out of court by a verdict in favour of Mr M'Nabb. The landlord threatens to carry the case to the House of Lords; it is possible that he will see the folly, if not the injustice, of such a step. The jury were composed of landed proprietors, not farmers. We feel confident that, should he follow out his threats, and the case become known, a subscription in England would most readily be raised to assist Mr M'Nabb in defending the action.⁴³

By water to Limerick

The "Return relating to trade boats" in Appendix B No 6 of the Second Report from the Railway Commissioners in 1838⁴⁴

lists turf boats belonging to the Limerick Distillery as one of the four main types of boats using the Limerick Navigation (Limerick to Killaloe). However, there is no information about the types of boats in use or their methods of propulsion. Nonetheless, it is possible to make some deductions.

In 1801 John Brownrigg reported to the Directors-General of Inland Navigation on the state of the Limerick navigation. His report included a description of the boats in use at the time. The smallest were flat-bottomed boats of 6–8 tons, like the sand cots but carrying a wider range of loads including turf. Larger lighters carried 12–16 tons (turf was amongst the cargoes), with four-man crews who were not owners; they had two oars, one in the stern, and no rudder.⁴⁵

Such boats were considerably smaller than the canal-boats of the twentieth century, the most common types of which carried 40–50 tons in hulls of roughly 60 feet by 13 feet. These smaller boats would not have filled the locks of the Limerick Navigation, but the canals at Portcrusha are much narrower and the boats were probably sized to fit them.

The Ordnance Survey map of 1840 shows the bog at Portcrusha as having a canal with two branches; the 1893–99 map⁴⁶ shows a more extensive system of channels, which may have served both to drain the land and to transport the turf. The Griffiths Valuation map matches the 1840 OS map. A wooden bridge is shown on both Griffiths and 1840 OS.

The canal is referred to locally as John's Canal. It joins the Shannon just upstream of, but on the opposite side of the river from, the upstream end of the Errina–Plassey Canal, which would have made carriage by water to Limerick very easy. The "substantial pier" to which Meadows refers has been uncovered recently. Local information says that there was a lock gate at the entrance to the canal.

A boat taking turf from the bog to Limerick would first have crossed the river to the Errina–Plassey Canal. It could not have used a horse for the crossing and it is unlikely to have hoisted a sail for such a short distance; a sail would have been useless for the rest of its journey. Thus it would have probably have used oars or poles to get across the river, and then been towed (tracked) by men or by horse to Plassey. At that point, a boat had to cross the river to reach the towing-path on the other side: a hazardous operation before the footbridge was built:

Great inconvenience is felt from the want of a foot-bridge to cross from Plassey Mill to Annaghbeg Lock, for the purpose of towing the packet-boats and trading vessels: at present a ferry-boat is employed for the purpose of taking horses and passengers across the river. The velocity of the current at this place has been ascertained this winter, and found to run at the rate of three miles per hour; width of river, 450 feet. [...] trading vessels have been cast ashore upon the bank below,



Brown's Quay

and under the necessity of unloading the cargo into other craft for the purpose of getting off: this is highly dangerous to lives and property. At present a buoy is anchored in the centre of the river, and in times of a flood trading vessels are obliged to run out a cable or warp to this buoy to swing clear of the north bank; and when this is accomplished, they run another warp to the south side to haul them across: this method causes great delay.⁴⁷

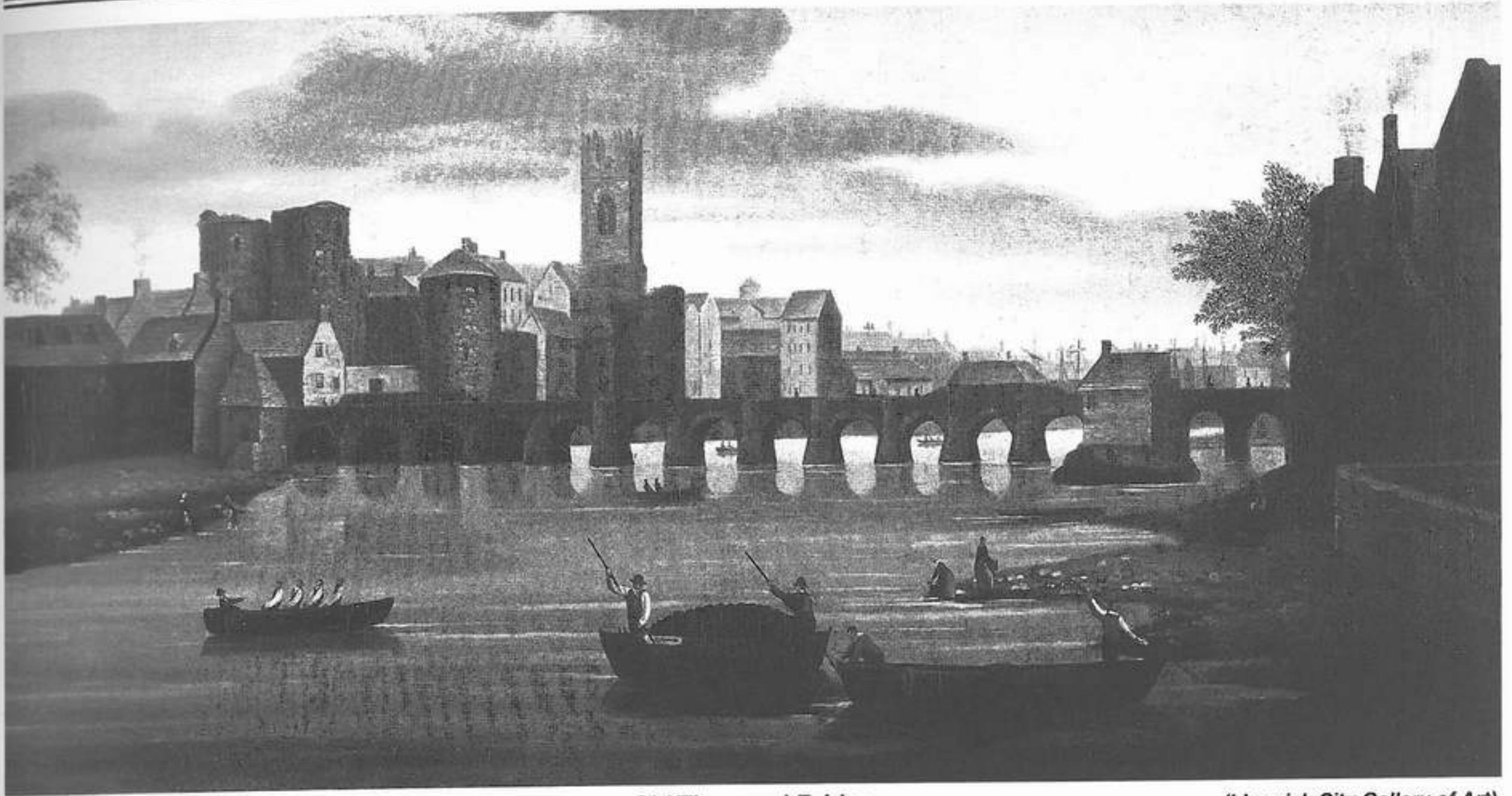
Once it had crossed the river at Plassey, the turf boat would have continued in the river (with a towing-path available) as far as the head of the Park Canal, then down that canal for a mile to the canal harbour, just above the junction with the Abbey River.

From there, there were three possible ways of getting the turf to the distillery at Brown's Quay, just above Thomond Bridge. First, the turf could have been unloaded at the harbour and carried by cart to the distillery, but that would have been the most onerous option. Second, the crew could have worked the boat downstream past Merchants Quay, then waited for full tide and gone upstream over the Curragour Falls, but I suspect that the mills and associated dams would have made that impossible. Third, they could have worked the boat up the Abbey River and then down the main stream to Brown's Quay at the distillery.

The third option seems to me to be the most likely, and my belief is strengthened by the anonymous painting of Old Thomond Bridge from the collection of the Limerick City Gallery of Art. The two boats closest to the viewer are just off Brown's Quay; one is loaded with turf and the other is empty. Each has a crew of two and is propelled with poles. It is possible that they are feeding the Limerick distillery's steam-engine with turf, and that that turf came from Macnab's Bog at Portcrusha, between Castleconnell and O'Briensbridge.

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Old Thomond Bridge

(Limerick City Gallery of Art)

a mixture of Malt and Raw Corn ... 1790-1825, DISTILLERY An Account of the Number of Gallons of Wash distilled from a Mixture of Malt and Raw Grain by each Distiller in Scotland and Ireland ... 10th October 1826 to 10th October 1827.

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30. Email 1 from Trish Manut, great great granddaughter of James Macnab, 1 May 2009. Trish Manut (Canada) and Bob Macnab (Texas), descendants of James, have both been to Castleconnell and Montpelier looking for information about their ancestors and would like to know where James is buried.
31. *Irish Times* 11 July 1873.
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